

Your Comment on the Hunua Quarry Development project application

Please include all the contact details listed below with your comments and indicate whether you can receive further communications from us by email at substantive@fastrack.govt.nz

1. Contact Details	
Please ensure that you have authority to comment on the application on behalf of those named on this form.	
Organisation name	Department of Conservation
First name	Emily
Last name	Bayliss
Postal address	[REDACTED]
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Email	[REDACTED]

2. We will email you draft conditions of consent for your comment			
X	I can receive emails and my email address is correct	☐	I cannot receive emails and my postal address is correct

3. Please provide your comments on this application
Please find comments attached



Celia Haden
Acting Fast-track Applications Manager

Acting pursuant to delegated authority on behalf of the Director-General of Conservation.

Date: 11 August 2026

Note: A copy of the Instrument of Delegation may be inspected at the Director-General's office at Conservation House Whare Kaupapa Atawhai, 18/32 Manners Street, Wellington 6011



Department of
Conservation
Te Papa Atawhai

**Te Kāwanatanga
o Aotearoa**
New Zealand Government

Comments on a fast-track consenting application

Fast-track Approvals Act 2024 section 53

To: The Expert Panel

From: Department of Conservation

Regarding fast-track project: Hunua Quarry Development

Fast track Reference: FTAA-2603-1185

Overview

- 1.1 Winstone Aggregates (the Applicant) proposes to develop the existing Symonds Hill Pit within the Hunua Quarry to secure additional high-quality greywacke resource and enable the continued extraction of aggregate from the quarry for a further 80 years (the Project).
- 1.2 There is no Public Conservation Land within or adjacent to the Project site.
- 1.3 Approvals are sought in relation to the Resource Management Act 1991 (RMA), the Wildlife Act 1953, and the Freshwater Fisheries Regulations 1983.
- 1.4 The Applicant seeks to vary existing resource consents under s 42(4)(b) of the Fast-track Approvals Act 2024 (the Act).
- 1.5 The Department of Conservation (the Department) undertook a site meeting on 23 January 2026 and has been in ongoing discussions with the Applicant since then.
- 1.6 The Department has already provided two reports under the section 51 of the Act for the wildlife approval and the complex freshwater fisheries approval.
- 1.7 In accordance with sections 53(2)(k) and 53(2)(m)(i) of the Act, the Director-General of Conservation (D-G) has been invited to comment on the substantive application. Statutory delegations are in place for the Department to provide commentary on behalf of the D-G.
- 1.8 The Department appreciates the thoroughness and quality of the Project's application documents. It has allowed the Department's experts to better understand the impacts of the Project, provide targeted comments that will ensure that all effects are appropriately managed, and ensure the conditions are not more onerous than necessary.
- 1.9 Technical advice to inform this report was provided by Dr Amber McEwan (as provided in Appendix 1) on freshwater ecology and Dr Catherine Beard (Senior Science Advisor – Ecology) who has provided advice on terrestrial and wetland ecosystems. Dr Beard's comments have been incorporated into the body of this report.

2 Conservation Values

- 2.1 The Project will result in the loss of indigenous vegetation, wetland and stream habitats, which the Applicant proposes to address through a range of restoration, offset and compensation measures, including revegetation, wetland restoration, stream enhancement and long-term pest management.
- 2.2 The mature secondary forest types present—including tawa–taraire forest, kauri–podocarp–broadleaf forest remnants, and mature kānuka forest—are high-value indigenous ecosystems that provide important habitat, ecological connectivity, and ecosystem functions within the wider Hunua landscape. These are mature forest communities that are not easily replaceable within the proposed duration of the Project.
- 2.3 Several native plant species of regional conservation significance are present within the Project site. Vegetation surveys recorded the regionally endangered Black maire (*Nestegis cunninghamii*), Poataniwha (*Melicope simplex*), and Forster's sedge (*Carex forsteri*). The surveys also recorded Kauri (*Agathis australis*) and King fern (*Ptisana salicina*), both of which are classified as At Risk – Declining nationally.
- 2.4 The Project includes a proposal to infill 1770 m² of the Mangapū tributary 2 and create a new 693 m² channel between the upstream and downstream reaches of Slippery Creek. The Mangapū tributary is of very high ecological value, and as such is also rare in the Slippery Creek catchment and the Manukau Ecological District.
- 2.5 The eDNA sampling detected longfin eel, shortfin eel, banded kōkopu, kōura, and two species of *Zephlebia* that are classified as At Risk – ‘Naturally Uncommon’ in Mangapū tributary. The application misclassified the threat classification of banded kōkopu as ‘Not-Threatened’ whereas the current classification is ‘At-Risk – Naturally Uncommon’. The Auckland region is classified as a banded kōkopu stronghold and is home to more than 20% of the national population.

