



Marine Mammals

Our independent experts have been busy thinking about how our proposed changes might affect marine mammals in the area

How did we assess noise effects?

The experts considered the impact of proposed dredging and disposal processes on locally and regionally significant marine mammals.

They carried out a review of records that contain data about marine mammal populations in the Whangarei Harbour and wider Bream Bay ecosystem, plus a literature review of the known effects of dredging activities on marine mammals.

This allowed them to pinpoint what mammals might be most susceptible to any effects from the proposed changes, identify the most likely direct and indirect effects, decide on an overall risk level (taking into account things like duration, likelihood and consequence of effects) and make recommendations for mitigation, avoidance and monitoring of effects.

Significance of marine mammals

Of the 29 species of marine mammal that have been sighted in Whangarei Harbour, four regularly or seasonally frequent these waters: bottlenose dolphin; Orca; Bryde's whale; and common dolphin.

Our experts considered these species in their assessment, as well as other marine mammals that visit less frequently but are known to have a low population size (e.g. southern right whale) or are particularly sensitive acoustically (e.g. pilot whale).

They noted the Harbour and Bream Bay are not considered unique or important feeding, resting or breeding habitats for any species.

They also noted the special significance of marine mammals in the Whangarei Harbour to Tangata Whenua generally (in Te Reo – Whangarei-te-rerenga-paraoa means the gathering place of whales).

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Effects on marine mammals

The experts have identified the following possible direct effects on marine mammals:

- Risk of vessel strikes
- Increased underwater sound production having behavioural or physical impacts
- Risk of entanglement

Each of these effects does indicate the potential for a serious consequence e.g. vessel strike leading to the death or injury of a marine mammal.

However, the likelihood of these effects occurring is low and the overall risk level is acceptable, provided we take into account the experts' recommended mitigation actions.

The following indirect effects are possible:

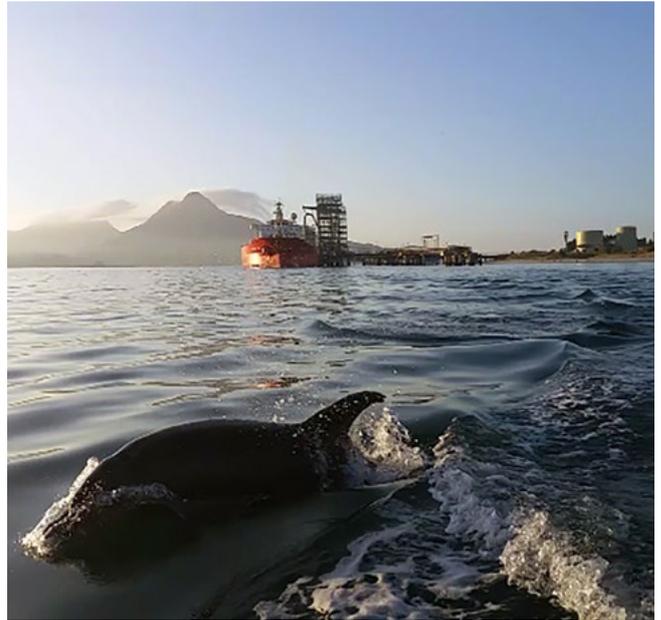
- Physical changes to the underwater environment that damage ecosystem or prey resources

The independent experts have said that any effects associated with the change to the environment are not expected to be detrimental and will only be temporary.

Mitigation & monitoring

The experts have recommended adopting a 'best management practises' approach to mitigate, avoid and/or monitor any effects on marine mammals:

- Simple and common sense boating behaviour is to be followed
- Taking the 'best practicable option' method in choosing a dredge and disposal plan (i.e. one that minimises noise and duration)
- Implementing a 'safety zone' when operating in daylight hours, where if a marine mammal is sighted within a set perimeter of the vessel, dredging activity is suspended
- Creating a marine wildlife management plan, in partnership with the Department of Conservation, that allows for monitoring by:
 - » Conducting visual sightings and periodic passive acoustic monitoring in the area before, during, and after dredging and disposal activities
 - » Using monitoring as a learning tool for the future, and to inform any changes needed for future maintenance dredging



If you'd like to know more of the nuts and bolts of the visual and noise effects of our proposed changes you can get a copy of the assessment reports from the independent experts [here](#)