## **Summary Statement of Antony Julian Beauchamp (Avifauna)**

- 1. My name is Antony Julian Beauchamp.
- 2. My qualifications and experience are specified in my Evidence in Chief (sections 1-4).
- 3. I have presented a brief of evidence on Avifauna on behalf of the Director-general of Conservation.
- 4. I have monitored birds, roost sites and changes in distribution due to development in Whangarei Harbour since my arrival in 1991. Most records have been collected during daylight and recent work has indicated that there are different movement and roost patterns during the night. (The lack of understanding of night activity makes assessment of siteimpacts challenging).
- 5. In my view the correct species, variable oystercatchers (VOC) and New Zealand dotterel, have been identified as being displaced by the eastern port reclamation. However, the zone of influence of these species considered in this application is not "whole harbour" as assessed by Dr Bull, but should be considered as more local and having an "outer harbour zone" focus:
  - a. For VOC, this is due to the lack of observed movements between the upper harbour the harbour entrance.
  - b. For New Zealand dotterel, since 1970, the number of New Zealand dotterels in the upper and mid harbour has never matched the higher numbers detected by the applicant within Northport.
- 6. My observations indicate that VOC using the eastern roost site (E1, Dr Bull's EIC Map 2) use Mair Bank as a low tide foraging site. The eastern roost is the closest sheltered area to Mair Bank. At other times they roost on Northport and CINZ land, and pairs are dispersed along the coastline towards Ruakaka.
- 7. The VOC foraging from Marsden Bay to One Tree Point predominantly use Marsden Bay beach, and Marsden Canal development land. Short-cut grass and swampy areas of Marsden Bay have been used by VOC for foraging for at least the past 70 years.
- 8. Roost sites for New Zealand dotterel are not necessarily coastal.
- 9. Consequently, I agree that there needs to be a local solution to the effects of any displacement of these two species from roost sites and by disturbance at remaining foraging areas to the east of the proposed eastern reclamation. If this is not done, then there could be losses in both populations.
- 10. However, it is my view that neither species is likely to move from shoreline sites to an offshore high tide roost.

- 11. I do not agree that this local solution is best accomplished by the provision of a sandbank renourishment area approximately 50 m from the western port zone boundary. There is no behavioural evidence to support this proposition.
- 12. In addition, my opinion is that the constructed sandbank renourishment area (roost site) and its proposed maintenance will degrade a well-used foraging site of the lesser knot in Marsden Bay. The lesser knot currently has a higher threat status than VOC and has declined in Whangarei harbour from around 3000 to 450 in the past 15 years, potentially due to international factors associated with the reclamation of feeding sites used in migration in the Yellow Sea. However, local impacts cannot be ruled out, and there is no information to support lesser knots having better foraging habitat in other parts of Whangarei Harbour.
- 13. Mapping of foraging areas by the applicant (Dr Bull's EIC Map 11) has shown that lesser knots forage in a restricted area of the Marsden Bay, and counts show that birds fly to that site to forage from elsewhere in the harbour. The bills of lesser knots are specifically designed to detect small shellfish in moist sand including when they are at low density. The part of Marsden Bay where they are foraging remains puddled on outgoing tides and includes the discharge of Blacksmith's Creek. The proposed provision of sand over time is proposed to raise the seabed which will impact on the puddles and outflow channels of the bay, potentially reducing the sites for knot foraging.
- 14. As far as I can tell, Tonkin and Taylor only considered an intertidal sandbank renourishment area (roost) in eastern Marsden Bay as their means of providing a pre-construction alternative roost location for VOC and New Zealand dotterel. The only alternative that Dr Bull considered was the direct restoration of beach areas in western Marsden Bay, which was dismissed due to access by people and dogs. There were no alternative measures proposed should the sandbank renourishment area (roost) not be used by VOC and New Zealand dotterel.
- 15. Land based predator control has been important in both VOC and New Zealand dotterel population recovery. Consequently, in my view one of the most useful local activities that can be undertaken to reduce the impact of any loss of habitat for VOC and New Zealand Dotterel by the reclamation is predator control and fencing where these species roost within Marsden Bay and Marsden Point. This would not necessarily address the immediate impacts of displacement and loss of foraging habitat but would enhance local protection of the species being impacted, whether by the eastern reclamation or not.

- 16. It is my view that the impacts on the threatened species in Marsden Bay are in part cumulative. The VOCs that use Mair Bank are likely to be impacted by dredging of the channel and these are the same birds that use the eastern reclamation roost site.
- 17. The applicant has asked for solutions to be developed now that may not be utilised for decades. This may cause problems as things change. For example, I have over the past month found that over half of the red-billed gull population in Whangarei Harbour use the wharf within the proposed Northport berth 4 reclamation at night for roosting in September-October.
- 18. I support the provision of high tide roost development in Whangarei harbour. I consider that a high tide roost placed elsewhere on land in or beside Whangarei Harbour, and management of sites which are being overgrown by mangroves, are examples of more appropriate responses to the cumulative effects and permanent loss of habitat to port development.

**Dr Antony Beauchamp** 

12 October 2023