

Memo

To:	Andrew Beatson; WNDL	Job No:	2144.500
	Graham Ussher; RMA Ecology Ltd		
From:	Jeroen Lurling; RMA Ecology Ltd	Date:	10 August 2026
cc:	Mitch Lewandowski; BB Planning Ltd		
Subject:	Waikanae North Development FTAA: Ecology response to s51 and s53 comments		

1. Purpose and scope

This report responds to the comments received under section 53 of the Fast-track Approvals Act 2024 on the Waikanae North Development substantive application (FTAA-2603-1194) that fall within the ecology discipline. In addition to the section 53 comments, this report also responds to comments made by the Director General of Conservation under section 51 in respect of the Wildlife Approval sought.

It forms part of a set comprising a covering note addressing planning, legal and conditions matters, individual topic area reports, and a tabulated response covering every comment received.

For each comment this report sets out the comment made, and provides a response, either drawing on existing information from the substantive application, or with a supplementary response.

Comments are grouped by topic. Individual comment numbers and commenters are tagged against each topic.

2. Authors and Code of Conduct

This response has been prepared by Dr Graham Ussher and Jeroen Lurling.

Although this document has not been written as a statement of expert evidence, we confirm that at all times we have complied with the Environment Court's Code of Conduct for Expert Witnesses contained in its Practice Note 2023.

3. Comments relating to ecology

Topic	Comment reference(s)	Commenter(s)
Ec1 Support for the proposed ecological package	15.1	15 Wellington Conservation Board
Ec2 Pest plant and animal control - request for a 20 year minimum	15.2, 32.6	15 Wellington Conservation Board; 32 Director-General of Conservation (DOC)
Ec3 Management of domestic cats and dogs, and community education	15.2, 12.7, 32.6	15 Wellington Conservation Board; 12 Bryan & Debbie Edwards; 32 Director-General of Conservation (DOC)

Ec4 Pest-proof boundary fencing at [REDACTED]	12.7	12 Bryan & Debbie Edwards
Ec5 Erosion and sediment control and plant supply	15.3, 32.8	15 Wellington Conservation Board; 32 Director-General of Conservation (DOC)
Ec6 Ecological connectivity beyond the site	15.4, 32.2	15 Wellington Conservation Board; 32 Director-General of Conservation (DOC)
Ec7 Fish passage and Ngarara Stream restoration with Mana Whenua	15.5	15 Wellington Conservation Board
Ec8 Long-term compatibility of commercial activity with ecological objectives	15.8	15 Wellington Conservation Board
Ec9 Ecological sensitivity and watercourse change	13.4	13 Kensington Farm Park Ltd
Ec10 DOC section 51 report - term of the Wildlife Approval	S51.1	S51 Director-General of Conservation (DOC)
Ec11 DOC section 51 report - release area habitat and restoration planting in the LMP	S51.2	S51 Director-General of Conservation (DOC)
Ec12 DOC section 51 report - post-release monitoring and the financial contribution	S51.3	S51 Director-General of Conservation (DOC)
Ec13 DOC section 51 report - updated Lizard Management Plan and conditions	S51.4	S51 Director-General of Conservation (DOC)
Ec14 Screening vegetation alongside walkways	21.1	21 Kapiti Coast District Council
Ec15 Perpetual protection of Te Harakeke Wetland and vesting	21.2, 21.12, 21.13, 24.12, 18.4	21 Kapiti Coast District Council; 24 Greater Wellington Regional Council; 18 Ron & Jane Woodrow
Ec16 Enrichment planting of degraded wetland clusters - ERMP Table 5	21.3	21 Kapiti Coast District Council
Ec17 ERMP Table 18 - schedule and timetable of tasks	21.4	21 Kapiti Coast District Council
Ec18 Wetland loss and offsetting - effects management hierarchy and like-for-like offset for Wetlands 3 and 5	24.1, 32.3, 32.4	24 Greater Wellington Regional Council; 32 Director-General of Conservation (DOC)
Ec19 Functional need and effects management hierarchy for stream reclamation	24.2	24 Greater Wellington Regional Council
Ec20 Classification of the on-site watercourses as rivers	24.3, 32.4	24 Greater Wellington Regional Council; 32 Director-General of Conservation (DOC)
Ec21 Post-development Stream Ecological Valuation	24.4	24 Greater Wellington Regional Council
Ec22 Ongoing protection for ecological offset sites	24.11	24 Greater Wellington Regional Council
Ec23 Edge and fringe effects on the adjoining QEII-covenanted wetland at [REDACTED]	18.4, 18.5, 18.6, 18.7	18 Ron & Jane Woodrow
Ec24 QEII National Trust - effects on the covenanted portion of Te Harakeke Swamp	23.1, 23.2, 23.3, 23.4, 32.8	23 QEII National Trust; 32 Director-General of Conservation (DOC)
Ec25 QEII National Trust - adequacy and duration of pest plant and animal control	23.5, 23.6, 23.7	23 QEII National Trust
Ec26 QEII National Trust - long term protection and ownership of Te Harakeke Swamp	23.8	23 QEII National Trust

Ec27 DOC section 53 - classification of Wetlands 3 and 4 as dune slack wetlands	32.1	32 Director-General of Conservation (DOC)
Ec28 DOC section 53 - stable dune ecosystem and the scale of assessment	32.2	32 Director-General of Conservation (DOC)
Ec29 DOC section 53 - wetland delineation, significance criteria and the WEV/ECR methodology	32.3, 32.4	32 Director-General of Conservation (DOC)
Ec30 DOC section 53 - buffer widths and perpetual management of Te Harakeke	32.5	32 Director-General of Conservation (DOC)
Ec31 DOC section 53 - cat management, and the adequacy of an options-based approach	32.6, 23.7, 15.2, 12.7	32 Director-General of Conservation (DOC); 23 QEII National Trust; 15 Wellington Conservation Board; 12 Bryan & Debbie Edwards
Ec32 DOC section 53 - fish salvage, freshwater fisheries and mudfish monitoring	32.7	32 Director-General of Conservation (DOC)
Ec33 DOC section 53 - Ecological Restoration Management Plan amendments	32.8	32 Director-General of Conservation (DOC)

Total: 33 topics covering 44 individual comment issues.

3. Topic responses

Ec1 Support for the proposed ecological package

Comments: 15.1 | Commenters: 15 Wellington Conservation Board

Comment. The Wellington Conservation Board supports the proposed restoration planting of stream and wetland margins, improved floodplain-wetland hydrology and ecology, net gain in wetland extent, re-naturalisation of the Ngarara Stream, lizard habitat replacement and enhancement, and net gain in indigenous vegetation and connectivity along the dune-wetland corridor.

Response. The Board's support is acknowledged and recorded. No change to the application is sought or required in response to this comment.

Ec2 Pest plant and animal control - request for a 20 year minimum

Comments: 15.2, 32.6 | Commenters: 15 Wellington Conservation Board; 32 Director-General of Conservation (DOC)

Comment. The Wellington Conservation Board identifies this as a 'key ask'. It is concerned that an expanded road network increases invasive predator movement, supports the proposed control programme, and asks for additional pest animal control along roads and trails, a sustained commitment, and a recommended 20 year minimum for all pest plant and animal control. The Department of Conservation (DOC) makes similar comments, further addressed at Ec31.

Response. The Ecological Restoration Management Plan provides for animal pest control by an experienced and certified pest management contractor engaged by the consent holder, with a pest animal control plan prepared for each planting treatment, targeting possums, hares and rabbits, and control of hedgehogs and rats within the lizard release area.

The stated commitment is that animal pest management and maintenance measures will be implemented for 10 years post-planting, with post-monitoring advised by the pest control operator and targets set for subsequent control programmes. The Board's request is therefore for a doubling of the committed period, and for extension of the control area to roads and trails.

The design of the pest control programme in relation to lizard protection is that the pest control period (10 years) is sufficient so that lizard-focused planting areas have time to mature and provide refuge security for lizards in the long term. 10 years of pest control should be sufficient for planted wirevine, logs and other habitat features to mature, after which pest control can be ceased.

We consider a 10-year commitment to pest trapping is both reasonable and in proportion to the values that are sought to be protected (largely lizards, given the wetland areas will already be protected by fencing).

We also consider that with the enhanced buffer planting, setbacks, and other measures, once the ecological restoration has been established, monitored and certified as complete, these areas should be self-sustaining, so that over the longer term, there will not be an increased risk of predation arising from the project. Therefore, extending the requirement for pest management beyond the ten years post planting that is proposed goes beyond what is necessary to manage the effects of the development.

Ec3 Management of domestic cats and dogs, and community education

Comments: 15.2, 12.7, 32.6 | Commenters: 15 Wellington Conservation Board; 12 Bryan & Debbie Edwards; 32 Director-General of Conservation (DOC)

Comment. The Wellington Conservation Board asks for detail on managing domestic cats and dogs and on community education. Mr and Mrs Edwards ask what plans protect wetland wildlife from an increase in domestic pets. The Department of Conservation has noted that cats introduced through the subdivision need managing to protect At Risk and Threatened native birds including the Nationally Critical Australasian bittern, and that it is unclear which of the ERMP's cat-management options the applicant proposes to adopt. The Department of Conservation expresses a preference for a blanket cat prohibition within the subdivision.

Response. The Ecological Restoration Management Plan (ERMP) addresses domestic cats (section 6.3.1), feral and stray cats (section 6.3.2), educational material relating to domestic cats (section 6.5) and dog ownership management (section 6.6). Buffer planting around wetlands is proposed to mitigate disturbance of wetland birds, particularly by dogs, noting that dogs should be under control at all times (i.e. on lead) in public areas in the normal course of events (and this is a requirement of Council's bylaws). The proposal outlines conditions for cat and dog management, at conditions 74-104 of the land use consent section, with condition 124 securing consent notice requirements in respect of those conditions. In respect of cat management, the consent conditions provide for three options, each of which is considered suitable and robust to manage the risk of cat predation – whichever approach to cat ownership or control is selected, with the preferred option to be confirmed following the grant of consent.

The applicant's memorandum to DOC of 1 July 2026, which DOC has appended to its section 53 comment at Appendix A, sets out the position in more detail, with cross-references to the application materials. The Assessment of Ecological Effects assesses the risk of increased predation and disturbance arising from domestic cat and dog ownership: based on average New Zealand cat ownership of 0.68 cats per household, up to 800 additional domestic cats could be introduced into the local area, together with up to 500 additional dogs at 0.43 dogs per household, and without management the resulting predation and disturbance pressure on the High bird values of Te Harakeke Swamp and Peka Peka Road Swamp is assessed as a potential High adverse effect (AEE section 4.5.2).

The ERMP sets out mitigation options incorporating a combination of fencing exclusion, ownership controls and ongoing pest control at sections 6.3 to 6.6. The mitigation options link back to the approach to cat ownership within the subdivision. Different approaches to cat ownership require different responses and each mitigation package is tailored to the risk that each option carries.

The draft conditions require the applicant to notify the Council's Manager, Parks, Open Space and Environment in writing of which option is selected prior to construction of any residential lot. Each option's obligations are

fully specified in the conditions and once selected the option cannot be changed without the Manager's written approval. The selected option is secured in perpetuity through a consent notice. We consider that any of the three options will provide robust protections for wildlife at the site.

The proposed approach is to implement the necessary and proportionate mechanism to achieve the desired outcome once an option is chosen. Each option is robust for the scenario it relates to. For the reasons provided it is not necessary to select an option now to manage risk of predation by cats.

Ec4 Pest-proof boundary fencing at [REDACTED]

Comments: 12.7 | Commenters: 12 Bryan & Debbie Edwards

Comment. Mr and Mrs Edwards request that rear boundary fencing include rabbit mesh, their property having been rabbit-free for approximately five years, to keep rabbits and stoats out.

Response. The majority of potential rabbit habitat along this boundary will be converted to suburban housing, with the remainder consisting of wetland, a habitat unsuitable for rabbits, and wetland margin, which is suboptimal, particularly when planted up.

For this reason, full exclusion fencing along this boundary is considered unnecessary.

Boundary fencing around restoration areas is proposed to exclude stock, and rabbit, hare and possum suppression is proposed to enable revegetation of palatable species.

Ec5 Erosion and sediment control and plant supply

Comments: 15.3, 32.8 | Commenters: 15 Wellington Conservation Board; 32 Director-General of Conservation (DOC)

Comment. The Wellington Conservation Board supports the proposed 20 metre wetland planting buffer and is comfortable that the net gain in wetland extent and quality more than offsets the loss of 1.69 hectares of extant wetland, but stresses that erosion and sediment control must be allowed for throughout the development's life and beyond, and asks how plant and seedling supply will be managed given market shortages (in the opinion of Wellington Conservation Board). The Department of Conservation also comments on the suitability of some plant species.

Response. Erosion and sediment control is addressed at Topic E4.

On plant supply, the June 2026 conferencing with Greater Wellington recorded that detailed refinement of planting lists can be left to the certification stage provided the relevant condition makes the wetland-type requirement explicit, with flexibility retained for nursery supply constraints. Greater Wellington is to provide an updated plant list by wetland type. Further review of this condition can provide for refinement of plant species selection.

Sections 3.41 and 3.42 of the DOC Section 53 report raise issues with how the Ecological Restoration Management Plan addresses protection in perpetuity, buffers, suitability of some proposed plant species, and infill planting to achieve the minimum proposed canopy cover target. These are all issues can be resolved through permanent protection mechanisms, revisions to the plant schedules, and clarification of infill planting and compliance monitoring targets. These will be incorporated into the next revision of the Ecological Restoration Management Plan.

With respect to buffers to wetlands, DOC's request for 40 m planted buffers to address edge effects completely misses the point that these wetlands are not forests (from which their wide buffer theory and the request are derived). The 20 m wide buffer proposed by the applicant for the Te Harakeke wetland is more than adequate to provide a buffer against the environmental variables than can be controlled for wetland restoration, setting aside the natural vulnerabilities of such large wetlands to wind and weed invasion that occur even if the

excessively wide buffers advocated by DOC were to be adopted. Of all of the ecological reviewers who have looked at the proposed buffer planting to date, DOC is the only one who has suggested that the provision for 20 m is insufficient.

Potential supply constraints will be addressed by establishing contract growing arrangements with one or more suitably experienced nurseries. These arrangements would specify species, quantities, grades and delivery stages, as well as contingency arrangements, including substitute species or alternative suppliers.

The Interim Cultural Impact prepared by Ātiawa ki Whakarongotai Charitable Trust seeks Te Ātiawa participation in restoration design and planting plans, supply of restoration plants from the Te Ātiawa nursery, and first refusal of restoration planting contracts. Nga Hapu o Ōtaki seeks a similar outcome.

These are primarily commercial rather than ecological matters. What matters for ecological purposes is the specified outcomes to be achieved, and these are clearly laid out in the application materials and proposed conditions.

A detailed plant-procurement programme will be prepared during detailed design and aligned with the staged earthworks and planting programme. Final species schedules, quantities, grades, eco-sourcing requirements and anticipated delivery dates will be confirmed sufficiently early to enable seed collection and propagation. Orders should be placed at least 18 months before planting, with additional time allowed for uncommon, slow-growing or seasonally difficult species. Updates to consent conditions can be made to address any reasonable concerns raised by DOC or Greater Wellington Regional Council.

Ec6 Ecological connectivity beyond the site

Comments: 15.4, 32.2 | Commenters: 15 Wellington Conservation Board; 32 Director-General of Conservation (DOC)

Comment. The Wellington Conservation Board encourages ecological corridors linking the site to Hemi Matenga Scenic Reserve, Nga Manu Nature Reserve and the surrounding wetlands, dunes, waterways and coastal ecosystems, rather than planning in isolation. The Department of Conservation addresses the dune landform which is discussed at Ec28 below.

Response. The restoration package is designed to deliver net gain in indigenous vegetation and connectivity along the dune-wetland corridor, which is the principal ecological linkage across the site, and connects to Te Harakeke Swamp and the Ngarara Stream system.

Together, these measures provide the ecological corridors that can reasonably be delivered within land controlled by the applicant and address the project's onsite connectivity effects.

While desirable, broader linkages to Hemi Matenga Scenic Reserve, Ngā Manu Nature Reserve, and the surrounding wetland, dune, waterway and coastal ecosystems are not necessary to address an adverse effect arising from the proposal and they are beyond the applicant's direct control, as their establishment or enhancement would require access to, and agreement from, third-party landowners.

Off-site compensation at QEII Regional Park is being explored with Greater Wellington in relation to offsetting the loss of Wetland 3.

Ec7 Fish passage and Ngarara Stream restoration with Mana Whenua

Comments: 15.5 | Commenters: 15 Wellington Conservation Board

Comment. The Wellington Conservation Board asks the applicant to work with Mana Whenua to restore mahinga kai, the mauri of the stream and traditional relationships; to extend stream restoration beyond the footprint with neighbouring landowners; and to incorporate enhanced fish passage through improved culvert

design, rock ramps, natural fish pathways and wetland-stream connectivity, drawing on Ātiawa ki Whakarongotai Trust examples.

