Before the Hearings Panel At Wellington City Council

UNDER Schedule 1 of the Resource Management Act 1991 ("RMA" or "the Act")

IN THE MATTER of the proposed Wellington City District Plan

Rebuttal evidence of Dr Michael Anderson on behalf of Wellington International Airport Limited (Ecology).

Date: 8th November 2024

PURPOSE AND SCOPE OF REBUTTAL EVIDENCE

1) This rebuttal evidence is to address comments raised by Dr McClellan (Ecology), in relation to the proposed "Bird Strike Rule" (proposed INF-R25 and associated definition) regarding the Wellington City Council (**"WCC"**) Proposed District Plan (**"PDP"**).

BIRD STRIKE AT WELLINGTON AIRPORT

2) Dr McClellan provides further background to aviation bird strike in general and bird habitats surrounding the airport and states (at paragraph 27) that despite abundant habitat, the most recent CAA quarterly report states that Wellington Airport has a 'Low' strike rate. This is not disputed. However, my understanding is that this strike rate rating is based only on the number of incidents per aircraft movements, and does not encapsulate the bird species, type of strike, or severity of the strike.

3) In addition, my understanding is that the purpose of having bird strike provisions in the PDP is at the very least to maintain a low strike rate. These provisions seek to proactively manage land use changes in the surrounding area which could create new habitats, increase hazardous species' populations, and new patterns of bird movement and thereby increasing strike rates.

4) Dr McClellan also points out (29) that the risk matrix provided differs from the Allen Risk Matrix. My evidence may have been unclear on this matter. The Allen Risk Matrix method was the model (i.e. scoring strike probability vs severity of outcome) for Wellington Airport's wildlife risk matrix. This version, using 6 categories of severity, has been adopted by the Wellington Airport for use in their Wildlife Hazard Management Plan, which was reviewed by Wildlife Management International, Ltd. This is the matrix and risk categories that was used in my evidence.

WELLINGTON AIRPORT SUBMISSION

5) Dr McClellan also queried the radii adopted by WIAL and whether it is appropriate to base these on overseas guidelines, stating they are not relevant for New Zealand or Wellington (45). However, many of the key areas of interest for bird habitats identified within the Wellington Airports Wildlife Hazard

Management Plan, as detailed in my evidence, fall beyond the 3 km radius which Dr McClellan considers is able to be supported.

6) Although most bird strikes likely occur within 3km of the airport, this is only reflective of the altitude that birds are flying within Wellington. Movements of birds to and from key habitats across the Wellington district and beyond, create bird strike events within that 3 km area. This is evident with the example of SBBG, which regularly move to and from the Southern Landfill (~4.8 km from the airport) and various other roosting sites, with the patterns of movement that this creates often results in bird movements intersecting the flightpath of aircraft.

7) A rule based on an 8 km radius would help to properly consider and manage any Bird Strike Risk Activity that would create new bird habitats and therefore movements of birds across plane flight paths in closer proximity to the airport.

KARORO|BLACK-BACKED GULL

8) Dr McClellan recommended that the regulation of landfills should cover everywhere in the districts, not just out to 13 km, given the movements of SBBG (58) and from an ecological perspective I can agree with this recommendation.

9) In terms of Ms O'Sullivan's recommended 8 km radius as opposed to 3km, Dr McClellan states (62) that there is no ecological justification provided for this departure from the Christchurch rules. This seems at odds with her previous paragraphs discussing the large scale movements of satellite-tracked SBBG.

10) In addition I understand that the 8km radius is not recommended just on current land use practices, but any potential future land use practice defined as a Bird Strike Risk Activity within this area. In my view any such new land use activity outside 3 km, may increase local bird populations and/or alter local movement patterns, which in turn increases bird strike risk closer to the airport.

WATERFOWL: MALLARD AND CANADA GOOSE

11) Both Mallard and Geese have a low likelihood of bird strike, at present. Mallard are currently distributed around Wellington's coastline and a few freshwater ponds or lakes (e.g. Zealandia and the Botanic Gardens), while Geese are less common and mostly near the Hutt River. However, the severity of a bird strike from mallard or geese is considered very high or extreme, respectively.

12) In my view the suggested exclusion of new water bodies (exceeding 1000m2) from INF-R25 may increase the likelihood of bird strike as this would involve the creation of new habitats for waterfowl. Especially, as Dr McClellan agrees, Canada geese are rarely seen in the vicinity of Wellington City however if new habitats are created, Canada Geese and other waterfowl are likely to colonize them shortly afterwards.

SUMMARY

13) The Evidence of Dr McClellan provides useful additional information. However, much of it is focused on the current distribution key species, in regard to what is required for bird strike areas. In my view it is more beneficial to take a proactive approach to consider how the distribution and movements of these species could change with the specified land use changes.

14) I recommend retaining the 8 km radius. Any new (or extended) Bird Strike Risk Activity within 3-8km of the airport that provides new habitat or food resources for birds, will also increase the risk of bird strike closer to the airport, due to increased population size or local movements.

15) I also recommend the definition of Bird Strike Risk Activity includes any new waterbody exceeding 1000 m^2, as new water bodies have the potential to attract high risk bird species that are not currently very common within the Wellington district.

Dr Michael Anderson

8th November 2024