Surf break management aspects of proposed footprint amendments for restoration works at Mangamaunu

TECHNICAL MEMORANDUM

Prepared by: Shane Orchard

For: Surfbreak Protection Society Inc.

Date: 18 March 2018

BACKGROUND AND SCOPE

This memo provides a preliminary review of surf break management aspects in relation to proposed consent footprint amendments for restoration works at Mangamaunu, Kaikōura, that are the subject of a current resource consent application. The information has been prepared at the request of the Surfbreak Protection Society (Inc.). The information provided is specific to the Mangamaunu components of the relevant consent application.

This assessment is based on a preliminary review of the consent documentation with the objective of identifying matters for consideration in relation to surf break protection and related issues for coastal management.

ASSESSMENT

- The way in which the Order in Council (OIC) ^[1] process is used is fundamentally important for management of the surf break and wider coastal environment. Arguably, this has been inappropriately used to advance the proposed works at Mangamaunu. In relation to the current consent ^[2] there is also a previous consent ^[3] already authorised under the OIC that poses related issues for coastal management, and additionally, some opportunities.
- The question of whether the proposed works are within the scope of matters to be considered under the OIC is highly relevant. The consents sought are for 'restoration work' of various kinds, as defined in the OIC. The OIC definition of 'restoration work' is therefore a key matter. This is defined as:

restoration work-

(a) means any activity that, because of or in connection with the Hurunui/ Kaikōura earthquakes, it is necessary or desirable to undertake to, without undue delay, restore the coastal route and enable it to be used fully, effectively, and safely; and

- (b) includes any activity necessary or desirable to-
- (i) repair and rebuild the coastal route; and
- (ii) enhance the safety and improve the resilience of the coastal route
- Decisions on applicability of the OIC have a major bearing on the timelines and process for decision making, and opportunities for public consultation. In combination this is likely to affect environmental outcomes. Important aspects of the OIC provisions include:
 - In considering an application for resource consent for restoration work, a consent authority is not required to have regard to some of the matters to which it would normally have regard when considering an application.
 - The consent authority is not required to have regard to any relevant provision of a national environmental standard, regulations, a national policy statement, a New Zealand coastal policy statement, a regional policy statement or proposed regional policy statement, or a plan or proposed plan.

ATERLINK

- One of the most important aspects of the OIC is that the consent authority must grant a resource consent for activities that are within its scope (although it does have the power to impose conditions). Although the consent authority must determine an application for resource consent under the OIC in accordance with Part 6 of the RMA (with some exceptions), the above provisions create considerable doubt as to what this would actually mean. In practice, this places a considerable burden on the consent authority. For these reasons, scrutiny of whether proposed works actually meet the OIC definition of 'restoration work' is extremely important.
- The operative words in the OIC definition of 'restoration work' are 'necessary or desirable'. The responsibility to determine this lies with the consent authority rather than the applicant. The rationale for the proposed works at Mangamaunu^[2] relates to safety and resilience improvements rather than significant damage to the road and rail infrastructure. Therefore it is important to consider if those proposals are actually 'necessary' or 'desirable'.
- The rationale provided in support of the proposed works includes improving the resilience of the coastal route to coastal processes and sea level rise. However the earthquake has raised the foreshore in this location thereby offering an improved situation versus pre-quake conditions. In general, resilience aspects of the current application do not relate to recovery from earthquake effects and instead relate to engineering works designed to protect new infrastructure proposed under another (recently approved) consent ^[3]. It is therefore important to consider the relationship between the two consents.
- This is needed to avoid the practice of staged consenting for same development proposal, which undermines impact assessment procedures and may result in increased (and unaccounted for) adverse effects. In relation to coastal processes this is important since the AEE for the earlier consent found that "the long term effects on coastal processes are considered to be less than minor" ^[3]. In addition, feedback from the Restoration Liaison Group (RLG) includes the desire to minimise the overall footprint of proposed works particularly below MHWS ^[2]. Importantly, the new information presented in current consent application suggests that aspects of the previous proposal may be unworkable within the footprint originally defined.
- There is a peculiarity in AEE for the current consent application which includes consideration of a 0.5 m sea level rise. Determining the application in accordance with Part 6 the RMA requires attention to longer time frames than this scenario provides for, when considering the potential impacts of sea level rise. For comparison, NZCPS policy 24 requires the assessment of hazard risks over at least 100 years ^[4] and following current NZ guidance the sea level rise increment to be considered for a 100 year planning horizon is far greater than 0.5 m. This also differs from the approach used in the coastal assessment ^[5] supporting the previous consent which included consideration of a 1.03 m sea level rise.
- The reason for this omission is unclear. However, it would dramatically alter the findings of the AEE and has a major bearing on evaluation of the proposal against relevant considerations. Implications include that adverse impacts will be greater than those reported. These are likely to affect such matters as; impacts on the beach environment, surf break values, ecological values, overtopping hazards, resilience of the proposed structure itself, and safety of recreational users on the beach including those entering and exiting the surf. In these respects, the proposal appears to be inconsistent with commonly sought environmental objectives including matters of national importance identified in the RMA. For example, the proposal would contribute to *increased* risk of social, environmental and economic harm from coastal hazards because it concerns the introduction of new infrastructure into an area that could potentially be affected. It is noted that under NZCPS policy 25(a) this is to be *avoided*. Similarly, policy 25(b) requires *avoiding* "redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards". Although these details relate to provisions of the NZCPS they are also directly relevant to Part 6 of the RMA, particularly sections 6(a), (c), and (h).
- Turning to the question of safety enhancements as a focus for 'restoration work', these are the subject of the earlier consent application ^[3]. Some aspects of that proposal, particularly the introduction of a right-turning lane and extra car parking at Kiwa Road will certainly result in safety improvements in the area. However the proposed Mangamaunu car park and its access road cannot