3 Assessment of ecological effects and application of the effects management hierarchy

- 3.1 The Department’s assessment has been confined to actual and potential ecological effects of the proposal and the proposed consent conditions that will manage ecological effects and minimise harm to fauna. Accordingly, the Department has not commented on its consistency with the wider statutory framework, except for discussion on the application of the offsetting and compensation principles found in national policy statements below.
- 3.2 Generally, there remains uncertainty around the extent to which values associated with mature indigenous forest and forest seepage wetlands can be replaced, and the time required for replacement habitats to develop comparable ecological functions. It cannot be confirmed whether the offsetting and compensation areas will be able to meet the

requirements of the National Policy Statement for Indigenous Biodiversity 2023 and the National Policy Statement for Freshwater Management 2020 (both amended December 2025) offsetting and compensation appendices, for ensuring that time lag is minimised.¹

Terrestrial Flora

- 3.3 The application of the effects management hierarchy on terrestrial vegetation, riparian margins and wetland function and flora values is appropriate. The proposed restoration, offset and compensation package is broadly consistent with accepted ecological practice and is likely to provide substantial ecological benefits over time.
- 3.4 While the Department considers the proposed offset and compensation package to be an appropriate response to the residual loss of mature indigenous vegetation, their loss is still considered ecologically significant. Replacement habitats will require many decades to develop the structure, species composition and ecological functions characteristic of mature forest ecosystems. As a result, there is inherent uncertainty regarding the extent to which equivalent ecological outcomes can be achieved within ecologically meaningful timeframes.
- 3.5 The removal of indigenous vegetation will occur well before many of the anticipated restoration outcomes are realised, and some characteristics of mature forest ecosystems may not be fully replicated for many decades, if at all. It is therefore necessary, that the offset and compensation planting occur prior to vegetation clearance and the resource consent conditions should reflect this requirement.

Wetland Flora

- 3.6 The proposed wetland offset and compensation package for wetlands are an appropriate response to the residual effects of the proposal on wetlands and likely to provide meaningful ecological benefits.
- 3.7 Nevertheless, the permanent loss of forest seepage wetlands remains a significant aspect of the proposal. These wetlands contribute not only to wetland biodiversity values, but also to wider freshwater ecosystem functions through hydrological regulation, flow attenuation, and ecological connectivity between wetland, terrestrial and stream habitats. These systems are strongly influenced by site-specific hydrological processes and may not be fully replaceable through restoration elsewhere.
- 3.8 The inclusion of performance standards for the offsetting and compensation sites is therefore an important component of the overall effects management response to ensure

¹ National Policy Statement for Indigenous Biodiversity 2023 (amended December 2025), Appendix 3: Principles for biodiversity offsetting, clause 8; National Policy Statement for Freshwater Management 2020 (amended December 2025), National Policy Statement for Freshwater Management 2020 (amended December 2025), Appendix 6: Principles for aquatic offsetting, clause 8.

that the outcomes stated in the application are implemented and achieved as a requirement of the consent conditions.

Riparian Margins

- 3.9 The proposed revegetation, offset and compensation package appears broadly proportionate to the scale of riparian habitat loss and should, over time, provide substantial replacement and enhancement of riparian ecological values.
- 3.10 The proposed monitoring and maintenance programme is also reasonably comprehensive, including regular inspections, ecological monitoring, adaptive management, weed control and replacement planting.
- 3.11 However, some uncertainty remains regarding whether the realigned channel will ultimately achieve the ecological functions of the existing densely forested stream corridor. The realignment assessment acknowledges that riparian vegetation will be managed to maintain access to the adjacent haul road and is therefore not expected to achieve the same density or diversity as the existing vegetation.
- 3.12 Greater certainty around future riparian width, canopy cover, stream shading and other performance outcomes would provide stronger confidence that the realigned stream will achieve comparable long-term ecological function, rather than simply establishing riparian vegetation cover.
- 3.13 As a result, the Department considers that moderate to high residual adverse effects on terrestrial vegetation and wetland values are likely to remain in the short to medium term and will need further conditions to ensure that similar ecological values can be potentially realised.

Freshwater Ecology

- 3.14 Dr. Amber McEwan has reviewed the application and has provided her technical assessment at Appendix 1. To summarise, Dr. McEwan mostly agrees with the assessment of ecological effects but considers the effects management, in areas, is insufficient to manage the effects of the activity to achieve no net loss.
- 3.15 Her assessment primarily focuses on whether the Mangapū stream alignment is considered to be remediation, or offsetting, in accordance with the effects management hierarchy. The difference is important to note, as if it is found to be offsetting, then greater management is required to ensure that there is no net loss of biodiversity. She further considers the effects of dewatering and cumulative impacts on the stream tributaries. The Stream Realignment Management Plan also proposes that the stream realignment is successful if it achieves the standards when the values stated are less than the tributary currently has, which would not achieve the overall objective no net loss.

- 3.16 The proposed offsetting approach relies on augmentation to prevent stream flows falling below Mean Annual Low Flow (MALF), on the basis that maintaining flows at or above MALF will prevent adverse ecological effects from dewatering. However, Dr McEwan considers that ecological effects associated with flow reduction are not necessarily confined to flows approaching MALF and may occur at higher flows where dewatering results in a substantial departure from the natural flow regime.
- 3.17 Reduced flows can affect habitat availability, aquatic biota and stream processes, including water temperature and the capacity of flows to buffer water-quality effects. Consequently, if dewatering significantly reduces flows but they remain above MALF, adverse ecological effects could occur before the proposed augmentation trigger is reached. This is particularly relevant given the range of permanent and intermittent habitats within the predicted zone of influence.
- 3.18 The dewatering management and monitoring framework should therefore provide for the identification and management of adverse ecological effects arising from dewatering across relevant levels of flow reduction, rather than relying solely on MALF as the threshold for intervention. Effects should be mitigated or otherwise managed as necessary.
- 3.19 Finally, the Applicant proposes to not provide for fish passage to tributaries 3 and 4 as the tributaries are proposed to be quarried later in another resource consent application at least 35 years out. The Applicant instead provides other offsetting and compensation to manage the effects of impeding fish passage.
- 3.20 The offsetting and compensation measures described by the Applicant are confusing. For example, the Applicant includes effects management measures for 'loss of fish passage' due to proposed culverts on tributaries 3 and 4. DOC has not addressed this in these comments because the Applicant has applied for complex freshwater fisheries approval in relation to these culverts and the Department has provided commentary on this in the section 51 report.
- 3.21 In addition, the Applicant includes offsetting and compensation for the loss of the tributaries themselves, but to the Department's knowledge this relates to future quarry expansion plans that are not consented or currently sought. A resource consent application cannot consider a potential future effect that has not been applied for, and it is inappropriate to offset or compensate for an activity that may or may not be consented in the future.
- 3.22 Discussions have occurred and will continue post section 53 comments between the Department and the Applicant to understand the exact effects of the Project.

