

Before the Environment Court
At Auckland

In the matter of **the Local Government (Auckland Transitional Provisions Act 2010 (LGATPA) and the Resource Management Act 1991 (RMA)**

And

In the matter of **appeals under section 156(1) of the LGATPA**

Between **Weli Yang, Zhi Lu & Jing Ni**
(ENV-2016-AKL-000196)
Okura Holdings Limited
(ENV-2016-AKL-000211)
Appellants

And **Auckland Council**
Respondent

And **Weiti Development Limited Partnership**
Section 274 Party

And **Royal Forest and Bird Protection Society Incorporated**
Section 274 Party

**STATEMENT OF REBUTTAL EVIDENCE OF GRAHAM DON (COASTAL BIRDS)
ON BEHALF OF THE ROYAL FOREST AND BIRD SOCIETY AND THE LONG BAY
- OKURA GREAT PARK SOCIETY INCORPORATED**

8 September 2017

1. My qualifications, experience and involvement with the Appeal are stated in my Evidence-in-Chief (EIC) of 28 July 2017.

2. The following rebuttal focuses on the evidence of John Laurence Craig insofar as it addresses coastal birds. The comments are based on my experience with approximately 200 coastal bird surveys during which I have observed the presence and behaviour of birds in a wide variety of situations. I also rely on my core discipline of marine ecology. For example, in the 1980's and early 90's, I was involved with the assessment of about 12 marinas (both existing and proposed). That included consideration and analysis of effects on marine organisms, water quality (including turbidity), sediment quality, contamination and sedimentation. I introduced the use of elutriate testing to assess whether sediments released soluble contaminants on their disturbance.

3. Dr Craig refers to what he calls the "outdated paradigm" (para 2.6) and "locking people and their activities out of areas..." (para 3.6). I disagree that protection of an area of high ecological value (as agreed by Dr Craig – para 5.1) reflects an outdated resource management approach and clearly people are not being locked out.

4. The international position on protecting habitat networks is articulated by the Ramsar Convention (refer my EIC para 4.2.9). The actual "landcare" situation prevailing in the Long Bay - Okura – Weiti area to protect this part of a habitat network is predator control in the Long Bay Regional Park (Auckland Council), Okura Village, Okura Sandspit, Okura Bush Walkway, Karepiro Bay and the Weiti cheniers (community groups) as referred to by Dr Craig (para 2.6).

5. The following numbers of pest animals have been trapped by the Friends of Okura Bush (FOOB) between January 2014 and August 2017 inclusive –

Rats	-	2202
Mice	-	3854
Stoats & Weasels	-	151
Possoms	-	470

The 2016 results from 50 houses in Okura Village are: rats – 78; mice – 25; possums – 5; rabbits – 1 (Ms L. Reid, pers comm).

6. The extent of public use of the area is illustrated by use of the Okura Bush Walkway, which is predominantly inland, and the Sir Peter Blake Marine Education and Recreation Center at Long Bay. The Department of Conservation refers to the Long Bay – Okura Marine Reserve as follows: - “Marine Reserves are ideal places for scientific study, education, snorkelling, diving, eco-tourism, swimming and exploring rock pools --- all these activities, together with boating and picnicking are encouraged.”
7. In that regard, I note that Dr Craig does not refer to the Marine Reserve’s presence even though Marine Reserves are the maritime equivalents of National Parks and the Reserve is contiguous with the OHL lands’ frontage; the Reserve is a significant feature.
8. In my view, the paradigm already prevailing at Long Bay – Okura – Weiti is one of both habitat protection (ie Marine Reserve) and community involvement, both of which are appropriate given the high ecological values. This is not “outdated” any more than it is reliant on the introduction of the occupants of 1200 – 1900 houses into the location to sustain it, along with the associated various risks I address in my EIC (para 5.2).
9. Dr Craig refers to the Tiritiri Matangi Wildlife Sanctuary (Tiri) that was re-vegetated (para 3.6) having been stripped of 94% of its native vegetation by farming. Although it also provides education, research opportunities and is a tourist destination, it is different from the Long Bay – Okura – Weiti habitats: - the emphasis is on terrestrial habitats. Tiri has no extensive soft substrate intertidal habitats; it is surrounded by water (a moat) and is developing problems regarding inbreeding of birds (eg kokako)¹. Tiri also provides advocacy and sanctuary ie “some of the habitats and species already present would not have been part of the Island’s original ecosystem” but Tiri “is not, and never can be, a self- sustaining ecosystem. The Island does not have the habitat and food resources necessary to

¹ Parliamentary Commissioner for the Environment May 2017. Taonga of an island nation: Saving New Zealand birds. 139pp

sustain all the resident species.”² The example provided by Dr Craig (para 3.7) relates to terrestrial birds that in my experience are relatively tolerant of the public use of tracks which is the only potentially adverse effect considered.

