

# Regulatory Strategy for the Designation of the Proposed Scott Islands Marine National Wildlife Area

Amendment to Schedule I of the *Wildlife Area Regulations*: Proposed Scott Islands National Wildlife Area





#### 1.0 Purpose

The purpose of this regulatory strategy is to outline the proposed boundary, conservation goals and management approach for the designation of the Scott Islands marine National Wildlife Area<sup>1</sup> (NWA) located on the Pacific coast of Canada, by amending the *Wildlife Area Regulations* under the authority of the *Canada Wildlife Act* (CWA).

In the Budget 2007 speech, the Scott Islands archipelago was identified as one of nine marine protected areas to be created across Canada. The Minister of Finance stated, "Our National Water Strategy will also help support the sustainable development and protection of our oceans. It creates nine marine protected areas, including ..., the Scott Islands on the Pacific Coast ...."

The designation of this area as a National Wildlife Area is a recognition of the environmental importance and sensitivity of this area for seabirds and marine biodiversity more broadly. The region is the ancestral home of the Tlatlasikwala First Nation and the Quatsino First Nation, and holds important cultural and spiritual significance for these First Nations. The NWA designation will bring with it an enhanced and coordinated management of activities in the area. Collaboration among federal departments, the Province of British Columbia and First Nations will ensure that authorized activities will continue under the highest standards of risk management and mitigation of potential detrimental environmental impacts on this productive marine environment.

This regulatory strategy includes a recommended boundary, vision, and management framework for activities in the proposed NWA. In addition it describes the process by which consultations with First Nations, stakeholders, the public, local and provincial governments, and other federal departments will continue.

#### 2.0 Overview of the regulatory strategy

A marine NWA to protect the marine habitat of the largest and most diverse seabird colony in Pacific Canada will be established in the context of a marine ecosystem-based management approach. The vision and goals for this area are consistent with the CWA and the Regulations and take into account the broader regional context within which the proposed marine NWA is situated. The vision is for a marine National Wildlife Area around the Scott Islands that conserves seabird populations as a vital part of a healthy marine ecosystem that also sustains the socio-economic and cultural values of present and future generations.

The current recommended boundary for the proposed NWA was developed using the best available information on seabird distributions and habitat as well as consideration of socio-economic information and integrated marine planning processes for this region. The proposed marine NWA consists of approximately 11 546 km² of an exclusively marine area that does not include the terrestrial portions of the Scott Islands, which are provincial protected areas.

Consultations with a steering committee and an advisory group were instrumental in providing guidance on the development of the regulatory strategy. The Steering Committee consists of

<sup>&</sup>lt;sup>1</sup> Environment Canada anticipates that the name of the proposed National Wildlife Area will be changed to reflect the cultural heritage of the First Nations in this area. The "Scott Islands" label will be used as a placeholder until a formal name is selected.

representatives from five federal agencies, the province of British Columbia, and the Quatsino and Tlatlasikwala First Nations. The Advisory Group consists of representatives of regional and local government, the fisheries and shipping sectors, environmental non-governmental organizations, and the tourism and non-renewable energy sectors.

The regulatory strategy proposes that the administration of activities such as fishing and marine safety and transportation within the boundaries of the NWA remain under the authority of Fisheries and Oceans Canada (DFO) and Transport Canada, respectively. Environment Canada will develop agreements with these departments—using a collaborative approach to the analysis, management, monitoring and enforcement of regulations<sup>2</sup> regarding activities within this marine NWA—to meet the conservation objectives for the area.

Upon designation of the Scott Islands NWA the Minister of the Environment will authorize, through public notice, existing activities as they are currently managed. Proposed new activities that do not benefit wildlife and its habitat or are inconsistent with the purpose for which the protected area was established will be evaluated based on guidance from the management plan, the best available information and the precautionary approach. Any proposals for new activities within the NWA boundaries will be examined in collaboration with the federal departments that have regulatory authority over these activities.

The NWA designation will significantly contribute to the 2020 global target set by the Convention on Biological Diversity (CBD)<sup>3</sup>, which Canada ratified in 1992, to reach at least 10% of coastal and marine areas conserved through systems of protected areas<sup>4</sup>. Canada currently protects 0.88% of its oceans,<sup>5</sup> including 2.8% of Canada's Pacific marine waters. The recommended boundary for the proposed Scott Islands NWA would increase the area under protection in Canada's Pacific marine waters from 2.8% to 5.3%.

#### 3.0 Authority

The CWA, passed in 1973, empowers the minister to carry out activities to promote and support wildlife research, conservation and interpretation (subsection 4(2)). Public lands subject to the Act may be designated as an NWA to ensure protection of vital habitat for bird and other wildlife species. The CWA was amended in 1994 to clarify that the Governor in Council can establish protected marine areas in any area of the sea that forms part of the internal waters, territorial seas or exclusive economic zone of Canada. Subsection 2(3) of the CWA, which gives the authority to the Minister of Environment Canada to designate an NWA, is clear that "...nothing in this Act shall be construed so as to abrogate or derogate from any existing aboriginal or treaty rights of the Aboriginal peoples of Canada under section 35 of the *Constitution Act*, 1982."

The process for creating an NWA involves amending Schedule 1 of the Regulations to include the name and boundary description for the NWA. The CWA (subsection 4(3)) stipulates that the concurrence of other ministers who administer public lands, including marine areas, is required

<sup>&</sup>lt;sup>2</sup> Regulations are meant to include rules, conditions, procedures and restrictions as prescribed by agencies with the legal authority over the conduct of an activity.

<sup>&</sup>lt;sup>3</sup> Strategic Plan for Biodiversity 2011–2020, Convention on Biological Diversity tenth meeting of the Conference of the Parties 2010.
<sup>4</sup> A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values (http://www.iucn.org/about/work/programmes/pa/pa\_what/).

<sup>5</sup> Canadian Council on Ecological Areas. November 18, 2011. Conservation areas reporting and tracking system (http://www.ccea.org/en\_cartsreports.html#publication).

in order for the Minister of the Environment to regulate activities within an NWA. The CWA is administered by the Canadian Wildlife Service under the authority of the Minister of the Environment. There are currently 54 established NWAs in Canada, which protect approximately 988 000 hectares of habitat.

Two additional federal Acts provide further regulatory authority over activities that may have negative consequences for wildlife species anywhere in Canada, including within the proposed Scott Islands NWA. The purpose of the *Migratory Birds Convention Act, 1994* (MBCA) is to protect and conserve migratory birds—as populations and as individual birds—and their nests. The MBCA protects 10 of the 12 seabird species breeding on the Scott Islands. The other 2 breeding species are protected by the British Columbia *Wildlife Act.* The MBCA also covers some other migratory bird species nesting on the Scott Islands, as well as significant seabird species such as albatrosses that nest elsewhere but may occur in the NWA at times.

The purpose of the *Species at Risk Act* (SARA) is to prevent wildlife species from being extirpated or becoming extinct; to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity; and to manage species of special concern to prevent them from becoming endangered or threatened. Under the general prohibitions sections of the Act (sections 32 and 33), with respect to species listed as extirpated, endangered or threatened, it is an offense to kill, harm, capture or take an individual; possess, collect, buy, sell or trade an individual or its part or derivative; and damage or destroy the residence of one or more individuals.

#### 4.0 Background and rationale

#### 4.1 Geographical location

The Scott Islands are a group of five small islands and numerous islets off the northern tip of Vancouver Island, British Columbia (BC) (see Figure 1). The largest islands, Lanz and Cox, are nearest the coast, about 10 km off Cape Scott. The three smaller islands consist of Beresford, Sartine and Triangle islands. Triangle Island is the farthest out from Cape Scott, at about 45 km. The land area and the foreshore of all five islands are protected by the Province of British Columbia: Lanz and Cox Islands Provincial Park, Beresford Island Ecological Reserve, Sartine Island Ecological Reserve and Anne Vallee (Triangle Island) Ecological Reserve. The provincial park is zoned for wilderness conservation, where use level is low and facilities and services are not provided. The Province has closed the ecological reserves to the public to protect the breeding birds and their nesting habitat, but scientific research for the purposes of seabird conservation is allowed through permit.