Lizards

- 3.23 The Department has already commented extensively on lizards in its section 51 Wildlife Approval report and does not seek to repeat itself here.

- 3.24 It extends its appreciation to the Applicant for the amendments made to the Wildlife Approval application lizard management plan and lizard relocation to ensure that the elegant geckos are managed in accordance with the purpose of Wildlife Act 1953.

4 Comments on conditions

- 4.1 Overall, the Department has some concerns about the Project, subject to appropriate conditions. To that effect, the Department suggests some amendments to the conditions proposed by the Applicant to ensure that the effects are appropriately managed.
- 4.2 The Department has provided some preliminary comments on conditions where appropriate, but requests that further work on the conditions be undertaken by the Applicant, in collaboration with the Department, particularly in relation to freshwater ecology.

Management Plans

- 4.3 The Applicant has proposed several management plan conditions to manage ecological effects of the project. It is welcomed that the management plans have been provided with the application so the Department can assess the management techniques proposed. However, there is additional information required in the conditions to ensure that the objectives of the various management plans are achieved and that the outcomes sought are implemented.
- 4.4 The Panel Convenor's Practice and Procedure Guidance Note states at section 21 that it is strongly encouraged that the Applicant include other mechanisms to provide greater certainty.² The Applicant has already included several of the mechanisms for the conditions, however further changes are sought:
- 4.4.1 Inclusion of performance or environmental standards that specify the standard that must not be breached.
 - 4.4.2 Provision of trigger responses for resource use to occur provided specified environmental conditions exist.
 - 4.4.3 Monitoring of triggers and responses, including adaptive management responses.
- 4.5 The performance/environmental standards, trigger responses, and monitoring provisions recommended by the Department below have been taken from the equivalent management plans provided with the application. Therefore, as the Applicant has already proposed the performance/environmental standards, trigger responses, and monitoring triggers, including them in the conditions, it is no more onerous, to capture these as conditions.

² Fast-track Approvals Act 2024: Panel Conveners' Practice and Procedure Guidance 22 July 2025 at 21.1.

- 4.6 The Department recommends that they are pulled out from the management plans into the conditions as condition 1 of the consent says that “the Project must be undertaken in general (emphasis added) accordance with [...] the management plans”.
- 4.7 There is a possibility that, if the performance standards are not being achieved by the management plan, the Applicant amends the management plan to reduce the standards. Instead, they should be increasing the measures to meet the performance standards. This will better avoid, the situation where adverse effects are not appropriately managed. Including the performance standards in the conditions would ensure that the effects are appropriately managed.
- 4.8 Where possible in the timeframe provided, the Department has provided potential track-changes to the conditions below. Other specific requirements referenced above, such as performance standards to ensure that ecosystem values and systems are accounted for, will require further work after the section 53 process.

Ecological Management Plan

- 4.9 The Ecological Management Plan condition (condition 55-56) is largely supported. As discussed in paragraphs 3.4 – 3.5, longer-term ecological outcome performance standards would be beneficial to ensure that the ecosystem value of the mature indigenous forest can be achieved through offsetting and compensation.
- 4.10 Performance standards such as canopy closure are necessary to understand whether restoration planting has successfully established, but indicators such as:
- the development of multiple canopy layers,
 - the recruitment of larger trees,
 - the accumulation of coarse woody debris on the forest floor,
 - the natural regeneration of indigenous species (particularly species that were not originally planted),
 - increasing indigenous species diversity, and
 - evidence that native fauna such as birds and lizards are using the habitat
- are necessary to monitor to ensure that the values of mature indigenous forests are reproduced. These monitoring requirements do not need to occur upon the grant of consent but instead be implemented after the initial establishment has succeeded.
- 4.11 The ecological assessment has already established a useful dataset through the vegetation plots and surveys completed for the project. Setting up plots in the restoration/enhancement areas and comparing them over time with suitable reference areas of mature forest nearby and the previously collected data, would provide a way of assessing whether the restoration areas are meaningfully progressing towards the type of forest and the values that are cleared.

