MEMORANDUM

Bioresearches
A Babbage Company

TO:	Azuma Property (Kallam Brown)	Date:	11 March 2025
COPY TO:	Azuma Property	Job No:	67954
FROM:	Simon West, Dylan van Winkel, Michael Anderson, Treff Barnett		

PRELIMINARY ECOLOGICAL ASSESSMENT OF PROPOSED WAIPIRO BAY MARINA

Dear Kallam,

This memorandum provides a high-level assessment of the avian, freshwater, marine, terrestrial ecology values, and characteristics within the proposed Waipiro Bay marina, Bay of Islands. For this assessment, the zone of influence (ZOI) includes the proposed footprint of excavation and reclamation, plus areas adjacent shoreward of the footprint. This assessment is informed by a desktop review of the area, and detailed investigations of the smaller projects nearby. This initial report is intended to support a request to include Waipiro Bay Marina as a Fast Track referral project. If successful, then a more comprehensive suite of assessments would be undertaken, with the results lodged with appropriate assessment of effects, offset, compensation and management plans as part of a substantive application.

A desktop review was undertaken to determine locations and extents of protected vegetation (riparian margins) of the Northland Regional Plan and significant ecological area (SEA) and biodiversity overlays (Northland regional plan).

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Figure 1. Draft Waipiro Bay marina design.

Overview of ecological values within ZOI.

Freshwater

Based on an aerial survey, two fresh water wetlands are located within 100 m of the proposed works area. Both wetland areas are highly likely to meet the definition of a 'natural inland wetland' under the National Policy Statement for Freshwater Management (NPS FM).

One area is an approximately 0.65 ha induced wetland isolated from the works area by a private seal road causeway (Figure 2, blue area). This contains both open water and wetland plant habitat and is surrounded by native vegetation. The wetland is known to support Bittern. However, their preferred fresh water wetland habitat is outside of the proposed development area and should not be directly impacted. The adjacent Significant Bird Area (SBA) is mangroves and intertidal, which is less preferred as a habitat type by Bittern. Surveys will be required to determine if the SBA is being used by Bittern and other bird species.

There is little likelihood of adverse effects to this freshwater wetland from the marina construction.