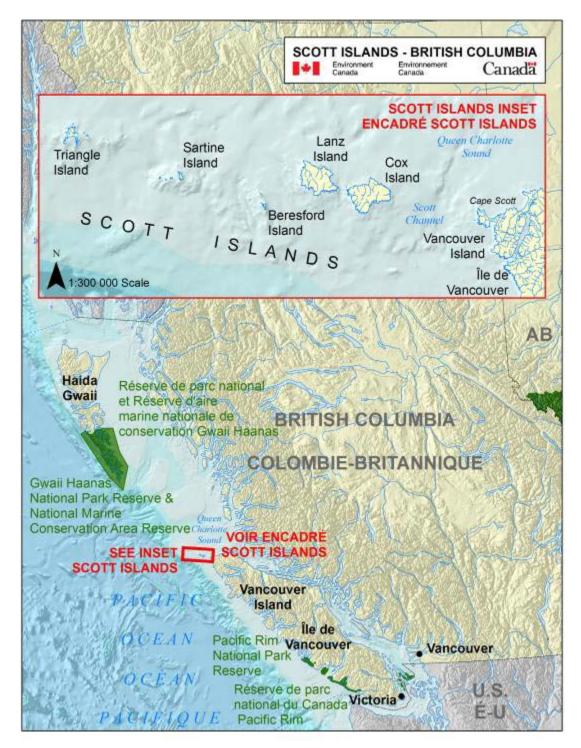


Figure 1. Geographical location of the Scott Islands

#### 4.2 Importance for seabird and marine ecosystem conservation

The marine area around the Scott Islands has been identified as an Ecologically and Biologically Significant Area in the Pacific North Coast Integrated Management Area (PNCIMA), and an Important Bird Area by BirdLife International. The Scott Islands support the highest concentration of breeding seabirds in the Canadian Pacific, and are the site of the most intensive seabird research in Canada. Information from this area provides the bulk of the scientific knowledge about seabirds and their environment on the Pacific Coast. About 40 percent of the seabirds that breed in British Columbia nest on the Scott Islands, including about half of the world's Cassin's Auklet, 90% of Canada's Tufted Puffin, 95% of Pacific Canada's Common Murre and 7% of the global Rhinoceros Auklet population. Other species of conservation importance breed on the islands and use large nearby ocean areas for feeding, including the Fork-tailed Storm-petrel and Leach's Storm-petrel. The Scott Islands breeding seabird populations were previously estimated at approximately 2.2 million; almost 2 million of these were Cassin's Auklet. Since those estimates were made in the late 1990s, Cassin's Auklet and Common Murre have declined significantly, suggesting a total breeding population of all species of about 1.4 million. Work to assess trends in populations is ongoing.

The effects of climate variability are having an impact on seabirds in this area, as their food availability, survival and reproduction vary with changing ocean conditions. For example, copepods essential for successful reproduction of Cassin's Auklet are available for longer periods in years having cold ocean temperatures, resulting in larger Cassin's chicks. Ocean conditions that provide high primary productivity benefit the Pacific Sand Lance, resulting in successful reproduction in Rhinoceros Auklet.

The marine ecosystem surrounding the Scott Islands also attracts millions of seabirds that do not breed in the area, some of which may travel thousands of kilometres across the Pacific. Two long-distance migrants are globally at risk: the Black-footed Albatross (endangered) and the Sooty Shearwater (near-threatened). Others are listed under Canada's *Species at Risk Act:* the Short-tailed Albatross (threatened) and the Pink-footed Shearwater (threatened). Species at risk that nest elsewhere in BC and may be found in these waters are the Marbled Murrelet (threatened), and the Ancient Murrelet (special concern).

The Triangle Island rookery of Steller Sea Lions (special concern) is currently Canada's largest colony and the second-largest in the world. After being extirpated from BC in the 19th century, Sea Otters (special concern) are beginning to re-colonize the area, which likely represents high-quality habitat for this species. <sup>6</sup>The area also provides habitat for many species of marine mammals, such as the Grey Whale (special concern), Humpback Whale (threatened), Blue Whale (endangered) and three distinct populations of Killer Whale (two threatened, one special concern).

Fish and marine invertebrates also utilize the area extensively throughout their life history. Groundfish species in the area include various rockfish, Pacific halibut, lingcod, sablefish, Pacific hake and soles. All five species of BC salmon commercially fished, are found in the waters around the Scott Islands. Most food items for the seabirds are small pelagic fish species such as the Pacific sand lance, and marine invertebrates such as the copepod *Neocalanus*.

<sup>&</sup>lt;sup>6</sup> Scott Islands Marine Wildlife Area Study Area – An Ecosystems Overview Report. 2007. K. Fort, K Amey and M. Dunn. Environment Canada Technical Report Series Number 427. 143 p

#### 4.3 Socio-economic considerations

The region is the ancestral home of the Tlatlasikwala First Nation and the Quatsino First Nation, and holds important cultural and spiritual significance for these First Nations. A traditional knowledge and use study inventoried 38 documented ethno-historic sites and 14 archaeological sites within the Scott Islands and the surrounding waters. The data compiled for this project indicate that the Scott Islands and surrounding marine areas were, and continue to be, significantly important to First Nations peoples.

The area is also valued by residents of North Vancouver Island and others for its fisheries resources, marine transportation and marine ecosystem values. The islands are located within the Mount Waddington Regional District (MWRD), which, according to the 2011 Census of Canada, had a population of 11 506. A study<sup>8</sup> of the importance of private-sector marine-based activities for the local economy showed that, in 2009, \$48 million in wages and benefits, as well as 1,160 person-years' employment, were generated within the area. Aquaculture, marine recreation, commercial fisheries and marine transport contributed 40, 27, 17 and 15% respectively in wages earned.

There is currently no mineral or oil and / or gas exploration and / or development activity in the area proposed for the Scott Islands NWA, although there are potential, but unproven, resources in the area. Four companies currently hold a total of 37 oil and gas tenures wholly or partially within the proposed marine NWA boundary. The oil and gas potential estimated by the Geological Survey of Canada is promising, although there has been minimal opportunity to confirm the potential given a 1972 federal moratorium on exploration and development in the offshore waters of western Canada. According to the Geological Survey of Canada, there are economically valuable minerals within the area, however there is not the capacity to extract offshore minerals at this time.

Several marine planning initiatives are underway on the Pacific Coast: these include implementing Canada's Oceans Strategy, the Canada-BC Marine Protected Area Network Strategy, the Pacific North Coast Integrated Management Area (PNCIMA) process and the Marine Planning Partnership for the Pacific North Coast (MaPP). Collectively these initiatives should contribute to the effective integrated management of marine resources, and to a network of marine protected areas in this region. The management plan for the proposed NWA will be developed while taking into account on-going integrated management and marine protected area network planning.

#### 4.4 Threats

One of the primary goals of designating the Scott Islands NWA is to mitigate the risk of adverse effects on the breeding productivity and survival of seabirds resulting from human activities. Whereas the current activities are not known to cause significant harm to seabirds, the regulatory authority of the Minister over this marine area will ensure that future threats will be prevented or mitigated appropriately.

<sup>&</sup>lt;sup>7</sup> Quatsino and Tlatlasikwala First Nations Traditional Knowledge And Use Study: Canadian Wildlife Service Proposed Marine National Wildlife Area Around The Scott Island Archipelago, BC. 2011. N. Collard, B. Evans, R. Chata and H. Odwak. Unpublished report prepared for Environment Canada. 52 p.

8 The Marine Economy & the Regional District of Mt. Waddington in B.C. 2011. Unpublished report prepared by GS Gislason &

Associates Ltd for Environment Canada. 45 p.

Net Economic Cost Analysis of Designation for Scott Islands Marine National Wildlife Area. Report, December 2011.

