

Deltaport Third Berth Project Wildlife Fact Sheet

This document contains ten questions on Wildlife that were presented to the Vancouver Port Authority (VPA) by the Deltaport Third Berth Project Community Liaison Committee (DCLC). The responses to these questions have been provided by the VPA.

The committee then distributed these responses to Environment Canada, the Ministry of Environment and Fisheries and Oceans Canada for comment on VPA's responses.

Response-specific comments from Environment Canada and the Ministry of Environment can be found in italics under VPA responses within this document. General comments were also received, as follows:

Environment Canada – Canadian Wildlife Service (CWS) – Noted that, as a part of the completed environmental assessment process for the Deltaport Third Berth (DP3) Project, the CWS has identified specific commitments concerning wildlife that the VPA is officially obligated to respect through an existing process. As such the CWS will not be judging the appropriateness or adequacy of the VPA's environmental activities. Noted that, the CWS has consulted with the British Columbia Ministry of Environment with respect to the questions. While both agencies have similar and sometimes overlapping concerns, specific responses reflect their respective mandate.

Ministry of Environment – Noted that the Ministry is listed as a Lead or Consulting Agency in the Vancouver Port Authority's Table of Commitments with respect to the VPA's Deltaport Third Berth Project (DP3). The Ministry fully expects the VPA to live up to those commitments which cover a range of environmental considerations from water quality to wildlife and vegetation, including project management and follow-up monitoring. Since migratory birds were the dominant wildlife consideration for DP3, the Ministry agreed to have the Canadian Wildlife Service (CWS) take a lead role for wildlife during the environmental assessment for DP3. Ministry staff has remained in communication with colleagues from the CWS, both at the Deltaport site during construction, and in consideration of some of the questions posed below. Noted that the Ministry concurs that the responses CWS has provided to the Delta Community Liaison Committee in relation to CWS's mandate are consistent with provincial conservation and regulatory interests. Some questions relate to matters of shared interest, or are primarily a provincial responsibility. The Ministry has provided a response to those questions clearly related to provincial jurisdiction.

Fisheries and Oceans Canada (DFO) – Noted that DFO has reviewed the VPA responses to the questions and considers them to be appropriate.

1. What wildlife is being affected, and what are current mitigation methods?

The construction of the Deltaport Third Berth is a marine project so the wildlife that utilize marine habitat that have the potential to be affected by construction are marine mammals (See Question 7 for more details on marine mammals), coastal waterfowl and shorebirds. The following is a list of bird species that have the potential to occur at Roberts Bank, their respective conservation status and records of previous observations.

Species	Conservation status*		Likely occurrence	Species recorded during surveys
	Federal	Provincial		
<i>Aechmophorus occidentalis</i> western grebe	-	Red	Overwinter, Migrant	√
<i>Ardea herodias fannini</i> great blue heron, fannini subsp.	Special Concern (1997)	Blue	All Year	√
<i>Bartramia longicauda</i> *upland sandpiper	-	Red	Migrant	×
<i>Botaurus lentiginosus</i> American bittern	-	Blue	Breeder	×
<i>Brachyramphus marmoratus</i> marbled murrelet	Threatened (Nov 2000)	Red	Migrant	√
<i>Branta canadensis leucopareia</i> Canada goose, <i>leucopareia</i> subsp.	-	Blue	Migrant, Winter	×
<i>Branta canadensis occidentalis</i> Canada goose, <i>occidentalis</i> subsp.	-	Blue	Migrant, Winter	×
<i>Butorides virescens</i> green heron	-	Blue	Migrant	×
<i>Clangula hyemalis</i> long-tailed duck	-	Blue	Overwinter, Migrant	√
<i>Fratercula cirrhata</i> **tufted puffin	-	Blue	Accidental	×
<i>Fratercula corniculata</i> **horned puffin	-	Red	Migrant	×
<i>Grus Canadensis</i> sandhill crane	Not At Risk (1979)	Blue	Migrant	×
<i>Heteroscelus incanus</i> wandering tattler	-	Blue	Migrant	×
<i>Larus californicus</i> California gull	-	Blue	Overwinter, Migrant	√
<i>Limnodromus griseus</i> short-billed dowitcher	-	Blue	Migrant	×
<i>Limosa haemastica</i> hudsonian godwit	-	Red	Migrant	×
<i>Melanitta perspicillata</i> surf scoter	-	Blue	Overwinter, Migrant	√
<i>Numenius americanus</i> long-billed curlew	Special Concern (Nov 2002)	Blue	Migrant	×
<i>Pelecanus erythrorhynchos</i> American white pelican	Not At Risk (1987)	Red	Migrant	×
<i>Phalacrocorax auritus</i> Double-crested cormorant	Not At Risk (1987)	Red	All Year	√
<i>Phalaropus lobatus</i> red-necked phalarope	-	Blue	Migrant	×
<i>Phalacrocorax pelagicus pelagicus</i> Pelagic cormorant, <i>pelagicus</i> subsp.	-	Red	All Year	√
<i>Phalacrocorax penicillatus</i> Brandt's cormorant	-	Red	All Year	√
<i>Phoebastria albatrus</i> short-tailed albatross	Threatened (Nov 2003)	Red	Accidental	×

