

BEFORE THE HEARING PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an application by Winstone Pulp International Limited (WPI) to the Manawatū-Whanganui Regional Council **(APP-2006012018.03)** for land disturbance associated with the construction of a wetland and for the discharge of up to 750 m³/day of condensate wastewater associated with proposed wood processing operations.

REPORT TO THE PANEL

COMMISSIONERS TREVOR ROBINSON (CHAIR), GREG RYDER, MIRIA POMARE

**SECTION 42A REPORT OF MR KERRY PEARCE – EROSION AND SEDIMENT CONTROL SPECIALIST,
BRYANT ENVIRONMENTAL SOLUTIONS LTD, ON BEHALF OF THE MANAWATŪ-WHANGANUI REGIONAL
COUNCIL**

22 September 2026

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A. INTRODUCTION

Qualification and Experience

1. My name is Kerry Stewart Pearce. I am the Director of Environmental Land Management Limited, which is subcontracted to Bryant Environmental Solutions Limited. I have been in that position since May 2005.
2. My role involves providing technical advice on earthworks and erosion and sediment control components of resource consent applications for Waikato Regional Council, Auckland Council, Horizons Regional Council and Greater Wellington Regional Council, along with monitoring the erosion and sediment control components of land use resource consents for those regional councils.
3. I hold the Bachelor of Applied Science (Agriculture) degree from Massey University. I am a member of the New Zealand Association of Resource Management.
4. I have specific experience in both preparing technical assessments to support RMA processes, as well as on-site experience with a number of large projects including but not limited to:
 - (a) Waka Kotahi Upper Harbour Corridor;
 - (b) Contact Energy Limited Te Mihi Power Station;
 - (c) Waka Kotahi Atiamuri Bridge Replacement;
 - (d) Mighty River Power Ngatamariki Power Station;
 - (e) Transpower Wairakei to Whakamaru "C" Transmission Line;
 - (f) Mercury Turitea Wind Farm;
 - (g) Meridian Energy Te Rere Hau Wind Farm Repowering; and
 - (h) Waka Kotahi Te Ahu a Turanga.
5. This report provides a technical assessment of the above application, in particular the erosion and sediment control and earthworks aspects during the construction of the proposal. This assessment

identifies and assesses the character and scale of any related effects on the environment and considers whether the erosion and sediment control plan and approach are consistent with the Greater Wellington Regional Council document “Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region” dated February 2021 (**GWRC Guidelines**).

6. I have visited the site, inspected the proposed wetland and earthworks footprint and the general location where the proposal is to take place on Wednesday 9 September, so am familiar with the site of the proposed earthworks.
7. I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 as it relates to conduct of expert witnesses and I agree to comply with it and have complied with it in preparation of this evidence. Other than where I state that I am relying on the advice of another person, the matters covered in this report are within my area of expertise. I have not omitted to consider material facts known to me that might detract from the opinions I express. I have all the information necessary to assess the Application within the scope of my expertise and am not aware of any gaps in the information or my knowledge.

B. OUTLINE OF EVIDENCE

8. As part of this technical assessment, I have reviewed the following documents that I consider to represent the most up to date information relevant to the erosion and sediment control aspects of the Project:
 - a. Resource Consent Application APP-2006012018.02 Planning Report – Karioi Wood Processing for Winstone Pulp International Limited. (**Planning Report**). Prepared by Babbage Consultants Limited dated 30 April 2026, which forms part of the application package lodged for APP-2006012018.03 on 9 July 2026.
 - b. Babbage Consultants Limited 1002 State Highway 49, Tangiwai, Ohakune Wetland Construction – Erosion and Sediment Control Plan Rev 2. (**ESCP**). Prepared by Cheal Consultants Limited and dated 10 June 2026.
 - c. Section 92A Response – APP-2006012018.02. (**S92 Response**). Prepared by Babbage Consultants Limited and dated 11 June 2026, which was included within the supporting material carried forward into APP-2006012018.03 application package.
 - d. Technical Memorandum APP-2006012018.03 – Karioi Wood Processing Contaminated Land Section 92 Response Technical Review. (**Contaminated Land Technical Review**). Prepared by Mr James Blackwell, SLR Consulting Ltd and dated 1 September 2026.

- e. Technical Memorandum APP-2006012018.03 – Winstone Pulp CLM Submission Review. **(CLM Submission Review)**. Prepared by Mr James Blackwell, SLR Consulting Ltd and dated 1 September 2026.
9. In this report I have provided the following:
- a. A description of the activity; and
 - b. An assessment of the erosion and sediment control measures proposed, including the interaction between those measures and the contaminated land management requirements.
10. In accordance with section 42A (1A) and (1B) of the RMA, I have minimised the repetition of information included in the application and where I have considered it appropriate, adopted that information.

