


Date	8 December 2025
To	Waitaha Hydro Expert Panel FTAA-2505-1069
From	James Bentley
Project advice provided for	<i>Waitaha Hydro Scheme</i>
Documents referred to	<i>Waitaha Hydro Scheme Substantive Application Appendix 27 Landscape and Natural Character</i>
Signature	

1. I have reviewed the comments and request for further information from the Expert Panel. I respond as appropriate below.

Landscape and natural character questions 5 – 9.

Question 5: Superimpose the weir location on a current photograph or photographs of the Site taken from both banks of the river (the Panel understands some photographs taken by Westpower Ltd representatives during the Site visit could be used for this purpose).

2. I attach, as Appendix A, a Graphic Supplement specifically prepared to support responses to the further information requested from the Panel. Within the Graphic Supplement provided as part of Appendix 27 of the substantive application (the “Landscape Report”¹), two visual simulations of the Intake structure were presented (IN1 and IN2). IN1 was taken from the true left bank of the Waitaha River’s immediate margins, looking towards Morgan Gorge and the Intake and Weir structures. IN2 was taken from the swingbridge above Morgan Gorge, looking down to the Intake and Weir structures. The photographs used in these visual simulations were those taken on the latest site visit (8 July 2024) and were taken using a high-resolution, full frame DSLR² camera with specific lens and tripod, from geolocated and referenced viewing points. The difference between these images and more general site-photographs are that the photographer has specific control over the camera parameters, whereas there is less control

¹ [Appendix-27-landscape-report.pdf](#)

² Digital Single Lens Reflex camera (Canon 6D2).

over more generic site photographs. Refer to the Visual Simulation methodology.

3. Whilst Boffa Miskell has numerous other photographs of the area, we do not have any taken from the true right of the Waitaha River (or where the access road to the Headworks access portal is located). This is primarily as most people would enter Kiwi Flat from the track on the true left of the river (accessed from the swing bridge). It is possible to gain access to the true right area; however, this would require some bush-bashing and rock-scrambling to occur. It may be helpful for the Panel to refer to Site Photographs 1-5 in the Graphic Supplement appended as part of the Landscape Report. These provide wider contextual panoramas of the intake area and were also taken on 8 July 2024.
4. I have worked with our visual simulation expert to label the visual simulations provided in Appendix A of this statement to assist understanding of the component parts. I trust that this goes some way to answering this question.

Question 6: Provide visual simulation of the weir structure looking back to the terrace, to show the two access tracks stemming from the access tunnel during the construction period and prior to rehabilitation.

5. As outlined in my answer to Question 5, I include labelling of specific component parts of the Intake area on IN1 and IN2 in the accompanying Appendix A to this response. I also included a new Year 1 Visual Simulation of IN1. I have worked with our visual simulation team to demonstrate the state the intake area at Year 1, or one year after operation commences. This includes the permanent access ramp leading from the headworks access portal to the river's edge. As this permanent access ramp is solely for diggers, although it is a permanent feature, it will have a river stone surface and does not need to be well graded or sealed. The longer, temporary access track extending to Construction Area 1 (also labelled) is only required during the construction phase and will be rehabilitated in accordance with the Landscape Management Plan (LMP)³. Visual Simulation IN1A (Year 1) illustrates the environment after much of the rehabilitation has occurred, which includes the careful placement of rocks

³ [Appendix-40-landscape-management-plan.pdf](#)

and subtle landform manipulation (or Type 5⁴ Option in the LMP) where the temporary access road was located close to the intake area (within the LMP). Early establishment of Type 1 rehabilitation (natural regeneration – Type 1) will be more juvenile in stature, and will mature in time, along with moss, lichen and fern growth. The second IN1B (Year 10) Visual Simulation in Appendix A illustrates the state of the Headworks environment with the project some 10 years after the start of operation.

6. As detailed within the Landscape Report, there is likely to be a significant amount of localised disturbance caused during the construction phase of the project. It is difficult to model and prepare a visual representation of this due to the specific, snapshot-in-time nature of what a simulation depicts. As outlined within the Project Description, it is estimated that construction at the intake area will take approximately 3-4 years, and a broad range of activities will occur over this time. Refer to paragraph 4.4.4 of the Landscape Report for a full assessment of the known activities likely to occur. Further, the project will be guided by the key landscape principles included in the Landscape Management Plan, including the following noted for the headworks area:
 - Avoiding significant cuts and battered slopes for access roads including avoiding their proximity to riverbank features; and keeping works in the bed of the river to the minimum required to construct and maintain the road.
 - Ensuring that the intake structures intersect with the existing topographic features and that appropriate cliff stabilisation measures are sensitively implemented.
 - Ensuring that active and passive rehabilitation measures are effective, notably for the construction sites.
7. Any vegetation clearance associated with the intake structure will result from construction of the temporary access track and Construction Staging Area 1 and will be contained to defined areas. Natural contours will be used in the alignment of the track to avoid excessive cuts and areas of fill. A buffer of vegetation will also be maintained along the edge of Construction

5 PLACEMENT OF LANDFORMS AND ROCKS

Placement of rocks, boulders and soil (which could include logs and other debris) to mimic a natural environment will assist in visually integrating constructed features/structure into the natural landscape character.

