

Appendix 8: s53(2)(a) Fast Track Approvals Act 2024, Technical Advice – Surface Water Resources

Date	22/4/26
To	Joanne Mitten, Principal Consents Planner, Environment Canterbury
From	Jen Dodson, Senior Scientist – Surface Water Resources Science, Water and Land Science, Environment Canterbury
Project advice provided for	NZTA – Woodend Bypass Project
Documents referred to	State Highway 1 North Canterbury - Woodend Bypass Project (Belfast to Pegasus) Substantive Application – Hydrogeology Assessment Tonkin & Taylor Ltd December 2025 Hydrogeology Assessment Appendices Technical advice of Environment Canterbury Senior Groundwater Scientist, Mark Trewartha.
Qualifications	I hold the qualifications of BSc (Hons) in Environmental Science from the University of East Anglia (United Kingdom) and a Master of Science in Hydrology for Environmental Management from Imperial College, University of London. I have 21 years' experience as a hydrologist and have been employed by CRC since November 2007. I am a member of the New Zealand Hydrological Society. In the course of my work for CRC, I have worked on catchment flow and allocation plans, notably for the Orari and Hinds/Hekeao catchments. I have assessed correlations of flows and modelled the effects of different allocation regimes on flows. I have also planned and analysed gauging investigations into surface water – groundwater interactions.
Code of Conduct	I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. This technical report has been prepared in accordance with that Code. In particular, unless I state otherwise, the opinions I express are within my area of expertise, and I have not omitted to consider material facts that might alter or detract from the opinions that I express.

Executive summary/overview

1. The Hydrogeology Assessment report presents a summary of proposed site activities and evaluates the potential temporary and permanent groundwater and surface water related effects associated with the construction and future operation of the State Highway 1 North Canterbury – Woodend Bypass.
2. The report sets out the hydrogeological assessment used to provide technical support to the Substantive Application Report (SAR) for the applications made by NZTA under the Fast-track Approvals Act2024 (FTAA).
3. The assessment identifies and assesses potential changes in groundwater levels, flow and quality and associated potential effects on groundwater receptors.
4. The following addresses the sections of the Hydrogeology Assessment report that pertain to surface water flow.

Agreement with the Applicant

5. I agree with the Applicant on identified surface waterways that may potentially be affected (temporarily or permanently) by the proposed project.
6. I agree with the Applicant that under proposed good management and environmental practices, potential effects from groundwater drawdown to surface waterways during dewatering activities will be temporary and negligible to low.
7. I agree with the Applicant that any discharge of water from dewatering activities is upstream of the affected reach in order to reduce the impact on the affected reach.
8. I agree with the Applicant that under proposed good management practices and environmental management controls, risks to existing waterways from potential temporary and/or permanent effects because of this project will be negligible to low.
9. I agree with the Applicant that discharge of water will require onsite management at the point of discharge. Discharges will require both good management practices and environmental management controls to mitigate effects to surface water flows.
10. I agree with the Applicant that the effect of the surface water take on the quarry lake water body is minor and does not impact surface water flows.
11. I agree with the Applicant that permanent effects are assessed to be in localised areas (i.e. pilings, rigid intrusions) are mostly negligible on surface water receptors.

Benefits of the project

12. The only direct benefits to surface waterways noted are part of the Ecological Offset Plan which affects McIntosh Drain.

Outstanding areas of contention and significance of these

Discussions with Applicant

13. I have not had any direct discussions with the applicant.

Outstanding areas of contention

14. I would like to know that if treatment of dewatering water is required prior to discharge, if there will be a time lag and how long that could be. If there is a time lag then is an

alternative water source proposed to negate the impacts of dewatering during the lag period?

Significance of these matters

15. Dewatering of stream flows can have ecological effects if the stream flows are lowered significantly.