Species	Conservation status*		Likely occurrence	Species recorded during surveys
	Federal	Provincial		
<i>Pluvialis dominica</i> American golden-plover	-	Blue	Migrant	×
<i>Ptychoramphus aleuticus</i> **Cassin's auklet	-	Blue	Accidental	×
<i>Puffinus creatopus</i> pink-footed shearwater	Red		Accidental	×
<i>Recurvirostra americana</i> **American avocet	-	Red	Migrant	×
<i>Rhodostethia rosea</i> Ross's gull	Threatened (Nov 2001)	-	Accidental	√
<i>Sterna caspia</i> Caspian tern	Not At Risk (1999)	Blue	Summer non breeder, Migrant	√
<i>Sterna forsteri</i> **Forster's tern	Data Deficient (1996)	Red	Migrant	×
<i>Synthliboramphus antiquus</i> ancient murrelet	Special Concern (1993)	Blue	Accidental	×
<i>Uria aalge</i> common murre	-	Red	Migrant	√
<i>Uria lomvia</i> **thick-billed murre	-	Red	Migrant	×

* Conservation status is as follows:

Extinct - A species that no longer exists;

Extirpated - A species that no longer exists in the wild in Canada, but occurs elsewhere;

Endangered - A species facing imminent extirpation or extinction;

Threatened - A species likely to become endangered if limiting factors are not reversed;

Special Concern - A species of special concern because of characteristics that make it particularly sensitive to human activities or natural events;

Not at Risk - species that has been evaluated and found to be not at risk;

Data Deficient - species for which there is insufficient scientific information to support status designation;

Red-listed - species populations or communities at high risk of extinction or extirpation; and

Blue-listed - species vulnerable to human activity or natural events.

** Considered a rare sighting by the Vancouver Natural History Society's Rare Bird Alert and requires a sighting confirmation.

√ Species recorded.

× Species not recorded.

VPA is conducting daily environmental monitoring during construction that includes observations for birds and their behavior within the project area including an assessment of disturbance from construction activities. If observations show that birds are being disturbed then construction methods may be changed or altered to reduce potential environmental effects. To date, a diversity of bird species are using the Deltaport Project area in the same manner as prior to construction. In addition bi-weekly field surveys using the same methods used during the environmental assessment are being conducted within the intercauseway area.

Environment Canada (CWS) response: *CWS's overall interest in migratory bird conservation as it relates to the DP3 Project is in assuring populations of species which are particularly dependent on the Roberts Bank Ecosystem for wintering, or as a migration stopover, are not adversely affected by project activities, nor by the loss of habitat due to the DP3 pad footprint. The key species of interest to the CWS are Pacific Black Brant, Great Blue Herons and Western Sandpipers. To date, the CWS concerns for the persistence of these populations have not been heightened by DP3 activities, with the possible exception of some apprehension that unexpected dendritic channel formation has occurred related to construction of the DP3 pad, for which VPA has taken corrective action. It is an obligation of the Scientific Advisory Committee (SAC), as guided by the*

Adaptive Management Strategy (AMS) to evaluate the environmental and ecological significance of any observed erosion and have the VPA report on it. EC's MoU with the VPA requires the VPA to undertake mitigation if requested by the SAC. To date, the SAC has not required the VPA to undertake mitigation.

Ministry of Environment response: The footprint of the project is mostly marine, however, there are dry land and intertidal components which each offer unique habitats to wildlife. For example, Barn Owls were included in the DP3 environmental assessment. Thus the types of wildlife which can be affected is a larger list than provided above. The Ministry concurs with the comments provided by CWS regarding mitigation for this site.