Response.

WNDL acknowledges the Board's request. The detailed stream and wetland restoration that is proposed has been developed to support the restoration of mahinga kai, the mauri of the stream, and traditional relationships with freshwater.

This design is consistent with the outcomes sought by the Interim CIA, which emphasises connected and resilient freshwater systems, habitat connectivity for species such as tuna, īnanga and piharau. Conditions provide for the participation of Te Ātiawa and other iwi in the finalisation of the draft Ecological Restoration Management Plan. Monitoring is provided through both the Ecological Restoration Management Plan (to be finalised with iwi input) and through the Kaitiaki Monitoring Strategy, to be developed with iwi.

The realigned Ngarara Stream is intended to provide more natural hydraulic and ecological conditions, while culverts will comply with New Zealand Fish Passage Guidelines and incorporate embedded or naturalised bed substrate and low-velocity refuges. Fish-friendly log weirs, backwater pools, notched low-flow channels and rock-and-cobble aprons are also proposed within the central wetland complex.

The wetland cycle-walkway crossings are separately proposed as raised boardwalks to maintain hydrological connectivity. Conditions further require a certified Native Freshwater Fauna Salvage and Relocation Plan and associated fish rescue under Conditions 115–117, maintenance of fish passage during and after works under Condition 118, fish-passable design of all instream structures in accordance with the New Zealand Fish Passage Guidelines under Condition 119, restrictions on works in flowing water during the 1 August–31 December recruitment period under Condition 120, and open-bottomed or at least 25%-embedded culverts under Condition 121. Condition 107 also requires the final ERMP to include mana whenua input and explain how recommendations have been addressed.

Opportunities for direct wetland–stream connections can also be explored at detailed design, as part of finalising the Ecological Restoration Management Plan in association with mana whenua, for several constructed offset wetlands adjoining Ngarara Stream and the “southern drain”.

More broadly, connectivity will be improved by raising water levels in Ngarara Stream and the drains through the central wetland complex and Ngarara floodplain wetlands, thereby raising adjacent water tables and increasing the frequency and extent of wetland inundation, together with the establishment of seasonally inundated swales within the central wetland complex. These measures are described in EclA Sections 4.4.4 and 4.7.1 and ERMP Sections 3.3.3 and 4.4.1–4.4.4. Any direct connections would be confirmed through site-specific ecological and hydrological design to avoid unintended drainage or inappropriate alteration of wetland hydroperiods. There may be opportunities to extend the proposed restoration beyond the boundaries of the Site, however these are outside of the applicant's direct control and are not required to offset the effects of the project.

Ec8 Long-term compatibility of commercial activity with ecological objectives

Comments: 15.8 | Commenters: 15 Wellington Conservation Board

Comment. The Wellington Conservation Board recommends conditions ensuring that future commercial uses do not cause adverse effects through waste, contaminants, lighting or vehicle movements, or impacts on wetlands, waterways and indigenous species, and that long-term conditions of use keep future activities compatible with ecological objectives.

Response. Activities on the commercial lots are subject to noise standards (Appendix 33, Condition 99), a Design Review Panel certification process for buildings on commercial lots (Conditions 127-138), and the general stormwater treatment framework which applies across the site. Waste management measures would be addressed as a normal activity and there is no reason to suggest that they need particular attention here.

As the wetland and stream system is a sensitive receiving environment, the application has adopted a comprehensive stormwater management approach for contaminants as detailed in the substantive application document.

It is important to bear in mind that the wetland near the commercial centre is currently in a degraded state and it will be substantially enhanced by the proposal, including by buffer planting. The net result will be improved ecological outcomes, including at locations near the commercial centre.

Ec9 Ecological sensitivity and watercourse change

Comments: 13.4 | Commenters: 13 Kensington Farm Park Ltd

Comment. Kensington Farm Park submits that this is a very ecologically sensitive area and that changes to watercourses and ponding effects from Expressway construction have already been noted.

Response. The ecological sensitivity of the environment is accepted and detailed in Appendix 23 of the application. However, the sensitivity of the area varies from SNA to degraded wetland and channelized stream to drains. It is the reason for the scale of the restoration package proposed, including at least 1.74 hectares of wetland gain against a loss of 1.69 hectares, renaturalisation of the Ngarara Stream, extensive dune shrubland and treeland restoration, alongside wetland enhancement and riparian restoration measures, and a 15 year plus monitoring and adaptive management programme (as detailed in the EclA - Appendix 23, and the ERMP - Appendix 26).

The effects management and restoration package proposed is robust and generous and will ensure an overall positive ecological outcome.

Ec10 DOC section 51 report - term of the Wildlife Approval

Comments: S51.1 | Commenters: S51 Director-General of Conservation (DOC)

Comment. The Director-General of Conservation recommends that the duration of the Wildlife Approval, if granted, should be no longer than 10 years rather than the 15 years sought. DOC's reasoning is that the conservation status of lizards is reviewed approximately every five years under the New Zealand Threat Classification System, that the 2025 review demonstrates an ongoing decline in New Zealand lizard species, worsening threat status, ongoing loss of range and increasing recognition of new taxa, and that a shorter term provides a higher level of confidence of ongoing lizard protection.

Response. The applicant sought a 15 year term to align the Wildlife Approval with the duration of the earthworks consent sought and with the staging of the application, avoiding the need for the approval to be re-certified part-way through the works. That rationale is set out in the applicant's memorandum of 1 July 2026 at paragraphs 5 and 6. That memorandum has been included as part of DOC's comments. DOC's concern is directed to the currency of threat classification rather than to the adequacy of the applicant's proposed methods.

Given the status of the species recorded at the site (Northern grass skink) and their abundance throughout the Wellington region and beyond, it is highly unlikely that a change to the threat status will occur within a 15 year period.

We consider that a 15 year terms remains appropriate, for ease of working in with staging and development of the site.

Ec11 DOC section 51 report - release area habitat and restoration planting in the LMP

Comments: S51.2 | Commenters: S51 Director-General of Conservation (DOC)

Comment. DOC considers that habitat and microhabitat in the release area needs to be designed to meet the specific requirements of each species applied for, rather than focusing solely on the northern grass skink, and that the current LMP (version dated 19 March 2026) does not adequately address the habitat and microclimate needs of the copper, ornate and glossy brown skinks or the Raukawa gecko.

Because the suitability of the release area relies on restoration of the dune area, DOC considers the LMP is insufficient in that respect and should include details of the restoration planting proposed. DOC notes that lizard habitat in restored ecosystems normally takes one to two years to fully develop, that microclimate under artificial refuges takes time to become suitable, that invertebrate food takes several lifecycles to recover from disturbance, and that trampling from replanting takes many months to recover.

Response. The applicant's memorandum to DOC of 1 July 2026 records at paragraph 8 that the proposed relocation area provides suitable habitat for any potential lizard species that might be found on the site, catering for all species that are known or could reasonably be present by providing dry grassland areas and deep cover for northern grass skink, moist dune gullies for copper, ornate or glossy brown skink, and deep complex ground cover and rotten logs for Raukawa gecko, and that there is no viable habitat for or likelihood of arboreal geckos being present.

The release area comprises 5.8 hectares on site, including 1.4 hectares of high quality and 4.4 hectares of moderate quality habitat, to be encumbered by consent notice to ensure its ongoing physical protection, with pest control measures and habitat enhancement including revegetation, stock exclusion through fencing and log stacks. The applicant has advised DOC that an updated Lizard Management Plan is being prepared and will be provided.

Overall, we consider that the matters raised by DOC are being addressed in the proposal as advanced, to the extent it is reasonable and necessary to do so.

Ec12 DOC section 51 report - post-release monitoring and the financial contribution

Comments: S51.3 | Commenters: S51 Director-General of Conservation (DOC)

Comment. DOC does not agree that post-release lizard monitoring would be impossible and would ordinarily prefer a collaborative on-site monitoring approach, but in this instance, given the project staging and the relatively low numbers present, it is not opposed to a financial contribution in lieu of on-site monitoring.

DOC welcomes the principle of proposed condition I17 but suggests amendments: that the contribution be made to the Society for Research of Amphibians and Reptiles in New Zealand mitigation fund or a named university, and be available for lizard mitigation research. DOC accepts the amount proposed - up to \$3,000 for every 20 lizards relocated, to a maximum of \$40,000 - but seeks that it be CPI adjusted given the long-term and staged nature of the proposal, so it remains meaningful into the future.

Response. The applicant proposed the financial contribution mechanism as an alternative to on-site monitoring in its memoranda of 27 May and 1 July 2026, on the basis that on-site monitoring is not warranted given the Not Threatened status of the confirmed species and the low likelihood of statistically meaningful data across a staged programme.

DOC has accepted the principle and the quantum. The outstanding matters proposed in the s51 comments are the identity of the recipient, the permitted use of the funds, and CPI adjustment - all of which are drafting matters that the applicant is prepared to agree to.

Ec13 DOC section 51 report - updated Lizard Management Plan and conditions

Comments: S51.4 | Commenters: S51 Director-General of Conservation (DOC)

Comment. DOC requests that an updated LMP be provided to ensure the matters raised in its report are addressed prior to the decision on the application, and that the updated conditions provided by the applicant on 1 July 2026 (Appendix C to the DOC report, marked up) would then only need to address the standard conditions without bespoke conditions addressing each of DOC's comments. DOC recommends the conditions attached at its Appendix C if the approval is granted, and considers that each condition would not be more onerous than necessary under section 83 of the Act.

Response. The applicant has confirmed to DOC that an updated LMP is in preparation. DOC records that post-lodgment consultation has been efficient and targeted, and welcomes the cooperation shown by the applicant.

From correspondence with DOC, DOC appears to be largely comfortable with the proposal following those discussions, with the residual matters being those at Topics Ec10 to Ec12.

Ec14 Screening vegetation alongside walkways

Comments: 21.1 | Commenters: 21 Kapiti Coast District Council

Comment. Kapiti Coast District Council seeks a 'low ecological impact' design response for walkways, including planting specifications and any other mechanisms that may be suitable to minimise disturbance to birds, such as educational signage along or near the pathways.

Response. The Ecological Restoration Management Plan provides that buffer planting around wetlands will mitigate disturbance of wetland birds, particularly by dogs. The boardwalk across Te Harakeke Swamp is subject to detailed design and construction methodology conditions requiring demonstration that it can be constructed in a manner that avoids adverse effects. CPTED and amenity considerations will also be relevant to the final planting plan. Given that a final Ecological Restoration Management Plan must be provided for certification, the appropriateness and final design of planting can be further considered throughout all ecological restoration areas.

Ec15 Perpetual protection of Te Harakeke Wetland and vesting

Comments: 21.2, 21.12, 21.13, 24.12, 18.4 | Commenters: 21 Kapiti Coast District Council; 24 Greater Wellington Regional Council; 18 Ron & Jane Woodrow

Comment. Kapiti Coast District Council does not support deferral of finalising the mechanism for ensuring perpetual protection of Te Harakeke Wetland, given the limited number of available options and because it does not support a lesser level of protection. KCDC's position is that Lots 5310 and 5311 should vest to Council as Local Purpose (Ecological) Reserve to ensure ongoing management and perpetual protection and to provide certainty of publicly accessible open space. KCDC records that Te Harakeke is listed in Schedule A3 of the Natural Resources Plan as a wetland with outstanding indigenous biodiversity values, meeting all three criteria (highly representative, high rarity values and highly diverse), and that with less than 3% of wetlands remaining in the region its protection is of utmost importance.

KCDC does not accept vesting of Lot 5003 (the walkway) unless Lots 5310 and 5311 also vest, and would only accept ownership of the walkway if the entire natural wetland extent were in Council ownership, rather than leaving management to a residents' group. Greater Wellington's position is aligned. Its priority is that the

ecological and hydrological characteristics of Te Harakeke are protected in perpetuity, and it considers vesting Lots 5310, 5311 and 5314 to KCDC as Local Purpose (Ecological) Reserve will achieve this. Mr and Mrs Woodrow separately note that their QEII-covenanted wetland at [REDACTED] is intrinsically linked to the same Te Harakeke system.

Response. Matters relating to the vesting of Te Harakeke Swamp are addressed in the covering response.

From an ecological outcomes perspective, concerns about achieving and securing these outcomes are best and fully addressed by the project design and proposed conditions. We consider vaguely expressed concerns about securing enduring outcomes are overstated in light of the planning context, proposed conditions, project design and lot configurations (including setbacks).

It is difficult to see how, once adjoining land is subdivided and ecological offsetting measures are implemented and established, there could be any credible long-term threat to these measures - given the sensitivity of the open space areas, Councils' clear interest and the large and likely engaged community that will be located immediately adjacent. The applicant considers that the focus of the present enquiry should be on the adequacy of the proposed mitigation measures rather than who owns these areas. From an ecologist's perspective, we are satisfied that the stated ecological objectives are clearly expressed and are properly secured by project design and proposed conditions.

Ec16 Enrichment planting of degraded wetland clusters - ERMP Table 5

Comments: 21.3 | Commenters: 21 Kapiti Coast District Council

Comment. Kapiti Coast District Council considers the approach in Table 5 of the Ecological Restoration Management Plan inadequate for achieving the enrichment planting of degraded wetlands (wetland clusters 2, 4 and 5). It seeks that the ERMP either be updated to include monitoring of the proposed 'nodes' of indigenous enrichment wetland planting for those clusters with minimum thresholds to be achieved over the monitoring period - so that the planted nodes progressively increase in extent by a minimum threshold such as 20% over the monitoring period - or be updated to require all exotic-dominated wetlands to be revegetated with indigenous plants.

Response. The ERMP provides for wetland enhancement planting alongside the creation of offset wetland, with monitoring and adaptive management over a 15 year plus period, and annual wetland monitoring reports required by condition (Appendix 33, Conditions 58-59). The proposal is already embedding a net gain outcome in terms of wetland revegetation.

KCDC's comment is directed at the measurement of the enrichment planting outcome for the degraded clusters rather than at the principle.

The areas proposed for restoration planting are already more than sufficient to offset the effects, therefore there is no reasonable basis to impose an additional requirement for further revegetation or natural regeneration (at any additional ratio).

Ec17 ERMP Table 18 - schedule and timetable of tasks

Comments: 21.4 | Commenters: 21 Kapiti Coast District Council

Comment. Kapiti Coast District Council seeks that Table 18 of the ERMP be re-titled to reflect that it is a full schedule and timetable of tasks, and reviewed to ensure all components of work are included - noting pest monitoring is not currently listed. KCDC also seeks that a review period be scheduled to assess whether adaptive management thresholds are triggered for wetland features, and that all aspects of the ERMP are on track to meet compliance requirements well in advance of compliance certification.

Response. The Applicant accepts this request. Section 9 and Table 18 of the ERMP will be amended to provide a complete implementation schedule covering all ERMP tasks, including pest monitoring. The schedule will also include a defined pre-certification review of wetland monitoring results, adaptive-management thresholds, and overall compliance progress. This can be achieved as part of the already provided certification process and does not necessitate an updated ERMP now. As an efficient alternative, the existing proposed condition could be amended to specify this requirement be incorporated and it can then be confirmed as part of the certification process.

Ec18 Wetland loss and offsetting - effects management hierarchy and like-for-like offset for Wetlands 3 and 5

Comments: 24.1, 32.3, 32.4 | Commenters: 24 Greater Wellington Regional Council; 32 Director-General of Conservation (DOC)

Comment. Greater Wellington records that four wetlands (W3, W5, W9 and W10) and parts of two wetlands associated with the Ngarara Stream are affected, and considers the proposed offsetting package is sufficient to achieve a net gain in overall area, but does not consider that like-for-like offsetting is achieved in all respects. The comment records that the application should demonstrate the effects management hierarchy has been applied and that compensation will only be provided where offsetting is not possible.

Greater Wellington seeks that the applicant demonstrate it has explored like-for-like offsetting options including beyond the site boundary (specifically at Queen Elizabeth II Park), and records that in accordance with NRP Policy P31 compensation (for example swamp wetlands as compensation for reclamation of dune-impounded wetlands) should only be offered when it is not possible to offset more than minor residual adverse effects.

Council seeks that the applicant assess the hydrology of the wetland areas to be reclaimed to determine their source (groundwater, rainwater or riverine) and type (fen or swamp) so that like-for-like offsetting can be confirmed. Greater Wellington notes it has not discussed its view on Wetland 5 with the applicant prior to its section 53 comment.

The Department of Conservation comment in respect of wetland type is addressed at Ec27 below.

Response.

Wetland 3 is a 1,569 square metre sand dune-impounded wetland comprising 9.3% of the overall proposed loss. Greater Wellington now considers Wetlands 3 and 5 to be dune-impounded fens. We characterise them as Marsh/Ephemeral wetlands. GWRC concludes the proposed offsetting package does not provide a like-for-like replacement, primarily on the basis of landform, ie. dune-impounded.