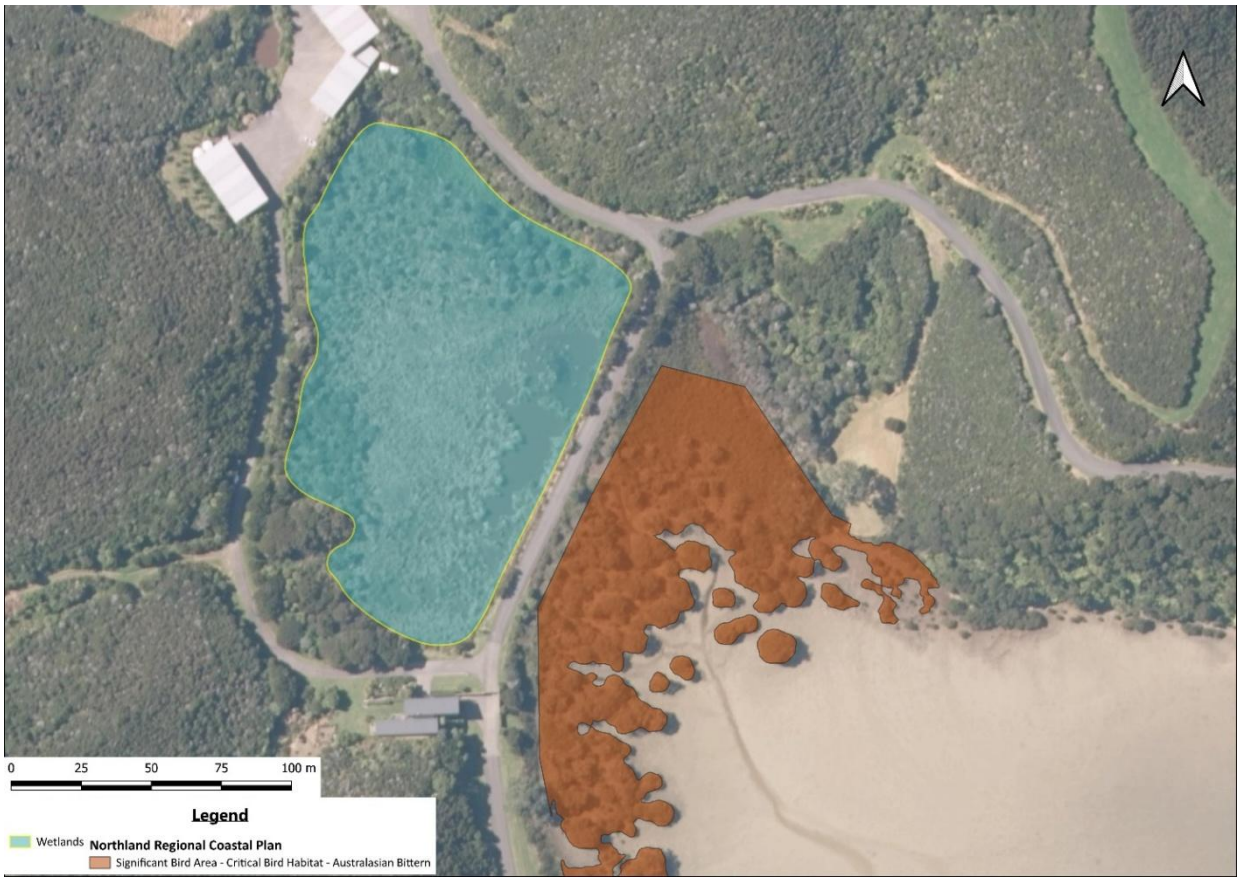

Figure 2 Outline of Northern Wetland

The second wetland is an approximately 0.26 ha area with raupo and rushes, at the base of the water course that follows the Manawaora Road some 500 m down the valley from the west to the shore at the entrance to the Omarino estate (Figure 3). The area of reclamation on the southern side of the marina is not adjacent to this wetland.

This wetland will be delimitated prior to any substantive application, and the ecological values determined.

Figure 3 Outline of Southern wetland

Terrestrial

Vegetation

The terrestrial vegetation community within the proposed marina development site is comprised of a mix of planted and natural native vegetation that is situated between the existing Ōmarino access road and the high tide line or intertidal zone. The area also supports a relatively large patch of maintained (mowed) grass, with rows of pōhutukawa trees (*Metrosideros excelsa*), flax (*Phormium tenax*), kānuka (*Kunzea robusta*[1]), and other native trees and shrubs. The proposal predominantly affects an environment that was previously modified for the development of an adjacent community. A more detailed inventory of the plant species present will need to be confirmed following a detailed site investigation.

Herpetofauna (reptiles and amphibians)

The Northland Region is known for herpetofaunal diversity, currently supporting 26 species of native lizards, one species of native amphibian, two species of non-resident migrant marine turtles, and at least five species of vagrant marine turtles and marine snakes (van Winkel *et al*. 2018). Eleven species are known to occur in the greater Bay of Islands area, of which eight species (six lizards, one

[1] *Kunzea linearis* may also be present and would need confirmation during site visit.

turtle, and one snake) have been recorded within 5 km of the proposed Waipiro Bay marina (Table 1) (DOC Herpetofauna database, accessed January 2025).

The marina development would mostly affect the marine, intertidal, and mangrove/ coastal habitats on the eastern side of the Ōmarino access road. While native lizards do not prefer these habitats, it is possible that the narrow strip of foreshore vegetation to the west of the road could harbour copper, moko, and/ or shore skinks—all three species are listed as 'At Risk' under the New Zealand Threat Classification System (Townsend *et al.* 2008; Hitchmough *et al.* 2021). Native geckos such as forest or Northland green geckos could also potentially inhabit the foreshore trees and shrubs, but the likelihood is considered relatively low due to the vegetation being sparse and fragmented by both the access road and the area of maintained (mowed) grass. It is expected that geckos would more likely occur outside of the project area, in the denser vegetation to the west of existing access road.

In addition to terrestrial lizards, there are records of marine reptiles such as turtles and marine snakes from the waters within 5 km of Waipiro Bay. These records likely reflect migrant or exploratory individuals that occasionally enter the sheltered bays and estuaries. There are two records of undetermined turtle species (probably green turtle, *Chelonia mydas*), one from Pareanui Bay, Orokawa Peninsula and the other Otehei Bay, Urupukapuka Island. Since the eastern Bay of Islands supports an abundance of seagrass meadows—an important food source for green turtles—it is possible that green turtles visit the shallow bays to feed more frequently than what is currently reflected by records. However, the absence of seagrass beds in Waipiro Bay suggests that bay is not likely to be important for turtles. There are only two recorded observations of marine snakes in the Bay of Islands, both of which are historical (pre-1900). These include a yellow-lipped sea krait (*Laticauda colubrina*) collected near Russell in 1880 and a single record of a yellow-bellied sea snake (*Hydrophis platurus*) from 1895 (specimen held in Auckland Museum). These historical records indicate that marine snakes are very rare in the Bay of Islands and probably unlikely to intentionally enter the waters of Waipiro Bay.