#### 4.4.1 Oil and pollution

It has been well documented that oil, whether in large or small amounts, can kill seabirds. Birds may be killed by ingesting oil while attempting to clean themselves, or by loss of insulation resulting from the effects of oil on their feathers. Small amounts of oil that are invisible to people may be enough to affect and kill seabirds. One of the key objectives of the marine NWA is to minimize the potential for oil or other similar pollutants to enter the water.

Global and national regulations are in place to minimize discharges from ships and boats, resulting in significant reductions in discharge of oil and pollution in recent decades. It has been shown, however, that a small proportion of vessel operators continue to be non-compliant with regulations. Although discharges of waste oil from vessels tend to be smaller and less noticeable than larger catastrophic oil spills, the cumulative impact is much greater at the global scale.

There have been no catastrophic oil spills, and there are no known natural seepages, in the vicinity of the proposed NWA. Nevertheless, sampling by aerial surveillance on the Pacific coast from 1997 to 2010 detected a total of 471 oiling incidents within near-shore and offshore waters, or about 33 per year. Three of the incidents were in the vicinity of the proposed NWA. The rate of surveillance within or near the NWA, however, is low, and it is estimated that less than 1% of occurrences would be detected. Additionally, carcasses of birds affected by oiling are unlikely to be found on this region's beaches due both to the prevailing winds blowing birds offshore and to the rugged, sparsely populated coastal areas. There is currently no information to assess environmental effects resulting from past events in the vicinity of the NWA.

#### 4.4.2 Fishing of seabird forage species

The Scott Islands and the surrounding marine area include nationally important seabird breeding and foraging habitats. Seabirds may eat a wide variety of items. In this area, key forage species are those needed to feed seabird chicks, and those forming a significant part of the diet. While there are no existing or planned fisheries for the key seabird food species, such as Pacific sand lance and krill, there is potential for future fisheries to target such species. Information suggests that there is insignificant bycatch of seabird forage species in current fisheries in and around the proposed NWA. Fisheries on forage species elsewhere, however, have been linked to seabird population declines.

#### 4.4.3 Seabird bycatch

Study has shown that bycatch of albatross and gull species occurs in longline fisheries within the proposed NWA, and was shown to be under-reported. <sup>10</sup> Environment Canada will continue to work with DFO and the fishing sector to minimize bycatch, improve reporting and sample caught birds, within a viable fishing industry.

<sup>&</sup>lt;sup>10</sup> Unpublished CWS information, based on DFO data.

#### 4.4.4 Other concerns

Concerns have been expressed that bottom-trawling may be affecting various forms of marine life that rely on bottom habitats. Once the NWA is established, one of the research priorities will be to investigate the relationships between bottom-trawling and marine life, including potential effects on the ecosystem that supports seabird forage and other marine values.

Activity from offshore oil and gas exploration development could result in impacts to seabirds. These include chronic oil pollution, oil spills during extraction or transport, and bird collisions with oil platforms.

There is potential for renewable energy development within the proposed NWA. Wind energy developments have the potential to affect seabirds through displacement of habitat, collisions with turbines or disturbance from construction activities.

Regulation of activities in the immediate vicinity of the islands will ensure that the risk of predators reaching the islands, and devastating the nesting colonies, is minimized. The seabird species on the Scott Islands nest on the ground or in burrows. Ground or burrow nesting seabirds are very vulnerable to predation from mammal predators, which very often eliminate or drastically reduce populations of seabirds. In some other areas, rats have reached nesting islands from ships, either by jumping off or by being deposited from disabled ships or spilled cargo. While introduced raccoons and mink have eliminated seabirds from Lanz and Cox islands, the other nesting islands in the Scott Island group are still predator-free.

Marine debris has been identified as a growing concern globally, in particular the persistence of plastics in the marine environment and its effects on marine wildlife. Marine debris is present on the Scott Islands themselves, however the nature and extent of plastic debris in the marine waters and its effect on wildlife in the proposed NWA have not been investigated to date.

All threats, both current and future, will need to be examined in the context of climate change and its effects on this marine ecosystem. Climate change may impact seabird populations and other marine values through changes in the marine ecosystem. These changes jeopardize the capacity of wildlife and marine habitats to withstand impacts from human activities. One of the research priorities will therefore be to improve our understanding of the cumulative effects of environmental change and human activities on seabirds and their habitat.

#### 4.5 Selection criteria for candidate National Wildlife Areas

Environment Canada has developed criteria for selecting NWAs. First, the proposed Scott Islands NWA supports the highest concentration of breeding seabirds on Canada's Pacific coast, including about half of the world's Cassin's Auklet, 90% of Canada's Tufted Puffin, 95% of western Canada's Common Murre, and 7% of the global Rhinoceros Auklet population. These percentages clearly exceed the threshold criteria of 1% of the Canadian population of these species. Second, 5 species of birds and 19 other species listed under SARA are also found in this area. Finally, the area is a unique wildlife habitat: the waters that surround the Scott Islands include the transition zone between the Alaska and California currents, which leads to conditions favorable to very high marine productivity. These characteristics contribute to exceptional conditions both for seabirds and commercial fisheries.

#### 5.0 Regulatory options

#### 5.1 Protected area options

The federal government has at its disposal a number of regulatory tools to protect marine ecosystems. The choice of the most appropriate instrument is driven by the objectives for the marine area around the Scott Islands. Objectives were developed which center on (1) the conservation and protection of the natural habitats, ecosystem linkages and marine resources that support seabird populations nesting on the Scott Islands; (2) the mitigation of the risk of adverse effects of human activities on the breeding productivity and survival of seabirds; (3) the recognition that other agencies have authority over the management of activities in this marine environment, which also sustains socio-economic and cultural values; and (4) the importance of understanding the marine ecosystem and the socio-economic and cultural values to inform management of the area.

Three federal departments have regulatory tools aimed at protecting marine ecosystems. National Marine Conservation Areas (NMCAs), administered by Parks Canada Agency, are established to protect and conserve representative marine areas in each of the country's 29 bioregions. NMCAs are established to represent a marine region and to demonstrate how protection and conservation practices can be harmonized with resource use in marine ecosystems. Hence, this tool does not have the appropriate focus on the protection of this key habitat area for migratory birds and the forage species they depend on.

Fisheries and Oceans Canada uses the *Oceans Act* Marine Protected Area (OA MPA) designation to complement measures within an integrated management framework and sustainable use of oceans space. OA MPAs can be established for a number of different purposes and require regulations to be written for each area. The protection mandate of Fisheries and Oceans Canada, however, is to conserve and protect fish, marine mammals, and their habitats; unique areas; areas of high productivity or biological diversity.

Environment Canada can protect marine habitat using Migratory Bird Sanctuaries (MBSs). These focus on the protection of birds, nests and eggs where and when the birds themselves are present in significant numbers, rather than on habitat essential to the long-term health of populations. Environment Canada's NWAs, however, provide the most appropriate framework for conservation and research where the focus is both on seabirds and on the foraging habitat that is essential to support their populations. NWAs focus on habitat of key importance to migratory birds, to wildlife or ecosystems at risk, and rare or unique wildlife habitat. When complemented by the collaboration of other departments regulating activities in the marine environment, a marine NWA is the most suitable long-term mechanism to meet Environment Canada's conservation and research obligations and the objectives for the Scott Islands. Environment Canada will develop agreements with these departments—using a collaborative approach to the analysis, management, monitoring and enforcement regarding activities within this marine NWA—to meet the conservation objectives for the area.

#### 5.2 NWA recommended boundary

The current recommended boundary for the proposed NWA was developed using the best available information on seabird distributions and habitat as well as consideration of socio-economic information and integrated marine planning processes for this region. The

resulting recommended boundary reflects a balance between the conservation, social and economic values in the area. The proposed marine NWA consists of approximately 11 546 km² of marine area (Figure 2). The final boundary will be further informed by consultation on the Regulatory Strategy.