The proposal involves the loss of 1.69 hectares of moderate quality wetland, offset by at least 1.74 hectares of purpose-built offset wetland plus enhancement of existing low-quality wetlands, with a 15 year plus ERMP monitoring and adaptive management programme.

The Wetland 3 characterisation dispute was discussed between WNDL and GWRC during conferencing on 4-5 June 2026, where off-site offsetting at QEII Regional Park was identified as a matter being explored with Greater Wellington Regional Parks alongside further on-site compensation as a fallback, and the applicant committed to offsetting to the extent practicable. Greater Wellington's comments confirm that this option remains open. GWRC have now included Wetland 5, which has not previously been the subject of discussion.

It appears that the loss of W3 can be offset off-site (at QEII Regional Park). The loss of W5 can be offset by the protection and enhancement of W13.

Overall, there will be a net gain in wetland extent and values so we have no concern that there will be any residual effects of any note. The proposal presents a strongly positive outcome for wetlands.

This topic is addressed in greater detail by the separate Dune Wetland Memo, presented with this s53 response. While there is a dispute over some matters of detail - the Panel can be confident that the applicant will provide a net gain in overall wetland quality and extent.

Ec19 Functional need and effects management hierarchy for stream reclamation

Comments: 24.2 | Commenters: 24 Greater Wellington Regional Council

Comment. Greater Wellington considers the applicant should demonstrate that the proposal aligns with the requirements of Regulation 57(2) of the National Environmental Standards for Freshwater in relation to stream reclamation, including demonstrating a functional need for the reclamation and how the effects management hierarchy has been applied.

Response. The proposal involves realignment of approximately 993 metres of the Ngarara Stream and 76.9 metres of culverting, with the realigned section designed to maintain more natural hydraulic and ecological conditions. The realignment is properly characterised as mitigation rather than offsetting, because the realigned reach will be of equal or better ecological value.

The functional need question is addressed in the covering response.

Ec20 Classification of the on-site drains as rivers

Comments: 24.3, 32.4 | Commenters: 24 Greater Wellington Regional Council; 32 Director-General of Conservation (DOC)

Comment. Greater Wellington considers that the approximately 3 kilometre network of drains connected to the Ngarara Stream, while highly modified, meets the definition of 'river' under the RMA.

It relies on its 'Watercourse Types Guidance Note May 2021', which provides that watercourses constructed to drain areas that were historically wetlands or lakes are the modified form of those pre-existing waterbodies and are therefore rivers under section 13 of the RMA, and also relies on its 2013 digital elevation model mapping which categorised some of these watercourses as highly modified streams for the purposes of NRP Rules R134-R136.

Greater Wellington considers resource consent is required under Regulation 57 of the NES-FM and Rule R142 of the NRP for reclamation of the bed of these 'rivers', that the applicant must demonstrate functional need and application of the effects management hierarchy, that an SEV assessment should be carried out across the relevant watercourses to determine residual effects, and that if residual adverse effects cannot be avoided, minimised or remedied then offsetting should be provided in line with Schedule G2 of the NRP and RPS Change 1 Policy 24A(e), which seeks at least a net gain and preferably a 10% net gain or greater. Greater Wellington seeks that the site watercourse classifications be reconsidered in light of its guidance and that the scope of the application be amended to seek consent for the reclamation of these watercourses.

Response. The applicant has obtained legal advice, supported by our ecological advice, that these watercourses are artificial watercourses of low ecological value falling outside the RMA definition of 'river', and on that basis the application does not treat their loss as reclamation, does not seek consent for reclamation, and offers no specific mitigation package beyond relocation of fauna. The covering note addresses the question of scope of the application.

This has been the central point of difference between the applicant and Greater Wellington, as recorded in the memoranda supplied to the Panel Convener.

At the 4-5 June 2026 conferencing between the parties, WNDL proposed a pragmatic middle ground – that notwithstanding its legal advice, it would investigate the values of minor drains, to enable an assessment of the

feasibility of compensating their loss through the existing restoration package, in the event they are deemed by the Panel to be streams – notwithstanding our ecological advice and the legal advice that has been obtained.

The sufficiency of the compensation is quantified using the SEV methodology, as well as an in-house Wetland Ecological Valuation methodology adapted from SEV. At conferencing Greater Wellington's Dr Taylor described that as a sensible middle ground worth exploring, and actions were assigned for the applicant to prepare a memorandum quantifying the values and impacts of removing these drains. This information is presented in a separate 'Stream and Drain Memo', provided with this s53 response.

Irrespective of the determination as to status that may be made by the Panel, we consider these artificial features to have low ecological values, they were created to drain a wetland and their reclamation does not give rise to any significant adverse ecological effects (i.e. with or without additional offsetting).

Ec21 Post-development Stream Ecological Valuation

Comments: 24.4 | Commenters: 24 Greater Wellington Regional Council

Comment. Greater Wellington records that an SEV has been completed defining the current value of the Ngarara Stream and its two largest on-site tributaries, but that the applicant has not supplied a post-development SEV to determine the expected outcomes of restoration and offsetting in the proposed new reach.

Greater Wellington agrees that a net gain in stream area and habitat quality can be achieved, but considers an SEV calculation for the post-development stream would provide a clear target for restoration. It records the agreement reached at the June 2026 conferencing that an SEV before-and-after comparison, rather than an ECR or offset approach, is the right way to demonstrate the realigned Ngarara Stream will be of equal or better ecological value than it has in its current state, which should help close out the issue, and conveys it understanding that the applicant is working on producing this. Greater Wellington seeks that the post-development SEV calculations be provided to the Panel and to Greater Wellington for review.

Response. The Applicant agrees to this request. The ERMP will be amended to incorporate the baseline and predicted post-development SEV comparison, its assumptions, and a measurable SEV performance target for the realigned Ngarara Stream. Monitoring and reporting provisions will also be added to verify the achieved post-construction outcome and identify any necessary remediation. The post-development SEV calculation and revised consent conditions will be provided in due course.

Ec22 Ongoing protection for ecological offset sites

Comments: 24.11 | Commenters: 24 Greater Wellington Regional Council

Comment. Greater Wellington's priority is that areas identified as ecological offsets are protected for that purpose in perpetuity. Consistent with Schedule G2 of the Natural Resources Plan, it seeks demonstration that management arrangements, legal arrangements such as covenants, and financial arrangements such as bonds are in place to allow the positive effects to endure as long as the residual adverse effects of the activity, and preferably in perpetuity.

Response. The proposed design of the open space areas and the lack of credible threat to them by other activities has already been discussed and is discussed further in the covering note. The proposed conditions require the consent holder to enter into an appropriate legal protection mechanism (Appendix 33, Conditions 69 (GWRC) and 82 (KCDC), and the lizard release area is proposed to be encumbered by consent notice to ensure physical protection in perpetuity.

Financial arrangements such as bonds are not proposed, nor are they considered necessary given the consenting requirements and need to demonstrate outcomes as part of the subdivision approval process.

The Applicant will undertake a further review of consent conditions to ensure comprehensive coverage of all ecological areas to align with this comment. This matter is further addressed in the covering response.

Ec23 Edge and fringe effects on the adjoining QEII-covenanted wetland at [REDACTED]

Comments: 18.4, 18.5, 18.6, 18.7 | Commenters: 18 Ron & Jane Woodrow

Comment. Mr and Mrs Woodrow own [REDACTED], which contains a natural inland wetland protected by an Open Space Covenant under section 22 of the Queen Elizabeth the Second National Trust Act 1977. They consider their wetland system is intrinsically linked to the wetland system on the application site, both being part of Te Harakeke Swamp, a protected ecological area under the Kapiti Coast District Plan (Ecological Site K066), and note their site is contiguous with Ecological Site K236 (Pharazyn Reserve). They record the significance of the ecosystem, including that it contains the second largest area of harakeke flaxland and raupo reedland in the district, that wetland habitat is nationally rare and dune and swamp forest are rare in the Foxton Ecological District, and that Australasian bittern (Threatened - Nationally Endangered) and At Risk - Declining long-fin eel, inanga and Wellington green gecko are present.

While acknowledging the applicant does not propose to reclaim this wetland, they are concerned about edge and fringe effects from development close to and along the boundary of the system, and that any effect on the applicant's wetland will in turn affect theirs. They are concerned about effects on water health and quality through stormwater runoff during and after construction, and seek a high quality of stormwater treatment. They note the applicant proposes only wetland buffer planting within the wetland system bordering their property (ERMP Figure 15), and consider the applicant should go further, with wetland rehabilitation planting delivered within this wetland complex to ensure no significant residual effects remain.

Response. The commenters are not opposed to the development. The ERMP provides for 20 metre wetland enhancement buffer planting. The stormwater approach uses a treatment train with bio-retention, wetland treatment and attenuation, and soakage where appropriate.

Australasian bittern is not recorded on site, although the Department of Conservation has noted it is present in the vicinity and has historically been recorded nearby. This is a key driver for the cat management approaches proposed through the ERMP and consent conditions.

Overall, we are satisfied that the issues raised by the commenter are addressed through the project design and proposed conditions. We do not envisage any adverse impacts on the wetland located on the commenter's property.

Ec24 QEII National Trust - effects on the covenanted portion of Te Harakeke Swamp

Comments: 23.1, 23.2, 23.3, 23.4, 32.8 | Commenters: 23 QEII National Trust; 32 Director-General of Conservation (DOC)

Comment. The QEII National Trust identifies its primary concerns as the potential for sedimentation, changes in water level, discharges of stormwater, inappropriate planting in the buffer areas surrounding the applicant-owned portion of Te Harakeke Swamp, as well as pest control and pet management to manage the open space values in the QEII-owned portion of the swamp and the neighbouring open space covenant. On sedimentation, QEII asks that in certifying any phase-specific ESCP, the Council ensure sedimentation levels in the QEII-owned portion are not at a level detrimental to the health of the wetland. On water levels, it notes the proposed activities will result in a temporary change in groundwater level and that dewatering associated with peat removal may impact groundwater levels near wetlands, and encourages the Panel to consider whether the duration of any water level change is short enough not to have a detrimental effect.

On stormwater, it acknowledges the SMP applies best practice principles and that the system is designed to capture and treat the water quality volume equivalent to one third of a 50% AEP storm event, consistent with ARC TP10 and GWRC water sensitive design guidance, but encourages the Panel to consider whether these measures are sufficient given expected increases in weather event severity. It identifies specific risks from direct discharges - poisoning freshwater life, smothering plant life, affecting fauna feeding through turbidity, disrupting water chemistry and temperature, and displacing freshwater habitats - and notes that sustained high water levels can cause die back of vegetation not suited to inundation, while subsequent actions to lower levels if neighbouring properties are put at risk can cause equally catastrophic long term ecological damage. On planting, QEII asks that any planting in buffer areas use eco-sourced species appropriate for the wetland and wider ecological district, since those species will likely spread into the QEII-owned part.

Response. QEII has an interest in neighbouring land. Several points can be answered from the existing material. The ERMP records that no enhancement planting is proposed within Te Harakeke wetland because most is already native dominated, and that eco-sourced and locally appropriate buffer planting of margins, and pest plant control throughout the wetland, is most critical to restoration, which QEII expressly notes and accepts.

The point about the indirect effects of future wetland management is acknowledged - that lowering levels to protect neighbouring properties could itself cause ecological damage. For the reasons outlined in the covering response and in other topic responses, water levels in Te Harakeke Swamp are outside of the applicant's control, and are fundamentally a product of downstream management by KDC. Nothing in this application will have a material impact on water levels in Te Harakeke Swamp.

Matters relating to earthworks and hydrological impacts are addressed in separate responses.

Ec25 QEII National Trust - adequacy and duration of pest plant and animal control

Comments: 23.5, 23.6, 23.7 | Commenters: 23 QEII National Trust

Comment. QEII considers that the language used in the ERMP for pest plant and animal control is general and leaves considerable discretion to operators and contractors, and that while reliance on industry expertise is reasonable to an extent, the application does not set out objective measures allowing later determination of whether the required level of pest control has been carried out. It notes the proposed control does not appear to address mustelids, although their presence will be monitored. It notes the ERMP's weed control references all relate to the revegetation programme, whereas environmental weeds are present in other areas of the site and will spread to neighbouring properties if not controlled, giving the example of existing wetland areas heavily infested with pampas grass, which produces millions of seeds from a single plant and requires repeated control to achieve eradication.

On the lizard release area, QEII understands pest animal control will be undertaken across the 5.8 hectare area for 10 years and encourages the Panel to consider whether 10 years is sufficient given the slow breeding ecology of New Zealand lizards, suggesting 35 years would be more appropriate.

On cats, QEII would prefer a blend of the three ERMP options securing the highest level of protection, notes the proposed pet control boundary fence would only be constructed on the subdivision-wetland interface, that unneutered tom cats and feral cats can have significant hunting ranges, and that the fence is unlikely to be fully effective due to the incomplete perimeter - suggesting the high installation and maintenance costs would be better invested in comprehensive enduring pest animal control and subdivision covenants precluding outdoor domestic cats.

Response. Mustelids are a part of the pest animal control programme, and that will be emphasized clearly within the updated ERMP. 10 years of animal pest control within the lizard release area is considered

appropriate for the reason given in the answer to Ec2 above. The three cat control options presented by the Applicant will each independently provide protection to wetland birds and the design and duration of each is considered proportionate to the risk. While we agree that an encirclement fence, pest eradication, and long-term management would provide the ultimate protection, that solution is technically complex, financially onerous, and out of proportion to the effects that will be generated by the proposed development, the values sought to be protected and the marginal additional gain that might arise over the protection options proposed by the Applicant.

Ec26 QEII National Trust - long term protection and ownership of Te Harakeke Swamp

Comments: 23.8 | Commenters: 23 QEII National Trust

Comment. QEII notes the application states Te Harakeke Swamp will become an area of private ecological open space, and that section 4.7 records the applicant proposes to retain ownership with future options including vesting in the Council, ownership by Iwi, or ownership by a Residents Association. QEII encourages the Panel to consider which of these future ownership options will result in the best long-term ecological outcomes, and states that of these options it prefers vesting in the Council or ownership by Iwi.

Response. As discussed earlier, we consider questions of ownership sit separately to the ecological outcomes that are enshrined in the project design and to be delivered by conditions. We are satisfied that the project design and proposed conditions will deliver an enhanced Te Harakeke Swamp - irrespective of who ultimately owns it. This matter is further addressed as part of the covering response.

Ec27 DOC section 53 - classification of Wetlands 3 and 4 as dune slack wetlands

Comments: 32.1 | Commenters: 32 Director-General of Conservation (DOC)

Comment. In its section 53 comment the Department of Conservation (relying on the advice of Ms Hooker at Appendix B), queries the classification of Wetlands W3 and W4 (also referred to as Wetland Cluster 4) as not constituting dune slack wetlands and therefore not a threatened and naturally uncommon ecosystem. DOC's view is that the absence of threatened flora pertaining to dune swale habitats should not disqualify an area from being identified as a dune swale, that the areas should be treated as naturally uncommon ecosystems with the threat status of Nationally Endangered, and that the impacts of the application should be assessed on that basis. DOC states that the application does not currently identify or remedy significant impacts on dune ecosystems, and that given these ecosystems are naturally uncommon they should be afforded a high level of protection and fully avoided, and that given their rarity like-for-like offsetting is not an option - the only real options being to avoid or compensate.

Greater Wellington considers wetlands W3 and W5 to be dune-impounded fens, not dune slack wetlands. As noted in respect of Ec18, GWRC also considers that in respect of these wetlands, that the offset package is not like-for-like.

DOC now says that wetlands W3 and W4 are dune slack wetlands, that they are Nationally Endangered, and that offsetting should not be available at all.

Response.

In our opinion, wetlands W3 and W5 (both proposed to be removed), and W4 (not proposed to be impacted) are *not* dune slack wetlands and are therefore not irreplaceable ecosystems under the National Policy Statement for Indigenous Biodiversity. The wetlands are degraded, moderate-value wetlands that can appropriately be managed through biodiversity offsetting.

We disagree with GWRC's view that W3 and W5 are fens containing peat soils.

If the FTAA Panel does not accept our assessment, there are options, including:

- On-site like-for-like offsetting using enhancement of Wetlands W13 and W4.
- Off-site offsetting for the loss of W3 through restoration of a comparable degraded wetland within QEII Regional Park (assuming that WNDL can utilise this – it sits within GWRC control).
- Like-for-unlike compensation (on-site) using surplus wetland creation and enhancement already proposed elsewhere within the development.

The QEII Park option is a feasible offset because the wetland is comparable in landform, hydrology, vegetation, and degraded condition, with restoration supported by buffer planting and pest control. However, it relies on GWRC to allow access for this work to be undertaken.

