

Memo

Supplementary information under Section 92 of the RMA - Northport Coastal Avifauna	To: Brett Hood Reyburn & Bryant
	From: Dr Leigh Bull
Date: 11 July 2023	Project title: Northport

Introduction

Outlined in this memo is the additional information pertaining to coastal avifauna requested by Northland Regional Council in their letter dated 5 July 2023 with respect to clarifications on s92(1) response and further information requested to respond to matters raised in submissions.

Request:

9 a) The effect conclusions of the avifauna assessment are generally underpinned by the assumption that, as a result of the proposed reclamation, coastal waders will disperse to other accessible intertidal areas for foraging and high-tide roosting. Please identify likely alternative locations and provide comment on whether those areas are capable of absorbing/accommodating the displaced birds and any potential adverse effects that this additional pressure may place on those alternative intertidal areas (with regard to both foraging and roosting).

Response:

High tide roosting

The figure below, taken from Beauchamp & Parrish 2007¹, identifies high tide roosts in Whangarei Harbour and Ruakaka Estuary. I note that Beauchamp & Parrish identify the Marsden Bay roost site (2h ha) as a long narrow tidal spit that is gradually eroding, and it does not appear to encompass the area above MHWS behind the proposed eastern reclamation. Thus, potential alternative locations for birds that will be displaced from the construction of the proposed reclamation include all those sites shown in that figure, as well the high tide roost that is proposed to be recreated to the west of the Northport prior to the construction of the eastern reclamation.

Beauchamp & Parrish (2007) observed that the most numerous waders (e.g. bar-tailed godwit, lesser knot, pied stilt, South Island pied oystercatcher, NZ dotterel, variable oystercatcher) used many roosts each tide, and that the populations were well dispersed. They concluded that counts since the 1970s indicated that the loss of a roost site was not critical to South Island pied oystercatchers (SIPO), variable

¹ Beauchamp, A. J., & Parrish, G. R. (2007). Wader (*Charadriiformes*) and royal spoonbill (*Platalea regia*) use of roosts in Whangarei Harbour and Ruakaka Estuary, Northland, 1973-2000. *Notornis*, 54(2), 83-91.

oystercatchers (VOC), pied stilts, lesser knots, or bar-tailed godwits, because they were well distributed amongst the roosts at each high tide.

Beauchamp & Parrish (2007) also noted changes in roost site preference by both SIPO and NZ dotterel over time. SIPO were most numerous at Marsden Point, then later were more widely distributed amongst the inner southern harbour sites. Whereas NZ dotterel were recorded favouring Ruakaka Estuary, then later were found over most sites. Thus, changes in species patterns of use of high tides have been recorded over time – both the numbers and species compositions are not static.

Based on the above factors, it would suggest that the nearby alternative high tide roost locations (including the proposed recreated high tide roost) are capable of absorbing/accommodating the relatively small number of birds (refer to Section 6.1 of the Coastal Avifauna Assessment²) that will be displaced from roosting in the project site.