- 4.12 The Department recommends that the Applicant provide a condition that includes the requirement for mature forest values to be achieved within the life of the consent, and performance standards that must be achieved. The condition would help enforce the Ecological Management Plan as a long-term programme designed to achieve no net loss of indigenous biodiversity from the Project. The Department is willing to assist the Applicant with drafting such a condition/s.
- 4.13 There is minor amendment recommended to ensure that the required offsetting and compensation planting occurs before vegetation is cleared.³

56(h) timeframes for the implementation of Site Specific Planting Plans before Construction works occurs in the staged area;

Stream Realignment Management Plan

- 4.14 The objective for the Stream Realignment Management Plan condition 63 is not consistent with the objective in the corresponding draft management plan. The Department requests that the condition is amended as follows to match the management plan objective, and also recommends other wording changes to ensure the condition reads well:

63. The objective of the Stream Realignment Management Plan is to ~~detail the process for the design, Construction, and long-term establishment of the Mangapū Tributary realignment in a way that:~~ realign and rehabilitate the Mangapū Stream Tributary in a manner that restores natural stream processes and form, enhances ecological values, and protects and strengthens the natural character of the waterway and its margins, while supporting long-term freshwater health and resilience and a culturally aligned freshwater ecosystem.

This will be achieved by:

- (a) ~~as far as practicable, replicate the channel form and function of the restored reach upstream, and the natural stream downstream; and mimicking natural channel morphology, hydrology and habitat diversity; and~~*
- (b) ~~incorporates~~ incorporating riparian planting along the full extent of the realigned stream corridor, and revegetation on the quarried benches above using native species to enhance natural character and ecological function consistent with the certified Landscape Rehabilitation Strategy and Management Plan required by Condition 52;*
- (c) ~~Supports a healthy, resilient, and culturally aligned freshwater ecosystem; and~~*
- (d) ~~Ensures~~ Ensuring compliance with Conditions 106 – 108 and 121 – 124.*

³ Vegetation clearance is included in the term “Constructed work”.

Pest Management Plan

- 4.15 The pest management plan (PMP) is intended to control pest animals and pest plants to protect new plantings and existing mature bush areas within Site and within the offset and compensation sites. The Panel sought clarification of the PMP's timeframe and the Applicant has stated the PMP will be implemented for 35 years.
- 4.16 The Project's summary states that the application will enable the extraction of aggregate for a further 80 years. The plantings proposed by the Applicant are to be staged over the course of the 80 years, meaning that there will likely be young plants still requiring protection when the 35 year period ends, and therefore will require additional pest plant and animal control for a longer period. This is particularly important considering that time lag is an outstanding concern from the Department regarding the offsetting and compensation proposals. While the ecological values of mature indigenous forest cannot be immediately reproduced or created, pest management should continue past 35 years to ensure measures are in place for the life of the quarry.
- 4.17 It is acknowledged that approaches to pest control could vary over the course of 80 years. However, instead of limiting the pest control for 35 years, condition 63(k) should be updated to provide the ability to update the plan for changes in best practice for pest management.
- 4.18 The PMP condition 62 should implement the Table 6 and Table 8 from the Boffa Miskell Pest Management Plan submitted in support of the application. The targets within the Applicant's tables 6 and 8, have been stated to achieve the overall objective of the ecological management plan, to achieve no net loss of biodiversity. To assist monitoring of the consent conditions, and to ensure the activities are meeting the no net loss objective, the tables should be included in the consent conditions.
- 4.19 Further, the Department requests an amendment for the threshold for Feral Cats matches the response at section 10.1.1 of the PMP should be made, and there should be a specific link to the Auckland Council Regional Pest Management Plan, and its subsequent versions, to ensure that all applicable pest plants are included.

~~62. The purpose of the Pest Management Plan (PMP) is to detail the measures and procedures to control pest animal's and pest plant's to protect new plantings and existing mature bush areas within Site and the offset and compensation sites. The objectives of the Pest Management Plan (PMP) are:~~

- ~~(a) To protect and enhance ecological values and connectivity at Winstone's Hunua Quarry and adjacent sites in Hunua Road and Judge Richardson Drive, and at the Meremere Quarry, through achieving sustained suppression of key target predators/pests at or below desired abundance targets within set timeframes over the lifespan of the consent.~~

- (b) To protect new enhancement plantings from target pest animal browsers during establishment of the enhancement planting areas, from the initial enhancement planting installation until 5 years after final planting is completed by management area.
- (c) To achieve removal of target invasive pest plants within enhancement planting areas prior to planting installations.
- (d) To achieve sustained control of pest plants at or below desired targets throughout all other pest management areas within set timeframes over the lifespan of the consent.

62A. The animal pest management required by condition 61 must meet the management targets and adhere to the thresholds for initiating additional control and monitoring frequency for each target species as set out in the following table:

<u>Pest Species</u>	<u>Management Target</u>	<u>Threshold</u>	<u>Monitoring frequency</u>
<u>Rats</u>	<u><5% CCI (year-round)</u>	<u>≥10% CCI (year-round)</u>	<u>Survey prior to and after each area knockdown and/or exceedance of threshold (if required).</u>
<u>Possums</u>	<u><3% CCI</u>	<u>≥5% CCI</u>	
<u>Hedgehogs</u>	<u><5% CCI</u>	<u>≥10% CCI</u>	
<u>Mustelids</u>	<u>5 detections per 2000 CH</u>	<u>>10 detections per 2000 CH</u>	
<u>Feral Cats</u>	<u>Zero detections</u>	<u>>1 detections per 2000 CH</u>	
<u>Rabbits and Hares</u>	<u>Modified McLean Scale (MMS) level 2 or below for 100% of survey lines</u>	<u>MMS level 3 on all survey lines</u>	<u>Biannual surveys thereafter.</u>
<u>Ungulates, Feral Deer, Pigs, and Goats</u>	<u>Reduction to less than 1/20ha of area</u>	<u>≥1/20ha of area</u>	<u>Timing to be determined by expert hunting contractor</u>

Advice note:

CCI = Chew Card Index

CH = Camera Hours

62B. The pest plant management required by condition 61 must manage plants that are compiled from the Auckland Council Regional Pest Management Plan 2020-2030, or any

other subsequent version, and updated accordingly on proposed baseline monitoring required in condition 63.

