

#### Gray whale population structure in Northern Pacific

Eastern (Chukchi-California)

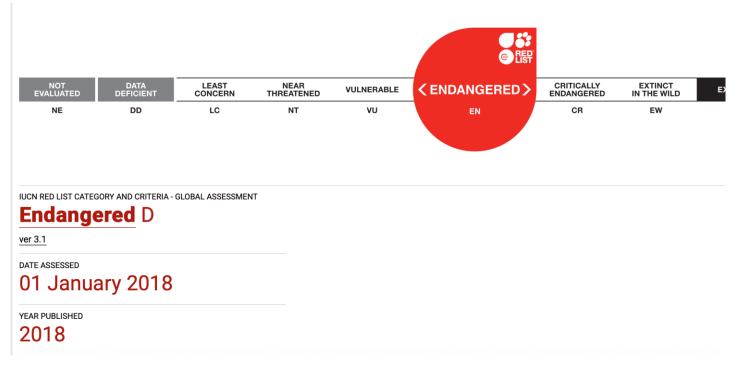
- Number 13800 Lindividuals
- Limited traditional whale hunt
- Breeds in Mexican waters

- Western (Korean-Okhotsk)
- Number about 250 1 individuals
- Protected
- Part of the population comes to give birth in Mexico, but the breeding sites of some part of population are not yet known.

# Concervation status of western gray whale (WGW) population

- IUCN Red list EN
- Russia Red Data Book - Critically endangered





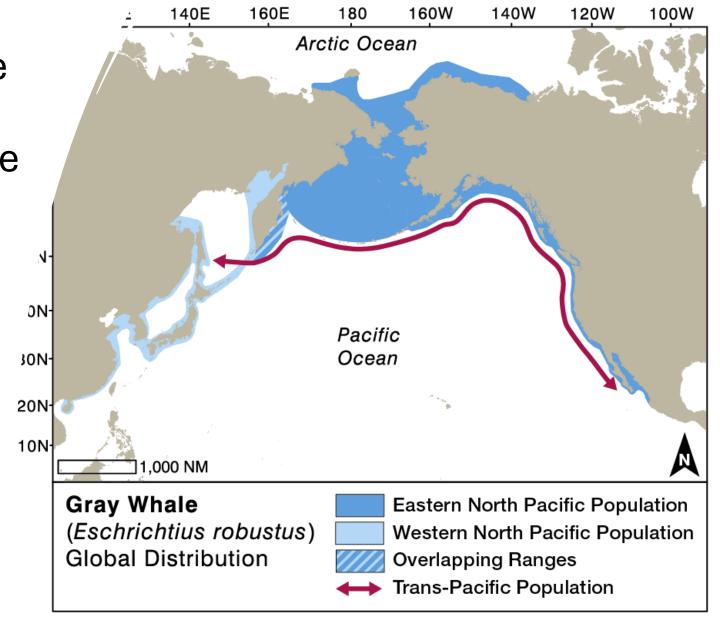
## Main demographic parameters of WGW

- Total number ~ 250
- Breeding females ~ 70
- Number of calves born since
   1995 to 2025 225
- Female reproductive interval  $3,4 \pm 0,2$  (SE, n = 134) years
- age of females at first delivery12 years

