

Memorandum

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Attention: FTAA-2603-1185

Date: 15 September 2026

From: Ian Boothroyd

Message Ref: Response to Minute #8, Item 3(f)

Project No: BM250767

PURPOSE

This memo provides a response to item 3(f) of FTAA Panel Minute #8 dated 4 September 2026.

ITEM 3(f)

For the Mangapū Stream diversion Auckland Council and the Department are to provide, ideally in a tabular form, their reasons why and where the proposed 'remediation' for the diversion is deficient and what they consider is required (the quantum) to deliver appropriate ecological outcomes for each matter. That is to be provided to the Panel and the Applicant by 4pm on Wednesday 9 September. The Applicant is to provide its response by 4pm Friday 11 September¹. The parties are of course encouraged to discuss these matters among themselves during this time. The Applicant will also address the legal question of whether the diversion is remediation as advanced or some form of 'mitigation', including a consideration of, and application of the evidence against, relevant case law² (and noting as relevant the terminology in the NPS-FM and NPS-IB). As discussed, all parties agree that it is the ecological outcome that is key, but the terminology here does potentially influence the scope of the ecological outcome.

RESPONSE

In our response to the Auckland Council and Department of Conservation feedback we re-emphasise our approach to effects management, before systematically working through the tabulated comments.

APPLICANT'S POSITION

We retain the view that the permanent realignment of 571 m of the Mangapū Tributary constitutes a Remedy under the Effects Management Hierarchy (EFM). The realignment is not a temporary feature, and we do not disagree that the realignment is a temporary effect or response as suggested by AC and DOC. We acknowledge that the proposed Hunua quarry expansion includes the loss of stream length (630 m) because the realigned channel is shorter than the Mangapū Tributary, and this length (630 m) is recognised as a residual loss and provided for in the offset and compensation for the project.

We were not expecting a revised SEV/ECR calculation in response to the Panel's request, and it does prompt a rather scoring-reliant response all around. However, although we respond to the assumptions

¹ Extension granted to Tuesday 15 September 2026.

² Including as the Applicant may consider relevant, *Trans-Tasman Resources Ltd v Taranaki- Whanganui Conservation Board* [2021] NZSC 127, [2021] 1 NZLR 801; *J F Investments Ltd v Queenstown Lakes District Council EnvC Christchurch C48/06*, 27 April 2006; *Alexandra Flood Action Society Inc v Otago Regional Council EnvC Christchurch C102/05*, 20 July 2005.

inherent in the AC and DOC calculations, in the interest of avoiding a repetitive and largely unhelpful 'call and response' dialogue we do not respond with alternative calculations.

APPROACH TO EFFECTS MANAGEMENT

Our approach to the effects management for adverse effects of the proposed Hunua Quarry expansion is set out in s9.10.1 of **Appendix B12.4.5a: Ecological Assessment:**

We have taken an overall integrated approach whereby several improvements to waterways at specific locations provide for the overall offset of loss and change to waterways because of the Project. These include re-connecting waterways, provision for improved fish passage and planting the riparian margins of waterways.

We have used the ECR based on SEV calculations as a means of informing the overall offset but have not relied on it as the only and total component of the proposed effects management for residual aquatic effects.

In the case of the Project, the constrained location of the aggregate means that alternative options for quarry expansion are unavailable and thus the loss of freshwater ecological values resulting from the pit development (including associated extraction, culverts, stream realignment and access roads) on the loss of freshwater ecological values are unavoidable.

Our proposed freshwater offset comprises a mix of:

- Planting riparian vegetation along stream margins.
- Re-establishing connectivity and linkages to and between reaches of existing watercourses.
- Removal of willows from reaches of streams and rehabilitation with native riparian vegetation.

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).

We have applied the Effects Management Hierarchy (EMH) to the ecological assessment as set out in the National Policy Statement for Freshwater Management (NPS-FM). Applying the EMH avoids dispute over terminology, especially what constitutes 'mitigation', a term which is purposely excluded from the EMH. In our view, the determination of the language of the hierarchy (particularly what is offset and compensation) is largely academic, and it is the recognition of adverse effects and how they are managed that is the important outcome. The legal memorandum accompanying the applicant's response to Minute#8 sets out the differences between the terms mitigation and remedy as defined by case law.