62C. The pest plant management required by condition 61 must meet the management targets and adhere to the thresholds for initiating additional control and monitoring frequency for each target species as set out in the following table:

<u>Management Area</u>	<u>Target</u>	<u>Threshold</u>	<u>Monitoring frequency</u>
<u>All pest management areas (excluding new enhancement planting areas years 1-5 after final planting installations by area).</u>	<u>zero detectability of mature/reproductive individuals.</u> <u>≤10m2 of vegetatively reproductive species.</u>	<u>≥10 mature/reproductive stage individuals per pest management area</u> <u>≥15m2 of vegetatively reproductive species</u>	<u>Annual surveys</u>
<u>New enhancement planting areas</u> <u>Zero detectability</u>	<u>Zero detectability of any mature/reproductive individual pest plants (years 1-5 after final planting installations by area)</u> <u>Target will shift to sustained suppression after year 5 onward for each new enhancement planting area.</u>	<u>Identification of one or more target pest plants will trigger control response during planting establishment period (year 1-5 after final planting installation by area).</u>	<u>6 monthly surveys for plants in years 0 to 3</u> <u>Annual surveys for plants in year 4 onward</u>

63. The PMP must include:

[...]

(j) A process for review of the PMP (and any subsequent re-certification in accordance with conditions 23 – 27 and 30 – 31) to adapt to any changes in the receiving environment and updates in best practice pest management practices.

Off-site visual mitigation planting

- 4.20 The Department recommends a new condition that all indigenous plants included in visual mitigation planting are sourced from the Hunua Ecological District.

131A. Native plants proposed in any Visual Mitigation Plan must be sourced from the Hunua Ecological District.

Bat Management

- 4.21 The Department considers that the Applicant's proposed bat conditions can be simplified by instead referring to the Department of Conservation Bat Roost Protocols. As vegetation clearance will be staged throughout the lifetime of the quarry being approximately 80 years, there is a possibility that bats return to the Hunua ranges. Referring to the Bat Roost Protocols allows the consent holder to implement the best method of minimising adverse effects on bats, particularly as methods are likely to adapt and change overtime. These amendments are as follows:

137. ~~Prior to any~~ Vegetation clearance ~~being~~ must be undertaken ~~must~~ in accordance with the methodology specified in Protocols for minimising the risk of felling bat roosts (Bat Roost Protocols) Version 4: October 2024 approved by the New Zealand Department of Conservation's Bat Recovery Group or any subsequent version.

~~(a) all vegetation must be visually assessed by a Bat Specialist to identify any potential bat roosting areas; and~~

~~(b) if trees are identified as potential bat roost features (i.e., cavities, deadwood, loose bark and epiphytes), then acoustic surveys must be undertaken to confirm the presence/absence of bats; and~~

~~(c) if any bat roosts are identified all vegetation removal within 20 m of that roost tree must cease until it can be confirmed that the roost is no longer occupied. No felling must be undertaken of any tree with an active bat roost.~~

Ecological Offsetting and Compensation

- 4.22 The existing resource consents (Part G) require the covenants over the revegetation plantings to be Conservation Covenants pursuant to section 77 of the Reserves Act 1977 (RA). The new resource consent conditions should require that the covenants be Conservation Covenants as the RA specifies what values of the land are protected and what activities are prohibited in the Conservation Covenants.

139. The Consent Holder must ensure Conservation Covenants pursuant to section 77 of the Reserves Act 1977 are imposed on the Records of Title of sites that provide for the ongoing protection of the areas identified in the "Formal Legal Protection" column of Table 2.

Summary/Conclusions

4.23 The Department has only limited concerns about the activities of the Project under the resource consents sought, as the assessment of environmental effects provided is thorough. It has some outstanding concerns about:

4.23.1 Whether the offsetting and compensation planting areas will achieve the same mature indigenous vegetation values that will be lost.

4.23.2 Stream realignment being considered as remediation rather than offsetting;

4.23.3 The cumulative impacts of dewatering the headwaters of the Slippery Creek catchment on the lower reaches of the Mangapū stream,

4.23.4 The appropriateness of not providing fish passage to tributaries 3 and 4 to benefit an activity not currently consented.

4.24 The Department is open to continue discussions with the Applicant as the Project progresses through the Fast-track system, and it welcomes the opportunity to comment further on draft conditions either through dialogue with the Applicant or through the formal section 70 process.

