

GENERAL COMMENTS

Compensation Plan

- A compensation plan is mentioned for potential interactions with the fishery resulting in loss of damaged fish gear. Please provide specific details on the compensation plan and whether local (including aboriginal) fishery organizations of fishermen have been consulted in the development of this plan.

Cumulative Effects

- With the recognition that there may be three concurrent seismic programs in the project area, the NG would like to see much more quantitative analyses with respect to the potential cumulative effects of these operations.

Environmental Effects

- In general, the relative uncertainties with respect to seismic effects and underwater noise should be acknowledged in a realistic and open manner. These uncertainties are readily acknowledged by experts in the field, as they are trying to put in place research programs and processes to fill gaps in knowledge with respect to underwater noise, especially effects on marine life. Given the expert recognized and accepted gaps in knowledge that exist with respect to underwater noise, the residual environmental effects to VECs should be re-visited, especially the level of confidence that is associated with each residual adverse environmental effect rating. One would assume that, generally speaking, absence of knowledge (*i.e.* knowledge gaps) would not lend themselves to extremely high levels of confidence with respect to predictions of adverse environmental effects.
- Although a general outline of the project area was indicated, the NG would like to have information on specific proposed seismic survey lines in order to more accurately evaluate project footprint and seismic survey impacts.

Fish and Shellfish

- The evaluation of risks for fish and shellfish in relation to magnitude, geographical extent and other factors is generally rated as non-significant. Although it is recognized that this ranking is acceptable in the context of CEAA guidelines and information presently available in relation to risk, it is important to note that these guidelines also require a somewhat major impact at the population level before being ranked as significant. It is also noted that rankings in this assessment are based on old information dealing with mortalities or grossly overt effects. In this respect, it is now commonly accepted that there is a major knowledge gap related to the potential for sub-lethal effects and whether or not injuries may occur.

The EA report also states that follow-up and monitoring are not recommended at this time for fish and shellfish during seismic surveys. This is reasonable

for this area as it would be difficult to clearly define which species should be monitored as well as the protocols for doing so. For example, generic knowledge gaps such as effects on molting (which is a common knowledge gap for crustaceans) or potential effects on reproduction in halibut under chronic conditions of exposure could not be addressed under such a monitoring plan. Furthermore, both these commercial species are found and fished at great depths in the water column (~200 to 500 m) where sound and particle velocity would be greatly attenuated. With respect to behavioral impacts, crustaceans, namely lobster and snow crab, do not appear to be affected in the sense of scaring and related movement similar to some (but not all) fish species and there is some field evidence indicating there is no effect on catch rates of shrimp. However, this report also draws attention to an Australia study in which no effect was noted on lobster populations in areas of seismic surveys. Such a statement from this study can be misleading, since it was noted that a seismic induced impact in the 50% range would be required before being statistically resolved from natural mortality and fishing.

- There are also significant gaps in knowledge with respect to long-term impacts of seismic activity on fish behaviour and shellfish distribution patterns. Although studies have not directly linked seismic activity with fish or shellfish mortality, it is unknown whether behavioural changes as a result of seismic activity may affect migration or reproduction. This uncertainty should be acknowledged and incorporated into the EA. Moreover, in terms of mitigation with respect to this gap in knowledge, the precautionary principle should be incorporated within the EA to responsibly mitigate effects on the environment and fishery.

Fisheries

- The commercial fishery is very important to many communities on the south coast of Labrador. While the membership of the Fish, Food and Allied Workers' (FFAW/CAW) Union live in communities as far north as Fish Cove Point (just north of Cartwright), our Labrador members fish in NAFO divisions 2J, 2H and 2G for crab, shrimp, turbot, cod, etc. As well, our harvesters in 4R (northern Newfoundland) have rights to fish in 2J, and our northeast coast fishers still have fishing rights off the coast of Labrador as well. We also have members who fish quotas for the Natuashish Government in 2H.

As such, one of the industry's concerns with a multi-year seismic program being proposed is the need for frequent communication between the industry and the oil and gas company, in this case Husky Energy. Harvesters are spread out over a wide geographic area and communication is vital to the safety of all involved. There is a need for good planning and further consultation directly with the fishing industry several months prior to the start of the various components of the seismic program to avoid potential conflict(s) at sea. This should be coordinated with the FFAW and include

consultations in communities such as Cartwright and Port Hope Simpson, where the majority of the harvesters fishing in the project area live.

