



5 September 2023

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**NAPIER 4110**

Dear Brandon

## **APP-128957 WAIKARE GORGE - REQUEST FOR INPUT ON APPLICATION – INITIAL REVIEW**

### **1.0 Introduction**

Hawkes Bay Regional Council (HBRC) received a consent application from Waka Kotahi (the Applicant) to realign a section of road and install new bridge infrastructure along State Highway 2 (SH2), in Putorino, at the boundary between Hastings and Wairoa. Pattle Delamore Partners (PDP) have been engaged to undertake a technical review of the freshwater ecology and wetland aspects of the Application and subsequent Section 92 (S92) information.

The Applicant proposes to undertake a suite of activities as part of the proposal, including two bridge and five culverted watercourse crossings. The applicant has acknowledged a 'moderate' level of effect associated with the permanent loss of stream habitat (before and after mitigation) and has proposed biodiversity offsets and stream restoration in a separate stream to those affected, but in the same catchment. Constructed stormwater creation has also been proposed to offset impacts to natural wetlands. A request for further information has resulted in a S92 response from the Applicant, in relation to the suitability of the selected offset location to occur, as well as further questions as to the effects management hierarchy of the NES-F relating to both wetlands and rivers.

PDP have been engaged to provide input on the appropriateness and suitability of the s92 response and to identify whether there are any outstanding questions or concerns. In the sections below, the initial S92 question is presented in *Italics*, a summary of the S92 response is presented in underlined text, and the PDP S92 response review is presented in plain text.

### **2.0 Question 4**

*The ecological assessment states the proposed offsets will result in a gain of ecological function however, it is unclear as to whether the ecological function gain would be a 'like for like'. It is understood that specific details will not be completely understood until a time that the detailed design is complete however, and to appropriately satisfy the requirements of the effects management hierarchy of the National Policy Statement for Freshwater Management (NPS-FM) 2020, please clearly outline the how the proposal addresses those matters set out in: a. s3.22(3)(a)(i)-(iii) and the principles of Appendix 6 and 7 of the NPS-FM relating to wetlands; and b. s3.24(3)(a)(i) – iii) and the principles of Appendix 6 and 7 of the NPS-FM relating to rivers.*

Summary of Applicant Response - Options to avoid or minimise impacts on sensitive wetland and stream areas were considered as part of the initial options assessment for this project. These considerations contributed to the selection of the current alignment, which minimises the potential impact of the Project on both wetlands and streams.

PDP's review of the assessment reports indicates that alignment options were assessed through multi criteria assessment (MCA), in order to develop a short-list of alignment options. It is not clear what criteria were used to select the short-listed options, or whether the Effects Management Hierarchy was considered in this MCA (i.e., avoidance). If stream/wetland avoidance was a part of the MCA, it would be beneficial if the Applicant provided evidence of the application of the Effects Management Hierarchy in alignment options selection.

The MCA on short-listed alignment options concluded that the "White" Option be put forward as the recommended option, as it best met the investment objectives and PGF Outcomes of the Project. Neither Section 6 in the RMA nor the Effects Management Hierarchy were cited as contributing factors to the selection of the White alignment option. Evidence is not available currently of the consideration of Section 6 criteria and application of the Effects Management Hierarchy in the selection of the White alignment option.

Summary of Applicant Response - Section 3.24(3) of the NPS-FM deals with impacts on rivers and streams. As with wetlands, the selection of the chosen alignment was undertaken with consideration for avoiding impacts on watercourses as much as practicable.

No evidence of the application of the Effects Management Hierarchy in alignment options selection could be found.

Summary of Applicant Response - The Ecology Report identified that 339 metres of stream length is expected to be lost due to the construction of culverts. Using the Environmental Compensation Ratio (ECR) calculations as part of the Stream Ecological Valuation (SEV) methodology, this loss of ecological function can be fully offset through the restoration of 678 metres of stream length on a tributary of the Waikari River. This will involve the fencing and planting of riparian areas extending 15 metres from both banks of the stream, and the removal of existing barriers to fish passage.

The Stream Ecological Valuation (SEV) method is considered an appropriate tool for determining 'like-for-like' compensation for the loss of freshwater values in this case. However, PDP are not confident that the values input to the ECR calculation presented in the App B Ecology Assessment Report are accurate and therefore they may require amendment. For example, it is unclear what scores are presented in Table 1. It is presumed that these scores were the current score. However, the mean current score is stated in Table 1 as 0.373, whereas in Table 2 the Current SEVi-C is 0.396. This does not match. Similarly, the current restoration score which is based on Impact site C3 is stated as 0.289, but in Table 2 the compensation reach is listed as 0.433. A further breakdown summary is requested to confirm the calculations. Also, the use of fish spawning habitat is questioned where the Applicant states only eels are present, as the SEV fish spawning habitat is based on galaxiid spawning potential.

