

CSL file 2022-10 Misc  
12 September, 2022

District Plan Review Committee  
South Taranaki District Council  
HAWERA



Attention Ms Jessica Sorensen

### **Attribute summary supporting at extension of Waitotata ONFL to the district boundary**

An Outstanding Natural Features and Landscape (ONFL) overlay presently exists along 3.5 km each side of the Waitotara Rivermouth – this was based on the Boffa Miskell (2014) Landscape Assessment for the STDC. A primary attribute of this ONFL are the sand dunes.

This present attribute summary supports an extension of the ONFL to the STDC boundary with the Whanganui District Council – a shoreline distance of about 5.8 km (see red line Figure 1). The proposed extension covers the south eastern half of what is referred to as the **Waitotara foreland** which protrudes some 2.5 km seaward of the coastal outline.

The foreland results from the local **geology**. The area is underlain by layers (beds) of compacted limestone composed of fossilised and cemented shell beds over 1.8 million years old and referred to locally as “**shell rock**”. **Faulting has uplifted** these resistant strata on the foreland side. Fault lines have been marked on the aerial photo in Figure 2 and the dramatic southeasternmost scarp is clearly depicted at the bottom of the photo.

Across the beach and surf zone the shell rock forms a **distinctive intertidal platform and seaward reefs** unlike anything in Taranaki, or that I have seen elsewhere in NZ (Figure 3).

In addition, the slower shoreline erosion rate of the more resistant foreland (compared with the shoreline up and down coast) has enabled survival of what appears to be the regions youngest (uplifted) **marine terrace**.

The foreland’s sheltering effect on the underlying wind and wave regime results a **microclimate** with less onshore directed energy than the neighbouring coasts.

I have not studied the intertidal/ marine **ecology**, but it is diverse and contrasts with the adjacent environment up and down coast.

**Historical** aspects include remnants of the incline cut into the southern fault scarp and used to winch up horse drawn coaches which used the beach to travel southward. Remnant mining ramparts and abandoned quarries are also evident.

**Recreational** use includes swimming, surfing, walking, nature studies/research, surf casting and fishing from the nationally renowned Schnapper Rock and offshore via boat access at Waiinu Settlement.

**Vehicle access** is via clearly defined tracks. The new Waiinu Settlement road from the State Highway may further facilitate vehicle access via side accessways as it runs parallel to the coastline and about 1 km inland.

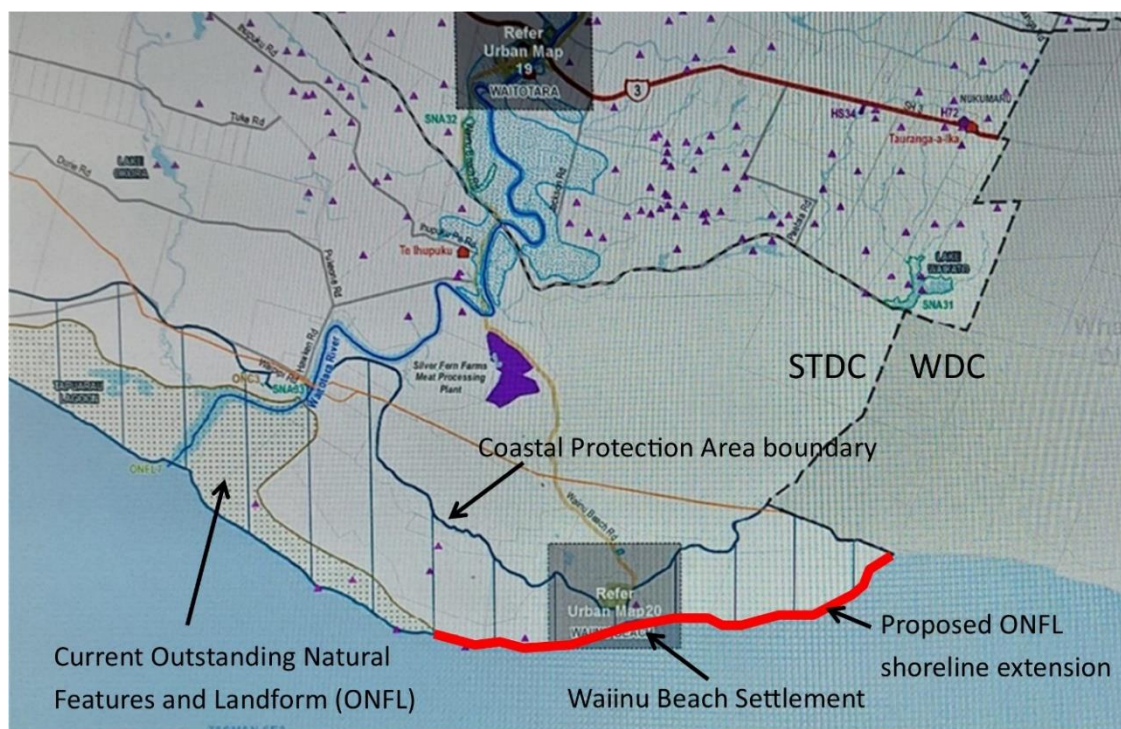
**Application** of the shell rock includes agricultural lime and road metal quarried about a km or more inland. The Durie Hill Memorial Tower, city monuments and the rivermouth moles are also composed of shell rock obtained from where the formation outcrops up the Whanganui River and barged downstream.

