

In the Matter of the Timaru District Council Proposed District Plan

Hearing F - Natural Hazards

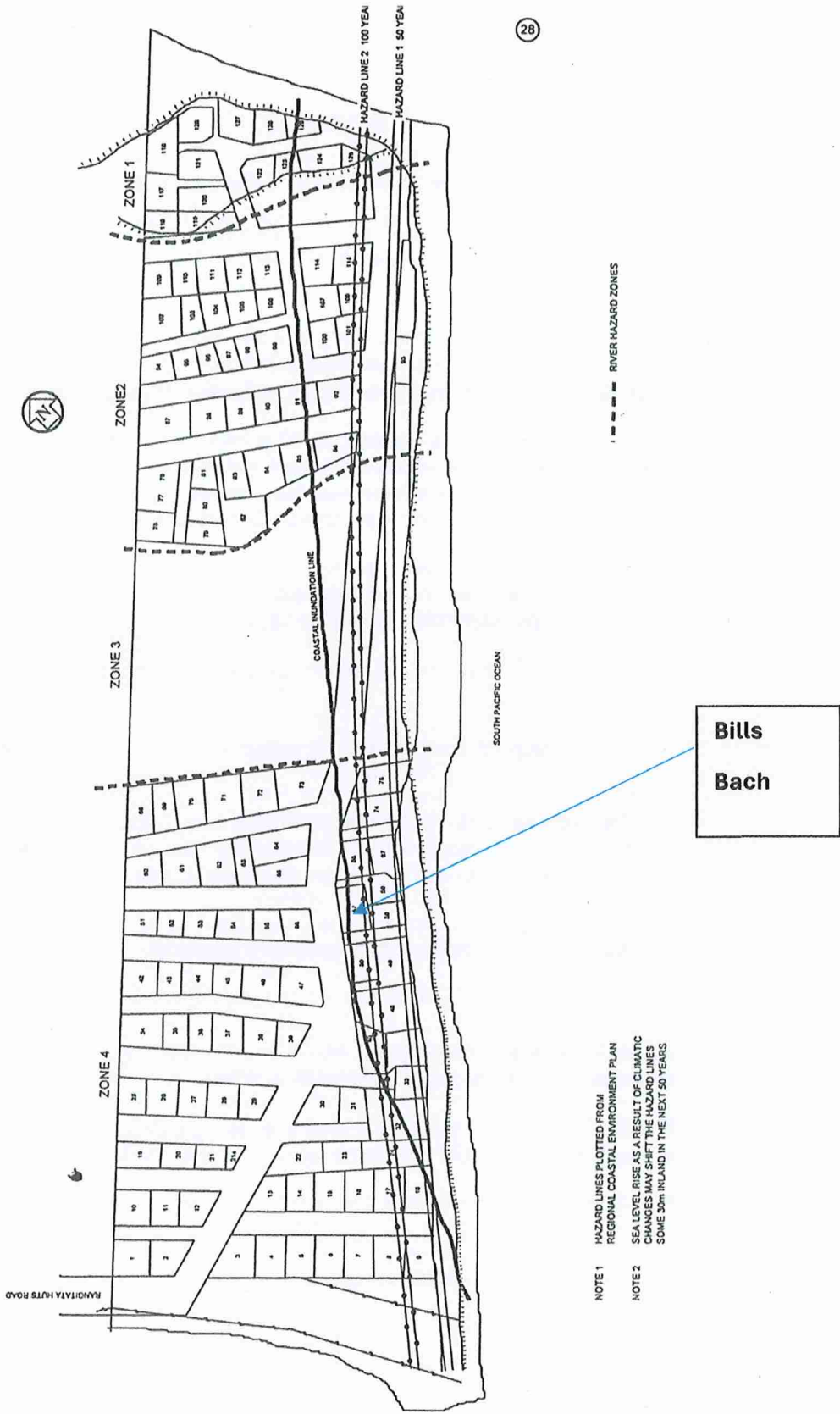
Submitters – Matthew Hall and Bob Mortimer
South Rangitata Reserve Inc
C/- Secretary,
Matthew Hall
11A Carters Terrace,
Ashburton