It was stated in the App B Ecology Assessment Report that the potential restoration site could not be accessed for assessment due to the landowner refusing access (as stated in the ecology report). The suitability of this location for the proposed restoration works, including the fencing and planting of a 15 m riparian buffer on each bank for a length of 678 m, is therefore in doubt. Evidence of landowner approval for the proposed restoration works extent, or alternative options if this cannot be achieved, is considered required. If the restoration site cannot be confirmed at this stage, then the appropriateness of this offsetting cannot be assessed.

The App B Ecology Assessment Report states that due to the potential restoration site not being accessible at the time of field surveys being undertaken, SEV assessments could not be completed at this site. When calculating the ECR, the SEV score for the poorest scoring 'impact' site was instead used in place of the proposed restoration site score. This approach lacks justification, is likely inaccurate, and inappropriate for determining 'like-for-like' compensation for the loss of stream values. An updated SEV assessment is required at the proposed restoration site (suggest multiple assessments due to the extent of the proposed restoration reach to capture spatial variability) and the ECR needs to be recalculated. If this cannot be achieved, alternative restoration site or sites should be proposed for SEV assessment. If access or an alternate site cannot be achieved, efforts to understand the condition of the waterway should be undertaken. For example, drone imagery of the current condition of the waterway/banks and riparian area or eDNA samples at the closest accessible location to the restoration reach site (i.e., at the publicly accessible confluence). If neither of these options can be achieved, use of the highest scoring 'impact' site (instead of the lowest scoring site) could potentially be used as a proxy to determine the ECR and appropriate offsetting until field surveys to confirm the condition of the restoration site can be undertaken.

The stream loss is dependent on appropriate enhancement to provide no net loss and there is currently not enough evidence that this will be achieved.

### 3.0 Question 8

*No environmental DNA (eDNA) information of the stream site selected for restoration was provided and HBRC's in house ecologist expressed concern that the waterfall in plate 3-37 of the Ecological Report may be an insurmountable barrier even for climbing elvers. Please undertake and provide to Council eDNA survey information in the location of the proposed stream restoration site.*

*If from the results of the eDNA survey show there is an absence, provide an assessment to determine an alternative stream site within the activity area better suited (containing existing eel population) for restoration.*

It is understood from reviewing the maps provided in the Ecology report that the waterfall presented in plate 3-37 is located at the downstream end of the proposed restoration reach and that the Applicant views fish passage upstream of this barrier is limited to eels. Can this be confirmed by the Applicant. It is still recommended that eDNA samples are taken in the proposed restoration site, which is a larger stream compared to the impact sites, to determine what aquatic community is present in its current baseline state.

The App B Ecology Assessment Report eDNA results show both longfin and shortfin eels are present throughout the impact area, and it is likely these species are present in the proposed restoration reach. These native predatory species have an important role in stream ecological function, are taonga, and the longfin eel has been assigned the At Risk-Declining conservation status. Therefore, in order to achieve a 'like for like' restoration, it is agreed that the loss of eel habitat from the impact sites could be compensated for at the restoration site.

### 4.0 Wetlands

The proposed loss of natural inland wetlands and offsetting through creation of constructed stormwater wetlands was also reviewed for the application. Constructed wetlands cannot be considered as offsets or compensation for the loss of natural wetlands. They may have a positive sediment control function associated with the proposed infrastructure, but they do not have the biodiversity functions appropriate for compensating for natural wetlands loss, therefore this approach is considered inappropriate.

As with the comments above, areas of wetlands proposed for offsetting or sites proposed for compensation would need to be assessed with the MfE Wetland Delineation Protocols and the offset or compensation area and values would need to be assessed with Environmental Compensation Ratio (ECR) calculations to enable residual loss to be properly addressed. An updated assessment of natural wetland loss, including the methodology followed to determine the area of potential wetland area loss, as well as appropriate offsetting/compensation is required.

There is also no clear information on the proximity to the road works and whether earthworks would be within 100m of the natural inland wetlands, cause wetland drainage or other impacts to their ecological values, which is required. A more detailed wetland impact assessment is considered required at this stage.

## 5.0 Limitations

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