While historical fishing patterns have been documented, fishing activity can change from year to year and during the season as well. As an example, turbot is becoming more of an important commercial species and many harvesters have geared up to fish turbot in 2010. (There is limited mention of this species in terms of potential conflicts in the document). This fishery uses fixed gear which may introduce more potential interactions between the fishing and oil and gas sectors in the coming years. The fishery is also being actively prosecuted at the time that Husky Energy is proposing to conduct its program. It is therefore important that Husky Energy maintain regular communication with the FFAW to keep apprised of ongoing developments with this, and other fisheries in the project area.

The unknown long term effects of seismic activities continue to concern harvesters as well. There have been reports from harvesters that fish behaviour has been affected following seismic blasts and shellfish have disappeared from areas following seismic work being undertaken. While the research has not determined any direct mortality of fish or shellfish attributable to seismic activity, as the document describes, there may be behavioural changes that could affect migration and/or reproductive and spawning activities as well as movement of the exploitable biomass in an area. The possibility that the fishery could be impacted in the future from seismic programs validates the concerns of harvesters.

Further to this, several companies have, or are in the process of indicating their interest in conducting seismic programs in the same timeframe as Husky Energy. The potential for seismic surveys to be conducted concurrently increases the risk for potential conflicts with fishing vessels and gear. This also increases the potential impact of seismic activity on important fish and shellfish resources.

With respect to accidental oil spills or other discharges, however unlikely they may occur during seismic programs, it is understood that these events will be prevented through the application of mitigative measure. It is important to note however that while the impacts of an oil spill or accidental discharge may be localized on the marine environment there could be longer term negative impacts on Newfoundland and Labrador seafood products in the global marketplace with reports of product tainting. Concern heightens further as a project proceeds to the drilling and development stages. Accidental oil spills and discharges significantly threaten the fishing industry.

In terms of timing of the seismic program identified by Husky Energy, the project area may be actively fished by harvesters. The same narrow window of opportunity for seismic work is also the same window when fishing takes

place. It is also important to note that an industry post-season crab survey takes place in 2J in the fall of the year. There is also an industry crab survey conducted in 2H in the fall of the year but that is not coordinated by the FFAW.

To mitigate potential conflicts with fishing vessels and fishing gear we recommend the company consider utilizing a fishing industry guide vessel as well as a Fisheries Liaison Officer during the program. The FFAW has a guide vessel program in place to mitigate safety concerns between the fishing and oil and gas industries. A fishing guide vessel would be better suited than a chase or picket vessel as they have experience with vessel traffic and gear deployment on the fishing grounds where the seismic activities are taking place. The fishing guide vessel could also serve to provide a communication "platform" for the fishing industry during the seismic program.

- It is extremely important to the Nunatsiavut Government (NG) that the aboriginal fishery (offshore and nearshore) is not disturbed or negatively affected by the proposed seismic program. The area proposed for seismic activity is extremely important to the Nunatsiavut fishery and will probably become more important in the future. As a mitigating factor, the NG recommends that the Torngat Joint Fisheries Board have input into the EA process and the seismic program during its implementation.

Marine Mammals

- With respect to marine mammals, timing of the seismic surveys has been specifically noted where Husky Energy proposes to undertake 2-D and 3-D seismic and follow-up geo-hazard surveys on its exploration acreage on the Labrador Shelf, with the potential for a 2-D seismic survey in the summer of 2010, while other surveys (2-D, 3-D or geo-hazard and Vertical Seismic Profiles) may occur at various times between 2010 and 2017. Given that the Environmental Studies Research Fund (ESRF) plans to support marine mammal and marine seabird surveys in this area in late summer and early fall of 2010 and 2011, it would be beneficial for Husky Energy to notify the scientific proponents regarding their plans and operations. It should be noted that if there is seismic activities occurring in the area at the same time as the ESRF survey, the results will not provide useable 'baseline' data that can be used to determine the impact of further exploration in the area.
- Since the seismic survey includes the acquisition of data using a large airgun seismic array, as well as single-beam echosounder, multibeam echosounder, side-scan sonar, chirp / pinger sub-bottom profiler, sub-bottom profiler, there is a possibility that these activities could affect marine mammals in the operations area. While the operational mitigations will help to reduce potential impacts, marine mammals and sea turtles will still be able to detect the variety of sound sources proposed.