**Iwi** undoubtedly have a particularly strong association to this coast and may be interested in contributing to the **cultural** background.

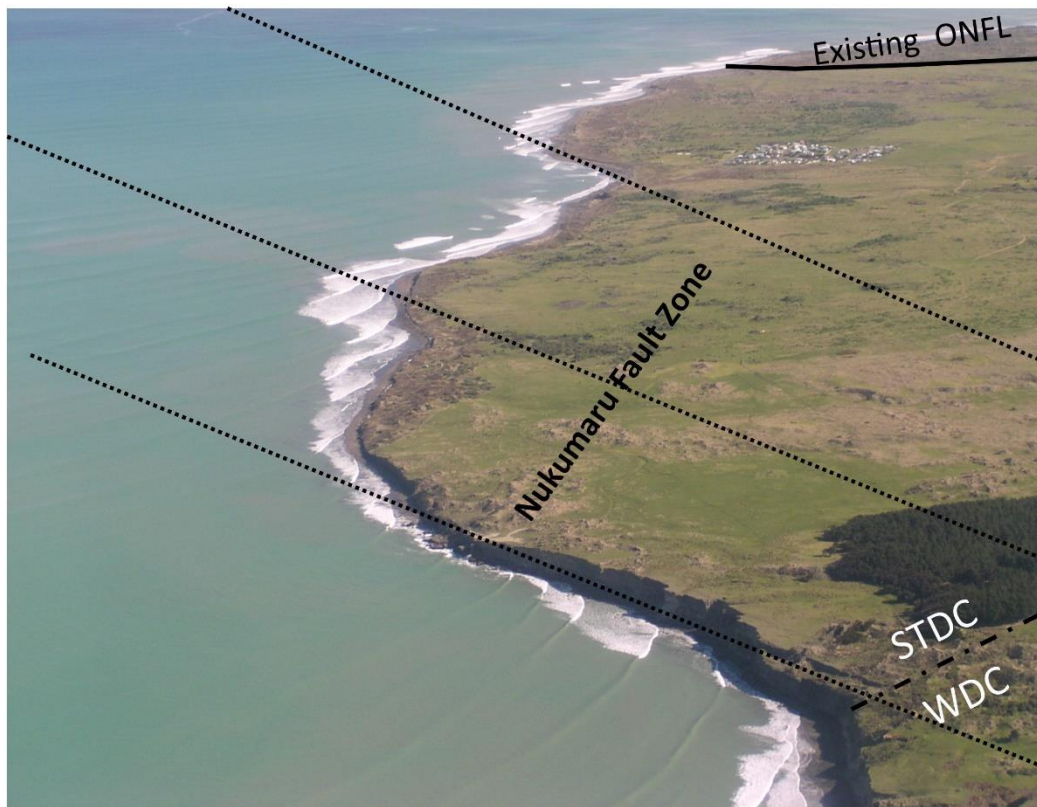
The Waitotara southeastern foreland is certainly regionally, and in some aspects nationally, **unique**; it ticks the boxes required for an **ONFL** and must warrant inclusion in the forthcoming District Plan Review.

My personal association with the Waitotara area began in the late 1960s and through the 1970s when my peer group began surfing there. During the 1980s and 90s my work as a Soil Conservator with the Taranaki Catchment Commission (forerunner of the Taranaki Regional Council) and my conservation interests took me there. More recently my coastal research has included Waitotara. For the past 20 years I have been the Principal Scientist for Coastal Systems Ltd whose clients include the South Taranaki District Council.

Dr Roger Shand



**Figure 1** Current STDC District Plan overlays and the proposed shoreline extension of the ONFL. (red line) The actual width of any such overlay would need to include offshore reefs and onshore



**Figure 2** Waitotara southeastern foreland with fault lines marked by the dotted line. The southeasternmost fault scarp is clearly depicted at the base with Waiinu Settlement and the existing rivermouth ONFL in the distance.



**Figure 3** Intertidal shell rock platform which characterises the south eastern foreland but which is absent along the sand-dominated rivermouth ONFL