Area 1, shielding the site from the view of anyone standing on the bank of the true left of Waitaha River. Rehabilitation of vegetation of these areas will be undertaken with natural (or passive) recolonisation expected to occur relatively quickly after construction particularly following treatment such as scarification, which will assist in softening the works to some degree, notably any cut faces. As stated, rock replacement will also occur.

8. I also encourage the Panel to engage further with LMP for the Scheme which provides a guide to the construction processes and how the landscape will be managed through this phase and into the post construction rehabilitation and vegetation re-establishment phases to ensure that mitigation measures are effective. Whilst it is acknowledged that the Scheme will create adverse landscape effects, the LMP represents a catalogue of principles and approaches to avoid, remedy and mitigate potential adverse landscape (and natural character) effects to the underlying landscape (and natural character) values.

Question 7: Update/provide visual simulation(s) of the power station looking back to the access road and including the transmission line.

9. It is not entirely clear where the panel are considering this updated or new visual simulation be from, however, I trust that the labelling of component parts shown in simulations PH1, PH2, PH3 and PH4 supplied within Appendix A of this response goes some way to answering this question.
10. In terms of an explanation of the graphic model used for the Power Station component, Figure 1 below represents the extent of what was used to model the Power Station in the visualisations. This confirms that only part of the Power Station access road was modelled and transmission lines are not included.

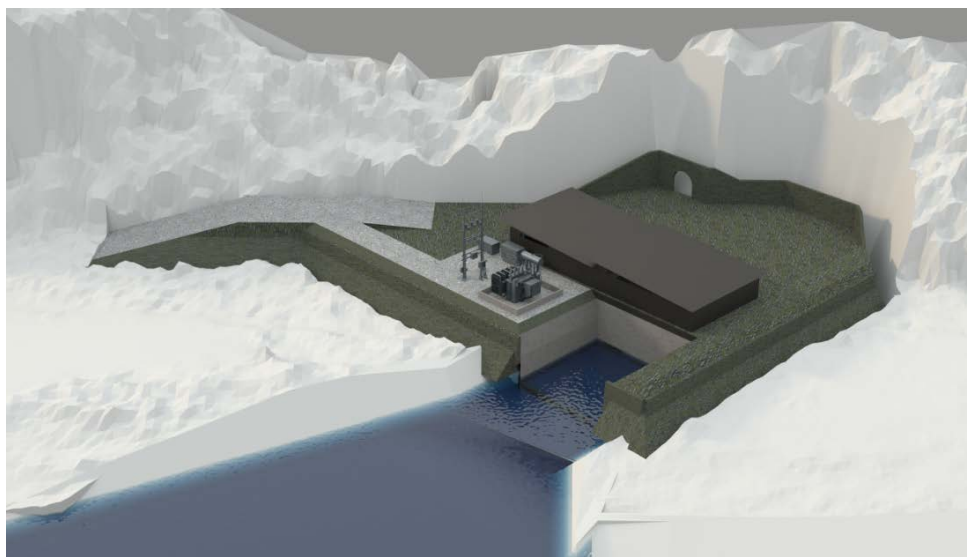


Figure 1: Snip of the graphic model used for Power Station Simulations

11. As outlined within the Vegetation Report⁵, the Power Station access track and transmission lines will extend through a range of forest types, with vegetation located nearest the Power Station being podocarps / hardwood forest or regenerating podocarps (Figure 2). Tree heights in these areas are typically 16-22 metres and 6-10 metres for regenerating podocarps. The proposed poles associated with the transmission lines would be typically 15.5m in height, extending to 21m high poles when crossing Macgregor Creek.
12. From the Power Station viewpoint locations chosen, which were based primarily on where people would be (i.e. on the walking track or on the river), this existing vegetation and type of vantage points will provide visual screening to the extent that it would not be possible to see most of the Power Station access track (other than a short section of it near the Power Station (refer to the PH1 visualisation in Appendix A labelled “Proposed View After 10 Years”)), and any views of transmission poles and lines in this area would be very limited.
13. Overall, views of the Power Station access track and transmission lines and poles in this area will be very limited, and if seen, seen in the context of established native vegetation. I trust this assists the panel.

