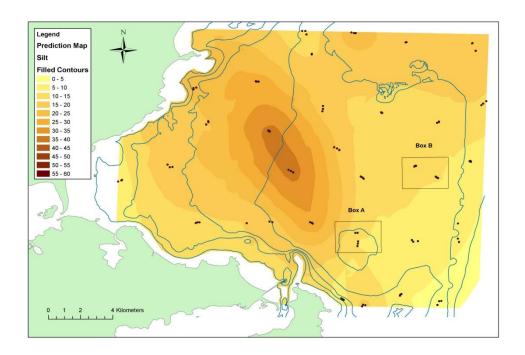
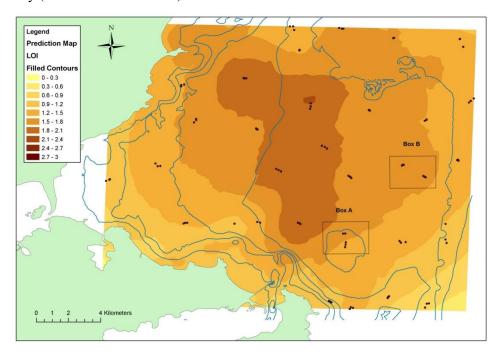
Heyward Point Mole Aramoana Tayler Point Pulling Point Taiaroa Head Spit Jetty Te Rauone Beach Deborah Bay Rocky Point Harington Bend Careys Bay Port Chalmers Ohinetu Pt. Harwood Goat Is Portobello Kilgours Point Curles Point Quarantine Is Latham Bay St. Leonards Yellow Head Grassy Point Ravensbourne Macandrew Bay DUNEDIN Otago

Figure 1. Map showing geographic sites in Otago Harbour (Bell et al. 2009).

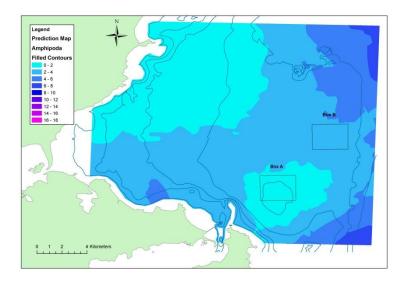
**Figure 2.** Distribution of silt (grain size  $< 63 \, \Box$ m) content (%) in the sediments of Blueskin Bay (from Willis et al. 2008).

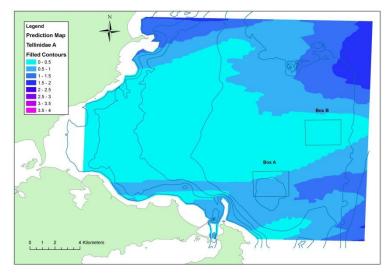


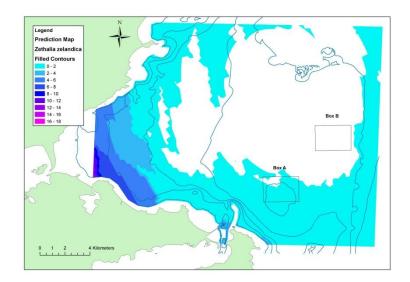
**Figure 3.** Distribution of organic content (% loss on ignition) in the sediments of Blueskin Bay (from Willis et al. 2008).



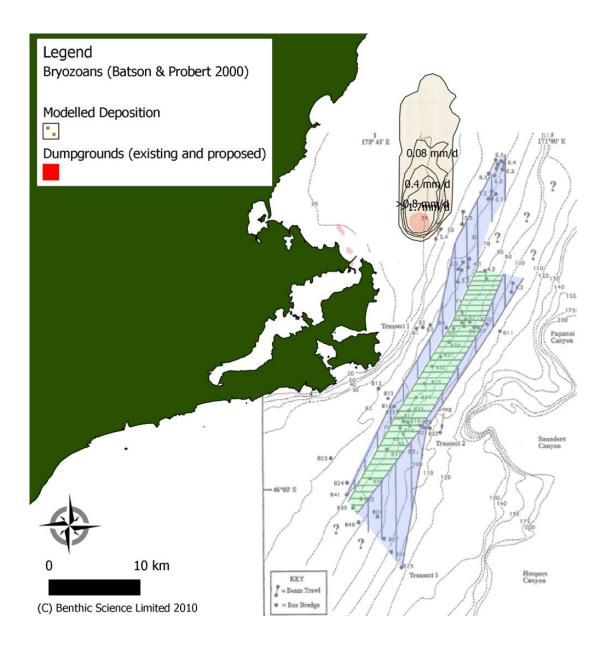
**Figure 4.** Distribution maps for amphipods, Tellinidae and *Zethalia* offshore (from Willis et al. 2008).



