## Submission on RC-2022-0039 / 220053 - Hokitika Seawall Extension

From Inger Perkins	эдегр С маганевин <u>г</u> ) - 00 - 100 - 0000
--------------------	--

Submitting as an individual.

I oppose the application.

I wish to speak to my submission and I may consider presenting a joint case with those making similar submissions.

I support the submission from Hokitika Coastal Protection Alliance Incorporated

- 1. As a resident on the sea side of Revell Street, Hokitika, I am privileged to enjoy access onto the beach from the end of my garden. I have lived here for over 15 years and in that time, I have seen erosion of the dunes that has been rapid at times, but I have also seen erosion cliffs disappear as sand is deposited, often as a bulge of sand moves along the beach in a northerly direction.
- 2. That was the case when the unconsented rock protection was installed in September 2021. It was clear that another bulge of sand was present near the CBD at the time and, sure enough, it moved along, quickly covering most of the rocks. The sand and slope of the beach has been relatively stable since.
- 3. I understand that the 'temporary rock protection' installed between the CBD and Richards Drive varies along its length with gaps in the Hampden Street section of beach. Before major investment in a short term rock protection structure is considered, it would seem wise to consider more economical and less destructive solutions. The first step would be to consent the previous rock protection and ensure the standard of rock protection is consistent from the CBD to Richards Drive. A second step could be to consider a sacrificial bund or bunds, similar to that used at Granity.
- 4. It is clear that erosion and aggradation has occurred around an average line of vegetation extent ever since a town was established here. It is also clear that climate change will bring storms of increasing frequency and intensity as well as sea level rise and therefore the erosion and/or risk of inundation is increasing.
- 5. The most important piece of work that is needed by and for the community from its councils right now is the **development of a plan to address coastal hazards and climate adaptation**.
- 6. My discussions with the consultants during community drop in sessions have centred around the timing for any new rock protection and my view that dunes and vegetation must not be removed unnecessarily. Putting a time limit on the installation of rock protection within five years of consent could mean installation when it was not needed with consequent devastation of the foreshore and healthy beach and dune system; vegetation and dunes would be destroyed through excavation, stockpiling and vehicle activity. However, the consultants have been open to proposals that a trigger point should be agreed before any installation. At present, there is no need for any work to install rock protection, there is no active erosion along the town beach.

- 7. **Consolidated dunes and established vegetation currently provide protection and shelter**, for humans and wildlife, the latter including little penguins / kororā, and weka, both of which breed in these areas. The remaining dunes and dune vegetation must not be removed through excavation to install rock protection.
- 8. It makes sense to have a consented plan ready to install rock protection, only when it is needed when and where there is a significant threat from active erosion.
- 9. The timing of intervention must be agreed and that can be achieved through a trigger point or trigger line. When erosion reaches that point, when there is a significant risk to property and the town, the work would commence, at least in that area where an erosion scarp means minimal excavation of any consolidated ground or destruction of vegetation.