5 Appendices

Appendix 1) Hunua Quarry: S53 technical advice regarding freshwater ecology

Appendix 1

TO: Christina Brodnax, Department of Conservation

FROM: Amber McEwan, Riverscapes Freshwater Ecology Limited

CC: Emily Bayliss

DATE: 02.08.2026

Re: Hunua Quarry: S53 technical advice regarding freshwater ecology



Note on tributary focus

The EclA discusses values and effects in relation to three tributaries: Trib 1 is the Mangapū tributary proposed to be realigned and Tribs 3 and 4 are other Mangapū Stream tributaries that are subject to potential effects on fish passage and we have addressed these in our S51 report. The applicant makes mention of future (unconfirmed as far as I understand) plans to also quarry Tribs 3 and 4 and includes offsetting measures in relation to this in the present application. It would be difficult for me to justify spending time considering an activity that may or may not happen, so my comments in this memo are restricted to proposed activities relevant to the present application – in terms of stream loss, this means only 'Trib 1' / 'Mangapū tributary'). I wanted to clarify this in case the absence of discussion related to Tribs 3 and 4 here gave the impression that I did not have concerns – to be clear, I would have concerns if the quarrying of these tributaries (i.e. permanent loss) was an activity currently under consideration.

S53 comments

1. Document review

To prepare the below advice, I reviewed the following documents:

- B12.4.5(a&b) Ecological Impact Assessment (EclA) – accessed from the Fast Track website on 01.08.26
- B12.4.6a Mangapū tributary realignment – preliminary design and effects technical report – accessed from the Fast Track website on 01.08.26
- B12.8.12 – Groundwater Monitoring and Contingency Plan (updated version accessed from the Fast Track website on 02.08.26)
- B12.4.9a – Development Groundwater Effects Assessment (accessed from the Fast Track website on 02.08.26)

- Memo to DOC (attention Amber McEwan) from the Applicant's ecologist (Ian Boothroyd) dated 9 July 2026.
- B12.7 – Conditions – 14 July

2. Ecological values present

The EclA describes forested permanent and intermittent streams that include barriers to passage of non-climbing fish species, and that are vulnerable to scouring by high flows. The downstream catchment is highly modified and developed. The applicant proposes to realign 1200 m² of the Mangapū tributary (often referred to as Trib 1 in the application material) and describes the ecological value of this reach as 'Very High'.

The eDNA sampling detected longfin eel, shortfin eel, banded kōkopu, kōura, and two species of *Zephlebia* that are classified as At Risk – 'Naturally Uncommon' in Trib 1. I did not find discussion of regional threat classifications in the documents, and the report has applied a superseded⁴ national threat classification for banded kōkopu. The main consequence of this is that assessments and effects management calculations have been performed with banded kōkopu assigned a status of 'Not Threatened', whereas the current national status of this species is 'At Risk – Naturally Uncommon'. Banded kōkopu are not threatened within the Auckland region, but this is due to the region being classified as a banded kōkopu stronghold (and home to more than 20% of the national population)⁵.

I consider that the surveying carried out by the applicant in relation to the Mangapū tributary is adequate but could be improved by the addition of physical survey methods, as recommended by Melchior & Baker (2024⁶). I also agree that the Mangapū tributary should be considered of 'Very High' ecological value, but I note that the addition of a further 'At Risk' and regionally significant species should increase the ecological value (but may not be required to in this situation, which highlights a problem with classification 'ceilings'.)

⁴ The current threat classifications are available in Dunn, N.R.; Closs, G.P.; Crow, S.K.; David, B.O.; Goodman, J.M.; Griffiths, M.; Hicks, A.S.; Hickford, M.J.H.; Jack, D.C.; Kitson, J.C.; Ling, N.; Waters, J.M.; Wylie, M.J.; Hitchmough, R.A.; Maken, T. 2025: Conservation status of New Zealand freshwater fishes, 2023. New Zealand Threat Classification Series 46. Department of Conservation, Wellington. 66 p.

⁵ Regional threat classifications are available in Bloxham M, Woolly J, Dunn N, Chaffe A, Tutt C, Melzer S 2023. Conservation status of freshwater fishes in Tāmaki Makaurau/Auckland. Auckland Council Technical Report 2023/13.

⁶ Melchior, M., & Baker, C. (2023). Environmental DNA guidelines and field protocols for lotic systems (NIWA Client Report No. 2023279HN). National Institute of Water & Atmospheric Research Ltd

3. Effects assessment

3.1 Assessing effects of realigning Mangapū tributary

The EclA describes the proposal to infill 1770 m² of the Mangapū tributary and create a new 693 m² channel between the upstream and downstream reaches of Slippery Creek. The report describes the permanent loss of stream extent and value as a 'significantly adverse effect'. I agree with this but also think that it does not adequately reflect the level of effects. I would consider the total and permanent loss of 'Very High' value habitat to be – at the point of impact – as adverse as an impact could possibly be.

3.2 Assessing the cumulative effects of loss of stream extent

The Mangapū tributary reach proposed for realignment is of very high ecological value, and as such is also rare in the Slippery Creek catchment and the Manukau Ecological District. The EclA mentions the cumulative loss of high quality stream reaches, but only to briefly note that it is a reason (among others) that an ECR greater than 1 is justified for offsetting/compensation.

Given the above, I consider it important that the application include discussion regarding the cumulative impact of the loss of headwater extent and value (that are not being like-for-like replaced regarding extent) related to ongoing quarrying activities. Presumably at some point, cumulative losses will reach a level that requires avoidance, and it is appropriate that this is acknowledged and taken into account during planning and decision-making, rather than each loss being considered in an isolated context as an adverse effect for which compensation is an option.

3.3 Assessing the effects of dewatering

The EclA describes the potential reductions in flow that Symonds Hill pit dewatering could cause in multiple parts of the catchment (EclA Table 20 pasted below for reference), some of which could be severe.

