

Feedback on submissions received regarding the selection of sites of significance for indigenous birds listed in Wellington's proposed Natural Resources Plan.

Background

1. Greater Wellington Regional Council (GWRC) has been working through public submissions regarding Wellington's proposed Natural Resources Plan. Among these submissions are some concerns raised about the methodology used to identify the sites of significance for indigenous birds listed in Schedule F2c of the proposed Natural Resources Plan.
2. Wildlife Management International Ltd (WMIL) has been asked by GWRC to provide feedback on some of the points raised in these submissions, due to the fact that WMIL Ecologist Nikki McArthur played a key role in developing the methodology used to select these sites of significance, in his former roll as an Environmental Scientist at GWRC.
3. In the section below, we've provided relevant excerpts from the submissions passed on by GWRC (in italicised text), followed by WMIL's feedback on the points that have been raised. It should be noted that we have not provided feedback on all of the points raised in the submissions that have been provided to us, as some of these points raise questions regarding the wording of policies included in both the Regional Policy Statement and proposed Natural Resources Plan, and their implementation. These points relating to specific policies fall outside the scope of the work done by both WMIL and GWRC Environmental Science staff to select the bird 'sites of significance' listed in the proposed Natural Resources Plan, so we recommend that relevant GWRC Environmental Policy staff are approached to provide feedback on these points.

Feedback on submission points

4. *“WCC is not opposed to the identification of Sites of Significance to birds where these areas can be demonstrated to be significant. The current extent of areas identified, and the fact that no portion of the undeveloped south or west coast of Wellington is identified raises issues with the methodology used to identify the areas.”*
5. GWRC consciously took a strongly evidence-based approach to identifying sections of coastline that could be demonstrated to meet one or more ‘significance’ criteria with respect to indigenous birds. This approach involved reviewing all readily-accessible, and readily-discoverable bird survey data describing the distribution and abundance of indigenous birds along all sections of Wellington’s coastline, and applying these data to a set of criteria that established thresholds for ecological significance with respect to indigenous birds. By taking this approach, GWRC is able to show exactly how each site listed in Schedule F2c of the proposed Natural Resources Plan meets these significance criteria, based on the documented bird values at each of those sites. A summary of the bird survey data reviewed, the criteria to which the data were applied, and a description of the methodology followed is documented in two technical reports published by GWRC: McArthur & Lawson (2014) and McArthur et al (2015). We’d encourage the submitter in question to review these reports to gain a better understanding of the methodology that was followed.
6. One inevitable shortcoming of this evidence-based process that was followed is that sections of coastline for which no bird survey data was readily available could not be assessed against the significance criteria developed, and therefore were not eligible for inclusion in Schedule F2c due to a lack of evidence to support their inclusion. This explains why large sections of the south and west coast of Wellington City are not included in the Schedule. This shortcoming was clearly identified at the time this work was done. For instance, McArthur and Lawson (2014) point out that any sites not put forward as candidate sites for inclusion in Schedule F2c should be considered information gaps, rather than sites that did not meet any of the

'significance' criteria that were applied to available bird data. In an attempt to ameliorate this shortcoming in the methodology, McArthur et al (2015) recommended that GWRC develop a process to periodically review all available bird survey data for the Wellington coastline, together with any changes to the conservation status of coastal bird species, and update Schedule F2c of the proposed Natural Resources Plan accordingly. It was recommended that this review occur on a five-yearly cycle, aligned with the publication of each update of the conservation status of New Zealand's birds.