In regard to amphibians, no native frogs are expected to occur in the project area. This is because the project area lies outside of the currently known range of Hochstetter's frog and because suitable habitat is absence. In Northland, Hochstetter's frog distribution is restricted to the south, with populations occurring around Waipu, Mareretu, and Brynderwyn. The frogs' habitat requirements include small, forested streams supporting bedrock substrate. This type of habitat is completely absent from the proposed marina development area. Thus, potential presence of native frogs in the proposed project area can be dismissed. Introduced bell frogs (*Ranoidea* spp.) are likely to inhabit the wetland and coastal vegetation either side of the existing access road. These species are common and not protected, thus their potential presence in the development area would not have any impact on the development.

Table 1. Herpetofauna of the Bay of Islands, including their New Zealand threat statuses, occurrence within 5km of project area, and preferred habitats. Green highlight = recorded within 5 km of project area.

Common name	Scientific name	NZ threat status	Occurrence within 5 km of project area	Preferred habitat
Shore skink	*Oligosoma smithi*	At Risk – Declining	Present	Supralittoral zone (sand, rock platform, and coastal vegetation).

Common name	Scientific name	NZ threat status	Occurrence within 5 km of project area	Preferred habitat
Copper skink	*Oligosoma aeneum*	At Risk – Declining	Present	Supralittoral zone to inland scrub/ forest.
Moko skink	*Oligosoma moco*	At Risk – Relict	Present	Supralittoral zone (coastal vegetation and scrub).
Ornate skink	*Oligosoma ornatum*	At Risk – Declining	Possibly present	Supralittoral zone to inland scrub/ forest.
Egg-laying skink	*Oligosoma suteri*	At Risk – Relict	Unlikely to be present	Littoral and supralittoral zones. Islands only.
Pacific gecko	*Dactylocnemis pacificus*	Not Threatened	Present	Supralittoral zone to inland scrub/ forest.
Raukawa gecko	*Woodworthia maculata*	Not Threatened	Possibly present	Supralittoral zone to inland scrub/ forest. Islands only.
Northland green gecko	*Naultinus grayii*	At Risk – Declining	Present	Coastal scrub to inland scrub/ forest.
Elegant gecko	*Naultinus elegans*	At Risk – Declining	Possibly present	Coastal scrub to inland scrub/ forest.
Forest gecko	*Mokopirirakau granulatus*	At Risk – Declining	Present	Coastal scrub to inland scrub/ forest.
Duvaucel's gecko	*Hoplodactylus duvaucelii*	At Risk – Relict	Unlikely to be present	Coastal scrub/ shrubland to inland forest. Islands only.
Turtle sp. (likely green turtle)	*Chelonia mydas*	Migrant	Present	Inhabits shallow waters near the coast (e.g. bays, estuaries) especially in areas supporting seagrass beds/ meadows.
Yellow-bellied sea snake	*Hydrophis platurus*	Not Threatened	Present (single historical record)	Marine pelagic environments, occasionally found closer to shore.

Bats

Two species of native bat, northern short-tailed bat (STB; *Mystacina tuberculata aupourica*) and long-tailed bat (LTB, *Chalinolobus tuberculatus*) are known to occur in Northland. Both species are listed as threatened; STB: 'Nationally Vulnerable'; LTB: 'Nationally Critical'. The STB is restricted to the Ōmahuta–Puketī Forest, which lies approximately 50 km north-west of the proposed marina development site. Long-tailed bats are more widespread, though there are no existing records from the Bay of Islands area (DOC bat record database, February 2024). The closest confirmed LTB record is from Otaha, approximately 32 km north-west of Waipiro Bay. Dedicated surveys for bats in Opua Forest, Russel Forest, Kawakawa, and Mimiwhangata have not detected them, though this does not indicate bats area absent from the Bay of Islands altogether. Considering the lack of bat records from the landscape surrounding the proposed marina development site and that the habitat within the potentially affected area is of lower value for bats (i.e., isolated pōhutukawa trees, coastal shrubland), it is not anticipated that bats will be utilising habitats in the proposed development area.

Terrestrial invertebrates

The project areas is likely to support a wide variety of small terrestrial invertebrates, including insects, myriapods (centipedes and millipedes), arachnids (spiders and mites), crustaceans

(amphipods and isopods), annelids (segmented worms), and gastropods (slugs and snails). Very few members of these groups are protected by the Wildlife Act 1953, but many are listed as 'At Risk' or 'Threatened' under the NZTCS (Rolfe *et al.* 2022; Walker *et al.* 2022[2]). Regarding the current project, land snails *Paryphanta busbyi/* pupurangi ('At Risk – Declining') and *Amborhytida dunniae* ('At Risk – Declining') could potentially be present in the footprint based on distribution though an assessment of the habitat values for these snails suggests that habitat is largely unsuitable. Thus, the likelihood of occurrence has been assessed as very low. No other 'At Risk' or 'Threatened' taxa are anticipated to be present in the works area, though a survey of the affected area would be required to confirm this assumption.