2. Has the Habitat Compensation Plan been developed to the point that VPA can guarantee a no net loss of fish habitat?

A habitat compensation program has been prepared that satisfies the requirements of the *Fisheries Act* Section 35(2) Authorization. A component of the Authorization requires long term habitat monitoring to verify and validate that the habitat is functioning as intended and whether “no net loss” or “net gain” of productive fish habitat has been achieved. The *Fisheries Act* Section 35(2) Authorization for DP3 requires habitat monitoring program that varies with each habitat compensation feature and includes quantitative surveys and assessments (during years 1, 2, 3, 5, and 8 (or as otherwise noted in the monitoring program) and annual qualitative surveys and assessments on years when the quantitative surveys are not conducted. In addition the Authorization requires that VPA fund a third party mutually to audit the monitoring reports against the conditions of the Authorization to ensure that its terms and conditions are met.

Environment Canada (CWS) response: CWS concurs with VPA's general description of the progress of the Habitat Compensation Plan, which is primarily a DFO consideration, but includes considerations for migratory birds. CWS has confidence in the HCP's potential for success.

Ministry of Environment response: The Ministry concurs with the comments of the VPA and CWS, noting that the Habitat Compensation Plan is primarily a commitment to DFO.

Fisheries and Oceans Canada (DFO) response: The plan and compensation elements have been developed to meet the DFO policy of “No Net Loss.” As the components of the compensation plan are developed, DFO will look to the extensive monitoring program to assess the plan in this regard and determine if any contingencies will be necessary. There has been no change to the habitat compensation plan referenced in the authorization and DFO remains confident that the compensation plan, as described and with monitoring and contingencies, will achieve “No Net Loss.”

3. Nest surveys were to be conducted prior to construction – have these been carried out?

Prior to start of marine construction nest surveys were conducted and confirmed that the only nest site within the proposed construction area was the osprey nest which VPA applied for and received a permit to relocate the nest.

Environment Canada (CWS) response: *As ospreys are a species subject to provincial jurisdiction, the question is deferred to BC MoE.*

Ministry of Environment response: *The response provided is acceptable. The osprey did not occupy the relocated nesting structure due to bald eagles using the relocated structure as a perch. The osprey pair did however remain in the vicinity for the majority of the breeding period.*

4. The western sandpiper population has seen a decline recently. Does VPA have accurate data on sandpipers – are these being tracked, and what are the results thus far?

VPA conducted bird surveys from September 2003 to August 2004, along the north and south sides of the Roberts Bank causeway, and around the tip of the Roberts Bank container facility. CWS also conducted bird surveys since 2003, along the shoreline from Brunswick Point to the tip of Tsawwassen ferry causeway. The combined VPA and CWS data sets are considered to be a baseline characterization of the composition of coastal seabird and shorebird species at the project site prior to the expansion of DP3. The surveys included the important Western Sandpiper (*Calidris mauri*) spring migration that occurs at Roberts Bank.

Bird studies are being conducted along the south side of the Roberts Bank causeway, north side of the Tsawwassen Ferry Causeway and the intervening shoreline at the head of the inter-causeway area. One monitoring event is completed every two weeks. Observations are being made at a frequency of twice each day, as daylight permits, or on two consecutive days within a 3-day monitoring window. Observations are made once during a daily high tide and once during a daily low tide. Low-tide observations along the South Roberts Bank Transect commence approximately 30 minutes before the daily low tide, and are made when a minimum of 500 m of mudflat is exposed. The low-tide surveys progress from the tip of the causeway to the base. Observers use binoculars, spotting scopes and range-finding binoculars to identify species and their distances from the point count stations. Observers count individuals and groups of birds and document bird behaviour. Observational data are recorded on survey forms that are consistent with those used by VPA and CWS in past bird studies.

Western Sandpiper is the most numerous shorebird on the Pacific Coast of North America. Environment Canada has been monitoring Western Sandpiper populations at Roberts Bank since the early 1990's. The annual counts are made on the mud and sand flats of the Fraser River delta during the Western Sandpiper spring migration and on

Sidney Island during their southbound fall migration. Environment Canada has reported a statistically significant decline in Western Sandpipers both in the spring and fall migration time periods. Although Western Sandpipers do not presently have any special conservation status the baseline work conducted by VPA's technical consultants included more intensive bird surveys during the spring migration period. It was determined that the DP3 project area is not used by Western Sandpiper either as significant feeding or resting habitat. However, given the significance of Roberts Bank area as a migratory stopover for the Western Sandpiper, VPA is monitoring the spring migration during DP3 construction to augment the ongoing scientific research that is being done by the Canadian Wildlife Service and the Centre for Wildlife Research at Simon Fraser University. There are several hypotheses that are being assessed by scientists to explain why Western Sandpipers are declining along the chain of important migratory stopover sites that link the arctic breeding grounds in western Alaska and eastern Siberia with tropical wintering locations in the southern USA and Central and South America. These long distance migratory flights require rapid intake of food to accumulate fat to fuel the flight to the next stopover point so each migratory stopover is important. In North America, the major migratory stopover sites include San Francisco Bay, Grays Harbor, the Fraser River delta (including Roberts Bank), the Stikine River and the Copper River delta.