7. *“Within WCC’s harbour and south coast urban area the adverse effects on bird habitat must be ‘avoided, remedied, mitigated or offset’, while in WCC’s rural south and west coast the effects on bird habitat must only be ‘minimised’. The current approach means key bird areas (breeding and nesting) are under protected, while areas where birds may have only a transitory presence (and are highly urbanised) must meet a very high policy threshold.”*
8. While we cannot comment in general on the appropriateness of policy requirements that stem from whether or not a site is listed as significant, the differential thresholds being applied to Wellington Harbour vs the south coast is once again a consequence of the existence and availability of bird survey data that demonstrates whether these sections of coast meet the Regional Policy Statement’s threshold of “significance” for indigenous birds. The “key bird areas” that the submitter claims are under-protected on the Wellington south coast either had not been adequately surveyed at the time that Schedule F2c was prepared, or that data was not easily discoverable by the expert panel of ornithologists that was convened to carry out this review. As such, there is currently insufficient evidence to demonstrate that these “key bird areas” meet the Regional Policy Statement’s threshold for significance, therefore GWRC has no grounds to apply a stronger policy threshold to this section of the Wellington coastline at the current time. As mentioned in the previous section above, GWRC’s recommendations that a) any sites not listed in Schedule F2c should be considered data gaps, rather than sites that don’t meet GWRC’s ‘significance’ criteria (McArthur & Lawson, 2014); and that Schedule F2c be periodically reviewed in light of new data becoming available, or changes being made to the conservation status of locally resident bird species (McArthur et al,

2015) would ensure that such sites do eventually receive the appropriate level of protection under the proposed Natural Resources Plan, once evidence does become available to show that these sites do meet one or more of the 'significance' criteria.

9. Furthermore, it's the opinion of the author, and of the expert panel of local ornithologist convened to identify the sites of significance for inclusion in Schedule F2c, that the submitter is underestimating the value of relatively modified stretches of coastline adjacent to urban and suburban parts of Wellington to indigenous birds. The bird survey data available for the Wellington Harbour coastline in particular clearly demonstrates that a number of Nationally Threatened or 'At Risk' species are either permanently resident, or present on >50% of survey occasions, along the stretches of Wellington Harbour coastline included in Schedule F2c. A number of these species, including the Nationally Endangered reef heron (*Egretta sacra*), At Risk, Recovering variable oystercatcher (*Haematopus unicolor*) and At Risk, Declining little penguin (*Eudyptula minor*) are breeding along these sections of coast. These data clearly demonstrate that these species have more than "only a transitory presence" at these sites, as asserted by the submitter.
10. *"Policy 36, on the other hand only requires that the adverse effects of works carried out in other areas along the South Coast (not identified in Schedule F2 yet known to contain threatened species such as banded dotterel) shall only be minimised."*
11. According to the criteria that the expert panel applied to available bird data to identify sites of significance for indigenous birds, the presence of banded dotterels alone is insufficient to meet the threshold of "significance". In the case of any Nationally Threatened or 'At Risk' species being present at a site, data must exist that demonstrates that the site provides habitat for at least 5% of the regional population of that species (McArthur et al, 2015). At the time that the work was carried out, the regional population estimate for banded dotterels stood at 500 individuals (GWRC, unpublished data), so data demonstrating the presence of a minimum resident population of 25 banded dotterels is required to provide the evidence that a site provides 'significant' habitat for this species, and therefore

warrants inclusion in Schedule F2c. At the time that this work was carried out, no such data was readily available, or discoverable for the Wellington South Coast.

12. *“The policy framework adopts a more restrictive approach to the effects on birds in areas where the continued functioning of infrastructure is essential and development can reasonably be expected. It adopts a more permissive policy approach to birds in the natural south and west coast and areas of little or no development.”*

13. This is not true. The policy framework is being applied consistently across the region, irrespective of the presence of infrastructure, or the potential for future development. The variation in the levels of protection that sites receive under the proposed Natural Resources Plan have come about as a direct consequence of the spatial variation in the availability of bird monitoring data used to demonstrate whether or not sections of coastline meet the Regional Policy Statement’s thresholds of ‘significance’. Wellington Harbour has been the subject of a great deal of survey effort by local ornithologists, as have other easily accessible and relatively densely-populated sections of coastline in the Wellington region. In contrast, more remote parts of the south and west Wellington coastline have received little, or no survey effort, so little or no data was available to provide the evidence to show that these areas of coast meet ‘significance’ thresholds. McArthur & Lawson (2014) and McArthur et al (2015) provide recommendations on how this by-product of the evidence-based approach that has been adopted can be ameliorated.