Overall, we regard the proposed steps taken by the Applicant regarding application of the mitigation hierarchy as appropriate, and that feasible offsetting or compensation options exist to achieve at least no net loss - even if the Panel adopts a different interpretation of the wetlands' classification. We are satisfied that the proposal represents a strongly positive outcome for wetlands.

The applicant's position and proposed effects management is further detailed in the Dune Wetland Memo supplied with this response.

Ec28 DOC section 53 - stable dune ecosystem and the scale of assessment

Comments: 32.2 | Commenters: 32 Director-General of Conservation (DOC)

Comment. DOC considers the stable dune ecosystem has not been adequately offset. It states that the current mitigation – retaining the dune ridgeline, planting indigenous vegetation and developing around this - will render the area unrecognisable as a stable dune and would be best described as an amenity planting area within the subdivision. DOC considers it more appropriate to assess the impact on the stable dune area as a landform comprising approximately 42 hectares of the site, rather than the small isolated indigenous remnants equating to approximately 0.54 hectares, because stable dunes are characterised not only by their indigenous vegetation but also by their landform.

DOC states that as stable dunes are a naturally uncommon ecosystem with the threat status of Nationally Endangered they cannot be recreated elsewhere, and that the amount of area to be enhanced should be guided by compensation guidelines rather than biodiversity offset principles. DOC proposes that a more meaningful mitigation would retain ecosystem connectivity between the stable dunes, the dune swales and the Te Harakeke wetlands rather than isolate them, which would restore a stable dune to its historic vegetation type, increase habitat availability for local fauna, enhance long-term protection of Te Harakeke Swamp, and result in significant biodiversity gains for the region.

Response.

While the dune landform is a key component of stable dune ecosystems, it does not follow that the full geomorphic extent of the stable dune landform should be treated as an ecologically uniform and naturally uncommon ecosystem. Nor do we accept that, as characterized by the DOC comment, the proposal will impact on some 41.5 ha of stable dune ecosystem. The DOC comment is comparing an overall area of landform with an area of indigenous vegetation on that landform. The correct approach is to identify which part of the dune landform comprises a stable dune ecosystem.

The areas that most clearly retain the composition, habitat and functioning of a stable dune ecosystem are those supporting indigenous dune vegetation (extremely small areas), moderate- or high-quality indigenous lizard habitat (very small areas), areas of confirmed indigenous-fauna use (small areas), and areas necessary to maintain connections between those values. Other parts of the dune ridge may retain the underlying landform

and have some restoration potential but they are highly modified by grazing, plantation forestry, clearance and exotic vegetation and currently have low ecological integrity.

The identification of a stable dune ecosystem should therefore depend on demonstrated ecological function, habitat, buffering or connectivity, rather than it having dune-derived topography. The approach taken by DOC therefore vastly overstates the extent of stable dune ecosystem – and if its approach were accepted, because of the widespread presence of sand dunes in the district and region we doubt that the dune landform could properly be described as naturally uncommon.

DOC notes, in s17 of Appendix C, that “11.6 % of the original extent of dunelands both stable and active are left across New Zealand. Most of these dunelands can be described as active dunes as much of the stable dune environment has either been developed for urban use, pasture or plantation forest”. This statement implies that dunes developed for pasture or plantation forest (such as those on the WNDL site) no longer constitute stable dune lands. DOC’s own note directly conflicts with DOC’s claim that the modified stable dune retains ‘stable dune ecosystem’ status. Following DOC’s own definition, the dunes on the application site are no longer stable dune lands, so we question why DOC is raising concern about further development of these areas - on the basis they are claimed to be something they self-evidently are not.

We also note that KCDC, in their pre-lodgment review of the substantive application (Dr Sarah Flynn of Boffa Miskell, 12 February 2026, Ecology Peer Review: Waikanae North Developments Ltd) stated that "proposed ecological mitigation and offset measures are appropriate" and that she "agree[s] with the qualitative evaluation (ie that the duneland vegetation community to be removed is resilient, and we support the principle of retaining most of the dune substrate and establishing nodes of dune planting as a restoration approach."

Furthermore, under the proposal, dune-impounded wetland W4 will retain direct connectivity with the dune ecosystem. This connectivity will be significantly enhanced by a wide margin of dune-appropriate buffer planting, and dune shrubland planting, as detailed in the ERMP. Terrestrial ecology connections to Te Harakeke wetland and the Ngarara floodplain wetlands are presently very poor, due to the presence of a band of cultivated pasture, unsuitable as habitat for indigenous vegetation, lizards and wetland birds (other than common indigenous pasture species such as pukeko and paradise ducks). We consider that ecological corridors along the dunes for terrestrial fauna and flora are maintained and will be enhanced by indigenous planting, pest control and other measures detailed in the ERMP and the LMP. To the extent that there are groundwater linkages between the dune system, dune wetlands and Te Harakeke Wetland these will also be maintained.

Ec29 DOC section 53 - wetland delineation, significance criteria and the WEV/ECR methodology

Comments: 32.3, 32.4 | Commenters: 32 Director-General of Conservation (DOC)

Comment. DOC raises concerns with the methods used to delineate natural wetlands, stating it is possible that due to flaws in the assessment, areas that should have been identified as natural wetlands have not been, and that the full impacts of the activity have therefore not been identified. Ms Hooker also raises concerns with the application of the Environment Institute of Australia and New Zealand criteria for significance across the wetland clusters and indigenous dune vegetation but not against the entire site, and identifies an issue caused by reliance on the EIANZ guidelines: all wetlands are correctly identified as ranking high for Rarity and Distinctiveness, yet the ecological value of several is assessed as Moderate.

DOC's position is that a rare ecosystem is a rare ecosystem and its value should not be drawn down by other assessment factors, that the ecological value of these areas should be assessed as high, and that this would lead to a larger offset requirement than currently provided.

On offsetting methodology DOC, in reliance on Dr Mora-Teddy at Appendix C, queries the appropriateness of the Wetland Ecological Valuation tool given its acknowledged limited use in practice, notes that the tool has been developed by the consultancy that supplied the AEE, states that the justification for its use over best practice models has not been demonstrated, and recommends that offset measures be calculated using DOC's Biodiversity Offsets Accounting Model with a comparative assessment against the ECR/WEV outputs.

Response.

We have undertaken careful and thorough site investigations and identified all natural wetland areas on the site. We note that DOC has not identified any additional areas from its site visit that might be natural wetlands that haven't been mapped or discussed in the Ecology Report.

We also note that KCDC's position contrasts with DOC's position, regarding the wetland value assessment. KCDC stated they agree with the overall "moderate" value ascribed to the more degraded wetland features onsite (eg. some W2 features, W5), and recognise that these habitat characteristics are to be retained and enhanced (in their pre-lodgment review of the substantive application - Dr Sarah Flynn of Boffa Miskell, 12 February 2026, Ecology Peer Review: Waikanae North Developments Ltd).

Wetland significance assessment against the RPS significance criteria produces an essentially binary outcome: a wetland is either significant or it is not. Because only one criterion needs to be met, and all natural wetlands must satisfy the rarity criterion at the national scale, this framework provides limited resolution as to the relative ecological value of individual wetlands. It can therefore place very different features - such as the high-value Te Harakeke Wetland and the eastern floodplain wetlands, which have been severely degraded by decades of drainage, grazing and pugging and retain comparatively limited indigenous flora and fauna values - within the same significance category. This is self-evidently a blunt instrument approach. By contrast, application of the EIANZ criteria provides a more graduated assessment of the ecological value of each wetland. Effects on wetlands across the site are addressed through a comprehensive effects-management package incorporating avoidance, minimisation, remediation and offsetting, with provision for compensation where necessary, as outlined in the Dune Wetland Memo (which accompanies this response).

The use of the WEV methodology is challenged by DOC, while Greater Wellington found the WEV concept interesting and worth exploring at the June 2026 conferencing, with Dr Taylor describing it as a sensible middle ground for the disputed drains. The WEV tool has been developed in conjunction with, and accepted by, Auckland Council for several dozen wetland offsetting projects in the Auckland region, and has recently been applied to, and accepted by Greater Wellington Regional Council, for the Plimmerton Farm Stage One consented land development project at Plimmerton, Wellington. The assessment method is thorough and based on the Clarkson Handbook for Monitoring Wetland Condition (Clarkson et al. 2003).

We consider the wetland delineation methodology is robust and is detailed in the EcIA and undertaken by experienced wetland ecologists using accepted wetland delineation methodology. GWRC has not questioned the delineation or identification of the wetland areas on the site. The approach being advocated by the DOC is, by comparison, crude and imprecise, and provides a very limited basis for useful assessment of effects.

Ec30 DOC section 53 - buffer widths and perpetual management of Te Harakeke

Comments: 32.5 | Commenters: 32 Director-General of Conservation (DOC)

Comment. DOC seeks, given the significant value of the Te Harakeke wetlands as one of the largest wetlands left in the Foxton Ecological District, that the management and health of the wetland in perpetuity be a key consideration. It notes that studies of microclimate conditions within forest interiors have found comparable microclimate conditions may not be achieved in buffers less than 40 metres, and that for this ecosystem's resilience in the long term, a 40 metre buffer is likely required. Dr Mora-Teddy separately recommends a wider

buffer for the other wetland clusters given the significant area of wetland being reclaimed. DOC also notes that the application states the high values of Te Harakeke will be protected in perpetuity but seeks clarification as to how the applicant specifically intends to achieve this.

Response. The application proposes a 20 metre wetland planting buffer for Te Harakeke Swamp (and buffers on the Pekapeka Wetland, and other wetland restoration areas on the site), which the Wellington Conservation Board expressly supported (comment 15.3).

GWRC also stated a 20 m buffer is appropriate for Te Harakeke Swamp, and a 10 m buffer is appropriate for all other wetlands, in their contracted wetland ecologist's pre-lodgment review of the substantive application (Melanie Dixon of Collaborations Ltd, 3 February 2026, Waikanae North Development (FTA106) Wetland and Stream Peer Review). This advice is consistent with the advice provided by GWRC, and the decision made by the COVID-19 Panel approval for the nearby Plimmerton Farm project, which include substantial wetland works to reclaim, enhance, create and restore wetlands across that site.

DOC now seeks a 40 metre buffer, which is not in line with what has been accepted by GWRC both here and elsewhere, or by the Wellington Conservation Board. DOC's 40 metre figure is drawn from forest interior microclimate studies, and is not specific to wetland margins. The DOC request has no evidential basis, has not been adopted in any other comparable projects such as Plimmerton Farm and we do not support the request as being necessary on ecological grounds.

We recommended the proposed 20 m buffer and consider that it is sufficient to ensure that the values of the Te Harakeke wetland are protected. While a 40 m buffer would no doubt provide additional protection it would go well beyond what is necessary to address the effects of the proposed development. We have not seen it requested or applied elsewhere.

The conservative and unfounded nature of the request is perhaps illustrative of the highly conservative approach that has been taken by the Department of Conservation in its comments on this application.

In respect of ongoing protection, this matter is addressed elsewhere, including in the covering response.

Ec31 DOC section 53 - cat management, and the adequacy of an options-based approach

Comments: 32.6, 23.7, 15.2, 12.7 | Commenters: 32 Director-General of Conservation (DOC); 23 QEII National Trust; 15 Wellington Conservation Board; 12 Bryan & Debbie Edwards

Comment. DOC, relying on Ms Thurley's report at its Appendix D, queries the feasibility of effectively controlling the potential 800 domestic cats at this site, particularly given the Threatened and At-Risk species present are especially vulnerable to predation by cats and dogs. DOC's view is that none of the three options in the Ecological Restoration Management Plan, and proposed conditions, provides protection against predation in perpetuity, as all propose only a limited duration of trapping and fence maintenance while the threat to wetland birds will persist beyond that period.

It queries whether the covenanted exclusion area in Option C is large enough, as it appears concentrated on Te Harakeke Swamp and fails to address risk to Peka Peka Swamp and other wetlands on the site. DOC considers a subdivision-wide covenanted area prohibiting cat ownership would provide more assurance and would largely eliminate the threat, and that this should be included in conditions or a consent notice registered on the title.

DOC states that the applicant's intention to choose an option post-approval does not provide certainty that the risk will be managed, that it is DOC's preference that domestic cats are prohibited from the development, and that it is open to engagement on alternatives that provide certainty. DOC has provided tracked changes to the draft conditions at its Appendix E.

Response.

Of the three options relating to cat management, Option B would provide for cats to be kept within a lot boundary at all time. Option C provides for a general prohibition but only in respect of the proposed Paetawa Road lots. The Option B approach has its genesis in existing District Plan rules (Rule GRUZ-R7) that requires cats within 500m of an ecological site to be kept within a cat run.

The fencing and pest control options provided by the applicant provide a realistic, improved level of protection of rare birds in the Te Harakeke Wetland above the current situation on site (which is no effective control of cats). Trapping within the wetland that is proposed as part of the options will further encourage landowners to keep domestic cats on properties.

We consider that the proposed options will secure the outcome in perpetuity once an option is chosen, and that whichever of the three options is chosen, there will be provide robust protection of wildlife from pet predation at the site.

Ec32 DOC section 53 - fish salvage, freshwater fisheries and mudfish monitoring

Comments: 32.7 | Commenters: 32 Director-General of Conservation (DOC)

Comment. DOC comments that the proposed works include significant diversion of the existing Ngarara Stream channel and some loss of overall stream length, and that to avoid fish mortality the area should be de-fished before work begins, with an ecologist on site during works where fish may have remained after de-fishing, and supervision by a suitably qualified and experienced ecologist required as a condition. DOC states that any relocation of fish should occur within the same catchment rather than across multiple catchments as suggested in the original fish salvage plan, and that multiple relocation sites within the catchment should be used to avoid overpopulating individual sites. DOC identifies the fish species present on site and notes that within Te Harakeke wetland and the wider wetland complex, inanga, shortfin eel and common bully are present. DOC raises the application of Regulations 42 and 43 in relation to the box culvert weir, noting Regulation 43 does not only apply to structures that would impede fish passage, and notes the applicant's position that complex freshwater fisheries approval is not required. Dr Mora-Teddy identifies that the proposed stormwater runoff management could increase water levels in some wetland areas, which could increase predatory fish populations to the detriment of mudfish - the most threatened species in this system, whose habitat has been significantly reduced within the Kapiti district - and DOC recommends conditions requiring monitoring of both mudfish and the water levels of Te Harakeke.

Response. The applicant's freshwater fisheries memorandum provided to DOC post-lodgment addresses the freshwater fisheries approval question, and this is further addressed in the covering response. The Native Freshwater Fauna Salvage and Relocation Plan at Appendix 24 provides the salvage framework, which expressly requires an ecologist onsite during subsequent instream or culvert works where residual fish may remain following de-fishing. The existing conditions require a final Salvage and Relocation Plan to be certified before streamworks commence, fish rescue to occur in accordance with it, fish passage being maintained at all times, works restricted during key recruitment migration periods, and culverts being open bottomed or with inverters placed to provide passage.

DOC's request regarding same-catchment relocation and multiple relocation sites within the same catchment are accepted by the applicant and will be included in a revised Native Freshwater Fauna Salvage and Relocation Plan. The matter can be added to the existing consent condition.

Ec33 DOC section 53 - Ecological Restoration Management Plan amendments

Comments: 32.8 | Commenters: 32 Director-General of Conservation (DOC)

Comment. DOC considers a number of clarifications and amendments are needed to the proposed Ecological Restoration Management Plan. DOC states that while the weed control guidelines in the ERMP appear robust in allowing the best chance of success for the plantings, DOC nevertheless seeks: clarification as to how all offset areas including wetlands and the stable dune planting areas will be managed in perpetuity; recognition that for wetlands in particular many riparian areas will not have an adequate buffer area to be self-sustaining; and substantive contingency measures should plantings fail to reach the 80 per cent indigenous canopy cover benchmark.

DOC states that the current provision - that if the benchmark is not met within year 5 then infill planting will be reconsidered - is inadequate, because if the plantings and site restoration are unsuccessful the offset measures are not achieved, resulting in a net loss in biodiversity of currently unknown and unpredictable scale.

DOC also seeks that species be eco-sourced from populations near the site and identifies species listed for planting that are outside their natural distribution and should not be planted, namely karaka (*Corynocarpus laevigatus*), and *Dracophyllum longifolium* which is known only from the South Island. DOC further notes that maire tawake (*Syzygium maire*), a Threatened Nationally Vulnerable species occurring in waterlogged ground, is proposed to be planted in drier wetland margins, and that the restoration plan should ensure species are planted in the right places.

Response. The ERMP will be revised to clarify the perpetual protection and management of all offset areas, address constrained wetland buffers, introduce mandatory contingency and remediation measures linked to the 80 % indigenous canopy-cover target, strengthen eco-sourcing requirements, and revise species selection and placement. Consequential changes will also be made to the planting schedules, monitoring provisions and implementation timetable. The species outside their natural distribution, such as karaka and *Dracophyllum longifolium*, can be removed from the planting list.

