Significant Ecological Estuarine Area Assessment Sheet for Wading and Aquatic Birds

Name/Area: Whangarei Harbour

Summary:

Whangarei Harbour is a moderately large harbour with extensive intertidal flats, multiple creeks and channels and highly variable levels of buffering vegetation. This ranges from quality saltmarsh and mangroves near Takahiwai and little-modified rocky and sandy islands, to recovering and degraded edge habitats and subdivision elsewhere. Seagrass flats are recovering in quality on the south side of the harbour. The tidal flats provide important habitat for migrant waders, including international and national species, many of them threatened (refer Table below). Key migrants with significant numbers visiting are wrybill, banded dotterel, NZ pied oystercatcher, pied stilt, bar-tailed godwit and lesser knot, while local (Northland) breeders include northern NZ dotterel and variable oystercatcher. The harbour is an important breeding and feeding site for Caspian tern, while some other threatened terns visit regularly and could potentially breed. The many forested headlands, islets and bays, provide nesting opportunities for reef herons, shags and little blue penguin, while saltmarshes and mangroves support localised numbers of fernbird, banded rail and Australasian bittern. The large size and wide habitat diversity and diversity and abundance of bird species makes this a harbour of High ecological significance.

Table 'Threatened' and 'At Risk' shorebird species present at Whangarei Harbour

| Species Scientific Name | Species Common Name | NZ threat classification | | Significance for species |
|--|------------------------|--------------------------|--------------------------|---|
| Ardea modesta | White heron | Threatened | Nationally critical | Rare visitor |
| Sternula nereis davisae | NZ fairy tern | Threatened | Nationally critical | Rare visitor |
| Botaurus | Australasian | Threatened | Nationally | Locally important |
| poiciloptilus | bittern | | endangered | breeding and feeding |
| Phalacrocorax varius | Pied shag | Threatened | Nationally | Locally important |
| Pilalaci Ocolax Vallus | | | vulnerable | breeding and feeding |
| Farotta caera caera | Reef heron | Threatened | Nationally | Nationally important |
| Egretta sacra sacra | Reel Heloli | | vulnerable | breeding and feeding |
| Anarhynchus | Wrybill | Threatened | Nationally | Nationally important |
| frontalis | | | vulnerable | feeding |
| Charadrius obscurus | Northern NZ | Threatened | Nationally | Nationally important |
| aquilonius | dotterel | | vulnerable | breeding and feeding |
| Charadrius bicinctus | Banded dotterel | Threatened | Nationally | Nationally important |
| bicinctus | banded dotterer | | vulnerable | feeding |
| Calidris canutus | Lesser knot | Threatened | Nationally | Nationally important |
| Canutis Canutus | | | vulnerable | feeding |
| Larus novaehollandiae scopulinus | Red-billed gull | Threatened | Nationally vulnerable | Locally important breeding and feeding |
| Hydroprogne caspia | Caspian tern | Threatened | Nationally vulnerable | Nationally important breeding and feeding |
| Eudyptula minor | Little blue | At Risk | Declining | Locally important |
| | penguin | | | breeding and feeding |
| Haematopus finschi | NZ pied | At Risk | Declining | Locally important |
| | oystercatcher | | | feeding |
| Himantopus | Pied stilt | At Risk | Declining | Locally important |

| himantopus | | | | feeding |
|---------------------|--------------------|---------|------------|-----------------------|
| leucocephalus | | | | |
| Sterna striata | White-fronted tern | At Risk | Declining | Locally important |
| | | | | feeding |
| | Fernbird | At Risk | | Locally important |
| Bowdleria punctata | rembilu | | Declining | saltmarsh populations |
| Gallirallus | Banded rail | At Risk | | Locally important |
| philippensis | Banded Fall | | Declining | populations |
| Limosa lapponica | Eastern bar- | At Risk | Doclining | Nationally important |
| baueri | tailed godwit | | Declining | feeding and roosting |
| Haematopus | Variable | At Risk | Recovering | Locally important |
| unicolor | oystercatcher | | Recovering | feeding |
| Puffinus gavial | Fluttering | At Risk | Relict | Locally important |
| | shearwater | | | feeding |
| Pelecanoides | Common diving | At Risk | Relict | Rare visitor |
| urinatrix urinatrix | petrel | | Kelict | |
| Phalacrocorax carbo | Black shag | At Risk | Naturally | Locally important |
| novaehollandiae | DIACK SHAR | | uncommon | feeding |
| Phalacrocorax | | At Risk | Naturally | Locally important |
| melanoleucos | Little shag | | uncommon | breeding and feeding |
| brevirostris | | | uncommon | |
| Phalacrocorax | Little black shag | At Risk | Naturally | Locally important |
| sulcirostris | LITTIE DIACK SIIAB | | uncommon | breeding and feeding |
| Platalea regia | Royal spoonbill | At Risk | Naturally | Locally important |
| | | | uncommon | feeding |

Key references:

OWR 2014. Whangarei Harbour. Northland Regional Council.

Pierce R.J. 2005. General patterns of bird use of Whangarei Harbour. Wildland Consultants Report No. 1047 for Northland regional Council.