The original study area included approximately 25 810 km² of marine area, as outlined in the Ecosystems Overview Report. A technical workshop was held in December 2010 to solicit and discuss information relevant to identifying boundaries for the NWA. Additional information provided by experts within Environment Canada was used internally to review and discuss potential boundaries. Subsequently, the various data were used to develop a preliminary ecological concept, approximately 16 110 km² in size, encompassing most of the documented marine habitats used by seabirds nesting on the Scott Islands. This preliminary ecological concept was provided to the Steering Committee and Advisory Group for input. Further review of the information on seabird habitat use, and consideration of comments received from the Steering Committee and Advisory Group resulted in a boundary option including approximately 11 925 km² of marine area. Analysis of updated seabird information (to 2010), resulted in the current recommended boundary of approximately 11 546 km² of marine area, which is 45% of the size of the original study area.

As a result of the consultations and continuing technical analysis, the current recommended boundary option encompasses significant habitats for seabirds nesting on the Scott Islands:

- Most of the marine areas in Canada's Pacific with significant use by Tufted Puffin during the breeding season.
- A substantial amount of marine area with significant use by Cassin's Auklet and Rhinoceros Auklet during the breeding season.
- Some of the habitat used by Common Murre when migrating in summer to other seasonal habitats, determined by satellite telemetry, is included. Male Common Murre and chicks migrate by swimming, as chicks are unable to fly at this time. Migrating chicks are also unable to forage, so the adult catches food to feed them. Consequently, the migration routes are also important foraging habitats.
- Ocean areas used by seabird species nesting on the Scott Islands, determined over 20 years of observations at sea, are included. Where there are no telemetry data, these areas are defined as an approximately 65 km radius from Triangle Island, which is the mean foraging distance of Cassin's and Rhinoceros Auklets, determined by the radio-telemetry studies.
- An area for which very detailed bathymetric mapping is available, showing likely habitat for Pacific sand lance, a key forage fish important to Rhinoceros Auklet and other fisheating seabirds. This habitat can be described as shallow-water areas, less than 100 m deep, on Cook Bank.
- Near-shore Scott Islands habitats, which breeding bird species use early in the season, and which include some near-shore radio telemetry locations of Cassin's Auklet, Rhinoceros Auklet and Common Murre.
- Key bathymetric features that support marine foraging habitat for seabirds, in particular Cook Bank and the shelf break.

Several factors were considered in reducing the area covered by the preliminary ecological concept to produce the current recommended boundary. Consultations with the Steering Committee and Advisory Group suggested that the area was too large and overlapped with

<sup>&</sup>lt;sup>11</sup> Fort, K., K. Amey and M. Dunn. 2006. *Scott Islands Marine Wildlife Area Study Area – An Ecosystems Overview Report.* Technical Report Series No. 427. Canadian Wildlife Service, Pacific and Yukon Region, British Columbia.

many economic values. The preliminary ecological concept was reduced to provide more room for other marine planning processes to protect other areas of high conservation value, to reduce overlaps with commercial fishing, and to focus on the most important ocean habitats of seabirds nesting on the Scott Islands. Habitats that cannot be included in the NWA will need to be considered in other marine planning processes, such as the Pacific North Coast Integrated Management Area process or the Canada-BC Marine Protected Area Network Strategy, as well as in normal management activities by agencies such as Fisheries and Oceans Canada.

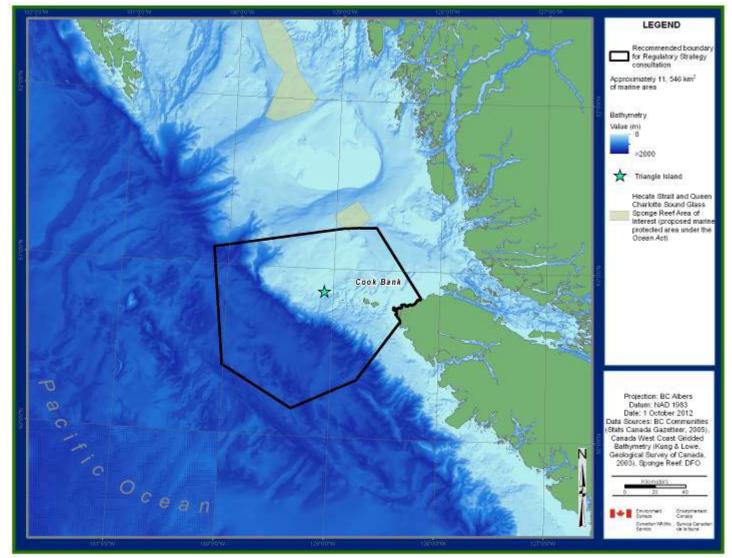


Figure 2. Recommended boundary for Regulatory Strategy consultation

#### 6.0 Management framework for the proposed Scott Islands NWA

This section presents the strategy to be used to manage activities within the proposed boundary of the Scott Islands NWA. This strategy rests on (1) the Regulations, which describe prohibited activities, (2) the authorities and responsibilities of other ministers who have administrative authority over the area, and (3) the policies and criteria that guide the authorization of activities under specific terms and conditions while considering the purpose, goals and objectives (see Appendix I) for establishing the NWA.

#### 6.1 Vision and goals

A marine NWA to protect the marine habitat of the largest and most diverse seabird colony in Pacific Canada will be established in the context of a marine ecosystem-based management approach. The vision and goals outlined below are consistent with the CWA and the Regulations and take into account the broader regional context within which the proposed marine NWA is situated. The goals are intended to guide the development of specific and measurable objectives through the management planning process.

Vision: A marine National Wildlife Area around the Scott Islands that conserves seabird populations as a vital part of a healthy marine ecosystem that also sustains the

socio-economic and cultural values of present and future generations.

Goal 1: The natural habitats, ecosystem linkages and marine resources that support seabird populations nesting on the Scott Islands are protected and conserved.

Goal 2: The risk of adverse effects on the breeding productivity and survival of seabirds resulting from human activities is mitigated in keeping with the conservation and

protection objectives.

Goal 3: The marine NWA is managed in a manner that recognizes the authorities for

management of human activities in the marine environment and takes into account the socio-economic and cultural values sustained by the marine

ecosystem.

Goal 4: Understanding of the marine ecosystem and socio-economic and cultural values

informs management of the marine National Wildlife Area.

#### 6.2 Regulatory authority over the proposed Scott Islands NWA

This regulatory strategy proposes that the administration of activities such as fishing and marine safety and transportation within the boundaries of the NWA remain under the authority of Fisheries and Oceans Canada and Transport Canada respectively. Environment Canada will develop agreements with these departments—using a collaborative approach to the analysis, management, monitoring and enforcement of regulations of activities within this marine NWA — to meet the conservation objectives for the area.

It is generally the case that in NWAs administered by the Minister of the Environment, human activities are either prohibited or mitigated for the benefit of wildlife and the ecosystem they rely upon, through the implementation of the Regulations. Section 8 of the Regulations also provides the authority to prohibit entry into NWAs.

The CWA provides that in an NWA, the Minister of the Environment may authorize an activity that is normally prohibited, through the issuance of permits or the publication of notices in local newspapers or posted at the entrance of any wildlife area or on the boundary of any part thereof. Authorizations may be issued only if the Minister is of the opinion that the activity is (1) scientific research relating to wildlife or habitat conservation, or (2) benefits wildlife and wildlife habitat or will contribute to wildlife conservation, or (3) is otherwise not inconsistent with the purpose for which the NWA was established and is consistent with the most recent management plan for the NWA. Terms and conditions governing the activity may be added to the authorizations where necessary for protecting and mitigating the impact of the activity on wildlife and wildlife habitat.

The process for regulating two of the most important current activities, commercial fishing and shipping, will not change. Therefore, the participation of Environment Canada in decision making will not alter the process or cause unnecessary burdens on stakeholders subject to the regulations. DFO and Transport Canada will continue to regulate fishing and shipping, respectively, in the proposed Scott Islands NWA in cooperation with Environment Canada and in a manner consistent with the conservation objectives for the Scott Islands NWA. Upon designation of the Scott Islands NWA, the Minister of the Environment will authorize, through public notice, existing activities as they are currently managed.