Environment Canada (CWS) Response: *The VPA is accurate that both the VPA and CWS continue to monitor the numbers of Western Sandpipers using the Roberts Bank Ecosystem. CWS's counts of Western Sandpipers in 2007 do not appear to indicate any substantial change in numbers when compared to the past few years. Additional sources of bird numbers, such as Bird Studies Canada's Coastal Waterbird Survey are also available for the Roberts Bank Ecosystem to inform on potential effects of the DP3 Project, as well as the possibility of the Terminal 2 Project.*

A meaningful understanding of the potential impact of TP3 and Terminal 2, should it proceed, on Western Sandpiper populations requires knowledge of more than population numbers. An informative environmental assessment of the potential impact of a Terminal 2 will require understanding how Western Sandpipers use habitat, how much flexibility they have to use alternate habitats, how successfully they forage to prepare for long range migration flights, and how anthropogenic disturbance or landscape alteration may affect foraging success and migration fitness. To date, VPA has indicated to CWS that they understand the need to address these concerns in any environmental assessment for T2.

Ministry of Environment Response: *Western Sandpipers are the responsibility of CWS, and the Ministry defers to CWS comments. The Ministry is however supportive of the need to obtain a comprehensive understanding of the sandpiper response to the potential impacts of the project.*

5. What steps have been taken to mitigate the construction impacts on blue herons in the area, especially on their nesting and breeding?

Great Blue Herons are included in the coastal seabird and shorebird survey noted above. There is no nesting or active breeding in the project area but the Roberts Bank inter-causeway area is important feeding areas for herons. Herons are continuing to feed up to the newly created shoreline.

Environment Canada (CWS) response: *CWS's primary concerns for Great Blue Herons relate to (1) the maintenance of the extent and quality of the estuarine eelgrass ecosystem that supports heron foraging, particularly during the breeding season, and (2) the availability of terrestrial breeding habitat, particularly given the federal 'Special Concern' status of the local fannini subspecies. Based on recent CWS surveys, the inter-causeway area is the most productive eelgrass ecosystem between Roberts Bank and Semiahmoo Bay for supporting foraging herons provisioning their young. The AMS includes a requirement for VPA to monitor herons and eelgrass.*

The extent and quality of the eelgrass habitat in the inter-causeway area is a relatively recent occurrence that is likely due to the Deltaport causeway deflecting freshwater from the Fraser River away from the inter-causeway area. It's also conceivable that the inter-causeway area could support more heron foraging should more breeding colonies be formed close enough to the inter-causeway area that the eel grass beds are accessible. However, preliminary studies suggest to CWS that the more serious threat to herons adjacent to the Fraser Estuary is a lack of suitable terrestrial breeding habitat.

Ministry of Environment response: *Great Blue Herons are provincially a blue listed species, but are primarily a federal responsibility under the Migratory Birds Convention Act. The Ministry shares the concerns raised by CWS. The Tsawwassen nesting rookery is perhaps the largest single nesting colony on the Pacific Coast, perhaps exceeding 400 nesting pairs. The birds from this colony require nearby foraging habitat, which is potentially vulnerable to accidents, malfunctions, or pollution due to Deltaport or other local operations and functions. Thus herons can be a good indicator species for the environmental and ecosystem quality of Roberts Bank and vicinity.*

6. What mitigation steps are being undertaken to deal with the protection of Dungeness crabs and their breeding?

Work on the Project involving the seabed, foreshore, and immediately adjacent uplands will adhere to the DFO fisheries sensitive periods to avoid impacts to fish and fish habitat:

The DFO fisheries sensitive periods are:

- a) No dredging is permitted in waters less than -5 m CD deep from March 1 to August 15 for the protection of juvenile salmon unless the works area is adequately isolated from fish bearing waters to the satisfaction of DFO;

- b) From October 15 to March 31 there shall be no works conducted which would result in a significant disturbance to the seabed of outer Roberts Bank which is situated in water greater than -5 m CD deep at daily low water for the protection of adult ovigerous female Dungeness crabs; and
- c) Any works proposed within the above referenced work windows will require DFO review and approvals which requires specific underwater survey information and mitigation.