- Also with respect to potential marine mammal occurrences, the proposed use of multiple Marine Mammal Observers (MMOs) to monitor operations during daylight operations, rather than a single Fisheries Liason Observer (FLO) which has been used in some other more extensive seismic surveys is highly recommended. However, the decreased horizontal visibility in the summer months due to fog as well as during nighttime operations, reduces the efficacy of MMOs significantly. The use of a picket vessel is an excellent mitigation if it can be used in advance of the seismic vessel and can be manned by experienced MMOs; from this arrangement the operation is better placed to detect and avoid marine mammals.

Navigation

- Husky Energy should submit work locations and timings as required to ensure the appropriate Notice to Shipping is promulgated prior to their activities occurring. DND will be transiting through the area during the summer of 2010; therefore, it is suggested that Husky Energy consult the Staff Officer Environmental Assessment each season to verify potential DND activity. There are no recorded shipwrecks or avoidance zones in this area based on information currently held at MARLANT.

Observers

- As stated in the Environmental Assessment, observers will play a key role in ensuring mitigation measures should the proposed seismic program proceed. It is strongly suggested that the Proponent incorporates Inuit observers onboard the seismic vessels. Inuit are keen observers of the ocean and many have previously been employed as observers onboard marine vessels in these sorts of capacities.

Picket Vessel

- The NG recommends that the Proponent use a local fishing guide vessel rather than a picket vessel to reduce conflicts with fishing vessels and gear. This would result in local employment opportunities while providing more effective communications with fishing vessels due to intimate knowledge of the local area and fishery.

SARA Species

- Given this document is intended to deal with the seismic program from 2010-2017, it raises questions in terms of considering species at risk. During that timeframe it is possible that more species could be added to Schedule 1 of SARA; COSEWIC will assess new species (examples of upcoming species assessments include Atlantic Cod, Deepwater and Acadian Redfish, and Loggerhead Sea Turtle); new Recovery Strategies, Management Plans or Action Plans could be posted for listed species; and critical habitat could be identified; etc. There could be alot of changes over this time period that may affect a species' status and its requirements under SARA. It is important to know how this will be addressed by the proponent.

Seabird Data Collection

- This survey provides a good opportunity to collect additional seabird data from the area, as committed to by the proponent in the EA Report.
- In an effort to expedite the process of data exchange, the Canadian Wildlife Service (CWS) would appreciate that the data (as it relates to migratory birds at risk) collected from these surveys be forwarded in digital format to the CWS office following completion of the study. These data will be centralized for the internal use of CWS to help ensure that the best possible natural resource management decisions are made for those species in Newfoundland and Labrador. Metadata will be retained to identify source of data and will not be used for the purpose of publication. The CWS will not copy, distribute, loan, lease, sell or use this data as part of a value added product or otherwise make the data available to any other party without prior express written consent.

Species at Risk

- Section 5.1 states that there are no known sensitive areas or critical habitats in the project area now. The proponent should commit to re-evaluate this issue before planned operations as sensitive areas and critical habitats may be identified during the course of the proposed program.

Report Quality

A quality review of this document should have been undertaken prior to submission. Some comments, which require revision or clarification, include:

Section 5.5.1 Data and Information Resources, 1st para., pg 126 – It states “These are for the management areas *that most closely approximate* study area”. Please clarify what is meant by *that most closely approximate*.

Section 5.5.5.3 Longlines (Baited Trawl), pg 136 – In some cases, longlines are not anchored but are suspended by buoys *at either end when then* set to drift for a time (when longlines are set in this way, it is referred to by some fishers as “fly and set”). Please clarify what is meant by *either end when the set*.

Section 5.5.6.4 Greenland Halibut, last para., pgs 147 – 148 – It states “In NAFO 2J the biomass *index for is also increasing* and has substantially increased from 2006 to 2007. Please clarify what is meant by *index for is also increasing*.

Section 7.4 Seabirds, line 7, pg 202 – Please clarify what is meant by “those the not-listed species”.

Section 7.5.5 Environmental Effects Analysis, pg 208 – Please clarify what is meant by the following statement “*An adverse environmental that is not significant adverse environmental effect is one that does not meet the above criteria*”.

Section 7.5.5.3 Loss of Income, pg 210 – Please clarify what is meant by the following statement “*Sound from a seismic array can result in fishing avoiding the sound by temporarily moving out of the vicinity of the source...*”.