C. LOCATION

11. The site location and description are included in Section 1.1 and 1.2 of the ESCP, with the proposed works located at 1002 State Highway 49, Tangiwai. The proposed wetland overlays the existing pond area in the south-eastern part of the Site. The earthworks area is generally flat to gently undulating and the ESCP identifies no defined overland flow path through the works area nor was any overland flow path observed during the site visit.

D. APPLICATION AND PROPOSAL

12. The proposed earthworks are associated with the construction of a wetland treatment system through which the condensate wastewater will pass prior to discharge to the Whangaehu River. These are further described in Section 1.3 of the ESCP:

The proposed earthworks will affect an area of approximately 17,146m², with a total cut volume of approximately 10,447m³ and a total fill volume of approximately 9,994m³, resulting in an excess of approximately 453m³ of material, which will be reused on site for the construction of a protection bund around the earthworks extent.

13. This equates to approximately 20,441 m³ of cut and fill in total.

E. ASSESSMENT

14. The proposal includes earthworks over approximately 17,146m². Cut to fill earthworks are required to create a series of treatment wetlands for the site. An existing pond is located within the proposed earthworks footprint and will be progressively incorporated into the earthworks and erosion and sediment control methodology. There are currently no inflows or outflows from the existing pond.
15. The environmental effects associated with the discharge of sediment into watercourses are well documented and accepted and can include adverse effects on the aquatic flora and fauna of an area. These effects can extend substantial distances downstream from the works area and range from the smothering of aquatic life, the injury to the mouths and gills of aquatic animals, and the destruction of spawning grounds. An increase in turbidity within a stream can also stop animals feeding due to poor visibility, can increase heat absorption and stop light penetrating the water reducing photosynthetic activity. The deposition of sediment from works can also result in a disruption to stream hydraulics, which may result in an increase in extent and/or frequency of flooding and changes to in-stream habitat. Significant quantities of sediment may be discharged from bare/disturbed earth surfaces where appropriate erosion and sediment control measures are not implemented.
16. In my opinion, the GWRC Guidelines are currently regarded as industry best practice when undertaking earthworks activities. The GWRC Guidelines are well recognised within the Horizons Region with a proven track record in ensuring successful erosion and sediment control management for a range of projects with which I have been involved. The GWRC Guidelines are highly regarded and well understood by industry and contain a 'toolbox' of measures that can be employed to minimise erosion and control sediment within the earthworks site. The use of the GWRC Guidelines is also consistent with the One Plan. While the One Plan references the 2002 version of the GWRC Guidelines, the current 2021 version reflects current best practice and is referenced here.
17. The GWRC Guidelines promote the following fundamental principles of erosion and sediment control:
 - a. Minimise disturbance;

- b. Stage construction;
- c. Protect slopes;
- d. Protect receiving environments;
- e. Rapidly stabilise exposed areas;
- f. Install perimeter controls and diversions;
- g. Employ sediment retention devices;
- h. Get trained and develop experience;
- i. Adjust the ESC Plan as needed; and
- j. Assess and adjust your ESC measures.

18. With reference to GWRC Guidelines, Section 1.1 of the ESCP states:

This ESC report has been prepared in accordance with the Greater Wellington Erosion and Sediment Control Guide for Land Disturbing Activities, Feb 2021 (Guidelines). The controls proposed and nature of the earthworks ensures that the proposal exceeds the objectives of the Guidelines by capturing and containing all sediment and runoff from the site.

19. Section 1.4 of the ESCP proposes the following works methodology:

- *Earthworks will be undertaken during a favourable weather window in the summer months, where practicable, to minimise erosion, sediment generation, and the potential for runoff during rainfall events.*
- *Existing topsoil within the works area will be stripped and subsequently reused to form a temporary perimeter bund around the earthworks area as shown 260156-201. This bund will provide containment of disturbed areas and assist in preventing sediment-laden water from leaving the site.*

- *Excavate and dispose of appropriately material (if any) from the base of the existing pond (refer separate Contamination Survey Report by Babbage Consultants Ltd).*
- *The wetland basins will be excavated within the perimeter bund, with excavated material placed into the footprint of the existing pond. Placement and compaction of this material will be undertaken in layers not exceeding 150mm to ensure stability.*
- *The formation of the wetland in the northwest corner of the site shall be completed first as this wetland requires the least amount of earthworks resulting in cut. This pond can then be used for storing and soaking runoff from other earthworked areas during construction. This runoff can be pumped to the storage wetland/pond so that earthwork operations can continue for the remainder of the site. As each additional wetland is constructed, there will be even more capacity for storing runoff.*
- *At the start of earthworks, the existing pond has a capacity of approximately 6,300m³. A 100-year event will produce approximately 900m³ of runoff for the entire site. Consequently, there is more than sufficient capacity to capture all runoff from large rainfall events.*
- *Upon completion of the first wetland pond (Pond 4), this newly formed pond will provide 900m³ of storage capacity, which is sufficient for the full 100-year rain event.*
- *Should dewatering be necessary, provisions of Section G1.0 of the Guidelines shall be followed, subject to requirements for contaminated soils.*
- *The temporary perimeter bund may be progressively removed in stages as the pond excavation and infilling works are completed and stabilised, and once there is no longer a risk of sediment-laden (dirty) water discharging beyond the works area.*