Avian fauna

Local observation from ebird and inaturalist indicate the local area (within 5 km of the site, excluding islands) has a moderate-high level of bird diversity, due to a diversity of habitats. Many of the species are exotic or non-threatened native species. The key habitats that may be either directly or indirectly affected are freshwater wetlands, Mangrove/Coastal habitats, intertidal mudflats, and subtidal marine environments. All these habitats are used for foraging by birds.

The Threatened or At Risk species that may occur within the project area are listed in Table 2. Only those that have suitable habitat within the ZOI are included. In total, 4 Threatened and 12 At Risk species are identified to potentially be present.

Table 2 Avian species that may occur within the ZOI and potentially impacted.

Species	Scientific Name	Threat Status	Habitat used	Habitat use
Banded rail Moho pererū	*Hypotaenidia philippensis*	At Risk-Declining	Mangrove/Wetland	Foraging, Roosting, Breeding
Australasian bittern Matuku-hūrepo	*Botaurus poiciloptilus*	Threatened – Nationally Critically	Predominantly freshwater wetlands, but may use salt marsh/mangroves	Foraging, Roosting
Brown teal Pāteke	*Anas chlorotis*	Threatened – Nationally Increasing	Intertidal, Mangroves	Foraging, Roosting
Caspian tern Taranui	*Hydroprogne caspia*	Threatened – Nationally Vulnerable	Subtidal	Foraging
Fernbird Mātātā	*Poodytes punctatus*	At Risk-Declining	Predominantly freshwater wetlands, but may use salt marsh/mangroves	Foraging, Breeding

[2] **Rolfe, J., Hitchmough, R., Michel, P., Makan, T., Cooper, J., de Lange, P.J., Townsend, A.J., Duffy, C.A.J., Miskelly, C.M. and Molloy, J. (2022).** New Zealand Threat Classification System manual 2021.

Walker, K., Walton, K., Edwards, E., Hitchmough, R., Payton, I., Barker, G.M. and Michel, P. (2022). Conservation status of New Zealand indigenous terrestrial Gastropoda (slugs and snails). Part 3. Rhytididae (carnivorous snails). New Zealand Threat Classification Series 42. Department of Conservation, Wellington. 32 p.

Species	Scientific Name	Threat Status	Habitat used	Habitat use
Little penguin Kororā	*Eudyptula minor*	At Risk-Declining	Subtidal	Foraging
Little black shag Kawau tūī	*Phalacrocorax sulcirostris*	At Risk-Naturally Uncommon	Subtidal	Foraging
Little shag Kawaupaka	*Microcarbo melanoleucos*	At Risk - Relict	Subtidal	Foraging
New Zealand dotterel Tūturiwhatu	*Anarhynchus obscurus*	At Risk - Recovering	Intertidal	Foraging
Reef heron Matuku moana	*Egretta sacra*	Threatened - Nationally Endangered	Intertidal	Foraging
Pied shag Kāruhiruhi	*Phalacrocorax varius*	At Risk - Recovering	Subtidal	Foraging
Red-billed Gull Tarāpunga	*Chroicocephalus novaehollandiae*	At Risk-Declining	Intertidal	Foraging
Spotless crake Pūweto	*Zapornia tabuensis*	At Risk-Declining	Predominantly freshwater wetlands, but may use salt marsh/mangroves	
South Island pied oystercatcher Tōrea	*Haematopus finschi*	At Risk-Declining	Intertidal	Foraging
Variable oystercatcher Tōrea pango	*Haematopus unicolor*	At Risk - Recovering	Intertidal	Foraging.
White-fronted tern Tara	*Sterna striata*	At Risk - Recovering	Subtidal	Foraging

Four key habitats have been identified that may be impacted by the proposed marina (Figure 4). Approximately 11 ha of intertidal foraging habitats for shorebirds may be affected. This area may also be used by other coastal birds (e.g. shags and terns) for feeding on small fish when submerged by the tide, as well as another 2.5 ha of subtidal habitat. Another 1.7 ha of coastal margin habitats (i.e. mangroves) will be directly impacted and 1.0 ha may be indirectly affected by altered tidal currents. These coastal margin habitats, as well as the adjacent freshwater wetlands, may be used by wetland birds (e.g. banded rails) for foraging and roosting, or even potentially breeding. Species presence within these habitats is yet to be determined, surveys are planned as part of the substantive application, but the total number of birds impacted are likely to be small.