10. Therefore, I disagree with Dr Craig that my overall assessment of effects and the considered cumulative risk in the longer term to the Marine Reserve and its environs is based on a failing paradigm, especially if Tiri is promoted as some sort of parallel.
11. At Dr Craig’s para 3.18 he states that cat control will rely on voluntary controls and education. The additional risk of cats from 1200-1900 dwellings at 1.5 cats per dwelling in 39% of New Zealand households³ (ie 468-741 homes) is relatively high at 702 to 1112 (rounded) cats. While I acknowledge all avifauna experts strongly support a ban on cats (second expert conferencing statement), the practicalities of implementing this were also acknowledged, and I am not aware of any such control being introduced or enforced in a development of the proposed scale.
12. At Dr Craig’s para 5.2 there has been clear misunderstanding of my para 4.3.3. The two intertidal areas that were exposed early on a falling tide were firstly the northern side of Okura Estuary followed closely (about 30 minutes later) by the southern side immediately adjacent to the OHL lands. In addition, the maximum number of New Zealand dotterel (at risk, recovering, refer my EIC, para 4.2.4) was recorded on the rocky upper intertidal platform on the southern side adjacent to the OHL lands. This is more than “an occasional NZ dotterel” making use of the area near the OHL site as suggested at Dr Craig’s para 3.12.
13. Dr Craig asserts at para 3.15 that there is a “predominance of Not Threatened species feeding or roosting on the mudflats adjacent to the OHL land”. In para 3.12 he lists a total of 8 species of which one is threatened and five are at risk i.e. 75% of the species he refers to as using the OHL frontage are of national conservation concern. That excludes red-billed gull (at risk species) that I recorded in March 2017.
14. Dr Craig (para 3.15) also suggests that the numbers of birds seen (by Boffa Miskell) feeding or roosting on the mudflats adjacent to the OHL land were small. My

² Tiritiri Matangi Island Biodiversity Plan 2013. Supporters of Tiritiri Matangi (Inc.) 111pp.

³ The NZ Companion Animal Council Inc. 2016. Companion Animals in NZ 2016 93pp.

observations indicated that a maximum of about 100 birds utilised the adjacent intertidal habitat. I note again (as above) that the maximum number of dotterel recorded in the estuary were located adjacent to the OHL lands.

15. No analysis of specific use of parts of Okura Estuary has been presented by Dr Craig. It is difficult to determine from the data produced by Dr Craig which birds were actually recorded “adjacent to OHL land” (para 3.15) or use “the foreshore immediately in front of the OHL block” (para 3.28a). I have assumed that the species recorded using that frontage are those listed in Dr Craig’s Appendix 1 and para 3.12.

16. At Dr Craig’s para 5.3 he dismisses the Index of Waterbird Community Integrity (IWCI) (ie de Luca et al). In my view that dismissal is unfounded. The de Luca paper (my E.I.C reference N°11) arose from a program initiated by the United States Environmental Protection Agency (USEPA)⁴ and is recommended for use (with 16 other similar indicator protocols) by resource managers and scientists across the United States⁵. Of necessity, the index used a range of actual development intensities and types, and actual coastal bird data (86 transects) from 28 sub-estuaries, so that a gradient of actual values and effects could be determined. Both total and suburban development had a significant negative impact on IWCI scores. The human disturbance aspect is accommodated by different weightings for tolerant and sensitive species.

17. Dr Craig comments on mangrove spread (para 5.5) being an effect that occurred 30-40 years ago. Figure 4 of my E.I.C. shows the spread of mangroves in the past 12-13 years; in my view development of the OHL land will potentially accelerate that trend and reduce the biodiversity of coastal birds in areas covered by dense mangroves.

⁴ USEPA 2006 A Manager’s Guide to Indicator Selection. USEPA Office of Research and Development, Washington DC. 8pp.

⁵ Brooks, RP; Wardrop, DH; Thornton KW; Whingham, D; Hershner, C; Brinson, MM and Shortle, JS (eds) 2006. Integration of ecological and socioeconomic indicators for estuaries and watersheds of the Atlantic Slope. Final report to U.S. Environmental Protection Agency STAR Program, Agreement R-82868401, Washington, DC. Prepared by the Atlantic Slope Consortium, University Park, PA. 96pp.

18. Dr Craig is concerned (para 5.6) with 70,000 visitors using the Okura Bush Walkway regarding disturbance, and the presence of pest animals (para 5.7). The Okura – Karepiro Bay habitats are of high value to coastal birds because they contain both feeding and roosting habitats. That high value has been maintained in the context of existing (and apparently successful) control of feral predators and use of the walkway by the public. I suspect that the coastal bird values are largely unaffected by walkway use because most users are day-trippers and most keep to the track. In my view, intermittent walkway use is an entirely different situation from the potential adverse effects (para 5.2 EIC) arising from a possible permanent residential population of 2400-3800 people.

19. Conclusion

I do not resile from the conclusions of my Evidence in Chief. In my view, the proposed increase in the number of residential dwellings at Okura will increase the risk of a cumulative adverse effect on coastal birds and their habitats. In the long term my concern is a reduction in both the biodiversity of coastal birds and the use of the Okura-Karepiro area by coastal birds, including Threatened and At Risk species.

Graham Don

September 2017