be regarded as components that will enhance safety. There are also other options to improve safety with regards to traffic and pedestrian movements that do not appear to have been explored (or at least mentioned in the consent documentation). They might include introducing signage warning motorists of the upcoming recreation area. Returning to the specific details of the current consent application ^[2] it is clear that it the proposed works at Mangamaunu do not relate to safety enhancements. Instead, the proposed expansion of shoreline armouring works are likely to reduce safety in this area. This is a highly relevant consideration due to the popularity of the surf break. Particular concerns relate to increased risk of injury for people entering and exiting the surf zone when a swell is running.

- It is also arguable whether paving and/or armouring of the coastal environment should be interpreted as an amenity improvement. There are currently restoration plantings made by the local community in the footprint of the proposed works and the local coastal lifestyle often includes activities such as walking, picnicking and lighting fires for warmth on the upper beach. Destruction of the high tide beach will arguably result in a loss of amenity as defined by the Resource Management Act. Nearby New Zealand examples of similar situations include Scarborough beach in Sumner, Christchurch, and St Clair beach in Dunedin, both associated with poor land use development decisions. This situation is problematic worldwide and in many instances results in significant socio-economic losses over the longer term.
- In addition to the above impacts on the beach and coastal amenity, there are likely to be other adverse effects on surf break values at Mangamaunu. The potential for unmitigated adverse impacts arises because the proposed structure would be situated on, or close to, the current high tide line. Comparable case studies worldwide ^[6,7] have shown that such impacts could include backwash effects on wave quality in addition to access issues and aesthetic impacts. As a surf break of national significance the adverse effects of other activities on access to, and use and enjoyment of the surf break must be avoided ^[8,9]. It is also important to emphasise that these effects will result from the proposed works with sea level in its current position. Many of them will be exacerbated by sea level rise.
- Overall the proposed works at Mangamaunu appear to relate to a pre-existing situation (providing safe access to the coast) and a new proposal unrelated to earthquake effects in this location (construction of a car park, access road, and shared pathway in an marginal position). Removal of the Mangamaunu component from the bundle of consents being sought under the OIC is considered to be beneficial in this case. The proposal could be then processed via the normal RMA route which would ensure much wider community consultation which is appropriate (e.g. to look at the wider topic of improving safe access to the coast). The best way for this to be achieved would be for the applicant to voluntarily withdraw the Mangamaunu component from the current consent application, and this review is specific to only that component. Technically, it could also be achieved by the consent authority by imposing severe restrictions on authorised activities in the form of consent conditions (e.g. in consideration of coastal processes).
- It may also be appropriate to encourage further work on the details of the existing approved consent in light of the new information presented in the recent application and findings of this review, for example, in relation to the potential for adverse impacts and the need to address resilience to sea level rise. This is best done with wide community consultation. The form of that consent can clearly accommodate this (i.e. it provides for a consented footprint for potential restoration works with the actual details to be established via a future process). This would allow a range of options to be reconsidered, and these might include revisiting the desirability of an extra car park at Mangamaunu and the access road to it within the narrow coastal strip between existing fixed infrastructure and the MHWS line.