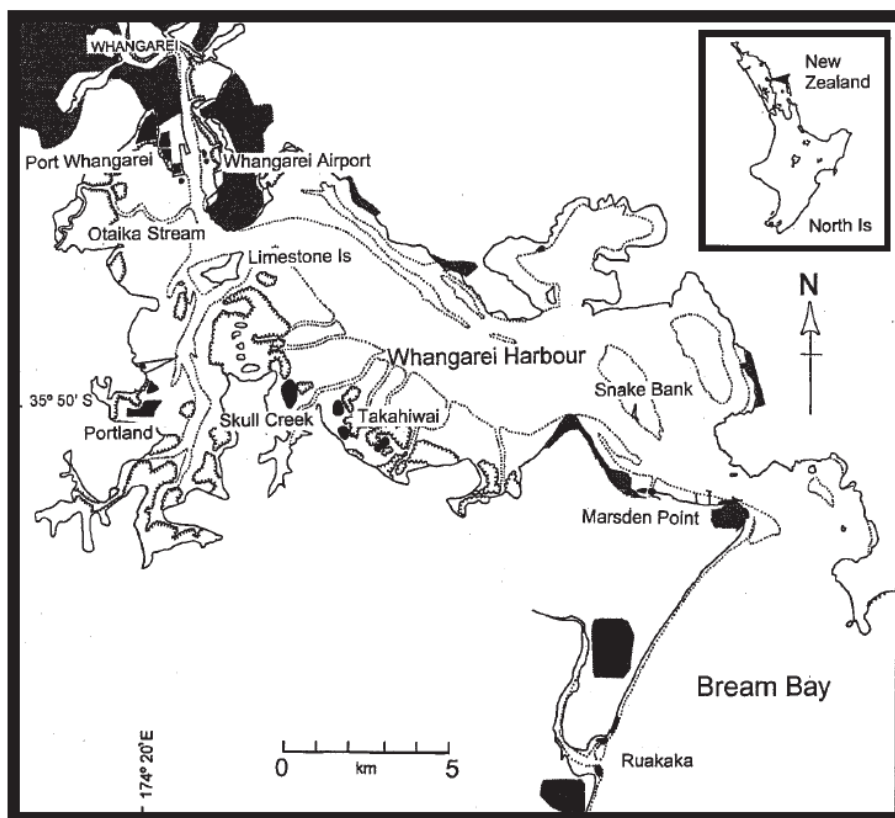


Fig. 1 Distribution of wading bird roosts in Whangarei Harbour and Ruakaka Estuary, Northland, New Zealand.

Foraging

There are a number of alternative intertidal foraging habitat available to displaced birds (refer to Table 16 in the Coastal Avifauna Assessment), including Marsden Bay (One Tree Point to Northport) and Snake Bank. Notably, the intertidal macroinvertebrate fauna was found to be more abundant and diverse to the west of Northport compared to the east in the proposed reclamation.

Furthermore, as noted in Section 3.3.4 of the Coastal Avifauna Assessment, Beauchamp & Parrish (2007) reported that the wading bird count data from the Whangarei Harbour and Ruakaka Estuary suggests that food resources are not limiting birds there.

² Boffa Miskell Limited 2022. Northport Eastern Expansion: Coastal Avifauna Assessment. Report prepared by Boffa Miskell Limited for Northport Ltd.

Based on the above factors, it would suggest that the nearby alternative foraging locations are capable of absorbing/accommodating the relatively small number of birds (refer to Section 6.1 of the Coastal Avifauna Assessment³) that will be displaced from foraging within the project site.

Request:

9 b) To support an evaluation of cumulative avifauna effects, please expand on the cumulative effects assessment methodology utilised within the Avifauna Assessment. It would be helpful to understand Northport's specialists' opinion on whether any additional ecological pressures (beyond the coastal developments identified in Table 35 of the Avifauna Assessment) require consideration. These may include increased levels of human activity, recreational activities (dog walking etc.), vegetation removal and other disturbances of habitat/foraging resources.

Response:

As noted in Section 7.0 of the Coastal Avifauna Assessment, Cumulative effects are concerned with things that will occur, and include two components:

1. Effects arising / building up over time; and
2. Effects arising in combination with other effects.

Therefore, cumulative effects include the effects of the proposed activity in combination with "existing" effects, whether arising from existing uses, permitted activities, and consented and probable uses.

It is my opinion that all the potential effects that may arise from the proposal were considered in the Coastal Avifauna Assessment (refer to Section 6.1-6.7), and that these have then been assessed in the context of cumulative effects relating to this and other "existing" effects (as identified in the respective assessments and summarised in Section 7.0 and Table 36 of the Coastal Avifauna Assessment).

³ Boffa Miskell Limited 2022. Northport Eastern Expansion: Coastal Avifauna Assessment. Report prepared by Boffa Miskell Limited for Northport Ltd.