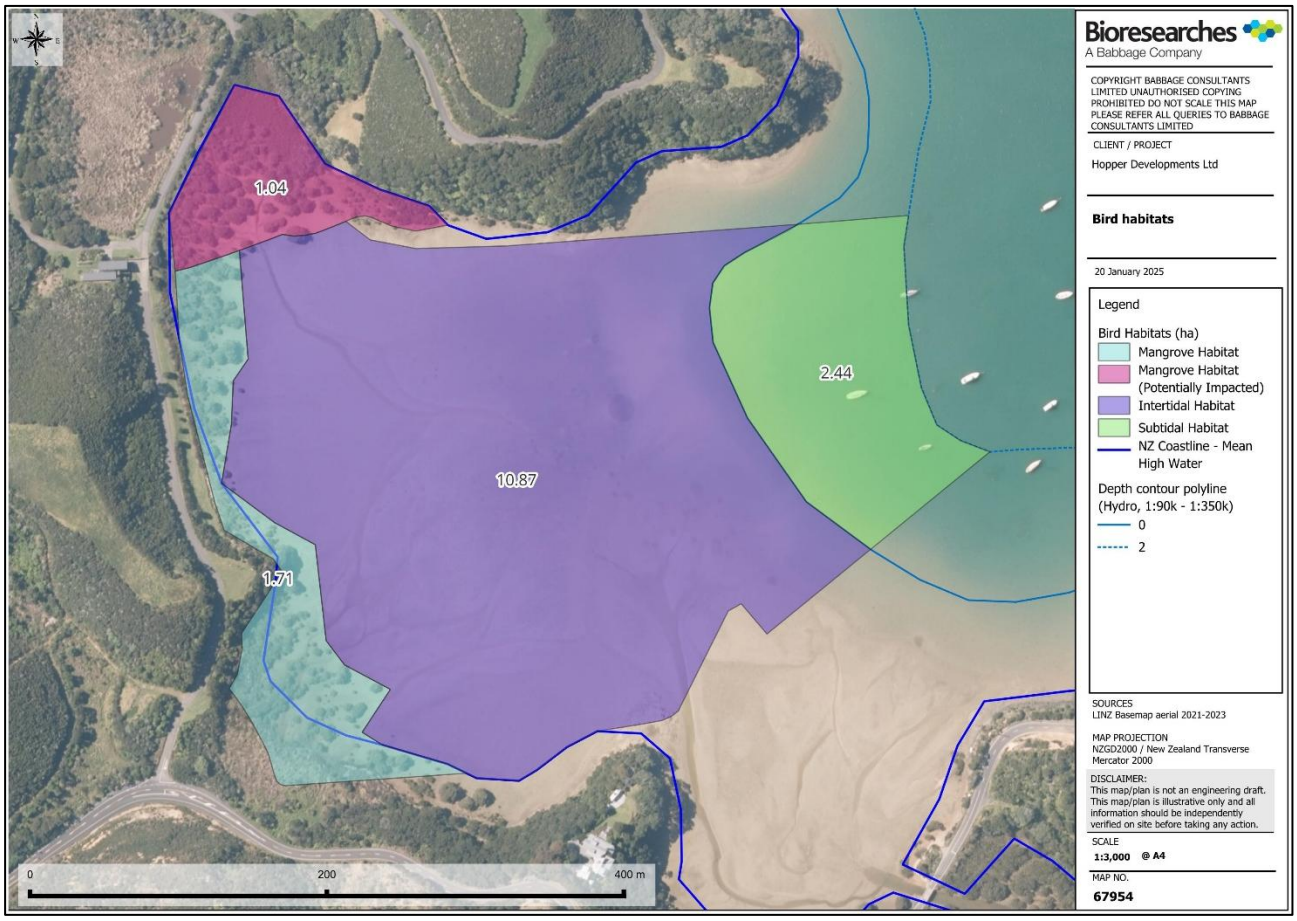

Figure 4 Bird habitats within the proposed marina ZOI. Numbers are indicative of the area (ha) of each habitat type.

Marine ecology

The Bay of Islands is located within the North-eastern Marine Biogeographic Region. The Bay of Islands comprises a large and diverse harbour and estuarine habitat together with many small to moderate sized islands. There are several inlets extending well inland, with varying levels of buffering, some with extensive mangroves, most with little saltmarsh. Much of the adjacent land is farmed, but there are increasing areas of shrubland recovery.