SPECIFIC COMMENTS

§4.4.1 Sea Temperature and Salinity, 1st & 2nd para., pg 39 – In the discussion of sea temperature and salinity, it appears that similar information is described in both paragraphs. Also, it indicates that QC was carried out on the data, while the second paragraph does not and there is a discrepancy in the number of data points included in the analysis. Also, a brief description of any QC procedures should be provided in this section.

Last para. – The description states that the upper layer is colder and saltier than the lower layer. However, based on Figures 4.5 and 4.6, the upper layer is colder BUT FRESHER than the lower layer.

§4.4.3 Currents, Table 4-6, pg 54 – The last column should be ‘MEAN velocity direction’ instead of ‘*velocity direction*’.

§4.4.3 Currents, last sentence, pg 55 – The current in the region is southeastward based on Table 4-6. The use of “southeasterly” is inappropriate, which (in meteorology) means from the southeast, the exact opposite meaning.

§5.1.1 Species Listed in the SPECIES AT RISK ACT, 2nd para, pg 79 – Section 32 of SARA is not correctly described. Section 32 prohibits the killing, harming, harassing...etc. of an individual of a listed, extirpated, endangered or threatened species; Section 33 prohibits damage/destruction of residences; and Section 58 prohibits the destruction of critical habitat.

§5.1.1.2 Marine Mammals and Sea Turtles – Blue Whale, pg 84-85 – Note that the Recovery Strategy for Blue Whale is now finalized.

§5.1.1.2 Marine Mammals and Sea Turtles – Blue Whale, pg 84 – The footnote at the bottom of this page is a personal communication attributed to Sue Forsey. Ms. Forsey recalls a phone conversation inquiring the status of Wolffish’s critical habitat. However, she was not asked for a personal communication and feels this quote is out of context and inaccurate, therefore it is recommended that this quote be removed from the document. Please refer to the Northern and Spotted Wolffish Recovery Strategy for further information on the identification of critical habitat for Wolffish. Also, if regulatory requirements change during the course of the seismic program (e.g. the identification of critical habitat in the study area for any species at risk), then it is the proponent’s responsibility to address them accordingly.

§5.1.1.2 Marine Mammals and Sea Turtles – Whales, pgs 85 & 114 – Population estimates are cited – there is an updated set of abundance estimates for cetaceans of Atlantic Coast. It is suggested that the authors refer to the following reference for more updated information:

Lawson, J.W., and Gosselin, J.F. 2009. Distribution and preliminary abundance estimates for cetaceans seen during Canada marine megafauna survey – a component of the 2007 TNASS. DFO Canadian Science Advisory Secretariate Research Document 2009/031. iv + 29 p.

§5.1.2 Species with Committee on the Status of Endangered Species in Canada Status, Table 5-2, pg 91 - The designation dates should be added to Table 5-2.

§5.1.2.1 Marine Fish – Atlantic Cod, last para., pgs 92 & 93 – It states that COSEWIC assessed Atlantic cod as endangered in 2005, which is incorrect; the last COSEWIC assessment was in 2003. Also, the population which is being referred to should be specified. In the 2003 assessment, COSEWIC's recommendations were: Newfoundland and Labrador population – endangered; Laurentian North population – threatened; Maritimes population – special concern; Arctic population – special concern. Also, there is a reference in this section to cod being on Schedule 3 of SARA. It should be noted that Schedule 1 of SARA is the list of species at risk, while Schedules 2 and 3 are lists of species that need to be assessed by COSEWIC.

§5.1.2.2 Marine Mammals – Atlantic Walrus, pgs 97 & 98 – While the Atlantic walrus was assessed as special concern by COSEWIC in 2006, it should also be mentioned that Atlantic walrus (Northwest Atlantic population) is listed on Schedule 1 of SARA as extirpated and that the Recovery Strategy for the Atlantic Walrus is in fact finalized, not proposed.

§5.2.3 Deep Sea Corals, pg 102 – It is suggested that the authors refer to the following references for more information on the presence of cold-water corals in the study area:

Gilkinson, K., and Edinger, E. (Eds.). 2009. The ecology of deep-sea corals of Newfoundland and Labrador waters: biogeography, life history, biogeochemistry, and relation to fishes. Can. Tech. Rep. Fish. Aquat. Sci. 2830: vi + 136 p.

Campbell, J.S. and Simms, J.M. 2009. Status Report on Coral and Sponge Conservation in Canada. Fisheries and Oceans Canada: vii + 87 p.

