



(taken from Raincoast's submission to the JRP December 2011)

Sea Otters

What is the status of sea otters in the project area?

The Sea Otter has *Special Concern* status under SARA, is blue-listed provincially, and ranked as the highest Conservation Framework priority.¹ Sea otters were extirpated in British Columbia by the fur trade by the early 1900s, and were re-introduced from 1969-72. Populations have since repopulated 25-33% of their historic range in British Columbia, but are not yet clearly secure.² By 1996, more than 1,500 sea otters were thought to occur on this stretch of coastline and were down-listed under SARA from *endangered* to *threatened*. Continued population growth resulted in further down listing by SARA to *special concern* in 2007. Numbers are still small (<3,500) and require careful monitoring. COSEWIC notes that, "Their susceptibility to oil and the proximity to major oil tanker routes make them particularly vulnerable to oil spills".³ Sea otters are also protected under the *Fisheries Act* as a marine mammal.

Baseline conditions

The history of sea otter extirpation and recovery in British Columbia is well documented, and adequately captured in Enbridge's baseline conditions. Enbridge also anticipates potential range expansion of sea otters to inside the CCAA.

A 2009 study confirms that sea otters were already closer to the CCAA than the Enbridge stated 85 km, occurring just 55 km south of Camano Sound.⁴ Furthermore, there has recently (August 2011) been a confirmed sighting (Figure 3.1) of approximately 24 females and pups in the

¹ Province of British Columbia, Endangered Species and Ecosystems, Accessed November 28, 2011, <http://www.env.gov.bc.ca/atrisk/red-blue.htm>

² Species At Risk Public Registry, Internet source: http://www.sararegistry.gc.ca/document/dspText_e.cfm?ocid=5351. Accessed 20 November 2011.

³ COSEWIC, Species database, Internet source, Sourced 27th November 2011, Source: http://www.cosewic.gc.ca/eng/sct1/searchdetail_e.cfm?id=149&StartRow=21&boxStatus=All&boxTaxonomic=All&location=1&change=All&board=All&commonName=&scienceName=&returnFlag=0&Page=3. Accessed 20 November 2011.

⁴ Nichol, L. M., M.D. Boogaards and R. Abernethy. 2009. Recent trends in the abundance and distribution of sea otters (*Enhydra lutris*) in British Columbia. Canadian Science Advisory Secretariat Research Document 2009/016 16 pp

Byers Island Group off the west coast of Aristabazal Island.⁵ The location of this sighting is less than 30 km from the southern boundary of the CCAA, and less than 15 km from one of the proposed tanker routes. In the dedicated sea otter survey documented in the Marine mammal technical data report, an individual male sea otter was observed approximately the same distance from the CCAA. The presence of a number of sea otters, including females and pups may indicate greater habitat use in this area than previously thought. In addition, there is evidence that sea otters are now present in Squally Channel.⁶

With the uncertainty surrounding the effects of climate change and the continuing expansion of sea otter range in British Columbia, sea otters will likely be present and increasingly exposed and vulnerable to project operations in the OWA and CCAA in the near future.

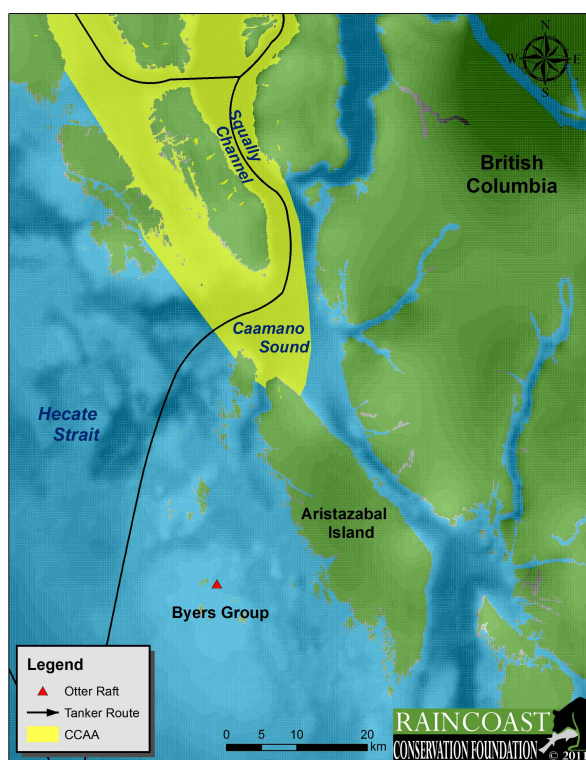


Figure 3.1: Location of a raft of sea otters sighted near the Byers Group of islands, west of Aristabazal Island, less than 30 km from the CCAA and less than 15 km from a proposed tanker route for the Enbridge Northern Gateway Project, Raincoast Conservation Foundation 2011.

⁵ Brian Falconer, Personal communication, November 2011.

⁶ Graeme Ellis, personal communication, June, 2010

What risks and impacts does the Northern Gateway project present to Sea Otters?

Sea otters are particularly vulnerable to oil because it destroys the insulating value of their fur. Grooming of oiled fur can lead to ingestion of oil and inhalation of fumes, resulting in injury of lungs and other internal organs. In addition, otters typically congregate near kelp beds, where oil tends to accumulate.⁷ An oil spill in Caamaño Sound would threaten a small recovering population of sea otters that is concentrated just 55 kilometres south of the area but which ranges at least as far north as the southern border of Caamaño Sound.⁸

Mass mortalities of sea otters days after the Exxon Valdez oil spill (EVOS), Alaska 1989 were recorded of between 1,000-2800 individuals.⁹ An impact of similar scale in BC could result in extirpation of sea otters from the province. The Prince William Sound sea otter population is still considered to be recovering from EVOS 20 years later.¹⁰ Peterson (2003) specifically notes that, “that sea otter survival in the oiled portion of PWS was generally lower in the years after the spill and declined rather than increased after 1989”. Importantly, this research also reported, “higher mortality of animals born after the spill, implicating a substantial contribution from chronic exposure”; explained by the fact that, “foraging sea otters suffered chronic exposure to residual petroleum hydrocarbons from both sediment contact and ingestion of bivalve prey”.¹¹

⁷ Ralls, K and D. B. Siniff. 1990. Time budgets and activity patterns in California sea otters. *Journal of Wildlife Management* 54(2):251-259.

⁸ Nichol, L. M., M.D. Boogaards and R. Abernethy. 2009. Recent trends in the abundance and distribution of sea otters (*Enhydra lutris*) in British Columbia. Canadian Science Advisory Secretariat Research Document 2009/016 16 pp.

⁹ R.A.Garrott, L.L.Eberhardt, D.M.Burn, 1993, *Marine Mammal Science*. 9, 343.

¹⁰ Charles H. Peterson, *et al*, Long-Term Ecosystem Response to the Exxon Valdez Oil Spill. *Science* 302, 2082 (2003); DOI: 10.1126/science.1084282

¹¹ J.L.Bodkin *et al.*, *Marine Ecological Program Series*, 241,237, 2002.