

BEFORE THE WHANGAREI DISTRICT COUNCIL AND NORTHLAND REGIONAL COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of a resource consent application by Northport Limited under section 88 of the Resource Management Act 1991 for a port expansion project at Marsden Point

APPLICATION NO. APP.005055.38.01

LU2200107

STATEMENT OF EVIDENCE OF SIMON WEST

8 SEPTEMBER 2023

INTRODUCTION

Qualifications and Experience

1. My full name is Simon Andrew West.
2. I am an Associate with Babbage Consultants Limited, employed as the technical director of marine ecology for Biosearches (a Babbage company), specialising in benthic ecology of intertidal to continental shelf environments.
3. I hold a Bachelor of Science with Majors in both Biology and Earth Science from the University of Waikato, and a Master of Science with Honours in Zoology from the University of Auckland (1991). I have been employed by Biosearches since April 1991.

Involvement

4. I have been engaged by submitters Marsden Cove Limited (Submitter 165) and Marsden Cove Canals Management Limited (Submitter 179) to the Northport Limited port expansion application to comment on effects to Marine ecology and Avi fauna.
5. I am familiar with the application site and the surrounding locality. I have conducted site visits and marine ecological surveys for Marsden Cove marina and for the Crude Shipping Project, Marsden Point NZ. I have also read the relevant parts of the application; applicants' evidence of Mr Reinen-Hamill, Dr Kelly, Dr Bull; and the Section 42A Reports.

Code of Conduct

6. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note (2023) and I agree to comply with it. In that regard, I confirm that this evidence is written within my expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

7. My evidence will cover
 - a) Effects in the port reclamation area
 - b) The effects of dredging
 - c) Bird roost reclamation compensation
 - d) Conditions of Consent

PORT RECLAMATION

8. I agree with the general assessments of values and effects. The use of differing scales provides insight for different aspects of the ecology. On the local scale all seabed biota, and mid water habitat will be permanently lost in the footprint of the reclamation, for the biota present this is of the highest magnitude of effect. But on the wider outer harbour entrance zone and the whole harbour scales the magnitude of effects are much reduced from the local scale. The key is determining the weighting of each scale of assessment to provide an overall assessment of the values and magnitude of effects. The magnitudes of effects are different for different aspects of the ecology. I generally agree with Dr Kelly's conclusions but can understand Dr Lohrer's difference of opinion. In assessing the effects at wider scales diffuses the actual effects at a local scale, for example if seagrass is eradicated from the reclamation area it's a total loss and significant effect locally, however on the wider scale of the whole harbour there is still seagrass present, and the area lost is small in relation to total area of seagrass in the harbour.
9. Mr Hood in Paragraph 8.14 suggests the project is consistent with The New Zealand Coastal Policy Statement 2010 under policy 11(a). Policy 11(a) directs us to "avoid" adverse effects to indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists. The seagrass *Zostera muelleri* has been identified as being present in the reclamation footprint and is listed as taxa at risk. Burial resulting in total permanent loss of seagrass by reclamation in my opinion would then constitute an adverse effect, thus the project does not avoid adverse effects to sea grass and is in conflict with NZCPS policy 11(a). In other significantly smaller scale projects I am involved in Northland the presence of seagrass has been taken far more seriously to the point of projects being redesigned to avoid adverse effects to the seagrass.

DREDGING

10. I agree with the assessments of effects posed by dredging.

BIRD ROOST RECLAMATION

11. With the total permanent loss of habitat used by birds for feeding and roosting as a result of the port reclamation, I agree with the suggestion for some form of compensation. The creation of a bird roost prior to port reclamation would act as compensation.
12. I agree with the creation of the bird roost prior to the loss of the existing habitat.
13. A bird roost has been proposed for the eastern end of Marsden Cove Bay, which is designated a significant bird area and a significant ecological area in the regional plan. The regional plan lists a number of rules which apply to reclamations including C.1.6.6 which states reclamation in significant areas is a non-complying activity. Thus, the bird roost reclamation is a non-complying activity. In addition to rules the plan lists a number of policies which relate to reclamation, chiefly policy D.5.20 Reclamation of land in the coastal marine area shall be **avoided** unless **all** the following criteria are met:
- land outside the coastal marine area is not available for the proposed activity;
 - the activity which requires the reclamation can only occur in or adjacent to the coastal marine area;
 - there are no practicable alternative methods of providing the activity; and
 - the reclamation will provide significant regional or national benefit.

However, the application nor applicant's evidence provide any discussion or assessment of options for such bird roosts. The application reports 1,220m² of bird roost habitat will be lost and that 2,703m² will be created by the proposed bird roost, no discussion is provided why an area double the size lost is required, nor is there discussion that this is sufficient area. Only one location for the proposed bird roost is recommended and no other alternative locations are discussed or suggested as options.