Also, it should be noted that there is a sponge in the study area. DFO-Science held a science advisory meeting in March 2010; these results should be published in April 2010.

§5.3 Marine Mammals and Sea Turtles, pgs 113-115 – DFO scientist have sighted sperm whales along the coast of Labrador. Sperm whales and northern bottlenose whales are sighted commonly in association with fishing vessels to the north of the study area, which should be added to Table 5-5. This table could

also include other cetaceans that have been sighted along the Labrador coast such as white-beaked dolphins and common dolphins.

§5.5.5 Fishing Gear – Stern Otter Trawls, pg 136 – Shrimp Trawls are mentioned in this section but the use of Nordmore grates, which are mandatory in the shrimp fishery are not. (This information can be found on the DFO Website under the Northern Shrimp Integrated Fisheries Management Plan at the following link: <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/index-eng.htm>).

§5.6 Sensitive Areas, pgs 153-155 – The definition of Sensitive Areas in this document should include the known presence of sensitive species and habitats, etc. For example, cold-water corals and sponges are internationally/nationally recognized as sensitive to human impacts (including activities such as oil and gas). It is recommended that corals and sponges be included in discussions related to sensitive areas.

§5.6 Sensitive Areas, Figure 5-32, pg 154 – The size and boundary of the Gilbert Bay (GB) Marine Protected Area (MPA) are difficult to identify in this figure, however it seems the area in this figure goes beyond the GB MPA boundaries (*i.e.* the Alexis Bay area, up to Port Hope Simpson is not included in this MPA). Please refer to the attached map of Gilbert Bay. Also, it should be noted that the Cape Chidley Coral Conservation Protected Area is incorrect. This is a volunteer closure by representatives from the fishing industry. It is recommended that the authors refer to Figure 10 in the following document:

Campbell J.S. and Simms J.M. 2009. Status Report on Coral and Sponge Conservation in Canada. Fisheries and Oceans Canada. vii + 87p.

§5.6 Sensitive Areas, pg 155 – The study and project areas are both located in Canada's NL-Labrador Shelves Marine Ecoregion. This is important to note as two primary uses of this biogeographic classification system are: i) assessing and reporting on ecosystem status and trends, and ii) spatial planning for the conservation of ecosystem properties and management of human activities. In addition, these areas and associated information will be useful in guiding the selection of future representative MPAs.

§6.2.2 Temporal, pg 156 – The temporal scope of the assessment has previously been identified as 2010 to 2017.

§6.8 Cumulative Environmental Effects, pgs 161-162 – With potentially three contiguous seismic operations on the Labrador coast (even if 50 km distances are maintained between operations) there will be an increased risk of large-scale marine mammal displacements, and higher ambient noise levels if operations are not planned to maximize distance between sound sources. Any efforts to schedule operations to reduce or eliminate concurrent underwater sound production must be encouraged.

§6.9 Follow-up and Monitoring, pgs 162 & 188 – More than a single MMO is likely required to ensure efficacy of this mitigation method. Even two observers will be hard-pressed to maintain rest and hence effectiveness for a 30+ day operation

§7.1.2.2 Potential Interactions – Marine Mammals and Sea Turtles, pg 167 – Although potential interactions with helicopters and sanitary/domestic waste are not indicated for marine mammals and sea turtles, they are discussed later in section 7.1.2.1 (*Page 175*). They should be provided in this section as well.

§7.1.3.1 Existing Knowledge – Marine Fish, pg 170 – This section contains a fairly thorough review of the available literature on the effects of seismic sound on marine fish. However, it should be noted that many of the cited sources are from the “grey” literature, including previous consultant’s reports and summaries of oral presentations. There could be more emphasis on the fact that there have been few recent peer-reviewed studies and these studies may be of limited value as they do not always deal with species of interest and are not always conducted under natural field conditions.

§7.1.3.1 Existing Knowledge – Marine Fish, pg 172-173 – The suggestion that the effect of masking may be less severe because of the “pulsed” nature of the seismic sound seems to be rather speculative. These effects could potentially occur over a wide geographic area and may not be immediately apparent.

This section is of a very general nature and could more explicitly examine how these studies may be applied to the species at risk noted to occur in the proposed Study Area. Interactions with spawning and migration routes could be more clearly delineated.

§7.1.3.1 Masking, pg 173 – The reference should be (US Minerals Management Service 2004).