Maire tawake is proposed to be planted within the lower margins of wetlands because the dual stormwater detention function of the floodplain wetlands is expected to result in a potential mortality risk to plantings in the wetland core. The ERMP will be amended to specify swamp maire will be planted immediately along the wetland edges, with a proportion within the wetlands themselves. The revised ERMP will be provided in due course.

Memo

To:	Andrew Beatson, Waikanae North Developments Limited	Job No:	2144.500
From:	Jeroen Lurling and Dr Graham Ussher, RMA Ecology Ltd	Date:	9 August 2026
cc:	Mitch Lewandowski, Building Block Planning Limited		
Subject:	FTAA-2603-1194: Waikanae North Developments Limited: classification of watercourses and management of ecological effects		

1. Introduction

1.1. Purpose

This memorandum responds to comments received from Greater Wellington Regional Council (GWRC) regarding the classification of the network of drainage features historically excavated to drain wetlands across the site. It then outlines a practical pathway for addressing GWRC's concerns should the Panel consider additional effects management is required for the loss of the drains on the site.

The memorandum also incorporates the results of additional Stream Ecological Valuation (SEV) surveys undertaken within these drainage features and the Ngarara Stream on the site, as was requested by GWRC in its Section 53 comments (Summary paragraphs 2 and 4, and Matters in Contention paragraphs 4-16) and was previously discussed by WNDL and GWRC. These results can inform the ERMP by specifying outcomes to be achieved when the stream is realigned and enhanced, as well as confirming the availability of on-site compensation should this be necessary to address any residual effects arising from removing the drains on site.

1.2. Code of Conduct

This response has been prepared by Jeroen Lurling and Dr Graham Ussher, RMA Ecology Ltd.

Although this document has not been written as a statement of expert evidence, I/we confirm that at all times I/we have complied with the Environment Court's Code of Conduct for Expert Witnesses contained in its Practice Note 2023.

1.3. Applicant's position

Our position on the status and management of the various watercourses/drainage features identified on the site is detailed in the Assessment of Ecological Effects (AEE) (sections 2.2.2 (p11) and 3.3.2 (p63)) which forms Appendix 23 of the substantive application. The substantive application itself addresses the matter at section 7.2.5.3.1 (p119) and is informed by legal advice on this matter provided at Appendix 39 of the application.

In summary:

- a) **Modified stream:** Ngarara Stream is classified as a modified stream, and effects on this stream are managed through realignment and enhancement.

- b) **Farm drains to be realigned:** Two larger drainage features (W1.1 and W1.1.1) are classified as artificial watercourses (farm drains), and will be realigned and enhanced. These larger drains also serve a water conveyance function.
- c) **Farm drains to be removed:** Eleven additional drains, primarily minor tributaries, are classified as artificial watercourses (farm drains), on the basis of our own assessment of their appearance, their function and the reason they were constructed in the first place (which was to drain a wetland), alongside supporting legal advice obtained by the applicant and lodged with the application. They will be removed, with any fish salvaged, and flows incorporated into the stormwater network.
- d) **Farm drains to be retained:** Seven other drains, which presently drain retained wetlands, are classified as artificial watercourses (drains) and will be retained and partially modified to improve wetland hydrology and habitat for wetland fauna and flora.

Given the existence of a contest as to the correct classification of these, and the availability of onsite compensation as discussed further below, it might be tempting for the Panel to simply impose a requirement that the reclamation of these is to be compensated for as if they were streams.

We consider that if they are classified as streams that would give rise to an offsetting or compensation requirement that is completely disproportionate to the values that are lost. It would go well beyond what is required to address the actual effects caused by the reclamation of these features. In our view the assessed amount of compensation that would be required if these drains were to be classified as streams, when compared to the actual values of these features, in itself lends weight to our assessment that it is erroneous to call them streams.

We are further concerned that a classification of that type could also give rise to results that lack any sensible merit. As an example - if there was no development proposed in this area and the applicant or some other subsequent landowner simply wanted to restore the wetlands that once existed in this area, the first and most obvious thing to do would be to remove (reclaim) these drains.

Given the beneficial ecological outcome of reclaiming these streams one wouldn't expect there to be a regulatory obstacle to doing this. However, if GWRC's approach is adopted, there would be a requirement arising from the planning instruments for extensive offsetting before the drains could be removed. Like for like offsetting wouldn't be available (and would be nonsensical) because it would involve the creation of new drains in wet areas. If compensation of the type described below were to be required on the basis of stream loss extent – this would discourage any restoration endeavours of this type.

We profoundly disagree with the proposition that the farm drains that are to be removed should be classified as streams. We set out our reasons in our earlier material, supported by legal advice, and develop those reasons further below, informed by our recent investigations.

1.4. GWRC position

During pre-lodgement discussion, GWRC indicated disagreement with the Applicant's categorisation of drainage features as artificial watercourses (farm drains). Council argues, on the basis of the GWRC guidance document on watercourse types, that features created to drain wetlands are the modified form of the pre-existing waterbodies, including historic wetlands, should be classified as modified streams or rivers, and that effects on these features must be managed via the effects management hierarchy.

1.5. Conferencing

At expert conferencing between Waikanae North Developments Limited (WNDL) and GWRC on 4 and 5 June 2026, the parties acknowledged the disagreement and agreed to explore a pragmatic "middle ground" on the wider watercourse/drain classification question.

Rather than attempting to agree the legal classification question (about which the parties maintained their divergent positions), the applicant proposed accurately quantifying the actual ecological values of, and the effects of removing, the network of drains (if the GWRC proposition that they are streams rather

than drains is accepted), along with identifying options to illustrate whether or not any effects can feasibly be managed if the panel agrees with GWRC that they are 'rivers/streams' rather than drains. In the event that effects cannot feasibly be managed, this additional assessment also enables an assessment of the significance of the residual effect of any shortfall.

Such an approach goes directly to the purpose and intent of the Fast-track Approvals Act. To quantify the effects of the proposal, to identify any residual effects, and to address any substantial effects that may arise.

Management options include out-of-kind compensation of extent and values via the substantial onsite wetland restoration package.

WNDL (Dr Graham Ussher and Jeroen Lurling of RMA Ecology) agreed to prepare a memorandum for GWRC, detailing the values of the disputed watercourse features, and the options for management of impacts. This memorandum fulfils that commitment.

This memorandum:

- (a) re-confirms the approach to the Ngārara Stream; two key drains to be realigned, and other drains to be removed;
- (b) provides further details on these watercourse features, including their ecological values and effects of the proposed development on them; and
- (c) outlines a feasible pathway to address Council's concerns by managing effects on these drains/disputed watercourse features - if the Panel agrees that these drains are watercourses and deems that additional management is necessary to manage adverse effects.

There is no fundamental dispute regarding the status of the modified stream (W1) and no fundamental dispute regarding mitigation of effects on this stream or on the watercourses to be retained. The primary focus of this memo is on the drains that are to be realigned or removed. Disputed watercourses are hereafter referred to as farm drains.

Updated SEV field survey data for Ngarara Stream is also presented, in response to Council queries - to provide further information for the ERMP targets.

2. Ecological values of watercourses onsite

2.1. Watercourses on the site

The AEE records that a network of 23 straight, excavated artificial watercourses ("farm drains") crosses the eastern flats of the site and feeds into Ngarara Stream (W1). Despite detailed examination of historical aerial imagery (back to the 1940s) and on-the-ground assessment, we found no evidence of any pre-existing natural stream channel or surface waterbody at the site or upstream of these features – the excavated drainage features were already present in the earliest available (1940s) aerial photographs. They therefore would have been excavated specifically to drain the historic wetlands that once covered this part of the site.

These features are labelled in Appendix 23 as W1.1 and its tributaries W1.1.1 – W1.1.7, and W1.2 – W1.17. Where a feature notably changes in character (e.g. becomes intermittent or ephemeral in its upper reaches), it is mapped as a separate watercourse feature. They are mapped in Figure 20 of the AEE, reproduced below as **'Figure 1'**, and outlined in Table 8 of the AEE.

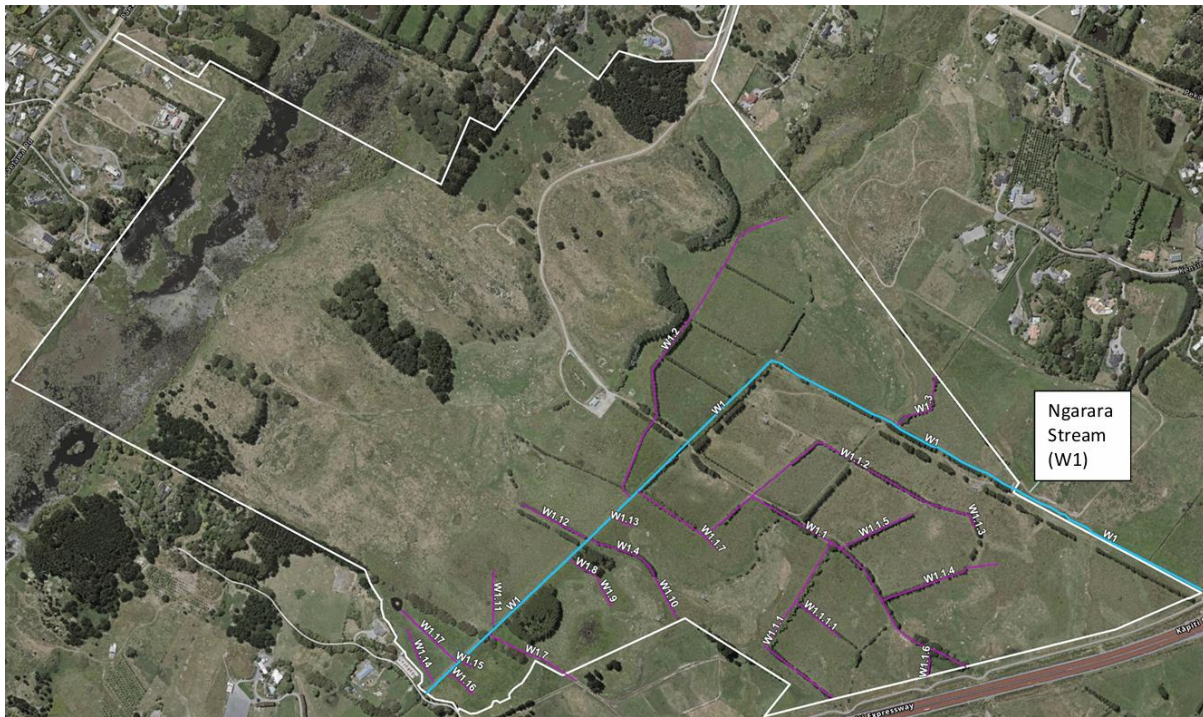


Figure 1. Watercourses onsite. Ngarara Stream (W1, blue line) and the network of drainage features feeding into it (purple lines).

2.2. Physical character and condition

Within Table 8 of the Assessment of Ecological Effects, we assessed the condition and value of every mapped watercourse feature using a customised condition index (covering riparian diversity, channel shade, in-stream habitat, bed characteristics and overall condition).

The drains were consistently found to be in poor to poor-moderate overall condition. Common characteristics recorded onsite include a high loading of fine sediment, no natural sinuosity, steep excavated banks, little to no flow heterogeneity (largely standing, often stagnant water), little in-stream habitat diversity (aside from seasonal drying), and poor to moderate riparian shading and vegetation, generally consisting of pasture, rank grass, and exotic shrubs and deciduous tree shelterbelts, with some flaxes (**Appendix A**).

Three of the drainage features (upper reaches or smaller tributaries) class as ephemeral farm drains – with vegetated beds, only holding water after rainfall, and being classified as “ephemeral watercourse that is not a river”.

2.3. Fish survey

Two seasons (2024 and 2025) of targeted survey utilising Gee’s minnow trapping, fyke netting and two rounds of environmental DNA (eDNA) sampling across the drain network found that fish presence in the drains is generally sparse. Of the drain reaches surveyed, fish were trapped in only three: W1.1 (the northern drain), in which 55 inanga and a longfin eel were trapped; and in W1.2, where a single longfin eel and an unidentified elver were caught. No fish were detected by trapping or netting on other drains surveyed. eDNA detected inanga, Galaxias sp., longfin eel and shortfin eel within the network of drains to be realigned or retained, with W1.1 (to be realigned) showing modest diversity.

No Threatened brown mudfish were recorded in the drains or in the extent of Ngarara Stream east of the main dune ridge that is to be realigned and enhanced, despite extensive and repeated sampling effort specifically targeted at this network (including during the 2024 drying event, and during relatively high water levels in 2026). We have a high degree of confidence that mudfish are not present in this part of the site – which is in contrast to Te Harakeke Swamp, where mudfish are considered likely to be present. Habitat in these drains is suboptimal, due to the presence of eels that prey on mudfish, a relative lack of riparian vegetation, and the stagnant hydrology of most of these drains.

2.4. SEV assessment

Following the WNDL and GWRC conferencing, in June and July 2026, RMA Ecology Ltd undertook additional Stream Ecological Valuation (SEV) assessment work, incorporating biotic indices for representative reaches of all watercourses proposed to be removed or realigned.

These SEV assessments were undertaken using field-based surveys, and incorporated biotic indices, including macroinvertebrate sampling, as well as fish indices using eDNA, fyke nets or gee minnow traps as part of the initial AEE assessment.

The Wellington version of the SEV calculation model was used. Macroinvertebrate samples were collected following standard methods, and were processed by EIA Ltd.

SEV assessments were carried out for:

- two 100 m reaches of the Ngarara Stream section proposed for realignment;
- 100 m reaches of the two farm drains proposed to be realigned (W1.1 'northern drain', and W1.1.1 'southern drain'); and
- 100 m reaches of three farm drains proposed to be removed.

Each drainage feature was surveyed and sampling locations were selected as they were representative of a set of drainage features onsite - on the basis of flow permanence, flow heterogeneity, instream macrophytes and channel shading.

The locations of these seven SEV surveys are illustrated in **Figure 2**, and images of the surveyed drainage features are presented in **Appendix A**.

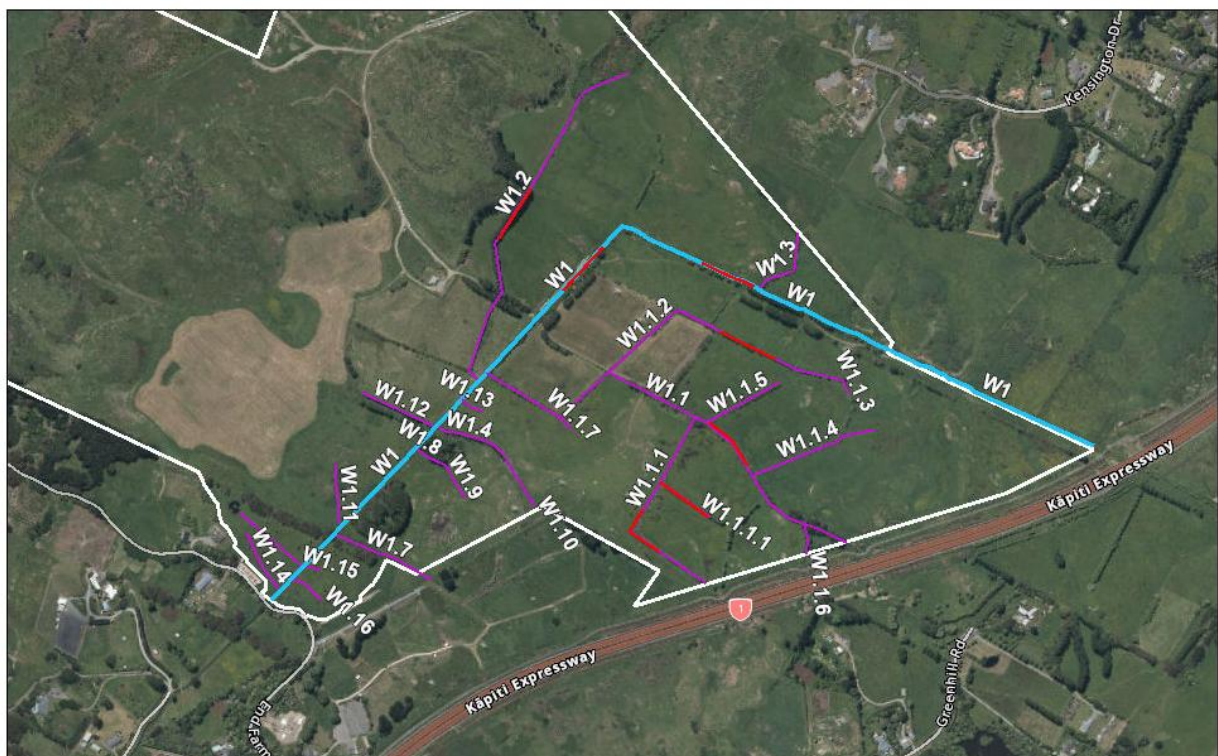


Figure 2. Locations of SEV surveys (red lines) on drainage features (purple lines) and modified stream (blue lines).