14. No discussion is provided as to the suitability of the proposed bird roost to accommodate the birds (New Zealand dotterel, variable oystercatcher, south island pied oystercatcher and red-billed gull) displaced from the reclamation area. If other bird species or populations utilise the proposed bird roost then the area or design may

be insufficient to accommodate the displaced birds, negating the compensation of the lost habitat in the reclamation.

15. Comments are made that the area of the proposed bird roost was located to recreate an historical sand bank. Examination of retro lens images from 1942, 1971 and 1979 showed the proposed bird roost location has not been a sand bank in the past. Yes, the shell bank enclosing Blacksmiths Creek area has receded south by about 90m since 1942, 70m of this occurring since 1971. The peak of the proposed bird roost is some 35m offshore (north) from the shell bank beach location in 1942. While the location is not a major issue it is incorrect to say the proposed bird roost is a recreation of a lost sand bank, as it is not.
16. No specific assessment of the proposed bird roost footprint has been made to show what biota are going to be permanently buried and lost. Dr Kelly's application report provided information on biota present at the wider scale of the intertidal habitat from One Tree Point to Northport and east of Northport in the reclamation area. His report shows a single sample site was collected under the footprint in July 2022 with three sample sites inshore and several sample sites near by offshore. No specific data was published or referenced in the application documents with regard to site locations or biota composition and abundance, other than figures showing numbers of key species or indicators. This is insufficient to assess the effects of the reclamation on benthic biota.
17. I agree with Dr Bull that the loss of feeding habitat as a result of the construction of the proposed bird roost will have negligible effects on the birds (NZ dotterel, bar-tail godwit, lesser knot, pied stilt, southern black-backed gull, white face heron and caspian tern) identified as feeding in the area. The proposed bird roost area is not unique nor currently highly used, with possible exception of lesser knots. A more detailed assessment of the bird use around the proposed bird roost would be helpful.
18. The general principle of offset compensation requires any habitat created as compensation such as the proposed bird roost should be permanently maintained otherwise it just delays the loss of habitat. Dr Bull in her evidence paragraph 18(a) suggests that the proposed bird roost maintenance should last for the duration of the consent. This is insufficient and it is recommended that any bird roost needs to be a permanent structure or permanently maintained, otherwise significant loss of habitat will occur as a result of the project.
19. Putting aside the legalities and potential adverse effects of the proposed bird roost the attention to design has not been adequately covered. Based on the evidence of Mr

Reinen Hamill the design involves placing sand in the location and moulding it to shape with a digger. While it is suggested that the area has low wave activity the inclusion of provision for ongoing maintenance top ups suggests that the material will migrate from where it is placed. The spread of material could potentially cause adverse effects to biota through changes in seabed height or changes in sediment grains size composition. A design which is more durable and contained would seem to be a better option, the existing bird roost at the mouth of the Blacksmith creek is rock armoured. Such a design would then less likely need ongoing maintenance or have the potential to cause adverse effects.

DRAFT CONDITIONS OF CONSENT

20. I have reviewed the recommended Northland Regional Council conditions of consent dated 25 August 2023.
21. The marine ecology monitoring associated with the dredging is all assurance monitoring before and following the activity. Unlike the turbidity conditions the marine ecology conditions do not specify any environmental triggers to determine effects or the management consequences of exceedances of such triggers. If adverse ecological effects (such as loss of shellfish or other benthic biota) are detected in the ecological monitoring, as the conditions are written Northport is not required to do any remediation.
22. With regard to avifauna conditions 55 to 61 the conditions are specific to penguins and variable oystercatchers. No such conditions are included for other shore birds with a threatened or at risk NZ threatened species classification, an all-inclusive set of conditions are required to avoid disturbance during the species breeding season and exclusion zones should be set up.
23. With regard to penguins works should avoid the breeding season July to March.
24. The monitoring associated with the creation of a bird roost (Conditions 189 – 193) is simply morphological descriptive repeated sampling with no conditions to trigger management responses if adverse effects are detected. It is recommended that additional conditions should be added to assess benthic biota and avifauna ecological changes as a result of the proposed bird roost. A rock armoured more durable and contained bird roost would seem to be a better option, potentially negating the need for some of the monitoring.

25. CONCLUSIONS

26. It is recommended that effects trigger levels be defined for the dredging ecological monitoring, and that mitigation measures should be defined depending on levels of effects detected.
27. It is recommended that alternative bird roost sites should be considered, investigated, and compared before consenting, particularly if reclamation is required to create the bird roost.
28. Any alternative bird roost locations should be investigated and shown by the applicant that there are no adverse effects on the Marsden Cove development channel (coastal processes) and that there are no adverse effects on avifauna or marine ecology.
29. Conditions of consent should be amended to protect all threatened or at risk bird species in the port reclamation area during construction, where possible construction during bird breeding seasons should be avoided.

Simon West

September 2023