The marine ecological values of the Waipiro Bay marina area are representative of partially sheltered rocky and soft shore habitats characteristic of north-eastern New Zealand. Waipiro Bay supports a diverse intertidal ecosystem transitioning from sandy shores to rocky outcrops, providing a variety of habitats that sustain a range of marine life. The sediment composition across the bay displays a distinct gradient, with finer sands dominating the upper intertidal zones and coarser sediments, including gravel and small cobbles, prevalent nearer the waterline. The Northland marine habitats maps produced by DOC in 2009[3] show within the project area the benthic habitats change from muddy to fine sediments changing to coarse sediments to the east as mapped in Figure 5.

[3] Kerr, V. C. (2010). Marine Habitat Map of Northland: Mangawhai to Ahipara Vers. Prepared for DOC.

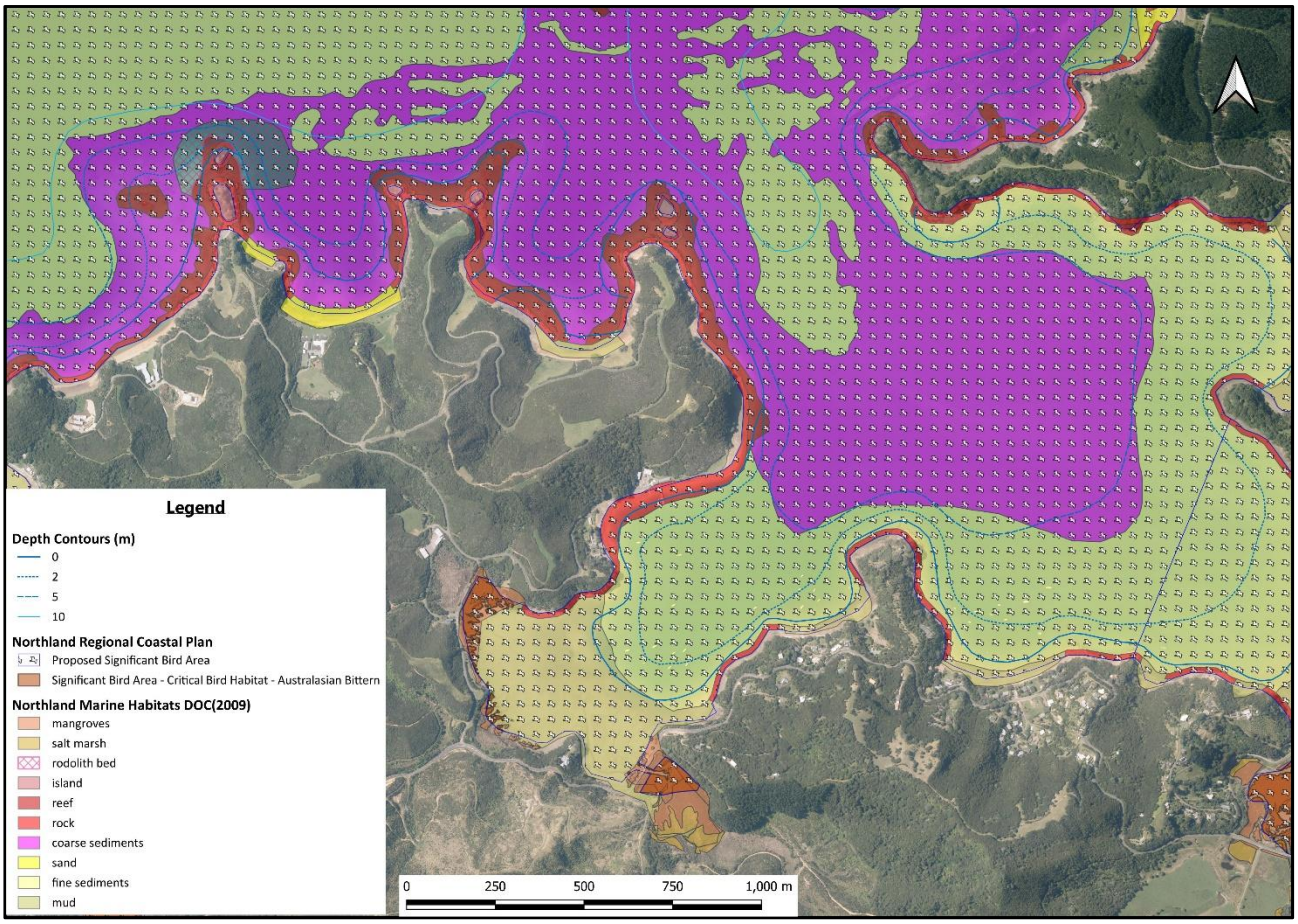

Figure 5 Northland marine habitats DOC (2009)