All assessed reaches had low SEV scores (below 0.4), indicating poor ecological condition, and substantial impairment of stream functions and biotic indices (Appendices B and C):

- W1 (Ngarara Stream) SEV scores for the two sampled 100 m reaches within the segment to be realigned were 0.341 and 0.374, resulting in an average score of 0.358. This score indicates it is at the upper end of poor ecological condition.
- Of the drains to be realigned, W1.1 (northern drain) scored an SEV of 0.287, and W1.1.1 (southern drain) scored 0.281, which signals they are at the lower-mid end of the “poor” ecological value range.
- Of the drains to be removed, drain W1.1.1.1 scored an SEV of 0.229, W1.1.2 scored 0.293, while W1.2, of which the majority will be removed, scored 0.275. These scores signal these drainage features are at the lower and lower-mid end of “poor” ecological condition. As mentioned above, these drains were specifically selected as they are representative of the 11 drains proposed to be removed onsite.

2.5. Overall ecological value

The overall conclusion is that the ecological value of the artificial drains onsite, considered as a network, is **low**. This sits below the assessed values of Ngarara Stream (low-moderate, but functioning), the site’s degraded wetland clusters (moderate), and well below the high-value features retained onsite (Te Harakeke Swamp, Peka Peka Road Swamp and the dune ecosystems).

3. Effects on drains

The proposal does not treat the drain network as a uniform resource. It distinguishes between the two larger drain features, W1.1 and W1.1.1, which total approximately 1,155 m in length, are at the mid-range of poor ecological condition, and support low–moderate fish values, and the 11 drains proposed for removal, which total approximately 2,000 m, are at the lower end of the poor-condition range, and support lower fish values. The effects-management response has been tailored to reflect these differences in condition and ecological value.

3.1. Realigned and enhanced drains

The two primary drains (the northern and southern drains; 1.1/1.1.6 and 1.1.1) will be realigned along the majority of their length (Figure 3). They will retain a steeper bank profile similar to the existing drains (reflecting their artificial origin) but will be enhanced with an average 5 m wide planted buffer, and the addition of meander, thereby improving fish habitat value relative to the existing degraded form.

Realignment will result in a loss of 90 m of length, which will be mitigated through an increase in bed width, resulting in no net loss of overall bed area for these drainage features (Table 1).

Table 1. Drainage features proposed to be realigned.

	W1.1 - northern drain		W1.1.1 - southern drain	
	original	realigned	original	realigned
Length (m)	774	590	381	475
Width (m)	1.3	1.7	1.5	1.5
Bed area (m ²)	1006	1006	572	713
Condition	poor	moderate expected	poor	moderate expected
SEV	0.287	>0.287	0.281	>0.281
Alignment	mostly straight	mostly meandered	mostly straight	mostly meandered
Bank steepness	steep	steep	steep	steep
Flow heterogeneity	low (pool)	low-moderate expected	low (pool)	low expected
Riparian veg width (m)	0-2	5	0-2	5
Riparian veg species	poplar/willow/flax	native tree/shrub/sedge	poplar/willow/flax	native tree/shrub/sedge

* Realigned length and width are approximate, and exact dimensions are to be confirmed in detail design.

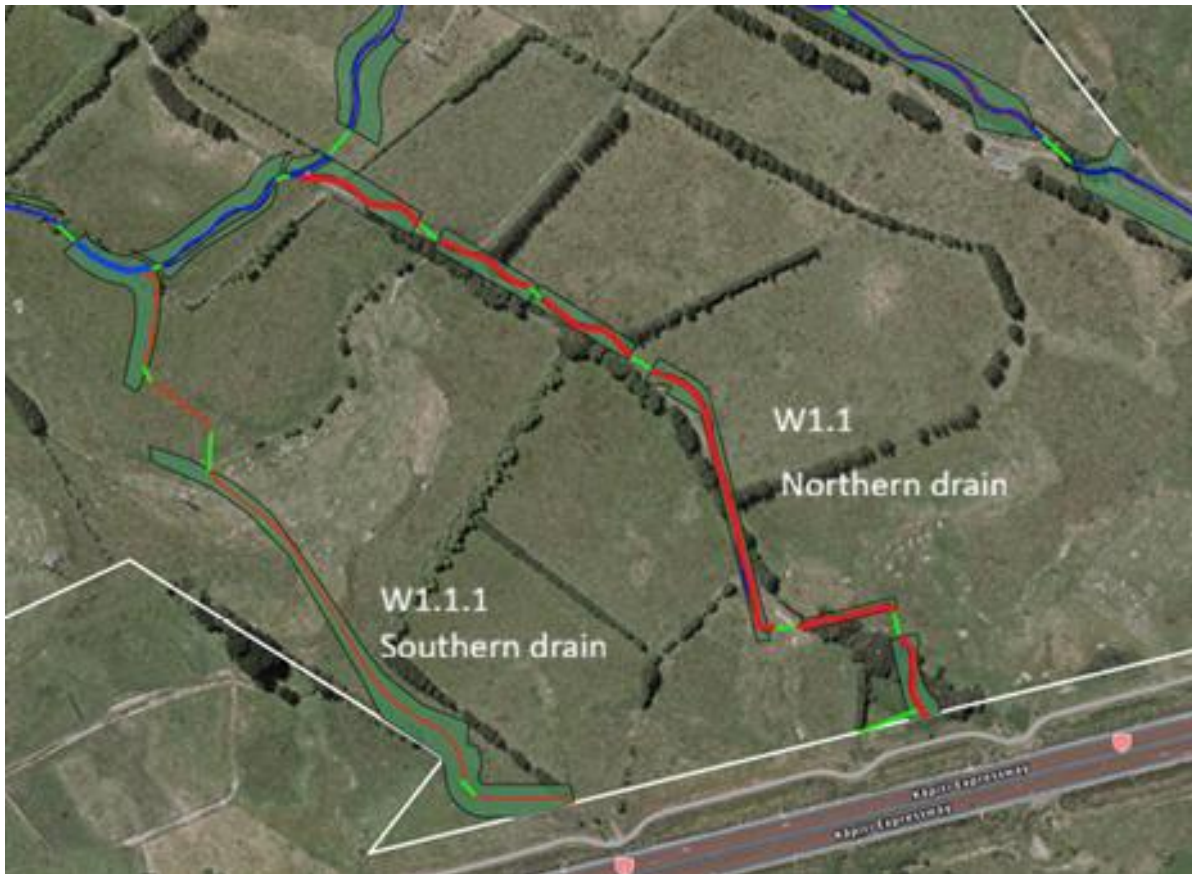


Figure 3. Approximate 5 m wide riparian planting buffer (green polygon) proposed along realigned drains W1.1 and W1.1.1 (red lines), and 10 m wide riparian plantings along Ngarara Stream (blue line).

3.2. Retained and enhanced drains within wetlands

Seven, primarily minor, drainage features or parts of drainage features within wetlands will be retained, including W1.11, W1.12, W1.14, W1.16, W1.17, and the southern part of W1.10. One larger drainage feature, the southern 160 m reach of drain 1.2, will be retained and actively enhanced through the installation of log weirs, widening of pools upstream of the weirs, and adjacent wetland planting – measures intended to raise water tables and maintain and improve fish habitat, consistent with the broader wetland enhancement strategy for that area.

Drains 1.14, 1.16 and 1.17 are located within the stormwater easement area and will be retained. Their hydrology will be enhanced through an increase in baseline water table and flood frequency associated with construction of the flood control structure downstream on Ngarara Stream.

Watercourses within Wetland Cluster 2 (the central restoration wetland cluster) will be partly obstructed by a series of low log weirs to raise water levels and improve wetland hydrology, while specifically maintaining fish passage – directly supporting the wetland hydrological enhancement programme described in the Hydrological Report.

3.3. Removed drains

All other permanent, intermittent and ephemeral drains – the reaches individually and collectively assessed as being of low ecological value, in poor to very poor condition, and (with one exception) no fish detected – will be removed as part of the development earthworks.

We maintain our view, reinforced after the additional fieldwork undertaken, that these are artificial watercourses (farm drains), requiring no mitigation or offsetting in response to loss of value or extent. Even if we are wrong about that classification, the ecological effect associated with the removal of these fixtures is low – and should not be of concern from an ecological perspective.

A comprehensive fish salvage and relocation exercise will be carried out in accordance with the certified Native Freshwater Fauna Salvage and Relocation Plan before works begin, with any salvaged fauna released into the Ngarara Stream catchment.

4. Management of effects

If the Panel considers instead that the watercourses are modified streams rather than drains (which we do not consider is the case), two options for managing effects are presented below. There is of course a third and reasonable option open to the Panel - doing nothing further on the basis that the ecological effect associated with their removal is low and the project will deliver substantial improvements to the values of the features that are to be retained and enhanced.

The discussion below continues on the basis that the Panel determines that these features are streams rather than drains and considers the effect of their removal requires some form of remediation. For the reasons already explained, we do not consider these features are streams and we do not consider that further remediation is necessary, including in the context of their assessed values and the substantial ecological gains that are being advanced as part of the ecological restoration package. Our considered view remains that it cannot properly be said that additional aquatic compensation is necessary to address the effects of the removal of these drains.

4.1.1. Offsetting

Option 1 is to offset the effects elsewhere in the region through a like-for-like offset approach, by creating additional stream bed area and enhancing value of degrading streams through riparian restoration. This is very unlikely to be feasible within the same catchment as this project, and presents significant logistical challenges. It also does not effectively mitigate the ecological effects onsite.

Undertaking offsetting works in a different catchment to the project is not available to or supported by the Applicant, and it runs counter to the intention to undertake ecological restoration and enhancement works at the site. There is no package for offsite offsetting that has been prepared by the Applicant, and given the function and values of the features in question we do not consider that preparing such a package is necessary or desirable.

4.1.2. Compensation

Option 2 is onsite aquatic compensation. Any residual loss associated with the removed drain features can be addressed by restoring wetland extent and value, as a like-for-unlike (or out of kind) compensation package.

The basis for this position is that the affected drains are artificial, highly modified, in poor condition, of low ecological value, and were originally constructed to drain wetlands at the site.

Redirecting mitigation toward wetland restoration is therefore considered more likely to reinstate the site's original ecological values than recreating lower-value tributary drains. Like-for-like replacement would risk perpetuating the adverse ecological effects of the historic wetland drainage system, rather than directing restoration effort toward measures capable of delivering a more meaningful ecological benefit.

If (notwithstanding our careful analysis) additional compensation is considered necessary by the Panel, we would support this approach.

4.1.2.1. Compensation of extent

Compensation of watercourse extent would involve creation of a wetland area of the same size (1:1 ratio) as the bed area of the removed watercourses (length x width), which equates to 0.23 ha (**Table 2**). There is sufficient area to provide an additional increase in wetland extent of **0.83 ha** beyond the 1.74 ha required to offset effects on wetland extent and ecological value.

If the applicant is required by the Panel to adopt this approach, we would propose to apply that additional capacity to address the residual loss of the low-value drain network.

Table 2. Drainage features to be removed, and calculation of wetland area required for like-for-unlike compensation of values, assuming an ECR of 2:1.

Drain	Length (m)	Average wetted width (m)	Bed area (m ²)	Bed and 20 m riparian area (m ²)
W1.1.1.1	103.9	0.7	73	2,151
W1.1.5	142.7	0.5	71	2,925
W1.3	135.9	1.2	163	2,881
W1.1.2	463.7	0.9	417	9,691
W1.4	138.2	1.5	207	2,971
W1.2 (northern reaches)	476.5	1.9	905	10,435
W1.1.4	225.6	0.8	180	4,692
W1.8	65.1	0.8	52	1,354
W1.10 (northern reaches)	93	1.5	140	2,000
W1.13	43.8	0.8	35	911
W1.1.7	27.9	2	56	614
Total (m²)	1,916		2,300	40,626
Wetland area to create to compensate loss of watercourse extent (ha)				0.23
Ecological Compensation Ratio				2
Wetland area to enhance to compensate loss of watercourse value (ha)				8.13

4.1.2.2. Compensation of values

Compensation for the loss of watercourse values would involve enhancement of wetland habitat over an area equivalent to the combined bed and riparian footprint of the affected watercourses, adjusted by an Environmental Compensation Ratio (ECR).

For this purpose, the indicative compensation area has been calculated using the watercourse width plus a 20 m riparian allowance, multiplied by the affected length and then by an indicative 2:1 ECR. The 2:1 ratio is a generic precautionary multiplier informed by similar projects that we have been involved with elsewhere in the region and nationally, and tailored to the poor condition and low ecological value of the drainage features proposed to be removed, which have SEV scores of approximately 0.211–0.281 on a scale of 0 to 1 (i.e. they are very degraded features). The 20 m riparian allowance provides for 10 m on either side of a stream and is a standard measure used for stream offsetting.

The estimated area of wetland required to be enhanced to compensate for loss of watercourse values (using an ECR of 2:1) is **8.13 ha** (Table 2). Wetland areas available for enhancement as part of the wetland restoration package, and classed as ‘additional benefits’ surplus to offsetting requirements, which could be used for this purpose, include:

- 0.7 ha of ‘surplus’ created wetland not required for offsetting of effects on wetlands. These areas will receive hydrological enhancement, planting to 80 % density, buffer planting of 9.7 m and pest plant and animal control.
- Wetland Cluster 2 (Ngarara Stream wetland cluster – 6.3 ha) which will receive hydrological enhancement, enrichment planting in nodes (which could be increased to meet required SEV), pest animal and plant control.
- Wetland Cluster 3 (Lower Ngarara Stream wetland cluster – 2.3 ha) which will receive hydrological enhancement.
- Wetland Cluster 4 (dune edge wetland cluster) retained wetland W4 (0.06 ha) will receive hydrological enhancement and enrichment planting.
- Wetland Cluster 5 (eastern wetland cluster) retained wetlands W13 and W14 (0.86 ha) will receive hydrological enhancement and enrichment planting.

In effect, this allows any residual drain loss of value to be reconciled against the surplus capacity (beyond that required for offsetting) that already exists within the proposed wetland restoration package.

The total area of wetland enhancement described above that could form this additional wetland restoration package totals over 10 ha, which exceeds the calculated 8.13 ha derived from the above calculation of drain loss and wetland enhancement of values. This indicates the feasibility of like-for-unlike compensation, noting that site-specific ECR detailing the value uplift of each wetland is required for confirmation.

In our view a decision directing application of a stream compensation assessment that requires an additional 8.13 hectares of wetland enhancement in response to the loss of these drains would be completely disproportionate to the values that are 'lost' by reclaiming these drains. They have virtually no intrinsic value (having been created to drain wetlands) and their ecological values are assessed as low to very low.

The assessed outcome in itself lends further weight to our view that these are not streams. If they were in fact streams, the outcome would be justified, but in the circumstances of this site and given the values of these features this cannot credibly be claimed to be a necessary or proportionate response to their loss.

If additional area is required, additional wetland areas are available for enhancement, namely Peka Peka Road Swamp (6.4 ha) and Te Harakeke Swamp (14.1 ha). Enhancement options include enrichment planting of areas with existing indigenous vegetation, and planting to 80 % density for areas which are presently exotic dominated (such as W1.3, the non-SNA part of Te Harakeke Wetland).

If the Panel determines that additional compensation is required, a site-specific ECR would be developed at detailed design stage using the measured area and ecological values of the affected aquatic features, including the relevant SEV and Wetland Ecological Valuation information. This would provide a more precise calculation of the wetland area required to compensate for the loss of drain values.

To provide a transparent way of testing whether this approach is proportionate, RMA Ecology Ltd proposes to utilise an in-house "WEV" (Wetland Ecological Valuation) methodology, adapted from the SEV framework, which has been accepted by Councils in other applications (in the Wellington context, most notable for Plimmerton Farms). The WEV, combined with the SEV and ECR methods, translates the value lost through removal of a drain reach into an equivalent area or value of wetland creation/enhancement.

GWRC indicated that it found the underlying SEV-to-WEV compensation concept genuinely useful and worth exploring further internally, and observed that it represented a sensible middle ground. We note that the DOC disputes its utility.

5. Conclusion

We maintain our position, expressed in the Assessment of Ecological Effects that supports the application, that the drainage features proposed for removal are artificial farm drains and do not require offsetting or compensation for loss of drain extent or value.

If the Panel determines that those features are modified streams or rivers and that additional effects management is required, a measurable pathway is available through onsite aquatic like-for-unlike compensation.

In ecological terms, directing any residual compensation toward restoration of the site's degraded wetland system is considered more appropriate than recreating low-value artificial drainage channels that were originally excavated to drain those wetlands.

If compensation is required to address the loss of drains, the calculations presented in this report show that there is sufficient un-used/ un-enhanced wetland available on the site to achieve an equitable replacement of extent and value. That is, the indicative assessment presented in this report, shows that there is more than sufficient capacity on the site to accommodate the calculated compensation requirement, subject to confirmation through a site-specific SEV-WEV/ECR assessment.