14. *“The presence of birds has occurred despite urban development occurring in these areas. In WCC’s view the Regional Council has not demonstrated that there is a resource management issue that justifies the proposed restrictive policy approach.”*

15. One reason why such a large proportion of the Wellington Harbour coastline has been included in Schedule F2c is because such a high proportion of the coastal bird species found along these stretches of coastline are classified as either Nationally Threatened or ‘At Risk’ under the New Zealand Threat Classification System (Robertson et al, 2017). The majority of these species are classified as threatened or

'at risk' because national populations of these species continue to decline due to the combined impacts of mammalian predators, habitat loss, habitat modification and habitat disturbance (Woodley, 2012). On stretches of coastline with significant development or high levels of human activity, habitat loss, habitat modification and human disturbance are leading causes of shorebird declines (Melville & Schuckard, 2013). Many of the human activities that could potentially result in the loss or modification of habitat for threatened coastal birds, or directly disturb local bird populations are regulated by local authorities under the Resource Management Act (1991), policies such as Wellington's proposed Natural Resources Plan and local bylaws. This in our view amply demonstrates that there is a resource management issue that exists along these sections of the Wellington coastline that justifies the proposed policy approach. It is simply untrue to state that shorebirds remain present *despite* development along our coastline, as current population trends, and the current conservation status of the majority of these species demonstrate that they're continuing to decline as a result of human activities at these sites. Once again, we recommend that the submitter reads the two technical documents that describe the process taken to identify the bird sites of significance included in Schedule F2c, to gain a better understanding of the justification for the approach taken.

16. Decision requested: 9.1 Review all identified sites of significance to birds along the urban and south coast portion of WCC's coastline in Schedule F2c, in consultation with Wellington City Council.

17. We see no reason to undertake such a review unless Wellington City Council are in a position to provide quantitative bird data to demonstrate whether portions of the south coast meet the significance criteria listed in McArthur et al, 2015. In regards to the 'urban' sections of coastline included in Schedule F2c, Wellington City Council have provided no evidence to justify the need to review the inclusion of these sites in the Schedule, as the bird data available for these sites is unequivocal.

18. Decision requested: 9.2 Include the following new area of WCC south coast in Schedule F2c: Map A (attached) NZ banded dotterel breeding site

19. In accordance with the evidence-based approach taken to assess sites for inclusion in Schedule F2c, Wellington City Council needs to provide data to demonstrate that either: a) the site provides habitat for a minimum population of 25 banded dotterels, or: b) a minimum of four Nationally Threatened or 'At Risk' species are either resident, or regularly occur at the site, or c): the site supports seasonal or core habitat for at least 33% of the regional population of a protected, but not threatened or 'at risk' species (McArthur et al, 2015). Until Wellington City Council are able to provide this evidence, there is no justification for including this site in Schedule F2c, so for the time being it should be considered to be an information gap (McArthur & Lawson, 2014).

20. Decision requested: 9.3 Include a new policy framework...[to] recognise the contribution that Wellington Harbour and south coast makes to the breeding, roosting, feeding and migration of birds."

21. We don't see a need to create a new policy framework "to recognise the contribution that Wellington Harbour and south coast makes...to birds", as the existing policies already adequately do this. As discussed above, the exclusion of the south coast from Schedule F2c is a consequence of a lack of evidence to demonstrate that this section of coast meets the criteria for 'significance', due to a shortage of available bird survey data. Rather than create a new policy framework therefore, we'd recommend that either WCC or GWRC fund a comprehensive coastal bird survey along this section of coast to quantify its indigenous bird values, and that once this data has been collected, that Schedule F2c be revised accordingly.

22. Additional Submissions on Schedule F2c: Masterton District Council – request that boundaries of the Stony Bay site be modified to exclude two boat launching facilities and associated vehicle access points.

23. We're satisfied that the exclusion of the boat launching facilities and associated vehicle access will have a negligible impact on the indigenous bird values of this site, so we support these alterations to the map and associated GIS layer.

24. *Additional Submissions on Schedule F2c: Wellington International Airport Ltd – request to remove areas of the CMA adjoining Wellington airport from Schedule F2c on the grounds that including these areas is “inappropriate”.*

25. We do not support the removal of sites in the CMA adjacent to Wellington Airport from Schedule F2c. WIAL has not made a substantive enough case to demonstrate why the inclusion of such areas is “inappropriate”. Rather, McArthur & Lawson (2014) and McArthur et al (2015) clearly demonstrate that based on available quantitative data, these areas meet the Regional Policy Statement’s criteria for being “sites of significance for indigenous birds”. The inclusion of areas in such close proximity to Wellington airport certainly may be inconvenient, but it is not “inappropriate” under the current policy framework.

