

**Comments by the Western Gray Whale Advisory Panel (WGWAP) regarding plans to construct an oil pipeline across Piltun Lagoon, Sakhalin Island, and to construct an ice bridge across the Lagoon in order to support pipeline installation.**

It has been brought to our attention that comments are requested on the proposal by Exxon Neftegas Ltd. (ENL) to develop an oil pipeline across Piltun Lagoon, Sakhalin Island, Russian Federation, in support of development activities for Sakhalin I, an oil and gas development project. We are writing in response to comments that the construction and operation of such a pipeline would not pose a potential threat to the habitat of the critically endangered Korean-Okhotsk (“western”) population of gray whales that numbers only about 130 animals.

To introduce ourselves, since 2004 the International Union for Conservation of Nature (IUCN) has convened a series of panels of independent scientists with expertise on western gray whales and their habitat. The present Panel, known as the Western Gray Whale Advisory Panel (WGWAP) and consisting of eleven independent scientists from six countries (Russian Federation, Canada, Germany, Ireland, UK and USA), has been convened by IUCN to provide guidance to the oil and gas industry in order to minimize risks to gray whales and their habitat on the northeastern Sakhalin shelf. Information on this IUCN initiative can be found at [www.iucn.org/themes/marine/sakhalin/index.htm](http://www.iucn.org/themes/marine/sakhalin/index.htm).

At present, the focus of our work is limited to the offshore development project known as Sakhalin II operated by the Sakhalin Energy Investment Company Ltd. (SEIC). Sakhalin II is near to the principal feeding areas of western gray whales. Other offshore development projects, especially Sakhalin I, are active in the region, and most importantly are adjacent to the near-shore (Piltun) feeding area used by nursing females and their calves. Although it has received invitations from IUCN to co-operate, ENL has not participated in the WGWAP or previous panel processes.

We have reviewed a document recently circulated by ENL (in relation to its public consultation period on Stage 2 of the Sakhalin I project, April 2008) that suggests the existence of technical data disproving the significance of organic or inorganic subsidies from Piltun Lagoon to nearshore feeding areas for the whales. We cannot agree with this conclusion since, to date, no studies have been undertaken that could disprove the significance of such potential subsidies. Moreover, the existence of other ocean processes that enhance benthic productivity on the northeastern Sakhalin shelf, as outlined in the document, would not negate the potential contributions by Lagoon-based subsidies to the feeding areas used by the whales.

The WGWAP and its predecessor panels have repeatedly expressed concern that Piltun Lagoon may be crucial to the productivity of feeding areas for western gray whales, and that the Lagoon must, as a consequence, be carefully monitored and effectively protected from disturbance. This concern has been noted in publicly available meeting reports, also available on the WGWAP website. The appended document provides the relevant excerpts from those reports.

To summarize, as a result of tidal fluctuation and estuarine circulation, effluent waters from Piltun Lagoon enter the ocean near the southern end of the near-shore (Piltun) feeding area used preferentially by females and calves. A broadly based technical literature on coastal marine lagoon ecology in locations around the world indicates the potential for subsidies to benthic productivity from lagoon outflow. The scientific literature implies that subsidies originating from the Piltun Lagoon to whale feeding areas on the Sakhalin Shelf could take one of the following forms:

1. Addition of significant quantities of organic detritus in particulate or dissolved form, originating from aquatic or terrestrial processes in the Lagoon's watershed;
2. Addition of significant quantities of organic detritus in particulate or dissolved form, resulting from phytoplankton production occurring in the Lagoon;
3. Addition of significant quantities of living phytoplankton produced in the Lagoon;
4. Addition of significant quantities of inorganic nutrients such as nitrate or phosphate that are known to stimulate primary productivity in nearshore ocean waters, resulting from organic decompositional processes within the Lagoon.

In short, it is premature to conclude that Piltun Lagoon is unimportant to the survival of western gray whales. Further, though our primary focus is on the whales, we also recognize the value of the Lagoon's botanical diversity and its role in supporting populations of fish, birds and seals, all of which stand to be affected by the proposed pipeline.

Given the precarious state of the western gray whale population, a precautionary approach is essential. We suggest that it would be preferable to develop an alternative option, such as rerouting of the pipeline, to eliminate the potential for disruption of key processes of biological productivity within the Lagoon. Of course, it would be essential for any such alternative plan to be subjected to thorough scientific evaluation in order to minimise disturbance to western gray whales and damage to the wider local ecosystem.