

Significant Ecological Estuarine Area Assessment Sheet for Wading and Aquatic Birds

Name/Area: Mangawhai Estuary

Summary:

Mangawhai Estuary is a small estuary, but it contains a wide variety and representative succession of habitats spanning dunes, tidal flats, channels, mangroves, saltmarsh and freshwater wetlands and adjacent shrubland. It is the single most important breeding ground for the Nationally Critical NZ fairy tern which breeds on the sandspit, and individuals forage in the estuary or just offshore for much of the year. The estuary is also important for breeding of a number of other threatened or at risk birds, notably northern NZ dotterel, Caspian tern, pied shag, reef heron, white-fronted tern and variable oystercatcher, with several migrant species visiting at different times of the year (refer Table below). The saltmarshes and mangroves support Australasian bittern, banded rails, fernbirds and others. The estuary has nationally important significance on the basis of being the primary breeding ground for a NZ-endemic and critical taxon, the NZ fairy tern. In a recent study¹ researchers have documented the use of the various habitats within the estuary by the birds and notably identified habitats that are believed to be critical foraging areas during the breeding season. These habitats are essentially all the shallow channel edges, the open coast shallow habitats and significantly the shallow 'edge' of mangrove forest areas.

The estuary is an internationally important site recognised by the Important Bird Area programme² triggered by the following species: NZ Fairy Tern; Black-billed Gull; NZ Dotterel; Wrybill and Australasian Bittern.

Table 'Threatened' and 'At Risk' shorebird species present at Mangawhai Estuary

<i>Species Scientific Name</i>	<i>Species Common Name</i>	<i>NZ threat classification</i>		<i>Significance for species</i>
<i>Sternula nereis davisae</i>	NZ fairy tern	Threatened	Nationally critical	Nationally important breeding and feeding
<i>Botaurus poiciloptilus</i>	Australasian bittern	Threatened	Nationally endangered	Locally important habitat
<i>Phalacrocorax varius</i>	Pied shag	Threatened	Nationally vulnerable	Locally important feeding and breeding
<i>Egretta sacra sacra</i>	Reef heron	Threatened	Nationally vulnerable	Locally important feeding and breeding
<i>Anarhynchus frontalis</i>	Wrybill	Threatened	Nationally vulnerable	Locally important feeding habitat
<i>Charadrius obscurus</i>	Northern NZ dotterel	Threatened	Nationally vulnerable	Nationally important breeding and feeding

¹ Ismar, S.M.H, Trnski, T., Beauchamp, T., Bury, S.J., Wilson, D., Kannemeyer, R., Mark Bellingham, M., Baird, K. 2014. Foraging ecology and choice of feeding habitat in the New Zealand Fairy Tern *Sternula nereis davisae*. Bird Conservation International, 24, pp 72-87 doi:10.1017/S0959270913000312

² Gaskin, C, 2013. Important areas for New Zealand seabirds, Part 1 – North Island. Compilation for Forest & Bird / BirdLife International.

<i>aquilonius</i>				
<i>Charadrius bicinctus bicinctus</i>	Banded dotterel	Threatened	Nationally vulnerable	Locally important breeding and feeding
<i>Calidris canutus</i>	Lesser knot	Threatened	Nationally vulnerable	Locally important feeding site
<i>Larus novaehollandiae scopulinus</i>	Red-billed gull	Threatened	Nationally vulnerable	Locally important breeding and feeding area
<i>Hydroprogne caspia</i>	Caspian tern	Threatened	Nationally vulnerable	Nationally important breeding ground
<i>Eudyptula minor</i>	Little blue penguin	At Risk	Declining	Present
<i>Haematopus finschi</i>	NZ pied oystercatcher	At Risk	Declining	Locally important feeding area
<i>Himantopus himantopus leucocephalus</i>	Pied stilt	At Risk	Declining	Locally important feeding area
<i>Sterna striata</i>	White-fronted tern	At Risk	Declining	Locally important breeding site
<i>Bowdleria punctata</i>	Fernbird	At Risk	Declining	Locally important resident population
<i>Gallirallus philippensis</i>	Banded rail	At Risk	Declining	Locally important resident population
<i>Limosa lapponica baueri</i>	Eastern bar-tailed godwit	At Risk	Declining	Locally important feeding area
<i>Haematopus unicolor</i>	Variable oystercatcher	At Risk	Recovering	Nationally important breeding site
<i>Phalacrocorax carbo novaehollandiae</i>	Black shag	At Risk	Naturally uncommon	Small numbers visit occasionally
<i>Phalacrocorax melanoleucos brevirostris</i>	Little shag	At Risk	Naturally uncommon	Locally important breeding site
<i>Phalacrocorax sulcirostris</i>	Little black shag	At Risk	Naturally uncommon	Locally important site

Key references:

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.

Pulham, G., Wilson, D. 2013 [updated 2015]. Fairy tern. In Miskelly, C.M. (ed.) *New Zealand Birds Online* www.nzbirdsonline.org.nz

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Estuaries Reliability Notes and Key References

Site	Assessor	Date	Key references (see below)	Data reliability
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:

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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.
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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.