For the purpose of ensuring public safety, all activities related to the construction, installation, management and supply of lighthouses and navigation aids managed by Fisheries and Oceans Canada - Coast Guard, or individuals and organizations mandated by them for that purpose, will be authorized.

Under the recommended boundary, the Scott Islands NWA will encompass marine areas within internal waters, the territorial sea and the exclusive economic zone of Canada. While the extent of federal jurisdiction differs somewhat in the exclusive economic zone, this will have a negligible impact on the extent of the regulatory powers and the mechanisms by which activities are managed and regulated.

# 6.3 Management approach for authorization of existing activities at time of designation

The management approach for existing activities occurring within the proposed boundary for the Scott Islands NWA is discussed below and summarized in Table 2.

#### 6.3.1 Vessel passage

While the CWA provides authority to Environment Canada for the management of NWAs in marine areas, Transport Canada would continue to regulate and manage vessel passage and shipping activity within the NWA. Vessel passage will be authorized in the marine NWA through public notice and be subject to the *Canada Shipping Act* and the *Regulations for the Prevention of Pollution from Ships and for Dangerous Chemicals.* In addition, the *Guidelines for the Operation of Cruise Ships under Canadian Jurisdiction* and the *Coasting Trade Act* continue to apply for the NWA. Marine transportation and vessel safety are

<sup>&</sup>lt;sup>12</sup> The double negative is used to indicate that activities which do not benefit wildlife or conservation may still be authorized if they do not have negative impacts on wildlife and their habitat and are considered "neutral" in that respect.

managed by Transport Canada and the Canadian Coast Guard (Fisheries and Oceans Canada). Environment Canada will continue to address known or potential risks to seabirds from marine vessel traffic, both within and outside the proposed NWA, via collaboration with these agencies and through relevant marine planning processes. Environment Canada also recognizes that vessel passage around Cape Scott is critical to the social and economic well-being of northern Vancouver Island. Maintaining access to this shipping route and ensuring marine safety will remain a management priority.

Additional proposed measures specific to the NWA include the following:

- Publication of Notice to Mariners (NOTMAR) to advise vessels transiting the NWA about the importance of the area for seabirds, its sensitivity to pollution, and enhanced surveillance.
- Increased support for the Marine Aerial Reconnaissance Team and Environment Canada's Integrated Satellite Tracking of Pollution Program for surveillance and enforcement of regulations, in particular for the discharge of oil or oily waste.
- A prohibition on the anchoring of vessels greater than 400 gross tonnage within a 1 nautical mile radius of Triangle, Sartine and Beresford islands, except where specifically authorized for fishing, safety or research, and when consistent with the emergency measures in the regulatory strategy.
- Assess the need to enhance protection of seabirds and the marine ecosystem, where and when required, through the designation of special areas<sup>13</sup> or particularly sensitive sea areas<sup>14</sup> under the International Maritime Organization.
- Continued support for the Birds Oiled At Sea program, led by Environment Canada, which develops science to support effective management of risks from oil on seabirds.

#### 6.3.2 Emergency measures

For the management of emergencies at sea, Environment Canada will collaborate with the Canadian Coast Guard and Transport Canada to ensure that the regulations and management goals for the NWA are considered in operational activities.

- Safe anchorage for fishing and coastal tug and barge traffic where there is no risk of release of fuel or other contaminants will be authorized.
- The marine NWA will not be considered by Transport Canada as a pre-designated place of refuge where a ship in need of assistance can stabilize its condition.
- Environment Canada will be consulted for advice on handling of distressed ships near or within the NWA, as soon as possible without creating hazardous delays.
- Any disabled vessels that are leaking fuel, other contaminants or cargo, or are on fire, will be towed via the least environmentally harmful route, to a designated place of refuge to undertake repairs.

<sup>&</sup>lt;sup>13</sup> The International Convention for the Prevention of Pollution from Ships (MARPOL) defines certain sea areas as "special areas" in which, for technical reasons relating to their oceanographic and ecological condition and to their sea traffic, the adoption of special mandatory methods for the prevention of sea pollution is required. (http://www.imo.org/OurWork/Environment/PollutionPrevention/SpecialAreasUnderMARPOL)

A Particularly Sensitive Sea Areas is an area that needs special protection through action by IMO because of its significance for recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities. (http://www.imo.org/OurWork/Environment/PollutionPrevention/PSSAs)

- In an effort to protect the shoreline and coastal waters from a potential risk of pollution the Tanker Exclusion Zone<sup>15</sup> will continue to apply in the NWA.
- Future strategies for management of shipping incidents will consider the availability of seagoing tugs able to handle large ships.
- Environment Canada's capacity to participate in programs for response to catastrophic spills will be improved.

#### 6.3.3 Fishing

Fishing is regulated under the *Fisheries Act* and its associated regulations administered by Fisheries and Oceans Canada. While the CWA provides authority to Environment Canada for the management of protected marine areas, DFO would continue to regulate and administer fisheries within the NWA. Environment Canada and DFO will develop a collaborative approach and agreement regarding analysis, management, monitoring and enforcement of fisheries within this marine NWA to ensure consistency with conservation objectives. Specific guidelines, best practices and license conditions will be developed over time and as required. Fishing activities in the marine NWA will also be managed in accordance with the Sustainable Fisheries Framework policies as a minimum, with any added levels of protection as defined in subsequent marine NWA management plans.

Existing fishing activities (Table 1) occurring in the marine NWA at the time of designation will be authorized through public notice in the appropriate Integrated Fisheries Management Plan, subject to applicable licenses and permits issued under the *Fisheries Act*. All other fishing activity in the NWA will be prohibited until it can be reviewed by EC and DFO (see section 6.4.2). The following measures, consistent with an adaptive management approach, are also proposed for the management plan for the marine NWA:

- Environment Canada and DFO will ensure that monitoring, enforcement activities and license conditions are adequate to support the existing mandatory requirement that seabird bycatch avoidance devices be used in 100% of commercial longline, and other hook fisheries where needed, to respond to documented bycatch issues. Environment Canada and DFO, as part of the long-term management of the NWA, will regularly review compliance monitoring results of the use of these devices to ensure that they are effective in minimizing seabird encounters and mortality. If it is demonstrated that current mitigation measures are not sufficient, other mitigation measures will need to be developed and implemented.
- Environment Canada and DFO, in collaboration with stakeholders, will develop a
  process to evaluate the impacts of fishing practices on habitat important for seabird
  foraging. Practices that are found to pose an unacceptable risk of impact to habitat
  important for seabird foraging will be identified for mitigation through the appropriate
  Integrated Fisheries Management Plan. It is anticipated that this work will be conducted
  by 2018, when the second iteration of the marine NWA management plan is to be
  prepared. New mitigation measures, if needed, could restrict certain practices or
  impose new measures or specific conditions on fishing licenses.

<sup>&</sup>lt;sup>15</sup> A tanker exclusion zone (TEZ) has been established off the Pacific coast of Canada. The purpose of the TEZ is to keep laden tankers west of the zone boundary in an effort to protect the shoreline and coastal waters from a potential risk of pollution. The zone boundary follows the Canada/Alaska border to a point approximately 115 miles west of Langara Island, thence southward to approximately 73 miles southwest of Cape St. James, thence to 40 miles southwest of Amphitrite Point and thence due east to just off Cape Flattery. Loaded TAPS crude oil tankers transiting along the Pacific coast are requested to remain seaward of this zone boundary. (http://www.ccg-gcc.gc.ca/e0003909)

- Environment Canada will produce information on the importance of conservation within the NWA for distribution to sport fishers and commercial guides.
- The existing Rockfish Conservation Area within the recommended boundary will be maintained, and fishing restrictions will continue to be applied by DFO.