In addition, when the construction dykes were enclosed to isolate the work area from fish bearing water a salvage of fish, including Dungeness crabs, within the enclosed dyke was undertaken over a period of a few weeks. Salvaged fish and crabs were relocated to suitable habitat within the intercauseway area.

Ministry of Environment response: *Question deferred to DFO.*

Fisheries and Oceans Canada (DFO) response: *Good response, no additional comment from DFO.*

7. What steps are being taken to protect Orcas from construction, port operations and ship traffic, and are protection issues being discussed with the United States?

The objective of the Deltaport Third Berth marine mammal monitoring program is to monitor marine mammal presence within the Project area during construction and avoid, reduce or mitigate potential environmental effects particularly as they apply to Killer Whales. In addition, the VPA has committed to assessing Killer whale presence at Roberts Bank during initial operation of the Project and evaluating ongoing measures to reduce potential environmental effects. This will help ensure the long term viability of resident killer whale populations and sustain their genetic diversity and cultural continuity by reducing potential human induced effects, including noise and pollutants, and sustaining their habitat and prey. The Deltaport Third Berth marine mammal monitoring program objectives are consistent with the *DRAFT National Recovery Strategy for Northern and Southern Resident Killer Whales (Orcinus orca)* (Resident Killer Whale Recovery Team 2005). The VPA retained Jacques Whitford and JASCO Research Ltd. to conduct this program based on phased monitoring plan to ensure that potential effects associated with elevated acoustic source levels from construction activities are avoided or minimized and to confirm that operational effects are minimal.

Phase 1 - Characterize the ambient (background) underwater noise levels (day and night) near the Project and in Georgia Strait in winter and summer.

Phase 2 - Apply sophisticated modeling studies to identify, with greater certainty, potential zones of acoustic audibility to killer whales.

Phase 3 - Using the above potential zones of acoustic audibility as a basis, conduct visual surveys during construction periods.

Phase 4 - During summer months, maintain regular communication with Steveston Harbour, Gulf Islands and Victoria Harbour based whale watching tour operators to ascertain likely position of killer whales.

Phase 5 - Immediately following commencement of dredging and vibro-densification operation acquire real-time acoustic spectrographs of operating equipment.

Phase 6 - Use spectrographs acquired in Phase 5 to validate sophisticated modeling studies identified in Phase 2.

Phase 7 – Conduct regular marine mammal surveys of proximate areas identified as likely to be subjected to acoustic levels likely to result in killer whale communication masking, behavioural change, or habitat avoidance.

Phase 8 – Integrate real-time regular marine mammal surveys (Phase 7) with construction activity: reduce operations according to status of whale presence/absence.

Phase 9 – Using focal animal visual survey techniques, evaluate killer whale behaviour and habitat avoidance.

Phase 10 – Produce daily reports on marine mammal activity.

Phase 11 – Conduct an extensive field program to evaluate possible changes of killer whale and other marine mammal use of the Roberts Bank and proximate project areas during construction.

The Vancouver Port Authority will also work with British Columbia Coast Pilots Ltd. to develop an education and awareness program about marine mammals, and specifically killer whales, such that pilots of deep-sea vessels transiting to and by Roberts Bank steer away from observed marine mammal pods when vessel safety is not compromised. This program will be in place when Deltaport Third Berth is operational in late 2009 and will be reported on in the Deltaport Third Berth Killer Whale Study.

The Vancouver Port Authority will evaluate vessel speeds of container vessels transiting to and by Roberts Bank and assess the potential for marine mammal interactions and the potential risk of marine vessel mammal collisions when ships approach the Roberts Bank port area. This work will be completed prior to operation of Deltaport Third Berth and will also be reported on in the Deltaport Third Berth Killer Whale Study.

The marine mammal monitoring program has been prepared based on consultation with Canadian regulators and scientists but has also incorporated emerging science for US programs and scientists. Due to the extent of the information that will be collected, such as the underwater ambient acoustic work and killer whale audiogram modeling, the VPA intends to share the results of the marine mammal monitoring program and killer whale studies with Canadian and US scientists working on killer whale programs in Georgia Strait.