REFERENCES

- NZ Government (2016). Hurunui/Kaikōura Earthquakes Recovery (Coastal Route and Other Matters) Order 2016. Issued under the authority of the Legislation Act 2012. 22 December 2016.
- [2] NZ Transport Agency and KiwiRail (2018). Application for Resource Consents under the Resource Management Act 1991 as modified by the Hurunui/Kaikōura Earthquakes Recovery (Coastal Route and Other Matters) Order 2016 Consent Footprint Amendments - Mangamaunu, Half Moon Bay, Okiwi Bay South. March 2018.
- [3] North Canterbury Transport Infrastructure Recovery (NCTIR) (2017). Application for Resource Consents: Safety and Resilience Restoration Work: Mangamaunu (Coastal Route). August 2017.
- [4] Orchard, S. (2011). Implications of the New Zealand Coastal Policy Statement for New Zealand communities. Report prepared for Environment and Conservation Organisations of New Zealand, Wellington, August 2011.
- [5] Reinen-Hamill, R. (2017). Coastal Assessment. Report prepared for North Canterbury Transport Infrastructure Recovery (NCTIR). August 2017.
- [6] Scarfe, B. E., Healy, T. R., Rennie, H. G., & Mead, S. T. (2009). Sustainable Management of Surfing Breaks: Case Studies and Recommendations. *Journal of Coastal Research*, 25(3), 684-703. doi:10.2112/08-0999.1
- [7] Nelsen, C., Cummins, A., & Tagholm, H. (2013). Paradise lost: threatened waves and the need for global surf protection. *Journal of Coastal Research*, 65(1), 904-908.
- [8] Skellern, M., Peryman, B., Orchard, S., & Rennie, H. (2013). Planning approaches for the management of surf breaks in New Zealand. Report prepared for Auckland Council, Bay of Plenty Regional Council and Surfbreak Protection Society, December 2013. 98pp.
- [9] Orchard, S. (2017). Lessons for the design of surf resource protection The Australasian experience. Ocean & Coastal Management, 148, 104-112. doi:10.1016/j.ocecoaman.2017.07.019

Waterlink Ltd

CONSERVATION PLANNING • RESOURCE MANAGEMENT 439 Marine Parade, Christchurch 8062 Aotearoa / New Zealand T: +64-3-388 8281 | M: +64-21-318548 | E: enquiries@waterlink.nz

© Copyright Waterlink Ltd 2018

Disclaimer

This document has been prepared for the benefit of the client and is subject to with the provisions of the agreement between Waterlink Ltd and the client. Findings, recommendations, and professional opinions expressed within this document relate only to the requirements communicated to Waterlink Ltd by the client and may not be applicable to other contexts. Assumptions relied upon in preparing this report includes information provided by the client and other third parties, some of which may not have been verified. Waterlink Ltd undertakes no duty, nor accepts any responsibility, to any party who may rely upon or use this document other than the client. This disclaimer shall apply notwithstanding that this report may be made available to other legal entities.

Copyright

Copyright in the form of this report remains with Waterlink Ltd. This report is entitled to full protection given by the Copyright Act 1994 to the holders of the copyright, and reproduction of any substantial passage from the report except for the educational purposes therein specified is a breach of the copyright of the author and/or publisher. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety. This copyright extends to all forms of photocopying and any storing of material in any form of information retrieval system.