Table 1. Currently occurring fisheries in the proposed Scott Islands National Wildlife Area. These fisheries currently occur in the proposed National Wildlife Area. The level of effort and catch varies from low to significant among these fisheries.

Category of Fishery	Species	Gear Type
Sport-fishing	Salmon (species not identified) Groundfish Crab	Hook and line fishery  Hook and line fishery  Trap fishery
Commercial salmon	Chinook salmon Pink salmon Chum salmon Coho salmon Sockeye salmon	Troll – hook and line fishery  Troll – hook and line fishery
Commercial – fish other than salmon	Sablefish longline Sablefish trap Rockfish Groundfish (multiple species identified in Integrated Fisheries Management Plans) Schedule II (groundfish) Halibut Albacore Tuna Pacific Sardine	Hook and line fishery Trap fishery Hook and line fishery Trawl net fishery Hook and line fishery Hook and line fishery Hook and line fishery Purse seine
Commercial – invertebrates	Red sea urchin Prawn	Picked by divers  Trap fishery

#### 6.3.4 Recreation

Private recreational boating and fishing, and commercial tourism operations, including sport fishing, will be authorized in the marine NWA through public notice and subject to laws, regulations and codes of practice of general application in coastal waters, under the authority of agencies such as Transport Canada, Fisheries and Oceans Canada, Environment Canada and the Canadian Coast Guard. However, boats will be prohibited within 100 m of any seabird nesting colony on Triangle, Sartine and Beresford islands. Such restriction is important in order to minimize chances of harassment of nesting seabirds. Management measures for outdoor recreation on the Provincial Protected Area lands (Lanz and Cox Islands Provincial Park and Beresford, Sartine and Anne Vallee Ecological Reserves) are specified by the BC Ministry of Environment. Public access to the Ecological Reserves is prohibited except under permit from the BC Ministry of Environment, to protect nesting seabirds and their habitat. Recreation activity will be included in the monitoring component of the management plan in order to assess whether specific measures will be required in the future to minimize impacts on seabirds and their habitat in the marine NWA.

#### 6.4 Management approach for new activities proposed following designation

#### 6.4.1 General

As new activities are proposed, they will be reviewed under the CWA to determine if they benefit wildlife and wildlife habitat or whether they are not inconsistent with the purpose for which the protected area was established. This will be evaluated based on guidance from the management plan, the best available information and the precautionary approach. Proposals for new activities may also require review under the *Canadian Environmental Assessment Act*, and be subject to other authorizations. Where review under two or more Acts is required, the processes will be coordinated to be as streamlined as possible.

Potential future activities not currently occurring in the proposed marine NWA include non-renewable resource exploration and development, renewable energy development, fishing for forage species, gill net fishing, dredging, and laying of cable and pipeline. Any proposal for these or other new activities within the NWA boundaries will be examined in collaboration with the authorities with the legislated power to regulate that activity.

#### 6.4.2 New fishing activity

It is possible that new fishing activities will be proposed within the marine NWA. The proposed management approach for new fishing activities is as follows:

- New fishing activities must be reviewed by Environment Canada and DFO to ensure that they are not inconsistent with the purpose for which the NWA was established and consistent with the management plan for the NWA.
- Fishing activities that target any significant seabird forage species, or species used by seabird forage species, will generally be prohibited unless it is demonstrated to be consistent with the conservation objectives for the NWA. Currently there are no commercial fisheries in the proposed NWA on known seabird significant forage species (e.g. Pacific sand lance or Pacific saury) or food for forage fish (e.g. zooplankton).

 Aquaculture is unlikely due to weather and ocean conditions. If proposed, aquaculture would be reviewed in the same manner as any proposed new activity.

#### 6.4.3 Sub-surface resources

Most of the area within the proposed NWA includes offshore oil and gas permits that were issued in the early 1960s, and an exploration licence. Exploration or development is currently not possible due to a federal (1972) and provincial (1989) government moratorium. Should the moratorium be lifted, the permits must first be converted to exploration licences prior to the commencement of any offshore oil and gas exploration and development. A review by an expert panel under the Royal Society of Canada<sup>16</sup> recommended that many additional measures would be required prior to lifting of the moratorium.

There is potential for seabed mineral resources in the NWA. According to the Geological Survey of Canada – Pacific, there are several economically desirable minerals within the Scott Islands proposed boundary. At this time, however, there are no proposals for exploration or development for minerals in the offshore.

Future proposals related to sub-surface resources will be reviewed by Environment Canada and Natural Resources Canada, which has primary responsibility for such resources. While the disposition and regulation of energy and mineral resources will continue to rest with Natural Resources Canada, any proposed activities will also be subject to permitting by Environment Canada to ensure that they are not inconsistent with the purpose for which the NWA was established and consistent with the management plan for the NWA. An agreement between the two departments will be developed to facilitate a streamlined regulatory process.

#### 6.4.4 Renewable energy

There is potential for renewable energy from wind, tide or waves in the proposed NWA. There are three investigative permits for wind energy within the recommended boundary for the NWA, but no proposals for development. Environment Canada and other agencies having responsibility for such resource uses will review future proposals, if any.

#### 6.5 Zoning

It is recognized that the seabirds using the area are only present part of the year and that the marine ecosystem itself shows seasonal cycles in productivity and availability of preferred prey items for the birds. Zoning of specific areas or times of the year is therefore a management tool that will be considered and used where warranted to ensure effective conservation of seabird populations and the marine ecosystem, while mitigating restrictions on activities. The management plan for the NWA can also be used to implement future protection and conservation zones that may be recommended through the Canada-BC MPA Network Strategy.

<sup>&</sup>lt;sup>16</sup>Report of the Expert Panel on Science Issues Related to Oil and Gas Activities, Offshore British Columbia. Royal Society of Canada. 2004.

Table 2. Summary of management approaches for current activities occurring within the proposed boundaries of the Scott Islands National Wildlife Area.

Activity	Proposed restriction	Current regulatory authority	Other applicable legislation	Notification of authorized activities
Vessel passage	No restrictions beyond existing regulations	Transport Canada	<ul> <li>Canada Shipping Act</li> <li>Regulations for the         Prevention of Pollution from         Ships and for Dangerous         Chemicals</li> <li>Migratory Birds Convention         Act, 1994</li> <li>Fisheries Act</li> <li>Guidelines for the Operation         of Cruise Ships under         Canadian Jurisdiction</li> <li>Coasting Trade Act</li> </ul>	Publication of Notice     Notice to Mariners
Anchoring	Anchoring of vessels greater than 400 gross tonnage within a 1 nautical mile radius of Triangle, Sartine and Beresford islands will be prohibited, except where specifically authorized for fishing, safety or research, and when consistent with the emergency measures in the regulatory strategy.	Transport Canada	Canada Shipping Act	Publication of Notice     Notice to Mariners
Discharge or disposal of sewage, grey water, and other hazardous waste (including garbage)	No restrictions beyond existing regulations	Transport Canada Canadian Coast Guard (DFO)	Regulations for the Prevention of Pollution from Ships and for Dangerous Chemicals	<ul><li>Publication of Notice</li><li>Notice to Mariners</li></ul>
Commercial fishing	No restrictions on current fishing activity beyond existing regulations. (see Table 1)	Fisheries and Oceans Canada	Fisheries Act	<ul> <li>Publication of Notice</li> <li>Integrated Fisheries         Management plan     </li> <li>Commercial fishing licenses</li> </ul>