Environment Canada (CWS) response: *Question deferred to DFO.*

Ministry of Environment response: *Question deferred to DFO.*

Fisheries and Oceans Canada (DFO) response: *Good response, no additional comment from DFO.*

8. What mitigation measures have been put in place with respect to barn owls?

The VPA will support appropriate environmental stewardship programs to place barn owl nest boxes in areas preferably towards Brunswick Point where they are less vulnerable to traffic from Deltaport Way and Highway 17. The work will be initiated through a barn owl management plan, either through a Barn Owl Management Team involving agencies such as CWS and MOE and other interested agencies and parties, or an ad hoc equivalent. This work is scheduled for early 2008 as it is a commitment pertaining to the operation of DP3.

Environment Canada (CWS) response: *Question deferred to BC MoE, since Barn Owls are a species subject to provincial legislation.*

Ministry of Environment Response: *The response and plan for Barn Owls appears acceptable to the Ministry. The VPA performance, to date, includes planning for Barn Owls in adjacent areas and appears acceptable to the Ministry.*

9. VPA has stated that Brant have become accustomed to existing noise at the port. What evidence is there for this and have Brant been disrupted as a result of the construction.

As part of the ongoing construction monitoring VPA observed that Brant geese were not using areas of shoreline that they have used in previous surveys but were using areas of suitable habitat in the Roberts Bank intercauseway area. Several surveys were conducted including some joint inspection with CWS and MOE staff. Brant behaviour and habitat utilization will continue to be monitored throughout project construction and during the first year of operation of Deltaport Third Berth.

Environment Canada (CWS) response: *CWS is generally concerned about the persistence of the Pacific Black Brant population along the Pacific Flyway. Local overwintering populations show signs of rebounding, but there has been a recent decline in the number of Brant using Strait of Georgia migration stopovers. As well, migration characteristics have changed. There is evidence that Brant are spending less time during spring migration at Strait of Georgia migration stopovers in recent years. Also, Brant appear to be heading to northern breeding grounds about two weeks earlier than 16 years ago, perhaps a consequence of climate change.*

Brant are subject to disturbance at many migration stopover sites, most notably locally by Bald Eagles, which disturb Brant at a much higher rate than humans or human activities. Though we have no data specifically on the effects of noise, our studies indicate that Brant appear tolerant of eagle and urban disturbance and can move among

available habitats with no apparent detrimental consequences at a population level. Chronic displacement to less preferred/suitable habitat, as has appeared to have happened as a result of DP3 Project construction activities in winter and spring 2007 will return to previous habitats once the acute disturbance has subsided. It should be kept in mind that the use of the inter-causeway area by Brant is a relatively recent phenomenon promoted by the development of healthy eelgrass beds in the inter-causeway area in the last two decades.

CWS continues to monitor Brant populations in the Strait of Georgia and encourages that unnecessary disturbance to Brant be minimized at all BC migration stopover sites. CWS research is currently attempting to assess any overall implications of climate change, change in food supply of timing, length and timing of migration stopovers on the persistence of Brant. In particular, CWS is investigating the potential effects of the length and timing of migration stopovers in the Strait of Georgia on the energetic fitness of Brant for completing lengthy flyway migrations.

Ministry of Environment Response: CWS is the lead agency for Brant management in the province and we generally concur with their comments. However, the Ministry has noticed varying degrees of success for Brant to habituate to construction noise and activities related to the project. The use of usual habitats appears to have been altered; although the changes in use appeared also during periods when there was no construction activity. The shift in habitat use to habitats of reduced value (which are degraded by noise and construction activities) has presented a challenge to this species' use of local habitats, though it remains to be seen if this disturbance will have lasting effects. The Ministry has an interest in assuring that Brant local populations remain at healthy numbers.

10. Is it true that the Ospreys no longer inhabit the nest that VPA has relocated? What is the VPA doing to rectify this situation?

Environmental monitoring has confirmed that the osprey did not occupy the relocated nest during this nesting season although both a male and female osprey have been observed at the Roberts Bank intercauseway area. It appears from the field observations that Bald eagles used the relocated nest, which is in fact a navigation aid, as a perch point during the spring. The VPA is assessing ways to dissuade use of the nest as a perch for Bald eagles and still be attractive for osprey.

Environment Canada (CWS) response: *Question deferred to BC MOE as Ospreys are a species subject to provincial legislation.*

Ministry of Environment response: *Osprey nests are protected by the provincial Wildlife Act. The VPA draft response appears to be acceptable. Significant resources and planning were committed to conduct the relocation of the nest site, which was conducted at an optimal time of the year. Due to the Bald eagles utilizing the relocated nest as a perch, the VPA could be approached to develop an alternate nesting site should the eagle perching continue to exclude the Osprey's use of the site.*