

**Refinery NZ Crude Shipping Project – Consent Application APP.037197.01.01**

**Addendum to Northland Regional Council Staff Report – Referenced Maps**

The following two maps from:

West and Don. *'Refinery NZ – Existing Environment Assessment: Ecology of the Dredge Area – Whangarei Heads'*. September 2016. Bioreserches Limited.

This report is referred to within the marine ecological assessment report by Brian T Coffey and Associates accompanying the AEE but was not part of the bundle provided.

The maps show:

- a. the particle size distribution of sediments within the proposed dredging footprint (Figure 3.14); and
- b. the habitats at and near the Home Point rocky reef.

These are referenced in the s42A report, at paragraphs 224 (Figure 3.14) and 294 (Figure 3.3) respectively, but not included with that report. These are now being supplied at the request of Commissioner Lieffering in the interests of completeness and clarity.

Glenn Mortimer

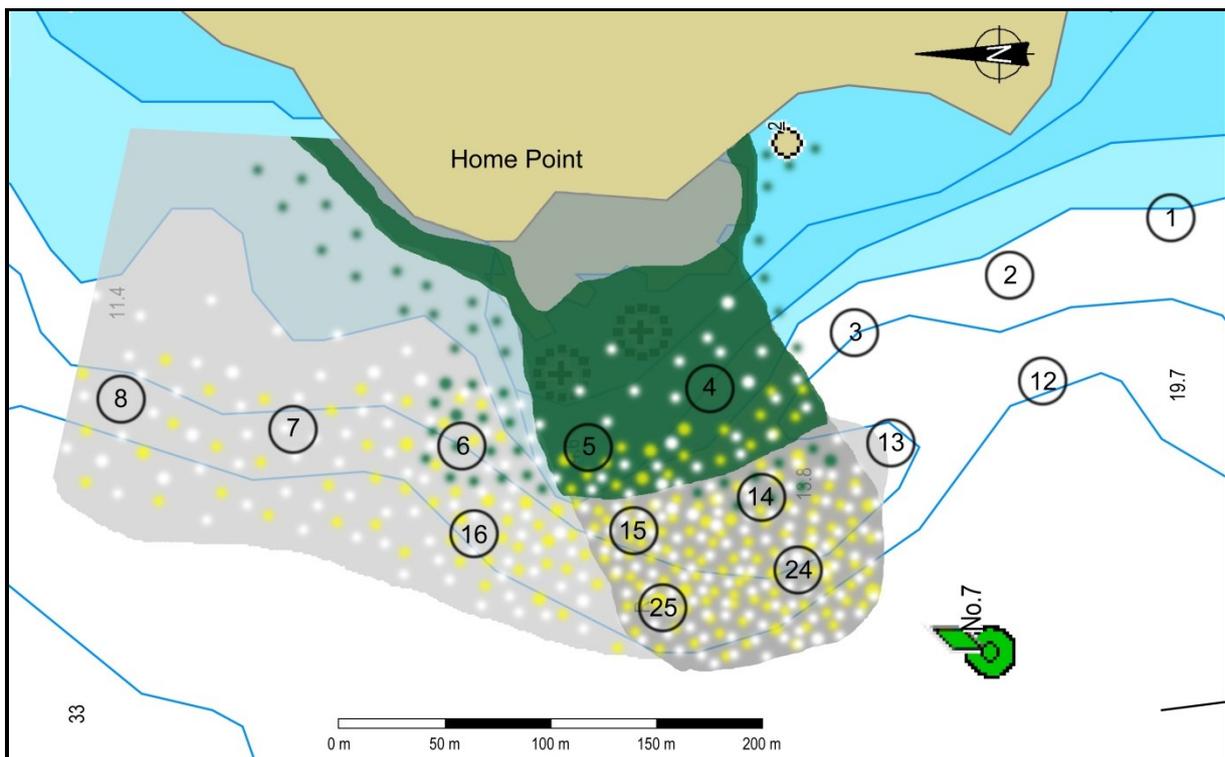
20 February 2018



Figure 3.14 Grouped average particle size distribution in the dredge area.

Point reef area. The data showed numbers of juvenile spotty were high, while goatfish and leather jackets were less abundant than in other areas within the Whangarei Harbour mouth. The 2015 video surveys showed similarly elevated numbers of spotties, but higher numbers of goatfish and leather jackets than was expected based on the Kerr and Moretti fish count data. Butterfish, demoiselles and parore were not observed in the video transects.

The 2015 videos showed the deeper area of the reef has moderately high numbers of fish, particularly snapper and butterfly perch. During the course of the field investigations at least six recreational fishing vessels were observed anchored and actively fishing in the deeper reef area adjacent to Buoy No.7, and along the channel edge between sample sites 8 and 16.



**Figure 3.3 Habitat distribution at Home Point**

**Key**

- |                               |                             |
|-------------------------------|-----------------------------|
| Rock reef                     | Kelp and other seaweed beds |
| Loose rock and unexposed reef | Sponges                     |
| Patchy habitat                | Anemones                    |
| ① Site                        | 33 Depth (m)                |