Activity	Proposed restriction	Current regulatory authority	Other applicable legislation	Notification of authorized activities
Commercial fishing: commercial longline and hook and line	No restriction beyond existing regulations  Use of seabird bycatch avoidance devices in 100% of commercial longline fisheries is currently required.	Fisheries and Oceans Canada	Fisheries Act	<ul> <li>Publication of Notice</li> <li>Integrated Fisheries         management plan</li> <li>Commercial fishing licenses</li> </ul>
Recreational fishing and boating; commercial tourism operations	No restrictions beyond existing regulations except for limitation below	Transport Canada & Canadian Coast Guard (DFO)	<ul> <li>Canada Shipping Act</li> <li>Regulations for the Prevention of Pollution from Ships and for Dangerous Chemicals</li> <li>Migratory Birds Convention Act, 1994</li> <li>Fisheries Act</li> <li>Guidelines for the Operation of Cruise Ships under Canadian Jurisdiction</li> <li>Coasting Trade Act</li> </ul>	<ul> <li>Publication of Notice</li> <li>Notice to Mariners</li> </ul>
	Prohibited within 100 m of any seabird nesting colony on Triangle, Sartine and Beresford islands	Transport Canada Canadian Coast Guard (DFO) Fisheries and Oceans Canada	<ul><li>Canada Shipping Act</li><li>Fisheries Act</li></ul>	<ul><li>Publication of Notice</li><li>Notice to Mariners</li></ul>
	EXEMPT	IONS FROM REGULATION	S UNDER THE CWA	
Activities related to public safety, health or national security (includes all activities related to the construction, installation, management and supply of lighthouses and navigation aids)			Authorized by or under another Act of Parliament or activities under the Health of Animals Act and the Plant Protection Act	

#### 7.0 Cost-benefit analysis

A cost-benefit analysis has been undertaken for the proposed Scott Islands NWA designation in accordance with Treasury Board's *Canadian Cost-Benefit Analysis Guide: Regulatory Proposals*. The cost-benefit analysis will inform various regulatory documents, such as the Regulatory Impact Analysis Statement, and Strategic Environmental Assessment. The scope of the cost-benefit analysis is guided by the proposed approach to managing activities (section 6) within the recommended boundary (section 5.2).

#### 8.0 Consultations

#### 8.1 Steering Committee and Advisory Group

The Steering Committee is composed of representatives of federal departments, the Province of BC and First Nations with responsibilities over components of the marine area around the Scott Islands. The Steering Committee operates using commonly developed and agreed-upon terms of reference specifically created for the NWA establishment process. It provides advice and recommendations on the overall establishment process and the development of the cooperative management approach and implementation plan for the marine National Wildlife Area.

The Advisory Group consists of members that represent relevant stakeholders with interests in this marine environment. One or two members represent each sector. Those sectors include local and regional governments, commercial fish harvesting, marine transportation and shipping, non-renewable resources, renewable energy, marine conservation, and marine tourism. The Advisory Group operates using commonly developed and agreed-upon terms of reference specifically created for the NWA establishment process.

Meetings have been held for both the Steering Committee and the Advisory Group. These meetings have resulted in a common foundation of understanding about the rationale and planning process for the marine NWA, terms of reference for the operation of both bodies, and feedback on management goals and objectives as well as on the recommended boundary option for the NWA.

#### 8.2 Federal departments

Environment Canada will consult with federal departments represented on the Steering Committee, as well as other departments, including the Department of National Defence, Aboriginal Affairs and Northern Development Canada, and others as required.

#### 8.3 First Nations

The approach to managing the NWA respects Aboriginal rights, title and self governance, and it works with First Nations to achieve mutually acceptable resource planning and stewardship. Environment Canada will consult with all First Nations groups with interests in the Scott Islands NWA and will work towards a collaborative management approach that respects the rights and interests of First Nations and treaty processes.

Quatsino First Nation and Tlatlasikwala First Nation are members of the Steering Committee, and Environment Canada recognizes that this participation is not intended to replace meaningful consultation on the proposed marine NWA.

#### 8.4 Province of British Columbia

Environment Canada already participates in multiple regional marine conservation planning tables involving other federal government departments and the Province of British Columbia. These include the Marine Protected Areas Implementation Team (Canada—BC), the Oceans Coordinating Committee (Canada—BC), and the Pacific North Coast Integrated Management Area (PNCIMA) Steering Committee (Canada—First Nations—Province of BC).

The management plans pertaining to the Scott Islands breeding colonies under the authority of the BC Ministry of Environment shall remain in effect. Provisions under the BC *Park Act* and *Ecological Reserve Act*, with respect to the permitted uses and access requirements for the Ecological Reserves, and Lanz and Cox Islands Provincial Park, shall apply.

The Province of BC is a member of the Steering Committee and will remain a partner in further consultations through the NWA planning and management processes.

#### 8.5 Regional District of Mount Waddington and the District of Port Hardy

The District of Port Hardy and the Regional District of Mount Waddington have designated members and alternates on the Advisory Group. To date four Advisory Group meetings were held in Port Hardy and two in other locations. Residents on northern Vancouver Island were consulted through a public meeting in 2012. The Scott Islands proposed marine NWA was introduced to the community of Port Hardy at the PNCIMA Advisory Forum on March 3, 2011. A mechanism to ensure continued consultation of the regional district and the district municipality of Port Hardy will be established in a way that best suits their administrations.

#### 8.6 Industry

Most industry sectors with a direct interest in the marine area around the Scott Islands are represented on the NWA Advisory Group. Other formal consultation events have been organized or attended by Environment Canada as required to ensure that comments from all sectors have been fairly heard and considered. Presentations have or will be made to the various fisheries advisory bodies.

#### 8.7 Marine conservation

The marine conservation sector is represented on the NWA Advisory Group by two members and two alternates. Other formal consultation events have been organized or attended by Environment Canada as required to ensure that comments from all sectors have been fairly heard and considered.

#### Appendix I. Conservation Objectives

The vision, goals and objectives outlined below were developed in consultation with the marine NWA Steering Committee and the marine NWA Advisory Group. They are consistent with the CWA and the Regulations and take into account the broader regional context within which the proposed marine NWA is situated. The goals and objectives are intended to guide the development of more specific and measurable objectives that will be developed through the management planning process. Research and monitoring plans will also be developed for the marine NWA.

#### **Preamble**

A marine National Wildlife Area to protect the marine habitat of the largest and most diverse seabird colony in Pacific Canada will be established within the context of other planning processes relevant to the Scott Islands NWA. Ecosystem-based management is an adaptive approach to managing human activities that seeks to ensure the coexistence of healthy, fully functioning ecosystems and healthy, sustainable human communities.

#### Vision

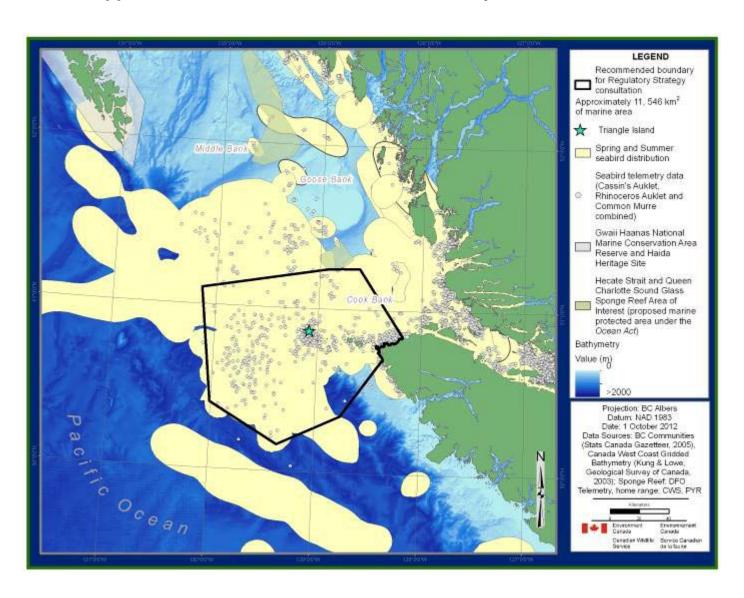
A marine National Wildlife Area around the Scott Islands that conserves seabird populations as a vital part of a healthy marine ecosystem that also sustains the socio-economic and cultural values of present and future generations.