Table 20: Changes in flow loss compared with existing consent at Hunua Quarry (from PDP 2026b) 10

Catchment	Predicted reduction in baseflow for existing consent (m³/d)	Predicted reduction in baseflow for proposed development (m³/d)	Change (m³/d)	Percentage increase in flow loss (%)
Taitaia Stream	311	549	238	76.5
Waipokapū Stream	2099	2290	191	9.1
Mangapū Stream	1053	946	-107	-10.2
Waihoihoi Stream	564	610	46	8.2
Hingaia Sub-Catchment	76	89	13	17.1
Papakura Sub-Catchment	23	36	13	56.5
Total	4127	4520	394	9.5

The EclA appropriately discusses the potential effects of this on habitat availability, periphyton, fish, invertebrates, and buffering capacity in relation to water quality, temperature, and turbidity. The report describes the effects of dewatering as a ‘significant adverse effect’, which I agree with, although I would add that cumulative effects of flow reduction in the catchment could also warrant consideration if quarrying activities have caused this effect previously, and may cause further similar effects in future.

4. Effects management

4.1 Managing loss of stream extent and value at the point of impact

The effects management approach outlined in the EclA characterises the constructed channel as remediation for the effect of infilling the natural channel, whereas DOC’s position regarding stream realignment is that the infilling of a stream reach represents a total loss that requires like-for-like offsetting. According to Quinn et al. (2021)⁷:

“Some ecological effects can be mitigated easily at the point of impact while others cannot. ...where a stream channel is permanently infilled, the effects of habitat loss and loss of ecological function cannot be easily mitigated as the stream will cease to exist at the point of impact.”

The application explicitly refers to the infilling as “unavoidable loss” but then proposes to remedy this loss by “moving the stream”. This view seems less suitable than viewing the infilling as a loss to

⁷ Quinn, J. Baber, M, Markham, J, Ussher G, Lowe, M and Goldwater N (2021). Defining mitigation: an ecology perspective. Resource Management Journal, Resource Management Law Association.

be offset - particularly given the uncertainties associated with habitat recreation in the constructed channel⁸ and the low suggested indicative performance targets for the new channel⁹.

To further explain the difference between these approaches:

In basic functional terms, the proposed realignment in this case involves the infilling of 1770 m² of stream and replacing it with 693 m² of stream (i.e. 1077 m² less). A mitigation-based approach to managing the effects of stream realignment would involve:

- Remedying the **temporary loss of 693 m² of stream extent and value** by 'moving the stream', and avoiding/minimising time lag associated with habitat development in the new channel. And,
- Offsetting or compensating for the **permanent loss** of the remaining 1077 m² of **stream value** with ecological rehabilitation intended to represent like-for-like replacement or appropriate compensation measures. And,
- Compensating for the **permanent loss** of 1077 m² of **stream extent** with appropriate compensation measures (or emphasising avoidance where appropriate based on cumulative effects).

Whereas an offsetting approach would involve:

- Offsetting the **permanent loss** of 693 m² of **stream extent and value** with like-for-like replacement (the constructed channel), including accounting for time lag associated with habitat development in the new channel. And,
- Offsetting or compensating for the **permanent loss** of 1077 m² of **stream value** with ecological rehabilitation intended to represent like-for-like replacement or appropriate compensation measures. And,
- Compensating for the **permanent loss** of 1077 m² of **stream extent** with appropriate compensation measures (or emphasising avoidance where appropriate based on cumulative effects).

In terms of specific measures proposed in the present application:

⁸ Section 10.4.1 of the EciA describes design principles for the constructed channel but includes many uses of phrases like 'as much as possible/practical', indicating that outcomes are uncertain.

⁹ Section 10.6.5 of the EcIA describes indicative performance standards for the constructed channel that are low compared to the 'Very High' value of the reach being lost.

The EclA proposes that the loss of 1077 m² of stream extent and value be remedied by constructing a new channel and attempting to recreate habitat values, with (it is not made clear but I assume) the remaining effect on value arising from time lag minimised by staged livening. The latter has merit as a concept provided that there is reasonable certainty that no net loss of stream value and extent would occur during the transition period. Certainty is not currently available, however, and there is risk that the new channel will not provide equivalent ecological value for quite some time – and possibly never based on the relatively low indicative performance targets suggested in Section 10.6.5. The progressive flow reduction in the impact reach may also temporarily reduce value there (as less habitat is available, and potential impacts result from reduced dilution potential and increased negative biotic interactions from overcrowding). The converging nature of these outcomes is one of the principles that supports the investigation of staged livening as a process, and comprehensive monitoring and reporting of the process could contribute to improving future management of the adverse effects of stream realignments.

I found the description of offsetting/compensation activities confusing based on the approach of *“...integrating and aggregating the mitigation and offsets/compensation to maximise environmental outcomes as much as practicable.”*

I wasn't able to systematically assess the proposed offset and compensation measures because I found it too difficult to confidently establish what actions were being proposed to manage what effects. For example, section 9.10 describes offset and compensation locations and actions in some detail but also says that these details are not relevant to the Mangapū tributary realignment, which is covered in Section 11. Section 11 relates to CFFA, but Section 10 focusses on the realignment (so I assume that is just a typo). However, this section notes the need for offsetting related to Mangapū tributary loss, but refers back to section 9.10 for details. The offsetting/compensation proposal also incorporates measures related to effects of activities that are not part of the activities currently under consideration (the quarrying of tributaries 3 and 4).