If the Panel requires this, the approach described in this report would restore habitat, hydrological function and ecological connectivity characteristic of the pre-existing wetland landscape, while providing

a transparent mechanism for demonstrating that the scale of ecological gain compensates the residual drain values lost.

However, in our view a decision directing application of a stream compensation assessment that requires an additional 8.13 hectares of wetland enhancement in response to the loss of these drains would be disproportionate to the values that are 'lost' by reclaiming these drains.

Whether the Panel ultimately accepts WNDL's classification of the features as drains or adopts GWRC's position that they are modified streams or rivers, **there is a clear and feasible pathway to ensure that all residual ecological effects of their removal are fully addressed.**

In our opinion, recourse to that pathway is neither necessary nor appropriate on the basis that the values of the drain network is low and their function is essentially negative in ecological terms.

Yours sincerely,



Jeroen Lurling

Senior Ecologist

RMA Ecology Limited



Dr Graham Ussher

Principal Ecologist

RMA Ecology Limited

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Appendix A: SEV drain/stream photos

W1(a)

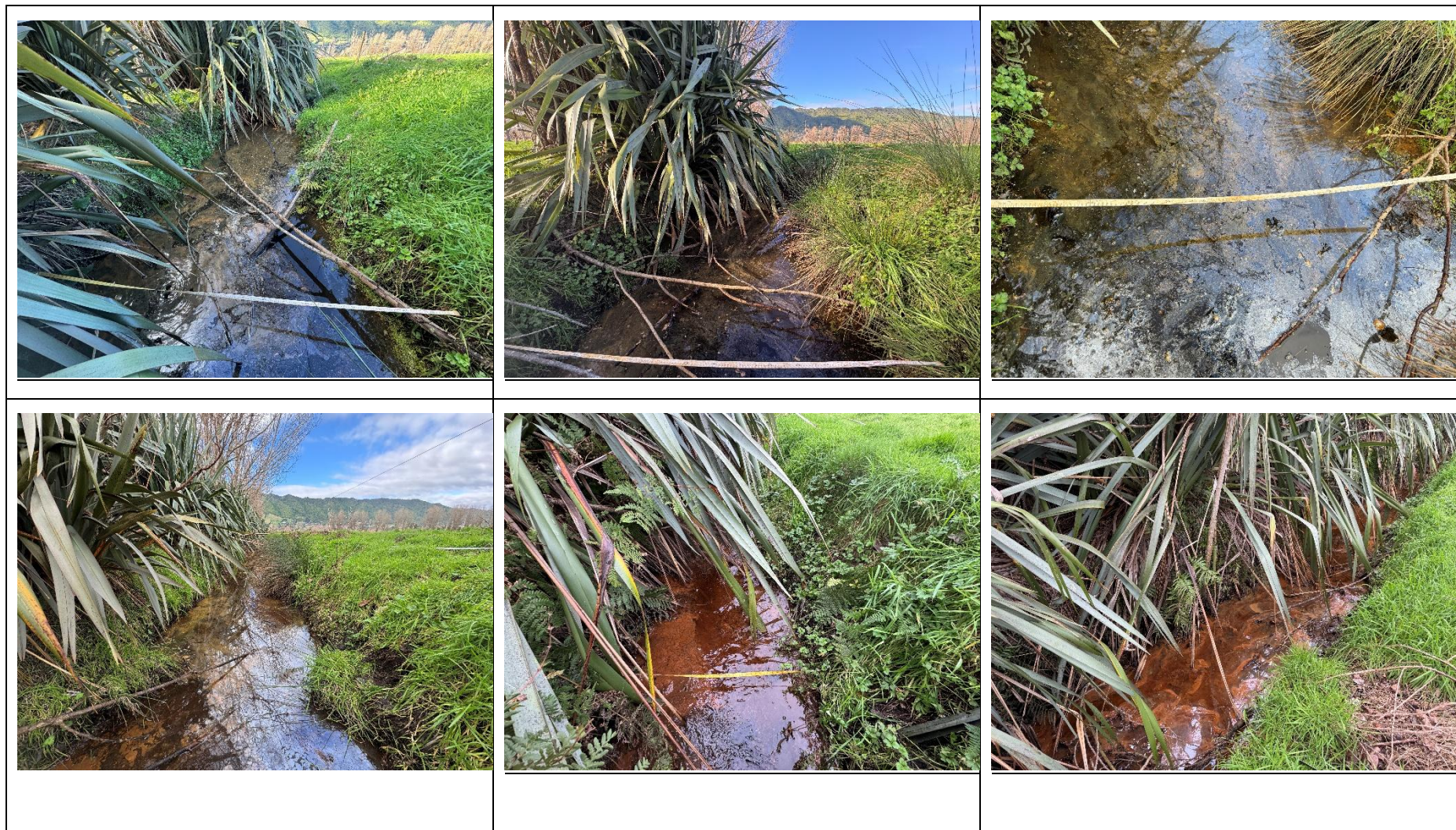
W1(b)

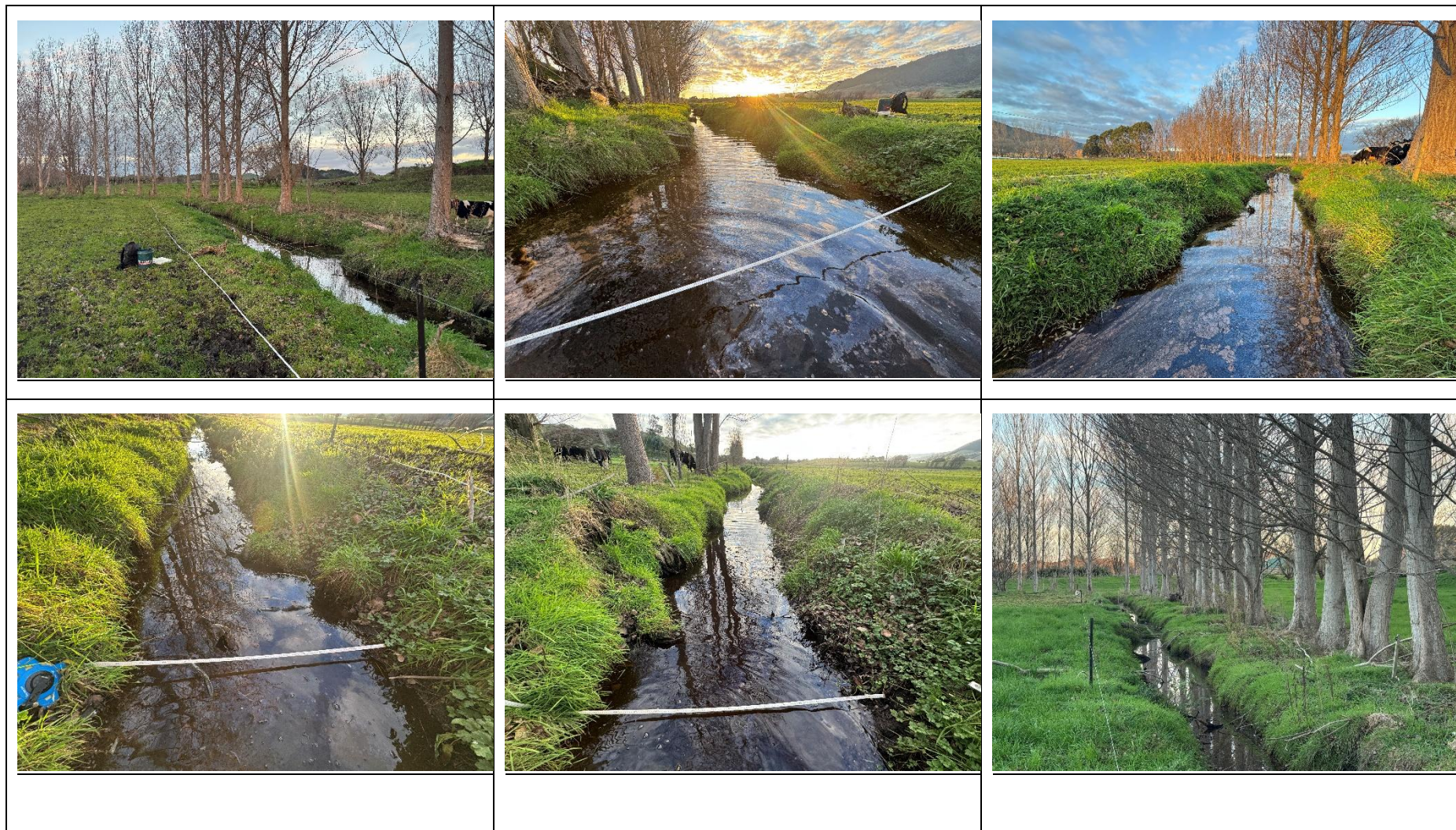
W1.1

W1.1.1

W1.1.1.1

W1.2



W1.2

Appendix B: SEV scores

Function category	Report section	Function	Worksheet #	Variable (code)	Ngarara Stream		Realigned drains		Removed drains		
					V1 (a)	V1 (b)	V1.1	V1.1.1	V1.1.1.1	V1.1.2	V1.2
				Vchann	0.18	0.18	0.10	0.10	0.10	0.10	0.10
				Vlining	0.80	0.80	0.80	0.80	0.80	0.80	0.80
				Vpipe	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hydraulic	4.1	NFR		=	0.39	0.39	0.33	0.33	0.33	0.33	0.33
				Vbank	0.20	0.20	0.20	0.20	0.20	0.20	0.20
				Vrough	0.60	0.52	0.49	0.65	0.38	0.67	0.38
Hydraulic	4.2	FLE		=	0.12	0.10	0.10	0.13	0.08	0.13	0.08
				Vbarr	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Hydraulic	4.3	CSM		=	0.30	0.30	0.30	0.30	0.30	0.30	0.30
				Vchanshape	0.28	0.28	0.20	0.20	0.20	0.20	0.20
				Vlining	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Hydraulic	4.4	CGV		=	0.63	0.63	0.60	0.60	0.60	0.60	0.60
Hydraulic function mean score					0.36	0.35	0.33	0.34	0.33	0.34	0.33
				Vshade	0.44	0.36	0.32	0.56	0.20	0.60	0.20
biogeoche	4.5	VTC		=	0.44	0.36	0.32	0.56	0.20	0.60	0.20
				Vdod	0.45	0.45	0.20	0.20	0.17	0.20	0.17
biogeoche	4.6	DOM		=	0.45	0.45	0.20	0.20	0.17	0.20	0.17
				Vripar	0.20	0.20	0.20	0.30	0.10	0.30	0.10
				Vdecid	0.72	0.37	0.50	0.40	0.25	0.75	0.35
biogeoche	4.7	OMI		=	0.17	0.14	0.15	0.21	0.06	0.26	0.07
				Vmacro	0.77	0.81	0.66	0.81	0.62	0.83	0.85
				Vretain	0.32	0.32	0.20	0.20	0.20	0.20	0.20
biogeoche	4.8	IPR		=	0.32	0.32	0.20	0.20	0.20	0.20	0.20
				Vsurf	1.00	1.00	1.00	1.00	1.00	1.00	1.00
				Vripfilt	0.44	0.50	0.40	0.50	0.24	0.40	0.22
biogeoche	4.9	DOP		=	0.72	0.75	0.70	0.75	0.62	0.70	0.61
Biogeochemical function mean score					0.42	0.40	0.31	0.38	0.25	0.39	0.25
				Vgalcpwn	0.28	0.33	0.00	0.00	0.40	0.00	0.00
				Vgalqual	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Vgobspwn	0.80	0.10	0.20	0.20	0.10	0.10	0.80
habitat prc	4.10	FSH		=	0.40	0.05	0.10	0.10	0.05	0.05	0.40
				Vphyshab	0.53	0.46	0.36	0.36	0.32	0.51	0.31
				Vwatqual	0.21	0.19	0.05	0.11	0.03	0.11	0.03
				Vimperv	0.80	0.80	0.80	0.40	1.00	0.70	1.00
habitat prc	4.11	HAF		=	0.52	0.48	0.39	0.30	0.42	0.46	0.41
Habitat provision function mean score					0.46	0.26	0.25	0.20	0.23	0.25	0.41
				Vfish	0.63	0.63	0.50	0.00	0.00	0.00	0.33
Biodiversi	4.12	FFI		=	0.63	0.63	0.50	0.00	0.00	0.00	0.33
				Vmci	0.18	0.14	0.07	0.25	0.11	0.32	0.17
				Vept	0.00	0.17	0.00	0.00	0.00	0.00	0.00
				Vinvert	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Biodiversi	4.13	IFI		=	0.06	0.10	0.02	0.08	0.04	0.11	0.06
				Vripcnd	0.41	0.41	0.33	0.39	0.29	0.40	0.29
				Vripcnn	0.20	0.20	0.30	0.40	0.50	0.40	0.30
Biodiversi	4.14	RVI		=	0.08	0.08	0.10	0.16	0.15	0.16	0.09
Biodiversity function mean score					0.26	0.27	0.21	0.08	0.06	0.09	0.16
Overall mean SEV score (maximum value 1)					0.374	0.341	0.287	0.281	0.229	0.293	0.275

*Limitations: Drain W1.1.1.1 was not surveyed for fish, as it was dry at the time of survey. The IBI score of comparable drain 1.1.2 was used.

Appendix C: Macroinvertebrate indices

Site			Pekapeka W1 (a)	Pekapeka W1 (b)	Pekapeka W1.1	Pekapeka W1.1.1	Pekapeka W1.1.1.1	Pekapeka W1.2	Pekapeka W1.1.2
Watercourse			2.07.2026	18.06.2026	18.06.2026	18.06.2026	2.07.2026	2.07.2026	2.07.2026
Date sampled									
Taxa	MCI score	MCI-sb score							
Caddisfly Polyplectropus	8	8.1		1					
Damselfly Austrolestes	6	0.7			2	1			
Damselfly Xanthocnemis	5	1.2	2	3	2				
Bug Anisops	5	2.2			2		3		
Beetle Hydrophilidae	5	8				1			1
Beetle Liodessus	5	4.9					1		
Beetle Scirtidae	8	6.4	1			5	20	13	30
True Fly Austrosimulium	3	3.9	125	54	1				
True Fly Chironomus	1	3.4							2
True Fly Culicidae	3	1.2	1				4	51	7
True Fly Hexatomini	5	6.7					1		
True Fly Orthocladiinae	2	3.2	1			1	1	1	1
True Fly Tanypodinae	5	6.5	1		1	9			3
Crustacea Cladocera	5	0.7					4		
Crustacea Copepoda	5	2.4		1			2		
Crustacea Ostracoda	3	1.9	5	1	4	3	5		5
Crustacea Paracalliope	5	0	54	98	86	107	173		178
Crustacea Phreatogammarus	5	5	1	8					
Crustacea Talitridae	5	5			6				
MITES (Acari)	5	5.2				1	1		1
SPIDERS Dolomedes	5	6.2							1
Mollusc Potamopyrgus	4	2.1	13	2	92	7			
Mollusc Sphaeriidae	3	2.9	3		9	67	3		1
OLIGOCHAETES	1	3.8	4	3	3	3	1		3
PLATYHELMINTHES (Flatworms)	3	0.9		3			1		
Number of Taxa			12	10	11	11	14	3	12
EPT Value			0	1	0	0	0	0	0
Number of Individuals			211	174	208	205	220	65	233
% EPT			0	0.57	0	0	0	0	0
% EPT Taxa			0	10	0	0	0	0	0
Sum of recorded scores			47	42	45	47	58	13	46
Count of recorded scores			12	10	11	11	14	3	12
Sum of individuals with scores			211	174	208	205	220	65	233
MCI Value			78.33	84	81.82	85.45	82.86	86.67	76.67
Sum of abundance load			758	743	910	879	1127	259	1206
QMCI Value			3.59	4.27	4.38	4.29	5.12	3.98	5.18
Sum of recorded scores			38.1	29.3	30.2	40.7	42.4	10.8	48.7
Count of recorded scores			11	9	10	10	13	3	11
Sum of individuals with scores			152	76	122	98	47	65	55
SBMCI Value			69.27	65.11	60.4	81.4	65.23	72	88.55
Sum of abundance load			572.9	284.9	286.9	333.7	189.9	147.6	273.1
QMCI-sb Value			3.77	3.75	2.35	3.41	4.04	2.27	4.97

Memo

To:	Andrew Beatson; WNDL	Job No:	2144.500
From:	Jeroen Lurling, RMA Ecology Graham Ussher, RMA Ecology	Date:	6 August 2026
cc:	Mitch Lewandowski; BB Planning Ltd		
Subject:	Waikanae North Development FTAA: s53 reply regarding dune wetlands		

Dear Andrew,

1 Introduction

This memorandum outlines our views regarding the status and effects management of several dune wetlands proposed to be removed at the Waikanae North Development. It has been prepared to support WNDL's response to section 53 comments. This memo provides our views on on-site offsetting options and identifies other options to demonstrate that effects can be appropriately managed in the event the FTAA Panel does not agree with our views on on-site offsetting,

2 Classification of dune wetlands

2.1 Greater Wellington Regional Council (GWRC) position

GWRC considers wetlands W3 and W5 to be dune impounded wetlands, but importantly, does not classify wetlands W3 and W5 as naturally uncommon dune-slack wetlands. GWRC's position on the status of wetland W5 was only recently made known through its section 53 comments, it having previously signalled it considered that status only related to wetland W3.