#### Goals and objectives

- Goal 1: The natural habitats, ecosystem linkages and marine resources that support seabird populations nesting on the Scott Islands are protected and conserved.
  - 1A Marine habitats and ecosystem functions important for seabird foraging are protected from harmful disturbance, damage or destruction.
  - 1B Forage species utilized by seabirds are available, within the limits of natural variation, to support viable populations of seabirds nesting on the Scott Islands.
- Goal 2: The risk of adverse effects on the breeding productivity and survival of seabirds resulting from human activities is mitigated in keeping with the conservation and protection objectives.
  - 2A New and existing activities are reviewed based on demonstrated consistency with the management plan, application of effective mitigation measures and best available information.
  - 2B Proactive measures are in place to ensure effective response to catastrophic and chronic spills of oil or any other hazardous materials.
  - 2C Direct mortality of seabirds caused by human activities is minimized through the use of effective mitigation measures.

- Goal 3: The marine NWA is managed in a manner that recognizes the authorities for management of human activities in the marine environment and takes into account the socio-economic and cultural values sustained by the marine ecosystem.
  - 3A Breeding habitats on the Scott Islands are maintained, and where feasible restored, in collaboration with the Province of BC, Tlatlasikawala First Nation and Quatsino First Nation.
  - 3B Surveillance, monitoring and enforcement are implemented in collaboration with other agencies, First Nations and marine users.
  - 3C The social and cultural values of First Nations for the Scott Islands and surrounding marine area are respected.
  - 3D In collaboration with other responsible authorities, support the implementation of recovery strategies, action plans and management plans for species listed under Schedule 1 of the *Species at Risk Act*.
  - 3E Management of the marine National Wildlife Area contributes to the broader marine ecosystem-based management goals for the PNCIMA and the Canada-British Columbia Marine Protected Area Network Strategy.
  - 3F Federal and provincial departments, First Nations, local and regional governments, and marine interest holders are engaged in the ongoing management planning process for the marine National Wildlife Area.
- Goal 4: Understanding of the marine ecosystem and socio-economic and cultural values informs management of the marine National Wildlife Area.
  - 4A Comprehensive research and monitoring programs are enhanced and developed to improve understanding of marine ecosystems and the influence of human activities.
  - 4B Best available information, including science, traditional knowledge, local knowledge and socio-economic information, is applied for adaptive management of the National Wildlife Area.
  - 4C Research and monitoring results are shared to contribute to broader understanding and awareness of marine ecosystem values.

#### Appendix II. Current recommended boundary with seabird data



#### Appendix III. Glossary

**Adaptive management:** An approach to managing complex natural systems that builds on learning—based on common sense, experience, experimenting and monitoring—by adjusting practices based on what was learned. (Bormann et al. 1999. "Adaptive Management". In: *Ecological Stewardship: A common reference for ecosystem management*)

**Biodiversity or biological diversity:** The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems. (*Canadian Biodiversity Strategy*)

**Conservation:** The maintenance of sustainable use of the Earth's resources in a manner that maintains ecosystem, species and genetic diversity and the evolutionary and other processes that shaped them. Conservation may or may not involve the use of resources; that is, certain areas, species or populations may be excluded from human use as part of an overall landscape/waterscape conservation approach. (*Canadian Biodiversity Strategy*)

**Cumulative effects:** The effects on a system caused by an activity which results in an incremental impact in combination with other past, present, and reasonably foreseeable future activities. (PNCIMA)

**Damage:** To cause loss or harm resulting from injury to wildlife and its habitat. (adapted from *Merriam Webster Dictionary*)

**Destroy:** To ruin the structure, existence, or condition of wildlife and its habitat. (adapted from *Merriam Webster Dictionary*)

**Disturbance:** To upset the natural state and the ecological balance of wildlife habitat. (adapted from *Merriam Webster Dictionary*)

**Ecosystem:** The living organisms and the nonliving environment interacting in a particular area. Ecosystems may be defined on many different scales, both large and small. (PNCIMA)

**Ecological integrity:** A term used to describe ecosystems that are self-sustaining and self-regulating. For example, they have complete food webs, a full complement of native species that can maintain their populations, and naturally functioning ecological processes (energy flow, nutrient and water cycles, etc.). (PNCIMA)

**Ecosystem service:** A benefit that people obtain from an ecosystem, including provisioning (e.g., food, water), regulating (e.g., regulation of floods, drought, land degradation, disease), supporting (e.g., soil formation, nutrient cycling), and cultural (e.g., recreational, spiritual, and other nonmaterial benefits) goods and services. (PNCIMA)

#### **Endangered species:**

(a) A taxon is Endangered when the best available evidence indicates that it meets any of the IUCN criteria for endangerment, and it is therefore considered to be facing a very high risk of extinction in the wild. (International Union for the Conservation of Nature, definition for world wide status)

**(b)** Wildlife species that are facing imminent extirpation or extinction (*Species at Risk Act*)

**Enforcement (law):** Enforcement embodies those activities that compel adherence to legal requirements. These activities include inspection and monitoring; investigation of violations; issuance of notices to individuals or businesses to require them to correct improper practices; issuance of tickets for violations; seizure of wildlife, or their parts and products, and any item that may have been used to commit the offence; and prosecution. (Environment Canada)

**Extirpated species:** Wildlife species that no longer exist in the wild in Canada, but exist elsewhere in the world. (*Species at Risk Act*)

#### Habitat:

- (a) In respect of aquatic species, spawning grounds and nursery, rearing, food supply, migration and any other areas on which aquatic species depend directly or indirectly in order to carry out their life processes, or areas where aquatic species formerly occurred and have the potential to be reintroduced; and
- (b) In respect of other wildlife species, the area or type of site where an individual or wildlife species naturally occurs or depends on directly or indirectly in order to carry out its life processes or formerly occurred and has the potential to be reintroduced. (Species at Risk Act)

**Individual:** An individual of a wildlife species, whether living or dead, at any developmental stage and includes larvae, embryos, eggs, sperm, seeds, pollen, spores and asexual propagules. (*Species at Risk Act*)

Marine ecosystem-based management: Ecosystem-based management is an adaptive approach to managing human activities that seeks to ensure the coexistence of healthy, fully functioning ecosystems and human communities. The intent is to maintain those spatial and temporal characteristics of ecosystems such that component species and ecological processes can be sustained, and human well-being supported and improved. (PNCIMA)

**Marine Protected Area:** Any area of intertidal or sub-tidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment. (IUCN)

**Minimize:** To reduce or keep to a minimum. (*Merriam Webster Dictionary*)

**Near threatened:** A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for, or is likely to qualify for, a threatened category in the near future. (IUCN definition for world wide status)

**Non-renewable resources:** Resources such as minerals, metals, natural gas and oil, whose reserves are depleted by their use. (*Canadian Biodiversity Strategy*)

**Precautionary approach:** The application of "precaution", or "the precautionary approach" recognizes that the absence of full scientific certainty shall not be used as a reason for postponing decisions where there is a risk of serious or irreversible harm. (*A Framework for the Application of Precaution in Science-based Decision Making about Risk,* Privy Council Office, Government of Canada, 2003)

#### Protected area:

A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." (IUCN)

**Protection:** Where legal securement of land is obtained, by acquisition or other means, and where those lands are managed for the purpose of conservation. (Environment Canada)

Research: A systematic investigation to establish facts. (Environment Canada)

**Species of special concern:** A wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats. (*Species at Risk Act*)

**Species at risk:** Means an extirpated, endangered or threatened species or a species of special concern. (*Species at Risk Act*)

**Sustainable use:** The use of components of biodiversity in a way and at a rate that does not lead to their long-term decline, thereby maintaining the potential for future generations to meet their needs and aspirations. Sustainable use in this strategy refers to consumptive uses of biological resources. (*Canadian Biodiversity Strategy*)

**Threat:** The proximate human activity or process that has caused, is causing, or may cause the destruction, degradation, and/or impairment of biodiversity targets. (Salafsky, N., et al. 2008. A standard lexicon for biodiversity conservation: unified classifications of threats and actions. Conservation Biology 22:897–911.)

**Threatened species:** A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction. (*Species at Risk Act*)