The Northland marine habitats maps produced by DOC in 2009 show the head of Waipiro Bay in which the marina is proposed is boarded to the north by a rocky shore which grades to mangroves in the northwestern corner of the bay. A fringe of mangroves extends around the western shore to the south. Approximately 2.5 ha of mangrove habitat are present within the marina embayment. The habitat maps show small areas of salt marsh may also be present between the shore and the mangroves. The centre of the bay is mapped as muddy fine sediments. Observations of the shoreline 100 to 400 m to the north east of the headland north of the proposed marina showed the upper shore was sand gravelly, while below low tide the seabed was fine muddy sand, as opposed to the rocky habitat marked on DOC northland marine habitats map. Observation from the road particularly in the south suggests the bay is likely more sandy than muddy.

The mangrove habitat is designated significant bird habitat for Australasian Bittern in the Northland Regional Coastal Plan, other birds are also likely utilising this area for feeding and nesting. Marine fish particularly juveniles will utilise mangroves on the high tide. Typically, this habitat is home to a number of molluscs and polychaete worms all of which are common.

The muddy sandy intertidal embayment is likely to provide food resources for wading birds and fish. How significant these resources are, will be determined by surveys of the benthic biota and bird usage. The intertidal sand flats are likely to contain shellfish beds of cockles and potentially pipi. The near shore subtidal benthic biota to the north of the proposed marina is diverse with a mixture

of approximately 30 typical biota including polychaete worms, crustaceans, molluscs, and echinoderms.

Marine mammals are expected to occur from time to time within the Waipiro Bay area. All of the marine mammals likely to be intermittently present in Waipiro Bay will have some threatened or at risk classification, however the establishment of the Waipiro Bay marina is not expected to adversely alter the habitat value for marine mammals. The wider Bay of Islands including Waipiro Bay was declared a marine mammal sanctuary in November 2021. This sanctuary limits human in water interaction and boating interaction with marine mammals by providing a 300 m restricted area around any marine mammal.

Anticipated adverse effects.

Freshwater

The seawall at the southern shore is separated from the potential southern wetland. While it is unlikely to alter the hydrological conditions of the wetland, and will not restrict access of fish to the wetland, the seawall is within 100m of the wetland and thus will have to consider the requirements of the NPS FM. Once wetland delineation has been conducted the information will be used to ensure avoidance of conflicts with the rules in the NPS FM is reflected in the application plans.

Terrestrial

Vegetation

It is anticipated that vegetation will need to be removed to accommodate the construction of the marina; however, the actual extent of the clearance is still being finalised. Nevertheless, it is expected that the native vegetation and maintained grass to the east of the existing access road at least will need to be removed. This would include areas of maintained (mowed) exotic grass, several pōhutukawa trees (*Metrosideros excelsa*), rows of flax (*Phormium tenax*), kānuka (*Kunzea robusta*[4]), and other native trees and shrubs. Most of the affected vegetation has been planted. It should be feasible for the removal of vegetation to be managed and mitigated, such that the native animal species that use the planted vegetation as habitat are also mitigated. Confirmation of the species affected, and extent of the clearance will, however, need to be confirmed following a detailed site investigation.

Herpetofauna

The loss of a small area coastal vegetation along the foreshore could potentially disturb or harm protected native lizards (notably skinks) if indeed they inhabit the area. The total loss of potential lizard habitat will be small relative to the habitat available in the surrounding landscape, and the quality of the affected habitat considered to be low. Overall, any potential effects on lizards will not be significant and could be effectively managed with mitigation measures. Considering the absence of suitable feeding resources for marine turtles in Waipiro Bay and the very low probability of visitation by both turtles and marine snakes, the project will not have adverse effects on marine reptiles.

[4] *Kunzea linearis* may also be present and would need confirmation during site visit.

Since native frogs are not likely or expected to occur in the footprint, no adverse effects on frogs are anticipated.

Bats

The presence of bats in the potential project area is considered unlikely due to the lack of bat records from the surrounding landscape and the seemingly low value of the affected habitat for bats. (i.e., isolated pōhutukawa trees, coastal shrubland, mangroves). Adverse ecological effects on bats are therefore, not anticipated. However, an assessment of the habitat values in accordance with the Department of Conservation bat roost protocols would be the recommended precautionary approach.

Terrestrial invertebrates

Since no protected or 'At Risk' or 'Threatened' invertebrates are likely or expected to occur in the footprint, no adverse effects on terrestrial invertebrates are anticipated

Avian fauna

The loss of foraging habitats and/or reduction in food supply will occur within the intertidal and subtidal environments. Loss of mangrove habitats in the upper intertidal may also affect foraging and roosting locations for a few species, depending on if they are present. Breeding habitats are less likely to be impacted for any Threatened or At Risk species.