§7.1.3.1 Existing Knowledge – Marine Fish, 3rd para., pg 173 – The authors make note that there have been no documented incidences of fish kills (repeated in Section 7.1.5.1), however, since these type of studies have been limited there is a possibility that fish kills may have occurred but were not observed/reported.

§7.1.3.1 Existing Knowledge – Marine Fish, pg 174 – The reference for *Kenchington et.al* (2001) is missing from the reference list.

§7.1.3.1 Existing Knowledge – Marine Fish, 2nd para., pg 175 – Reference to Hastings and Popper (2005) seems out of place. Perhaps this should be incorporated earlier in this section.

§7.1.3.2 Marine Mammals and Sea Turtles, pg 175 – Evidence that whales continue calling or that “masking” effects will be limited seems to have a high level of uncertainty.

Literature on whales seems to be slightly better than fish, however still a lot of reliance on 'grey' literature.

§7.1.3.2 Marine Mammals and Sea Turtles, 4th para, pg 176 – In a few instances there seems to have been a problem which leads to words including the letters “all” to be substituted with “a/l.”. It seems there was a search and replace where in all instances where there was a word ending in ‘et’ directly preceding the word all, it was replaced with *et al.*

§7.1.3.2 Marine Mammals and Sea Turtles, pg 182 – As suggested elsewhere, the impulsive nature of seismic sounds could still mask baleen whale communication as the low-frequency sounds of the arrays “smear” into longer duration impulses at greater distances from the array source. Also, multipath and bottom sound reverberance effects can cause multiple and overlapping sound impulses at greater distances. Thus, it is simplistic to assume that the impulsive and “short duration” nature of an airgun source cannot result in masking of baleen whale sounds over larger received areas.

§7.1.3.2 Marine Mammals and Sea Turtles, 3rd para., pg 186 – Moein *et al.* (1994) reference is missing from the reference list.

§7.1.3.2 Marine Mammals and Sea Turtles, 3rd para., pg 187 – The mitigation efficacy of limiting vessel speeds in the operational area is unproven. However, given the data on injury and ship strikes as it relates to vessel speeds this approach is a proactive strategy that should be commended.

§7.1.3.3 Seabirds, last sentence, pg 188 – Please finish the sentence.

§7.1.4.2 Marine Mammals and Sea Turtles, 1st para., last line, pg 188 – Please insert “Some” before “Mitigation requirements...”.

§7.1.4.2 Marine Mammals and Sea Turtles, 2nd bullet, pg 189 – Please identify where in the Guidelines this statement is found.

§7.1.5 Environmental Effects Analysis, pg 189 – Based on the incomplete evidence available at this time, it seems that ranking the Level of Confidence as ‘high’ in the summary of residual environmental effects on species at risk (Table 7-7), marine fish and fish habitat (Table 7-8) and marine mammals and sea turtles (Table 7-9) for the effects of seismic array noise may not be warranted.

§7.1.5.3 Seabirds, pg 194 – Shouldn’t there be an environmental effects assessment table for Seabirds Species at Risk.

§7.2.1 Assessment boundaries, pg 195 – Although evidence regarding the effects on invertebrates is limited, some invertebrate species may have limited movement and ability to avoid seismic sound. This may lead to increased susceptibility to repeated exposures to seismic surveys within the Study Area.

§7.5.5.3 Loss of Income, 1st para, line 12, pg 210 – “Of the two principal commercialin the Project Area”. LGL 2008 is referenced but the reason should be stated. This also applies to Section 8.5.5 on page 216.

§7.7 Follow-Up and Monitoring, pg 212 – A “qualified’ seabird observer should be on board the vessel. Operators are expected to implement a seabird and marine mammal observation program throughout survey activities as per the Geophysical, Geological, Environmental and Geotechnical Program Guidelines (C-NLOPB 2008).

§9.3.1.2 Marine Mammals and Sea Turtles, pg 219 – It is possible that loss of streamer fluid could taint marine invertebrates (an important food of leatherback sea turtles) in a localized area. Careful monitoring to ensure this does not occur is important. Since the streamer fluid disperses or evaporates rapidly, it is anticipated that this would not be a significant impact.

§9.3.6 Sensitive Areas, pg 221 – The assumption that there are no known special feeding areas or sensitive areas for marine mammals in the proposed project area is likely a reflection of the lack of research effort in this area.

Map of Gilbert Bay Marine Protected Area