20. Initial works proposed to be undertaken on site will be the creation of a perimeter bund with topsoil stripped from the works area. This will ensure no clean water can enter the works area, while containing any runoff from the exposed area on site. The works methodology proposed in the ESCP relies on containment of runoff within the site, with any dewatering to be separately managed in accordance with paragraph 25 below. The existing pond provides containment during

the initial stage of earthworks whilst the first wetland is constructed, then when excavated the first wetland provides a containment area while the balance of the wetlands is constructed.

21. While it is noted that the proposed ESC approach for this site does not contain typical sediment retention devices such as sediment retention ponds, the proposed containment of runoff within the earthworks footprint is consistent with the principles of the GWRC Guidelines. From an erosion and sediment control perspective, I consider full containment would be expected to provide a high level of sediment retention given that runoff is proposed to be contained within the site, with any necessary dewatering to be managed in accordance with paragraph 25 below, provided that sufficient storage is maintained throughout each stage of the works and that the management of retained water is compatible with the contaminated land requirements applying to the Site.
22. However, there are a few items that would need to be clarified prior to implementation of this methodology on site. These would need to be subject to a Finalised ESCP and are detailed in paragraphs 23 to 26 below.
23. Stabilisation of completed earthworks areas is proposed through either traditional topsoiling and grassing with the application of straw mulch (where necessary) with control measures remaining in place until stabilisation is achieved. Section 4.1 of the Contaminated Land Technical Review indicates that all soils will be encapsulated beneath a high-density polyethylene (HDPE) liner on completion of wetland construction. The Final ESCP should therefore clearly distinguish between areas that will be permanently covered by the HDPE liner and those external batters, bunds and other disturbed areas that require vegetative or other surface stabilisation.
24. Section 4.3 of the Contaminated Land Technical Review states:

The proposed design and quality assurance at construction indicate that soils beneath the wetland are unlikely to be saturated or subject to leakages, percolation or infiltration of water from surface such that residual contaminants in soils could become remobilised to groundwater.

The ESCP proposes containment and infiltration of runoff from within the works area, including the temporary storage and potential infiltration or soaking of retained water during construction.

I have considered this approach alongside the Contaminated Land Technical Review. Mr Blackwell

has advised that he has not identified an additional contaminant discharge pathway arising from the proposed works that would alter the Applicant's assessment, provided the works are undertaken in accordance with the RAP and the proposed containment measures. I rely on that advice in relation to contaminated land effects and any resultant discharges. From an erosion and sediment control perspective, I consider that the containment-based approach is appropriate, subject to those requirements being incorporated into the Final ESCP and conditions of consent and being consistent with the Contaminated Land Technical Review.

25. The ESCP does provide for dewatering in accordance with Section G1.0 of the GWRC Guidelines, subject to contaminated land requirements. On the information now available, groundwater is understood to be deeper than the proposed excavation and groundwater dewatering is therefore not expected to be routinely required. Dewatering may nevertheless be required to manage rainfall or runoff retained within the earthworks area. The Final ESCP should identify the circumstances in which dewatering may occur, the proposed treatment and discharge or reuse methodology, the applicable water quality criteria, and how the contaminated land requirements will be met. This will need to be consistent with the practices outlined in Section G1.0 of the GWRC Guidelines.
26. Section 3 of the ESCP contains information on review and monitoring of the ESC controls. However, it does not specify in sufficient detail the matters to be inspected, inspection frequency, performance standards, and trigger levels for maintenance or corrective action. The Final ESCP should include these matters and should separately address any dewatering or pumping of retained water as outlined in paragraph 25 of this Report.

F. SUBMISSIONS

27. I confirm I have read the submission summary provided on the application. There have been 20 submissions received on the application. While several submissions referred to the soils on site, there were no direct references to erosion and sediment control or sediment related effects of the proposal.
28. Any issues raised in the submissions related to erosion and sediment control and water quality impacts as a result of sediment from the activities are all adequately addressed within my assessment above.

G. RECOMMENDATIONS

29. The above assessment is based on the information submitted as part of the application and through the provision of further information. I consider that all aspects specific to erosion and sediment control and associated water quality can be addressed through appropriate conditions of consent. Subject to adherence to these, the effects on the environment in relation to these matters are considered to be less than minor.
30. I have collaborated with and reviewed the conditions proposed by Ms Morton. I am satisfied that those conditions appropriately address the matters identified in my report.