26. *Additional Submissions on Schedule F2c: Friends of Taputeranga Marine Reserve Trust – request to include the entire south coast...in Schedule F2c.*

27. As explained above, the inclusion of any additional sites in Schedule F2c can only be justified under the current evidence-based approach when quantitative bird survey data exists that clearly demonstrates that a site meets one or more of the ‘significance’ criteria outlined in McArthur et al, 2015. In order for the south coast to be included in the Schedule therefore, a comprehensive bird survey of the Wellington south coast first needs to be carried out, with the aim of estimating the populations sizes of any nationally threatened or ‘at risk’ species present, and the number of threatened and ‘at risk’ species that are either resident or regularly occur along that stretch of coastline. Given that it’s becoming increasingly apparent that the south coast represents a significant information gap, we recommend that this survey be carried out as soon as practically possible.

28. *Additional Submissions on Schedule F2c: Hutt City Council – request to use a scientifically-robust method for identification of areas of significance to birds that recognises the actual value of the sites.*

29. We’re comfortable that the approach taken to identify the sites listed in Schedule F2c is scientifically robust, and we encourage the submitter to read the technical

reports prepared by McArthur & Lawson (2014) and McArthur et al (2015) to gain a better understanding of the process that was followed. As already discussed, the process followed was strongly evidence-based, and involved sourcing large quantities of available bird survey data, then applying these data to criteria devised by a panel of local ornithologists from the Department of Conservation, the Ornithological Society of New Zealand and Greater Wellington Regional Council. We disagree with Hutt City Council's assertion that the threshold for 'significance' was set too low, and disagree with the council's suggestion that differential weighting should be given areas of coast used for nesting vs roosting. Coastal birds use different portions of the coastline for different essential activities including breeding, foraging and roosting and a failure to adequately protect habitat used for any of these activities will likely reduce the survival and reproductive success of local birds, leading to further local population declines.

30. Additional Submissions on Schedule F2c: Sophie Mormede – request to add the entire south coast to Schedule F2c.

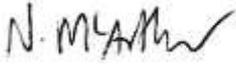
31. As already discussed, sites cannot be added to the Schedule without supporting evidence in the form of quantitative bird survey data. A number of submitters have drawn attention to the bird values of the south coast, so it's apparent that this section of coastline represents a significant information gap, and one that should be urgently filled. We therefore recommend that a comprehensive bird survey be carried out along the Wellington south coast as soon as practically possible.

32. Additional Submissions on Schedule F2c: Wellington Recreational Marine Fishers Association – request additional work be done to identify the indigenous bird values along the stretch of coastline between Makara and Lyall Bay.

33. As discussed above in relation to the Wellington south coast, it's apparent that this is a significant information gap at present. We support this request by the Wellington Recreational Marine Fishers Association and other submitters, and recommend that a comprehensive bird survey be carried out as soon as it's practical to do so. We also recommend that once this survey data has been collected, that Schedule F2c be reviewed and updated accordingly.

34. We hope that this feedback helps to clarify some of the points raised in these submissions. If you require any further clarification of any of the points discussed here, or need any further information please don't hesitate to get in contact.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'N. McArthur' with a stylized flourish at the end.

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Qualifications

Nikki McArthur has BSci in Ecology and Microbiology and a Post-graduate Diploma in Conservation Biology, both from Massey University in Palmerston North. He has worked for Greater Wellington Regional Council for seven years completing ecological monitoring and research. He was employed as an Environmental Scientist for the last three years at the Council. He has over 14 years of experience in conservation work, with particular expertise in bird monitoring and research. For the past three years Nikki has worked for a private ecological consultancy specialising in monitoring and managing threatened bird species.

Nikki has been a member of Birds New Zealand (the Ornithological Society of NZ) for 18 years and currently holds the position of Wellington Regional Recorder for Birds NZ. He has authored or co-authored half a dozen published papers on bird research and conservation. He has also co-authored the latest edition of the Conservation Status of NZ Birds.

References

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