Robertson, C.J.R., Hyvönen, P., Fraser, M.J., Pickard, C.R. 2007. *Atlas of bird distribution in New Zealand 1999-2004*. OSNZ, Wellington.

Estuaries Reliability Notes and Key References

| Site | Assessor | Date | Key references (see | Data reliability |
|---------------|-----------|----------|---------------------|------------------|
| 3.60 | 7.030330. | 2410 | below) | Data remaining |
| North Kaipara | RP | Oct 2015 | 3, 4, 6, 14, 15 | High |
| Mangawhai | RP | Oct 2015 | 1, 2, 4, 6, 13, 14 | High |
| Waipu | RP | Oct 2015 | 1, 2, 6, 13,14 | High |
| Ruakaka | RP | Oct 2015 | 6, 13 | High |
| Whangarei | RP | Oct 2015 | 3, 6, 9, 14, 15 | High |
| Taiharuru | RP | Oct 2015 | 10, 14 | High |
| Pataua | RP | Oct 2015 | 10, 14 | Moderate – High |
| Horahora | RP | Oct 2015 | 14, 15 | Moderate – High |
| Ngunguru | RP | Oct 2015 | 6. 10, 14 | High |
| Matapouri | RP | Oct 2015 | 10, 15 | High |
| Whananaki | RP | Oct 2015 | 5, 14, 15 | High |

| Whangaruru | RP | Oct 2015 | 5, 6, 14, 15 | High |
|-------------------|----|----------|-----------------------|-----------------|
| Bay of Islands | RP | Oct 2015 | 5, 6, 14, 15 | High |
| Whangaroa | RP | Oct 2015 | 14, 15 | Moderate – High |
| Mangonui-Taipa | RP | Oct 2015 | 14, 15 | Moderate –High |
| Rangaunu | RP | Oct 2015 | 1, 2, 3, 6, 7, 14, 15 | High |
| Houhora | RP | Oct 2015 | 3, 6, 11, 14 | High |
| Parengarenga | RP | Oct 2015 | 1, 3, 6, 7, 14, 15 | High |
| Whangape-Herekino | RP | Oct 2015 | 14, 15 | Moderate – High |
| Hokianga | RP | Oct 2015 | 6, 8, 15 | High |

Key references:

- 1. Dowding, J.E. 2013 [updated 2015]. New Zealand dotterel. *In* Miskelly, C.M. (ed.) *New Zealand Birds Online*.www.nzbirdsonline.org.nz
- 2. Dowding, J.E., Davis, A.M., 2007. New Zealand dotterel (*Charadrius obscurus*) recovery plan, 2004–14. Threatened Species Recovery Plan 58. NZ Department of Conservation.
- 3. Heather, B.D., Robertson, H.A. 2000. The field guide to the birds of New Zealand. Auckland, Penguin.
- 4. Ismar,S.M.H. et al 2013. Foraging ecology and choice of feeding habitat in the New Zealand Fairy Tern *Sternula nereis davisae*. Bird Conservation International 24: 72 87.
- 5. O'Connor, S.M., Maloney, R.F., Pierce, R.J. 2007. Pateke (*Anas chlorotis*) Recovery Plan, 2005-10. Department of Conservation Threatened Species Recovery Plan 59. 33 p.
- 6. OWR 2014. Oiled wildlife response (harbour specific series). Northland Regional Council.
- 7. Pierce R.J. 1999. Regional patterns of migration in the banded dotterel *Charadrius bicinctus*. *Notornis 46*: 101-122.
- 8. Pierce R.J. 2002. Assessment of ecological effects of proposed bridges and associated roadworks at Hokianga Harbour, Northland. Wildland Consultants Contract Report No. 575.
- 9. Pierce R.J. 2005. General patterns of bird use of Whangarei Harbour. Wildland Consultants Report No. 1047 for Northland regional Council.
- 10. Pierce R.J. 2007. Options for ecological restoration of the Tutakaka Landcare Coalition (TLC) area and neighbouring areas. *Eco Oceania Ltd* report for Tutukaka Landcare Coalition.
- 11. Pierce, R.J., **Kerr**, V.C, 2004. Effects of oyster farms on estuarine avifauna at Houhora Harbour, Northland. Contract Report No. 899, Report prepared for: Department of Conservation Private Bag 841 Whangarei.
- 12. Pierce, R.J., Kerr, V.C., 2007. Ecological Restoration of the Taiharuru Catchment. Report prepared for the Taiharuru Catchment Group. Eco Oceania Ltd.
- 13. Pulham, G., Wilson, D. 2013 [updated 2015]. Fairy tern. *In* Miskelly, C.M. (ed.) *New Zealand Birds Online* www.nzbirdsonline.org.nz
- 14. Robertson, C.J.R., Hyvönen, P., Fraser, M.J., Pickard, C.R. 2007. *Atlas of bird distribution in New Zealand 1999-2004*. OSNZ, Wellington.
- 15. SSBI. Sites of Special Biological Significance. Department of Conservation Series, Northland.