⁵ [Appendix-20-vegetation-report.pdf](#)

Type 2/1 – Regenerating Podocarp/Hardwood Forest (Stage 1)
 Type 2/2 – Grass, Sparse Shrub and Tree Fern Combination (Early Successional)
 Type 2/3 – Mature Podocarp/Hardwood Hill Forest
 Type 2/3A – Mature Hardwood Forest, Podocarp Element Reduced/Absent
 Type 2/3B – Poorly Drained Lower Stature Hardwood Forest With Minor Presence of *Dacrycarpus daerydioides*
 Type 2/4 – Regenerating Podocarp/Hardwood Forest (Stage 2; Average Canopy Height > Stage 1)
 Type 2/4A – Regenerating Podocarp/Hardwood Forest (Stage 3; Average Canopy Height > Stage 2)
 Type 2/5 – Regenerating Podocarp/Hardwood Tree and Shrub Admixture With Occasional Emergent Trees
 Type 2/8 – Regenerating Hardwood Tree/Shrub/Tree Fern Admixture With Grassed Clearings
 Type 2/7 – Sparse Colonising Hardwood Shrub Admixture Within Grassed Alluvial Flat
 Type 2/8 – Tree Fern/Hardwood Shrub/Monocot With Low Incidence of *Dacrycarpus daerydioides*
 Type 2/9 – Mixed Ground Cover/Shrub Hardwood Riparian
 Type 2/10 – Colonising/Pioneering Shrub Hardwood

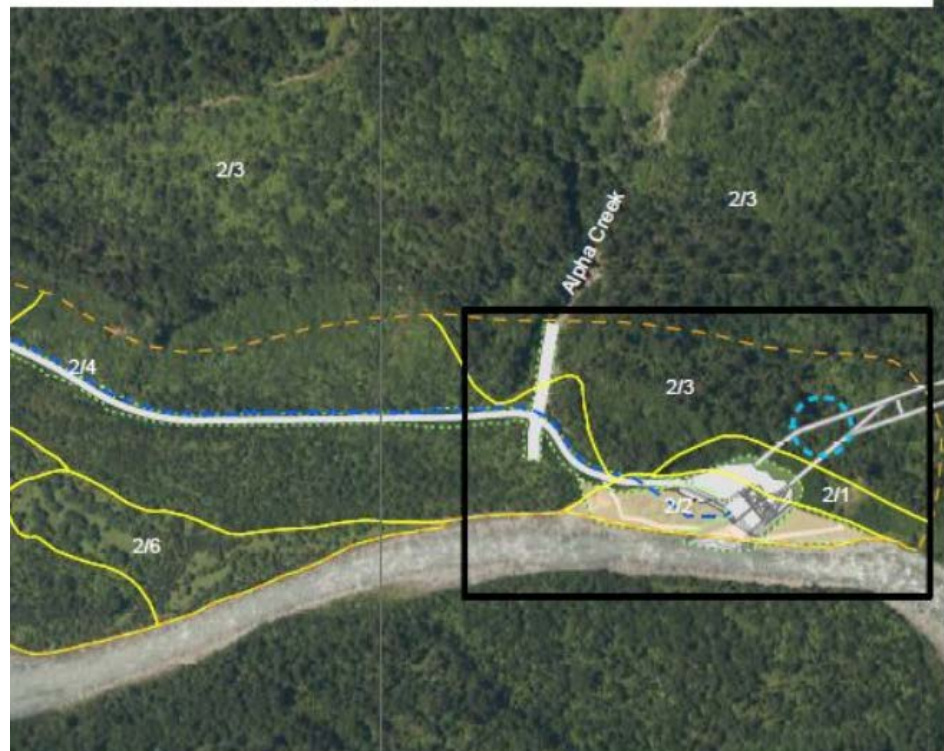


Figure 2: Snip from the Vegetation Report showing vegetation types near the Power Station

Question 8: Supply a visual simulation of a representative viewpoint of the transmission/distribution line along Waitaha Road.

14. The Panel can find a new visual simulation of the transmission/distribution line along Waitaha road provided as TL1 in the Graphic Supplement attached at Appendix A to this response.
15. Further commentary regarding levels of effect associated with this transmission line is included in my memorandum dated 17 November 2025.

Question 9: Supply a statement from its landscape expert confirming whether in light of the above information it changes any of the conclusions reached in his assessment.

16. Based on the above, I confirm there are no changes to the conclusions reached within the substantive assessment (Appendix 27) nor within my Memorandum dated 17 November 2025.

Appendices:

A: Graphic Supplement responding to RFI to FTAA letter dated 19 November 2025