## 10. A trigger line should be as far back as possible to:

- a. prevent any unnecessary loss of consolidated dune and established vegetation.
- b. defer investment and cost to the rating district until absolutely necessary.
- c. ensure the rock protection would be at a height/depth to afford maximum protection. Further towards the sea would risk loss of beach as well as risk of under cutting or overtopping and washing supporting material away.
- 11. Should rock protection be installed when the beach is not eroding, extensive excavation will be required to reach the required depth of the rock protection some 6-7 metres, resulting in an unnecessarily wide excavation into loose sandy material. Such an excavation will destroy consolidated dunes and established vegetation that is of great value for shelter and protection on the landward side and for amenity on both sides. Vast piles of material would need to be stockpiled on one side or the other, potentially damaging remaining vegetation.
- 12. If or when a rock wall is installed, disturbance to vegetation must be avoided first and minimsed second. Stockpiles of material must not be piled on vegetated areas. Penguin habitat and access must be protected/provided for. Safe/comfortable human access over the completed structure to be ensured and maintained as much as possible, ideally across its length. Public access points need to be prioritised, maintained and clearly marked to be visible from the beach.
- 13. The scale of proposed investment against the supposed life of the structure 10 to 15 years is nonsensical. Do it once and do it right. It can only be done properly if a plan is in place for climate adaptation and, if rock protection is still the preferred approach, action to be taken only when an agreed trigger line is reached. That trigger line could be some 10-15m from the boundaries of private property, though that line is likely to be variable along the beach according to different circumstances such as length of section and location of house on the section. The works could then occur at the erosion face rather than destroying dunes.
- 14. If consented and if installed, the rock protection would need to be undertaken with minimal loss of vegetation and with retention of public access within the legal road parcel, providing safe access when the beach is not available.
- 15. In order to protect against inundation, a combination of bund and hollow could be created with far less investment, the hollow creating a backstop for waves that overtop the remaining dune and / or bund. The hollow could also provide for public access if required during high seas, while contributing to the privacy of adjacent home owners.

- 16. Seabirds foraging in New Zealand waters are increasingly at risk from plastic waste. Whether lost to erosion or excavation, the disturbance of consolidated dunes could release rubbish dumped within the legal road area over past decades. In either scenario, it will be **essential to remove any such rubbish to landfill** before it can be washed or blown out to sea.
- 17. End effects or flanking erosion is a well-known phenomenon at the end of hard coastal protection structures or seawalls. Increased erosion at the end of the seawall needs to be understood and addressed.
- 18. Have other coastal processes been considered that could help mitigate erosion? Perhaps the morphology of the mouth of the Hokitika river needs consideration as some alteration could conceivably reduce erosion along the section of coast between the river and Houhou Creek some 4-5km north, including the sewage treatment ponds.
- 19. There seems to be some selective application of the NZ Coastal Policy Statement. The reason given for the short term nature of the proposed rock protection is to fit with the NZCPS. However, it appears to be inconsistent with the NZCPS in terms of preventing the natural functioning of the beach and dune system as a buffer against coastal hazards.
- 20. Rock suitable for the rock protection could be stock piled at the quarry.
- 21. Should any construction activity cause damage to property, repairs to be paid for.

## I therefore oppose the consent application unless:

- a) coastal process experts are involved and all options and issues considered before the proposed wall is installed, including the morphology of the Hokitika River mouth and transport of sediment north, alternative more economical short term solutions and longer term solutions.
- b) the proposed requirement to install the rock protection within five years of consent is replaced with a requirement to install only when a trigger line has been reached, say 10-15m from the boundary of legal road and property but variable along the length of the proposed rock wall to suit different circumstances. This would enable the natural functioning of the beach environment as long as possible.
- c) the works may only occur when a point on the agreed trigger line is reached during an active erosion cycle, and possibly in stages, starting where erosion action and risk is the greatest. That would allow the construction of the rock protection and the protection of private property as well as protection of the town but would not result in any unnecessary loss of dune or vegetation.
- d) it allows for re-engineering based on a climate adaptation strategy for the town and a more appropriate term for the consent and investment. The design may need to be altered to provide long term protection bearing in mind worst case scenarios of flooding, storms and sea level rise over a reasonable time frame.
- e) flanking erosion is considered and addressed appropriately.
- f) no excavated material is to be dumped on vegetated areas.
- g) replanting of disturbed areas takes place using appropriate native plants.

h) rubbish exposed through erosion or excavation of consolidated dunes is removed to landfill and not allowed to escape to the sea.

The councils, both regional and district, must start work on a plan and engagement with the community, and in fact all coastal communities in the region, regarding climate adaptation, to include triggers for actions including coastal protection works and or relocation. This should not be a consent condition; it should be an action any responsible council would have already at least started. If the only way to ensure this planning and engagement work is undertaken sooner rather than later is to include it as a consent condition, so be it.

**Inger Perkins**