I understand that the permanent loss of 693 m² of stream extent and value is proposed to be offset and compensated for by the enhancement of 2860 m² of existing streams based on an ECR of 4.13¹⁰. The applicant describes three specific enhancement activities, and acknowledges that not all proposed activities are easily quantifiable:

- *Planting riparian vegetation along stream margins.*
- *Re-establishing connectivity and linkages to and between reaches of existing watercourses.*

¹⁰ Or 4.8 - Appendix 15 reports an ECR of 4.8 in the text, but 4.13 in the table.

• *Removal of willow, blackberry and other woody weeds from reaches of streams and rehabilitation with native riparian vegetation.*

I make the following comments in relation:

- Presumably the quantification process counts ‘woody weed removal and replacement with native vegetation’ and ‘riparian planting’ separately, so as not to risk double counting.
- Presumably the comment regarding less quantifiable enhancement activities¹¹ does not mean that ‘benefits for threatened species’ or ‘enhancements to spawning sites’ are being counted separately, because they are outcomes that will occur as a result of the more quantifiable activities (riparian and barrier rehabilitation), so counting them as providing additional benefit could risk double counting.
- Presumably all proposed barrier remediation relates to culverts that the applicant does not have an existing statutory responsibility to fix¹², or are already likely to be remediated as part of Auckland Council’s wider barrier remediation programme (crossover could risk additionality).
- Presumably barrier remediation activities will both 1) meaningfully increase the ability of more migratory native fish species (compared to the status quo) to access higher value upstream habitats, and 2) not increase the ability of introduced fishes to access more habitats. More detailed planning may be necessary to ensure that barrier remediation achieves its intended objective and does not cause secondary effects in relation to species’ distributions.

In addition, I consider it appropriate that the ECR calculations are revisited with a view to incorporating the significance of banded kōkopu, and the potential value of the impact site – with the latter based on the possibility that it may contain a higher diversity of native fishes in future as a

¹¹ Section 9.10.1 of the EclA: “We have used the area calculations within the site of biodiversity loss (i.e., stream area loss as the residual effects of the proposed pit development) to inform the proposed offset/compensation but have not relied on the quantifications alone as the method as benefits for aquatic ecosystems can be derived from the management of other attributes that are not incorporated into the ECR/SEV methodology (e.g., improvements to fish passage, benefits for threatened species, enhancements to spawning sites).”

¹² Freshwater Fisheries Regulations 1983 – Regulation 42(2): “The occupier of any land shall maintain any culvert or ford in any natural river, stream, or water (including the bed of any such natural river, stream, or water in the vicinity of the culvert or ford) in such a way as to allow the free passage of fish”

result of downstream barrier remediation (which is a specific restoration opportunity identified by Auckland Council¹³).

4.2 Managing the cumulative loss of ‘Very High’ value stream reaches

As noted above, the EclA mentions the cumulative loss of high-quality stream reaches, but only as brief note that it is one of the reasons that an ECR greater than 1 is justified. Presumably this would have happened anyway, so I am unsure if this effect (that the proposed activities are contributing to) has actually contributed to the ECR value. It would be good for the applicant to clarify whether they are proposing specific measures to manage this effect.

4.3. Managing the effects of dewatering

The applicant proposes to remedy the effects of dewatering by augmenting flows to ensure that levels do not drop below Mean Annual Low Flow (MALF), and considers that no residual effects on aquatic ecological values will remain. I disagree with this opinion, because ecological effects associated with flow reduction are not confined to flows approaching MALF and could occur at a range of flow reduction levels. For example, Richter et al. (2012)¹⁴ proposed a presumptive standard under which alteration of natural flows by 10–20% provides only a moderate level of ecological protection, and ecological risk increases further where alteration exceeds 20%. If dewatering significantly reduces base flows and adverse effects result, then these effects will presumably remain unaddressed until levels decline to MALF.

I raised this concern during discussion with the applicant’s ecologist on 9th July 2026. The applicant responded in a later memo¹⁵ with their opinion that providing augmentation to prevent stream flow dropping below MALF is the only adverse effect that needs to be managed. The applicant identifies that the relevant objective in this context is to “prevent adverse effects from dewatering” and I agree with this – but I do not agree with the following assertion that “maintaining flows at or above MALF achieves that objective”.

I consider that preventing adverse effects from dewatering will require the consideration of a range of other effects (which were identified earlier in the EclA) of dewatering in relation to the ecological

¹³ Ingle, R., Rieger, A., Magee, J., Reeves, E., Macintosh, K., Lowe, M., Young, D. (2016) Watercourse Assessment Report: Slippery Creek Catchment. Morphum Environmental for Auckland Council.

¹⁴ Richter, B.D., Davis, M.M., Apse, C. & Konrad, C. (2012). A presumptive standard for environmental flow protection. *River Research and Applications*, 28(8), 1312–1321.

¹⁵ Memo to DOC (attention Amber McEwan) from the applicant’s ecologist (Ian Boothroyd) dated 9 July 2026.

context of the zone of influence – including intermittent reaches, and in relation to other levels of flow reductions. Effects should be mitigated or otherwise managed as necessary.

5. Proposed conditions

I commented on proposed conditions relating to the Aquatic Fauna Salvage and Relocation plan, detailed design, and monitoring and reporting in my S51 memo. I have looked over the current draft and have no further comment.