GWRC does, however, consider these wetlands to be sufficiently different from other wetlands onsite for the proposed offset to not represent like-for-like offsetting, primarily on the basis of the dune landform they are located in.

Offsetting of comparable 'dune-impounded wetland' is considered the preferred effects management option by GWRC, including through off-site options - if off-site offsetting is necessary to achieve a like-for-like outcome.

In its s53 comments, GWRC also classifies these wetlands as fens, on the basis of the claimed presence of peat soils at wetlands W3 and W5.

2.2 Department of Conservation (DOC) position

In its s53 comments, DOC asserts that Wetlands W3 and W4 are dune-slack wetlands. W4 is not affected by the development, but affords enhancement opportunities. Because this ecosystem type is naturally uncommon and endangered, its 'irreplaceability' is said by DOC to represent a limit to biodiversity offsetting under the National Policy Statement for Indigenous Biodiversity (NPS-IB). If the DOC classification is accepted, that position may be correct under business as usual RMA processes - but the FTAA has a different approach as outlined in the covering s 53 response.

2.3 Our assessment, based on observation and investigation

Our assessment, detailed in the Assessment of Ecological Effects in Appendix 23 of the Substantive Fast-track Application (AEE) is that no dune slack wetlands are present onsite, and the proposed offset package addresses effects on wetlands, and will result in a net gain in wetland area and values. Our view is that offsetting is a viable and appropriate effects management pathway, including because the wetlands onsite are not properly classified as 'irreplaceable' dune slack wetlands - a naturally uncommon ecosystem.

The application site features stable dune hollows and fluctuating water levels typical of dune slack wetlands, but these features alone are insufficient for formal classification as dune slack wetlands. It is not uncommon for wetlands located in dunes to have these characteristics. Key diagnostic elements and processes required for these wetlands to be dune slack wetlands, including characteristic native pioneer plants, mobile sand dynamics and tidal influences, are either completely absent or significantly degraded.

The absence of a precise definition for dune slack wetlands may contribute to these differing interpretations. We nevertheless note that GWRC has agreed with our interpretation on this point. The more liberal approach that would be required for the Department of Conservation's interpretation to be upheld is entirely incompatible with the suggestion that these features are rare, let alone irreplaceable.

There are numerous other comparable features in the Wellington Region, in particular north and south of the site on the coastal environment where we have mapped dozens of stable dune wetland areas on public and private land.

The characteristics of selected wetlands located in various stable dune landforms at the Waikanae North Development site are outlined in **Appendix 1**, and their vegetation and landform are illustrated in **Plates 1-2**. These wetlands are degraded and their ecological value is assessed as moderate, as per application of the EIANZ guidelines as detailed in the AEE.

We also do not agree with GWRC's classification of wetlands W3 and W5 as 'fens with peat soils'. No peat was detected in onsite soil cores taken to assess peat distribution; instead, sampling revealed mixed mineral and organic soils. These soils have likely been influenced by a history of farming, stock nutrient inputs, pasture grass and natural vegetation accumulation, resulting in some silt and organic additions to the mineral soils.

We also note that fluctuating water tables (as we have observed in these features) do not support peat formation, as low summer water levels accelerate organic decomposition.

Overall, we maintain our view that the approach proposed in terms of applying the effects management hierarchy, and providing a programme of wetland creation and enhancement on the application site is appropriate and will result in net positive outcomes in terms of wetland values and extent.

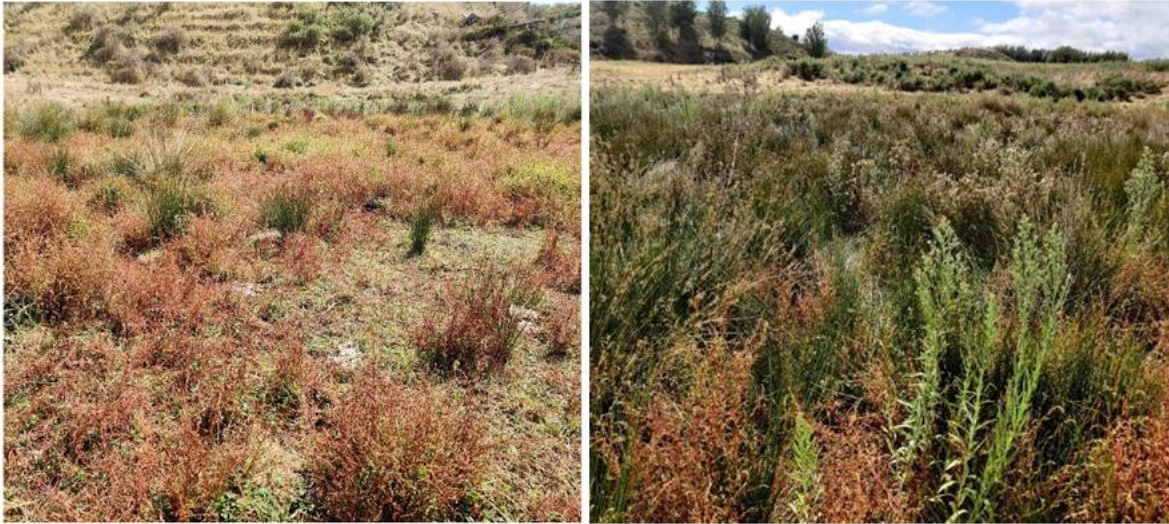


Plate 1. Wetland W5. (Left) The lowest part of wetland and the margin in 2024, where cover is primarily exotic herbs *Persicaria hydropiper* and *Ranunculus repens*, which have grown after water levels receded. (Right) *Juncus sarophorus* is common on the margins, along with exotic herbs *Cirsium arvense*, *Erigeron sumatrensis* and *Persicaria hydropiper*.



Plate 2. Wetland W13, within a historic low dune depression, dominated by exotic herbs *Persicaria hydropiper* and *Bidens formosa*, and rushes *Juncus sarophorus*, and *Juncus effusus*.

3 Effects management contingency options

In the event the FTAA Panel does not concur with our assessment, and agrees with GWRC's position that W3 and W5 are dune impounded wetlands, and that their features should be offset in a like-for-like manner, we detail several options to demonstrate that there are feasible options to manage effects on wetlands W3 and W5, through offsetting or compensation, onsite and offsite.

3.1.1 Onsite offsetting

Wetland W5

The vegetation composition, hydrology, substrate and landscape of wetlands W3 and W5 are comparable to that of Wetland Cluster 5 (eastern) wetlands. Common features include exotic rush and herb dominance, ephemeral inundation, and mixed mineral/organic soils. In particular wetland W13 is a wetland within a dune depression in this eastern cluster which is directly comparable to W5 (**Appendix 1**), providing a suitable like for like offset. Both wetlands (W5 and W13) are located in depressions in low dune landforms, so are considered to be comparable 'dune impounded wetlands'.

These low dune landforms are managed for agriculture and are modified by ploughing and pasture establishment. Both wetlands have stock access and a long history of farming, and they are both assessed as having moderate ecological value. They both have a perched hydrology, lack peat soils but have a component of organic topsoil combined with sandy/silty mineral soils. Vegetation consists of rushland/herbfield, with significant bare ground/herbfield after periods of extended inundation. Vegetation is exotic-dominated, but both have a component of indigenous rushes.

Wetland W13 is almost twice the size of wetland W5 (**Appendix 1**). The enhancement of W13 through buffer planting, predator control and hydrological enhancement (raising the outlet drain invert, to be further defined in detailed design) is considered to provide a like-for-like offset for the loss of wetland W5, and is already factored into the WEV:ECR offset calculations specified in the AEE.

Wetland W3

Under the currently proposed offset package, restoration of W4 (645 m²) partially addresses the loss of value resulting from the removal of W3 (1,567 m²). Whatever their classification, both sites share similar landform settings along the high/low dune margin, comparable vegetation, and intermittent inundation patterns.

Nevertheless, W3 is groundwater-connected (notwithstanding intermittent inundation identified above), whereas W4 has perched groundwater which is hydrologically isolated from deeper groundwater (as assessed by Ray O'Callaghan, Project Hydrologist on the basis of piezometric data presented in **Appendix 1**).

Additionally, W13 exhibits similar perched hydrology, despite being set in low dunes rather than the transition zone between high and low dunes. In our view, these differences do not render a W3–W13 offset "like-for-unlike."

If the panel disagrees with the evaluation of wetlands W4 and W13 as on-site offsetting options, two alternative options to mitigate the loss of value are provided below to illustrate the feasibility of managing effects.

3.1.2 QEII Regional Park offsetting

GWRC's preferred option for the loss of W3 dune-impounded wetland values is offsetting through enhancement of a comparable 'dune-impounded wetland' located in QEII Park to the south of the application site on public reserve land.

RMA Ecology (for the applicant) has engaged with Kellie Benner of GWRC and has visited the northern part of QEII Park (owned and administered by GWRC) to identify comparable wetland/s with enhancement potential. We have identified a 2,210m² wetland which provides a feasible offset site in the northwest part of the park (**Figure 1**). It is located within the stable dunes, and is presently in a degraded state due to historic farming. It has no restoration planting, and GWRC confirms this wetland can be made available to WNDL for restoration. We also note that there are many others that could also be suitable.

We consider the QEII Park wetland to be comparable to wetland W3 in that it is located in a dune hollow within a stable tall dune landform, it experiences intermittent inundation, has a long history of farming impacts, and a vegetation community dominated by exotic herbs and grasses with patches of native and exotic rushes.

If used as an offset, additional site investigation is recommended to confirm the exact wetland area, soils, and wetland class.

GWRC staff confirm the QEII Park wetland has not been comprehensively surveyed but suggest it is likely to be a fen with the water mostly below the surface and shallow organic (peaty) soils due to modification from years of farming and sand blowing in. However, our understanding is that farming degrades peat rather than forming peat. Farming can result in soil pugging and compaction, as well as inputs of fine silts and organic muck from faeces and grass and herb decomposition. Peat establishment also requires a relatively stable water table near to the surface, while aerial imagery and site observations at this location indicate a water table which fluctuates, leading to intermittent inundation (acknowledging no detailed piezometric study has been completed).

Proposed offset enhancements for the QEII Park wetland include revegetation of a 20 m buffer with suitable eco-sourced indigenous species, and pest plant and animal control, aligning with the existing QEII Park Management Plan that has been prepared by GWRC for this wider QEII Park site. This would connect the wetland to an existing block of native revegetation located to the east. To support ongoing site maintenance and integration with surrounding restoration efforts, an annual funding contribution of \$5,000 would be provided over five years for council staff or contractors to extend pest control to this wetland and its buffer.

There are no existing plans for the restoration of this particular wetland, satisfying the additionality principle of offsetting. The site is under long term legal protection as a Regional Park, and its long-term management is outlined in the QEII Park Management Plan.

The area of the QEII wetland is approximately 2,210 m², which exceeds the removal of value of the 1,569 m² wetland W3, at a ratio of 1.4:1.



Figure 1. The proposed QEII offset wetland, (left) indicated by the arrow, showing inundation in February 2020, and (right) as preliminarily mapped by GWRC.

3.2 On-site compensation

A second option to address the loss of ecological value for dune-impounded wetland W3 is onsite, like-for-unlike.

As outlined in the AEE, the proposed restoration package establishes 1.74 ha of wetland with the ability to create an additional 0.85 ha of wetland extent, over and above loss extent offsets. These offsets will be complemented by other wetland enhancement programmes (comprising improvement work to an additional 2.36ha to the 6.52 ha of degraded wetland on the site) that sit outside of the effects management package. While currently designated as ‘additional ecological benefits’ (comprising mostly swamp and marsh on the Ngarara Stream floodplain), a portion of this surplus can be applied as like-for-unlike compensation for impacts to Wetland W3.

Applying a standard 3:1 compensation ratio to account for temporal lags, ecological uncertainties, and functional discrepancies, Wetland W3 requires 0.47 ha—an amount comfortably accommodated within the 0.84 ha surplus already available and the balance of the additional wetland improvement works.

The above compensation ratios are in line with the ratios generated from commonly used offset models (for wetlands, the WEV) and will provide for at least no-net-loss should compensation on-site be favoured by the Panel.

3.3 Summary

In our opinion, wetlands W3 and W5 are *not* dune slack wetlands and are therefore not irreplaceable ecosystems under the National Policy Statement for Indigenous Biodiversity. The wetlands are degraded, moderate-value wetlands that can appropriately be managed through biodiversity offsetting.

We disagree with GWRC's view that W3 and W5 are fens containing peat soils.

If the FTAA Panel does not accept our assessment, this memo provides options, including:

- On-site like-for-like offsetting using enhancement of Wetlands W13 and W4.

- Off-site offsetting through restoration of a comparable degraded wetland within QEII Regional Park (assuming that WNDL can utilise this – it sits within GWRC control).
- Like-for-unlike compensation (on-site) using surplus wetland creation and enhancement already proposed elsewhere within the development.

The QEII Park option is presented as a feasible offset because the wetland is comparable in landform, hydrology, vegetation, and degraded condition, with restoration supported by buffer planting and pest control.

Overall, we regard the proposed steps taken by the Applicant regarding application of the mitigation hierarchy as appropriate, and that feasible offsetting or compensation options exist to achieve at least no net loss - even if the Panel adopts a different interpretation of the wetlands' classification.

Yours sincerely,



Jeroen Lurling
Senior Ecologist
RMA Ecology Ltd



Dr Graham Ussher
Principal Ecologist

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Appendix 1. Characteristics of relevant dune wetlands at Waikanae North Development and QEII Park. Note, the hydrology assessment has been revised by the project hydrologist on the basis of additional information.

Wet land	Effect/Management	Area (m ²)	Landscape	Form	Soil	Hydrology	Water source	Hydrological connection	General ground level	GW level	Vegetation	Value, and condition descriptors
W3	Removed	1,569	Stable tall dune/ low dune margin	Hollow/ depression	Mixed mineral (sand and silt)/organic. No peat	Intermittent inundation	GW, minor rainfall and surface runoff input	Perched	RL 6.4	RL 3.6 - 3.2 (Peizo 17)	Tall rushland/grassland with aquatic veg. when inundated, bare ground/herbfield after inundation	Moderate; Degraded by farming, stock now excluded, no artificial drainage
W4	Retained and enhanced as offset	645	Stable tall dune/ low dune margin	Hollow/ depression	Mixed mineral (sand and silt)and organic topsoil. No peat	Intermittent inundation	GW, minor rainfall and surface runoff input	Ground water table	RL 4.0 - 4.5	RL 4.0 - 3.5	Rushland/grassland with aquatic veg. when inundated, bare ground/herbfield after inundation	Moderate; degraded by farming, stock now excluded, no artificial drainage
W5	Removed	3315	low dunes	Hollow/ depression	Mineral soils with topsoil. No peat in hand augers*	Intermittent inundation	GW, minor rainfall and surface runoff input	Perched	RL 5.1	RL 4.4 - 4.1 (peizo 04-14)	Rushland/herbfield. Bare ground/herbfield after inundation	Moderate; ongoing grazing and mowing, no artificial drainage
W13	Retained and enhanced as offset	6172	low dunes	Hollow/ depression	Mineral soils with topsoil. No peat in hand augers*	Intermittent inundation	GW, minor rainfall and surface runoff input	Perched	RL 6.5	RL 5.1 - 4.5	Rushland/herbfield. Bare ground/herbfield after inundation	Moderate; ongoing grazing, limited artificial drainage
W14	Retained and enhanced as offset	2527	low dune/flood plain margin	Depression	Mineral soils with topsoil. No peat in hand augers*	Intermittent saturation. No inundation (drained by drain W14)	GW, minor rainfall and surface runoff input	Ground water table	RL 5.8 – 5.5	RL 5.1 - 5.5	Rushland/grassland/ herbfield dominated. No bare ground	Moderate; ongoing grazing and pugging, significant artificial drainage

QEII dune wet- land	Enhanced as offset	2200 *	low dunes	Hollow/ depression	Unknown	Intermittent inundation	Uncertain. Likely GW, minor rainfall and surface runoff input	Unknow n	Unknow n	Unknow n	Rushland/grassland/ herbfield dominated. No bare ground when surveyed	Low; Degraded by long history of farming, no artificial drainage
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- Exact area of QEII wetland to be confirmed by comprehensive wetland delineation.