1. Someone has drawn a map that includes the Rangitata Huts in a High Hazard Zone and according to NH -O1 in areas subject to high natural hazards risks to human life and significant risks to property should be avoided.
2. We are appreciative of the fact that the tribunal visited the huts and will be aware of the fact even though the Rangitata River is handy and the sea fronts the reserve, the area is stable and is on high ground well above sea level and the level of the river and there is currently no risk to human life or property.
3. My family can go back 120 years at the Rangitata and during this time no property at the Rangitata Reserve has been washed away by either the river or the sea.
4. The area has been gazetted as a reserve for Fishing Huts and recreation under the Reserve Act 1977. There are currently approx. 114 huts having a value between \$15m and \$20m.
5. The area is administered by the Timaru District Council and residents have an expectation that the Council will advocate on behalf of the reserve. We are not sure how visible this advocacy is!
6. The area was settled and buildings permitted long before someone in their wisdom came along and decided this is a high hazard area and building in this area should be non-compliant. Most would believe the risks in the so-called high hazard zone are perceived rather than real risks.
7. In recent years there has been tsunamis from the Kaikoura and Japanese earthquakes, and these did not flood the reserve. The greatest risk is seen as Peruvian earthquake. Clearly if a Tsunami originated from Peru there would be time to evacuate and if the reserve was destroyed than there is a choice at that time whether to rebuilt. Currently the situation is hypothetical and surely the plan is not based on this hypothesis.
8. The greatest risk to life and property is fire but then in this hearing we are talking about natural hazards.
9. The issue with natural hazards is no one knows what is around the corner. There are 'laws of probability' and when it comes to the Rangitata Reserve in our view an educated guess carries no greater certainty than an uneducated guess.
10. To show what I mean I refer you Hazard Lines that were drawn under ECan's Coastal Management plan. These lines were prepared by experts 25 years or so ago and show the 50- and 100-year coastal inundation line and the coastal erosion line. Rules that unfairly impact on properties within these lines have

been put in place. For example, building rules and permanent residency rules under the Reserve Management Plan.