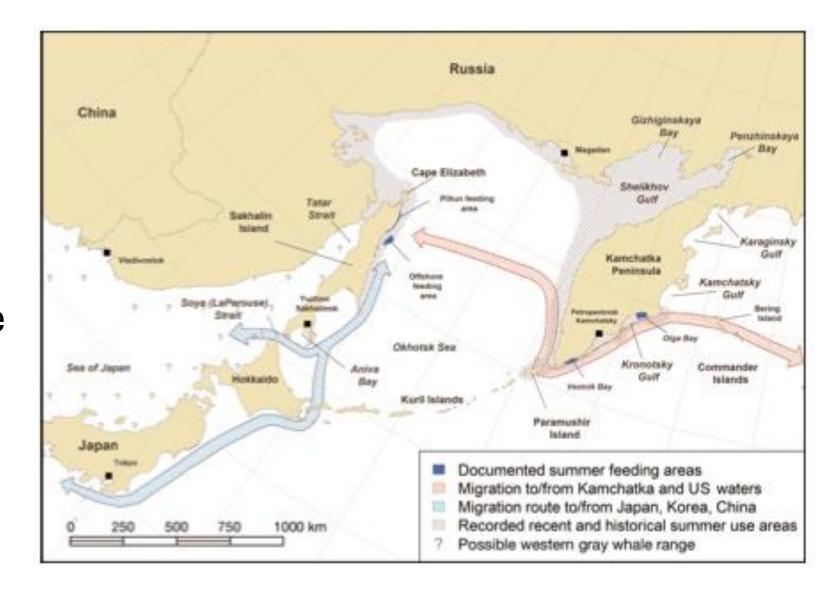


Gray whale distribution in the Northern Pacific cean and countries that include the gray whale range:

- Mexico,
- USA,
- Canada,
- Russia,
- Japan,
- Korea,
- China



Known and suspected distribution of western gray whales in the Russian Far East.
Migration routes are the general directions of migratory movements





Piltun Lagoon area in Sakhalin Isl. where the main research on the western population of gray whales is being carried out













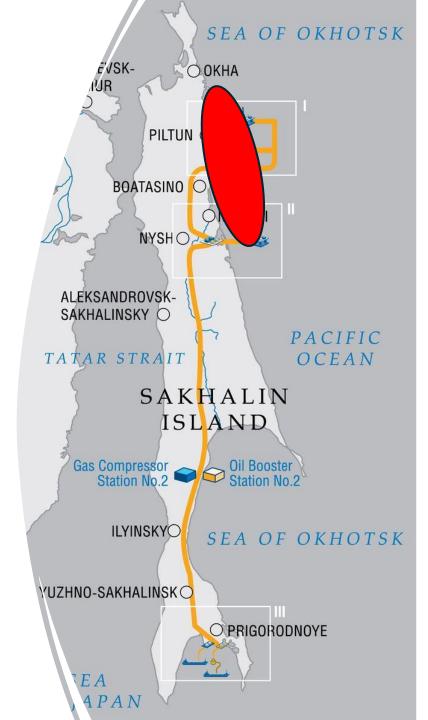


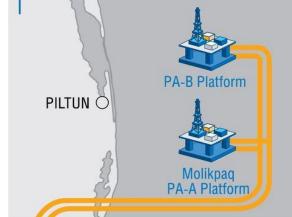
## The main threats to gray whales:

- risks associated with offshore oil production
- Entanglement risk from commercial fisheries
- Vessel strikes
- General ocean pollution

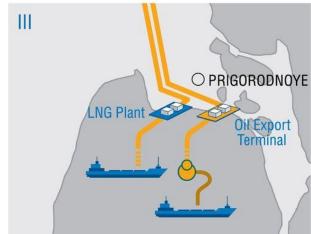
#### Oil development field and main feeding ground for western gray whale in Sakhalin

 Oil and gas development in Sakhalin is focused on the Sakhalin-1 and Sakhalin-2 projects









### Data and Knowledge gaps

- Gray whale migration routs in Asia
- Possible breeding sites in Asia
- Unknown feeding grounds in the Okhotsk Sea
- Role and importance of Kamchatka feeding area (Kronotsky Gulf, Eastern Kamchatka) for WGW



#### Proposal of crossborder collaboration in WGW research

- Resume gray whale satellite tagging program
- Determination of key population biological and ecological indicators required for conservation development across the Asian range
- Determination of key habitats, if any, off the coast of Asia and clarification of the characteristics of their use by whales, creation of protected areas



#### Gray whales washed up on the coast of Asia



Pacific Coast of Japan January 2007



China's Coast, November 2011