Effects Management Hierarchy (EMH)

Given our approach as set out above, the labelling of our approach as 'mitigation' by AC and DOC is misleading. We have been clear that we have followed the EMH. We recognise that the opportunity to avoid the realignment of Mangapū Tributary is not available, but some minimisation of effects is achieved through the staged livening of the realignment channel.

Realigning the Mangapū Tributary is a remedy under the EMH, and involves 'putting right', 'rectifying', or 'reforming the stream' with the goal of responding to the adverse effects of the quarrying activity. The legal memorandum accompanying the applicant's response to Minute#8 clarifies these definitions and interpretations in greater detail. Where AC and DOC refer to 'loss with replacement' in their explanation notes, we consider that this language is in fact the 'rectify' and 'making good' that is the essence of 'remedy'.

Residual Effects and Offset

As set out above, in offsetting the residual effects of the stream loss not covered by the diversion channel realignment, we have used the Ecological Compensation Ratio (ECR) based on SEV calculations as a means of informing the overall offset but we have not relied on it alone as a target or as a score. Rather we have used it as guidance towards a good outcome that meets the requirements of the FTAA.

In applying the EFM we clarify:

- Mangapū Tributary length (including its tributaries) affected by quarry expansion 1,200 m
- Length (area) of realignment as remedy 571 m (571 m²)
- Residual Length (area) to be offset 630 m (630 m²)

We confirm that the residual effects of the remaining length (630 m) of the Mangapū Tributary is included as part of the proposed offset, amounting to some 2,863 m (2,602 m²).

As the realigned channel is a permanent watercourse feature, we do not consider it a temporary effect and therefore do not consider there to be any residual effects for that portion of the Tributary (remedy being 571 m).

Staged Livening

The opportunity for a staged livening of the realigned channel is a novel approach and provides for a staged and exceptional delivery of outcomes for aquatic values. One matter unrecognised is the temporary increase in extent of watercourse as the existing Mangapū Tributary and realigned channel function concurrently as the function and biodiversity is transitioned between them. The transition allows for an anticipated 18-24 months of increased extent from 1,200 m to 1,771 m of watercourse length during this period.

This transition is less an experimental approach but a purposeful means of establishing foundational functionality and colonisation informed from knowledge and timescales of re-colonisation of streams. What is more, the staged livening provides the opportunity to test and adapt the realigned channel as the transition is progressing, providing a higher degree of certainty and adaptability compared to a conventional one-off livening event. We do not resile from the fact that the staged livening will be challenging operationally but that is a matter of planning, performance and compliance, rather than establishing the effects management response.

This approach means aquatic values are established within the realigned channel prior to their complete loss from the Mangapū Tributary, and aquatic values are elevating within the realigned channel as the values of Mangapū Tributary are diminishing over the staging of flow changes. Nevertheless, aquatic ecological values transition and accrue to the realigned channel before they are fully removed from the Mangapū Tributary.

Time Lag

We consider that the permanent realignment is permanent remedy for the loss of 571 m of Mangapū Tributary, with benefits to ecological values gained from temporary increase in extent and values of water course, and the benefits of the staged livening including gains ahead of loss, we do not consider that specific offset/compensation is required.

Any time lag would essentially relate to the maturing of the riparian planting for the provision of more complete shade for the realigned channel, noting that there is a period of transition (the period of staged livening) where adaptations for other channel factors (e.g., habitat, woody debris, organic material) that may be required can be achieved.