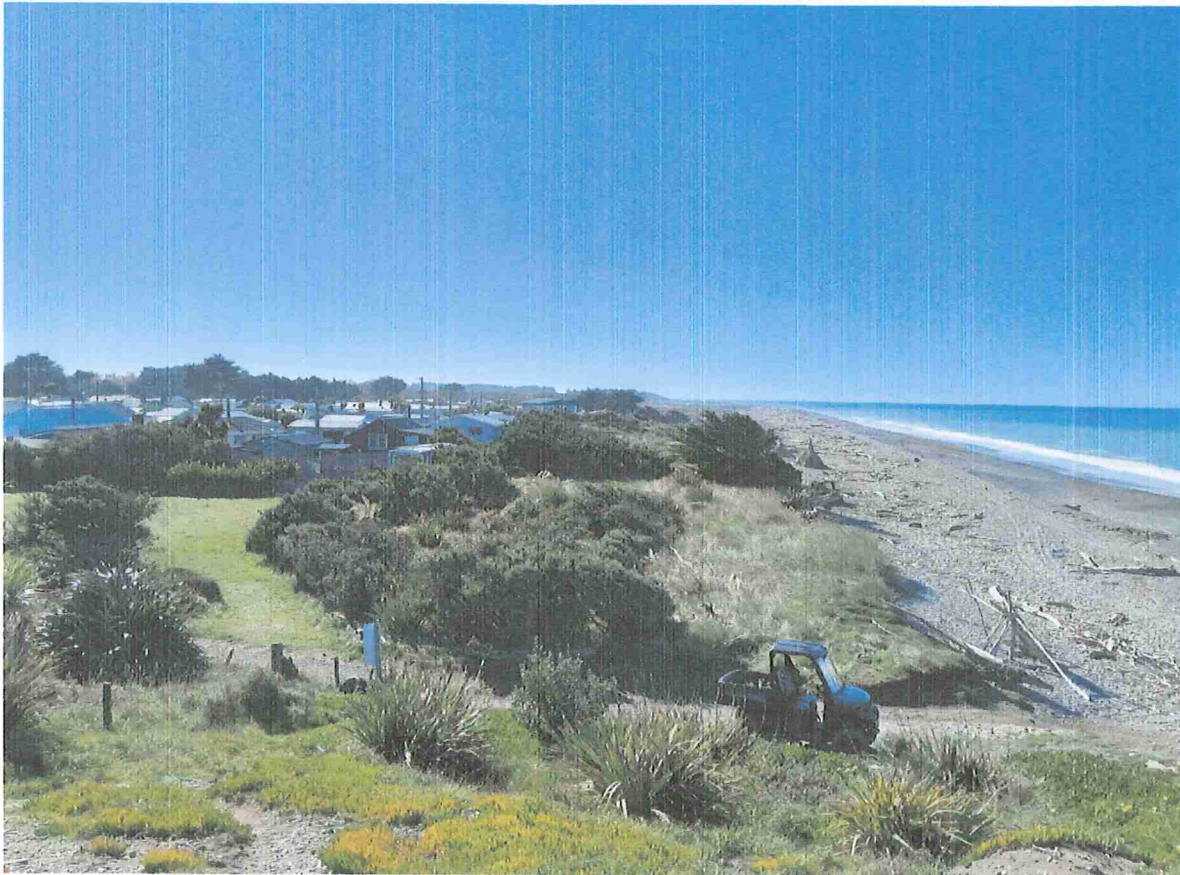
11. If the experts were right coastal inundation now 25 years on should be half way towards the 50-year line. However, they were wrong and in fact in places the line is further way than what it was 25 years ago. In 25 years, there has been little movement in the erosion line across the reserve. (In some places there has been accretion.
12. Whether through global warming or otherwise two factors have intervened.
 - a. Firstly, the December 2019 flood that sent tens of thousands of tons of shingle down the Rangitata and out to sea that now has been washed ashore and has re built the protective bank along the hut frontage.
 - b. The slash that was washed down the Opihi and Orari rivers during major flooding and this has been captured and built up the bank along the sea frontage.
 - c. These events could not have been predicted or projected but they have led to accretion along the sea frontage.
13. With abstraction for irrigation and power generation the Rangitata River flows can be artificially held at low levels for long periods of time. This causes the river mouth to become strangulated and will semi-block and if this is followed by a flood, water can pond and back up and historically has been known to enter some huts at the northern end of the reserve.
14. With ECan there is policy and a process in place that identifies this risk and at appropriate times the river mouth is opened at a central location this mitigating any risk of flooding.
15. The reserve has never been flooded by an active braid of the Rangitata and some years ago a protective groyne was built up stream of the huts to divert water away from the huts.
16. Given the fact that the reserve has for some years now been fully developed (long before a decision to rate the area as a high hazard area) The opportunity to mitigate the risk to investment should exist and barriers should not be put in place that makes this difficult.
17. Realistically what are the hazards? They do not appear to be immediate. Civil Defence systems are in place. There is an early flood warning system.
18. The hut holders have some mitigation measures that they would wish to explore with Council but fear non-complying status under the District Council Plan will be used an excuse to do nothing. Processes simply become too hard!!!

Coastal Inundation lines developed over 25 years ago that should be made redundant.



Bill Whipp's hut is on the market but has the 100-year coastal inundation line running straight through it. Hut was built long before someone decided maybe in 100 years the sea would take the hut. In 25 years, the sea is no closer !!!





This photograph is taken looking north from the southern terrace at the reserve. The coastal inundation line heads through the hut settlement. What the photo shows is the current erosion line vegetation line and along the hut frontage this hasn't moved much in the last sixty years. In places there has been some accretion in the coastal margin in recent years.



One of the protective barriers that was never envisaged was the slash or debris that has been washed down the Opihi and Orari Rivers and been caught in heavy seas in the soft spot along the beach frontage at the Rangitata. This has caused shingle to become trapped and resulted in a considerable build up in the height of the bank.



While not that obvious, the photograph shows a small embankment. This embankment replaces a gully that used to act as a funnel and direct water on to the reserve (more particularly the camping ground). The hut holders took the initiative and had small protective bank constructed. Since this work there has been no further inundation through this area. Looking ahead it is anticipated mitigation measures such as those shown in the photograph will help protect property. In a planning sense this work should be facilitated.



Between the hut settlement and the beach is a swale. A survey of hut holders took place a few years ago and by far the greatest measure that hut holders assessed as critical in protecting the hut settlement was keeping this swale open to take any overtopping of the beach. This became full of slash at one stage and has been cleared. A path needs to be maintained to the river and the river mouth.