Marine ecology

- The process of marina excavation will disturb the seabed potentially releasing contaminants into the water column if dredging is conducted at high tide.
- The excavation and reclamation of intertidal habitat with in the bay will result in the permanent loss of habitat and food resources for birds and fish.
- The creation of subtidal habitat will result in different composition and abundance of biota.
- One of the concept plans shows the creation of a rock seawall along the seaward margin of mangroves in the northwestern corner this will potentially restrict fish access to the mangrove habitat, as well as increase the potential for sediment accumulation, potentially changing the habitat impacting biota composition and abundance in the mangrove habitat.
- Construction activities will be required to avoid adverse effects to marine mammal.

In order to define any mitigation detail surveys of sediment quality and benthic biota composition and abundance within the works footprint will be required.

Anticipated Mitigation

Under the NZCPS 2010, Policy 11 'Indigenous biological diversity (biodiversity)' requires the protection of indigenous biological diversity in the coastal environment and avoidance of significant adverse effects, and avoidance, remediation, or mitigation of other adverse effects of activities on:

- Indigenous taxa that are identified as 'threatened' or 'at risk' in the New Zealand Threat Classification System (NZTCS) (NZCPS policy 11(a)(i));
- Taxa listed by the International Union for Conservation of Nature (IUCN) as 'threatened' (NZCPS policy 11(a)(ii));
- Habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare (NZCPS policy 11(a)(iv)); and
- Habitats in the coastal environment that are important during the vulnerable life stages of indigenous species (NZCPS policy 11(b)(ii));
- Habitats, including areas and routes, important to migratory species (NZCPS policy 11(b)(v)); and
- Ecological corridors, and areas important for linking or maintaining biological values identified under this policy (NZCPS policy 11(b)(vi)).

With the information known at present, a number of bird species such as the Australasian Bittern would require the final design to avoid adverse impacts on them and the habitats they live in under NZCPS 2010 policy 11(a). The detailed survey data planned to be collected as part of the substantive application will be used to finalise the design such that adverse effects are avoided.

NZCPS policy 11(a)(ii) requires avoidance of adverse effects to biota such as the marine reptiles. Based on the current design and knowledge no adverse effects are expected to the marine reptiles.

The significance of the loss of wading bird feeding habitats will be determined by quantification of food resources and the wading bird usage of the habitat as part of the substantive application. Under NZCPS 2010 policy 11(b) the significance of the effects determines if avoidance, remediation, or mitigation of other adverse effects is required.

Minimisation and mitigation of adverse effects at Waipiro Bay Marina would include fauna management:

- Timing of vegetation removal to avoid the main bird breeding season (or preclearance nesting surveys to guide avoidance of nesting native birds).
- Implementation of a lizard management plan to provide for capture, relocation, and any associated habitat enhancement.
- If bats or suitable bat roosting habitat are identified during on-site investigations, the roost tree felling protocols should be enacted to mitigate potential impacts on bats.
- Dense buffer planting of all newly created vegetation edges.
- Remediating areas with native replanting around the marina development to restore the natural ecosystem as far as practicable.

Minimisation and mitigation of adverse effects at Waipiro Bay Marina construction in the marine environment could include;

- Timing of activity to minimise impacts on fish breeding.

- Containment of works area to avoid spread of contaminants if present and including fine sediments.
- Observation for nearby marine mammals during construction.

Depending on the values identified in detailed surveys yet to be conducted, the effects of the construction of the as yet undesigned marina, and the mitigations yet to be finalised, it is possible some residual effects could still be present. If so then it is speculated that an offsetting and / or compensation package will be required.

Anticipated Offset/Compensation

With out the detailed knowledge planned to be collected as part of the substantive application it is hard to speculate if offsetting or compensation will be required or to what extent. Biodiversity offsetting or biodiversity compensation models (e.g. BOAM or BCM models) will be used to address any identified residual effects.

Kind regards,

Simon West, M.Sc. (Hons)

Technical Director Marine Ecology

Bioresearches

APPLICABILITY AND LIMITATIONS

Restrictions of Intended Purpose

This report has been prepared solely for the benefit of Azuma Property as our client with respect to the brief. The reliance by other parties on the information or opinions contained in the report shall, without our prior review and agreement in writing, be at such party's sole risk.

Legal Interpretation

Opinions and judgements expressed herein are based on our understanding and interpretation of current regulatory standards, and should not be construed as legal opinions. Where opinions or judgements are to be relied on they should be independently verified with appropriate legal advice.

Maps and Images

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