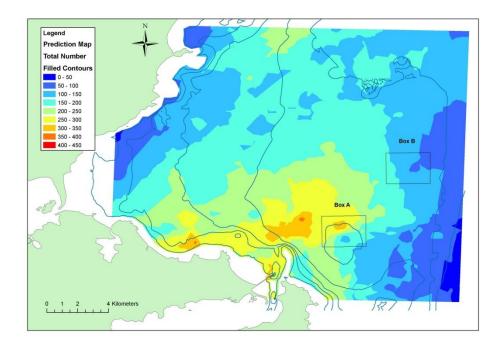




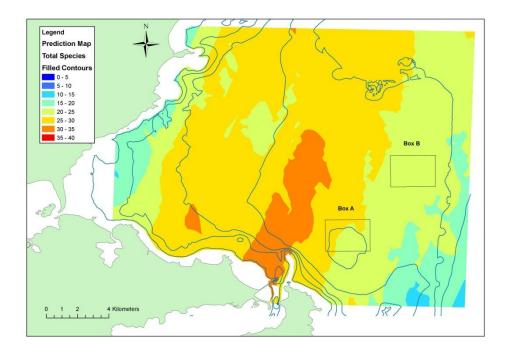
**Figure 5.** Map showing area dominated by bryzoan beds (green area) and where they occur in lower densities (Paavo 2010). Map also shows the extent of predicted sedimentation from the disposal site at A0.



**Figure 6.** (a) Spatial distribution of invertebrate numbers based on the total collected per sample at each site. Note that Box A and Box B in this diagram are referred to as Site A1 and A2 respectively elsewhere in evidence.



(b) Spatial distribution of number of invertebrate taxa based on the total collected per sample at each site.



**Figure 7.** Study area for surveys undertaken by Paavo (2010) at the proposed disposal site (red circle) and downstream. Green dots are sites sampled by Willis et al. (2008) and brown tracks show sidescan swaths sampled by Paavo (2010).

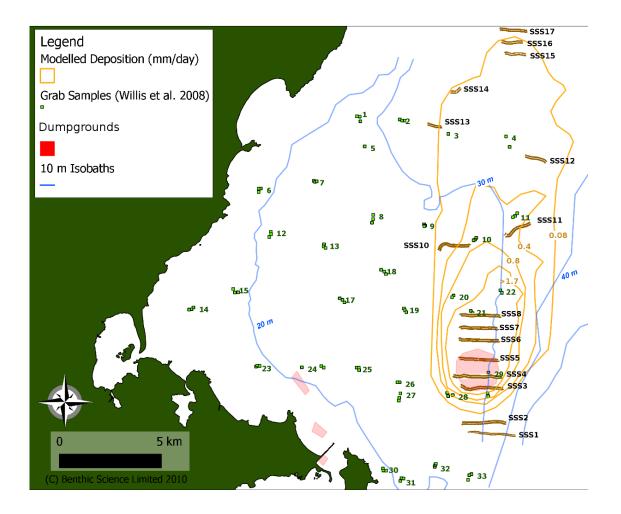
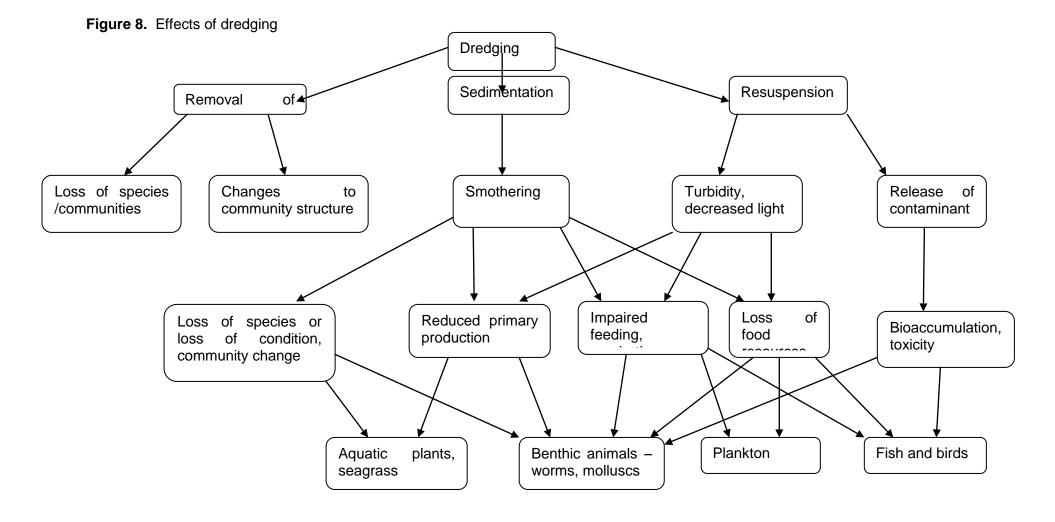


Figure 8. Effects of dredging



**Figure 9.** Map showing habitat types and plumes for of silt when doing major capital dredging in the east-basin of the Port. (A) Map showing suspended sediment concentrations and habitat types - 1 kg/m<sup>3</sup>=1000mg/l. (B) Map showing sedimentation and habitat types - 5 kg/m<sup>2</sup> =  $\sim 0.3$  mm/d.