'Mitigation approach' by applicant	'Offsetting approach'	Clarify differences	Applicant response
1. Temporary loss of 627 m² (570 m x 1.1 m) <i>extent</i> remedied by creating new channel. 2. In the Hunua case, proposed remedy for temporary loss of 627 m² <i>current value</i>³ associated with time lag is assumed to be wholly addressed through staged livening.	1. Permanent loss of 628 m² <i>extent</i> offset by creating new channel 2. Temporary loss of 628m² <i>potential value</i>⁴ remedied (in the Hunua case) by staged livening process. Residual effect from time lag (i.e. loss of <i>value</i> persists for x amount of time) EITHER: Offset by x m² (estimated based on expected lag time/uncertainty/environmental context specific to case) multiplied by 1.5 or higher ECR of stream restoration (this requirement is less in the Hunua case) OR (in the Hunua case we suggest): 3. Permanent loss of 748.89m² of ecological <i>value</i>⁵ which is represented by the SEV-ECR derived calculation (see attached spreadsheets) of estimated differences between the old and new channels. The ECR =2.19 and indicates a shortfall in mitigation of 680 m of similar stream or 750 m² (total offset value of 1,376m² – 628 m² of the proposed diversion). We also consider that formalising the implementation and monitoring of staged livening process in conditions (and providing robust indicators/monitoring criteria outcomes that will be of ecological benefit) would be a suitable approach and fit in with an adaptive management approach. We also consider the SEV is appropriate tool for assessment as this is how the other stream offsets in this application have been assessed. Further, we see no reason the SEV would not be an appropriate monitoring tool (as evidenced in the application, table 11).	Different approach for the 'loss with replacement' portion (i.e. the realignment) The loss of potential and actual ecological value in the constructed channel is not realised in the applicant's approach.	We do not refer to any temporary loss of stream extent, and there is no temporary loss of extent or values. The Mangapū Tributary is firstly permanently remedied (570 m length) and then the residual length is permanently offset (628 m) as explained in s10.7.2 of Appendix B12.4.5a: Ecological Assessment and revised Appendix 15 in response to Panel Minute# (dated 11 September 2026). We refer to additional temporary stream extent and values (as a gain not loss) through the staged livening of the realigned channel. In this circumstance some 1,200 m plus 527 m (= 1,727 m) will exist for a period (18-24 plus months). There is no temporary loss of stream as it is either remedied or offset with a benefit of additional temporary gain. We have clarified: • 571 m of remedied stream extent through realignment of channel • 571 m of values remedied through realignment of channel and staged livening of watercourse. • 630 m of length and extent of Mangapū Tributary is permanent loss and is considered in the offset/compensation of the EMH. Remedy does not require meeting potential values although in the case of the Mangapū Tributary the intention

³ In mitigation or remedy we consider the outcome must be no net loss of potential. In this case the impact stream is considered to be close to its potential under the SEV assessment.

⁴ 'potential value'; is used here for consistency in description of approach. In this case, current value of the impact stream has been taken as equal to potential value by applicant and this is accepted by AC and DOC.

⁵ In this case, due to physical conditions, the new channel will not be able to provide equivalent value to the old one. This means that – of the 'loss with replacement' component – some of the value loss will be temporary and some will be permanent. Assuming staged livening is highly effective, then this could be considered to wholly remedy temporary loss of value (covered in this Point 2), but there is still permanent loss of value that requires offsetting (covered in Point 3 below)

			is to reflect the existing characteristics which are of high value.
Residual permanent loss of 693 m ² <u>extent</u> to be compensated for by barrier remediation (specifics?)	Permanent loss of 693 m ² <u>extent</u> (preferably offset/compensated for by daylighting or suitable compensation)	Same approach for the 'loss without replacement' portion - i.e. in situations where constructed channel is shorter than reclaimed channel	We have acknowledged loss of stream extent through the restoration of fish passage to allow migration of aquatic biota to upper reaches of catchments of Waipokapū Stream and Meremere Quarry Stream. We consider this is acceptable compensation that provides for a very good outcome, especially as it is integrated with the other offset and compensation provisions of the proposal. .
Residual permanent loss of 693 m ² <u>value</u> to be offset with 4.13 ECR therefore: 2863 m ² of stream restoration equivalent required.	Permanent loss of 693 m ² <u>value</u> offset with 4.13 ECR therefore 2,863 m ² of stream restoration equivalent required	Same approach for the 'loss without replacement' portion – i.e. in situations where constructed channel is shorter than reclaimed channel	