

SUBMISSION ON RESOURCE CONSENT APPLICATION RC14513

This is the submission of the Katikati – Waihi Beach Residents and Ratepayers Association (Incorporated). It is made by me, Keith Hay. I am the current Chairman.

I have lived in or owned property at Waihi Beach since 1981. I am a Geologist with 40 plus years' experience.

In this submission we will discuss the deficiencies in this proposal and show that there is an alternative way of protecting the properties on Glen Isla place from erosion. We will look at how compliance with the conditions of the so-called "Dredging Consent" would provide a much bigger and environmentally more acceptable buffer of sand between the sea and the applicant's properties.

SLIDE 1 is Google Earth imagery of Waihi Beach. It shows a generally straight coastline with four distinct embayments, each one coinciding with the mouths of the four creeks.

SLIDE 2 shows the mouth of Three Mile Creek in more detail. The red line represents where we think the front of the dunes would be if the channel that is now Three Mile Creek had not been cut through the dunes.

Page 7 of the application document states that *"Three Mile Creek is located immediately to the north of the site. Three Mile Creek is a man-made diversion of inland drainage channels that was dug through the dune in the early 1930's. Training walls, made of sandbag groynes, line the northern and southern banks of Three Mile Creek. Three Mile Creek is periodically dredged by WBOPDC in accordance with the relevant Reserve Management Plan. Dredging typically occurs monthly, and sand is deposited immediately south of Three Mile Creek, seaward of the dunes."*

The Reserve Management Plan does not mention dredging or any other excavation work. The "dredging" is carried out under a resource consent granted to WBOPDC. Dredging is done on an "as required" basis, as illustrated by this data supplied by WBOPDC on 13.2.25. Dredging is not allowed from 1 August to 31 October each year.

2020 – 10 times, 2021 – 4 times, 2022 – 9 times, 2023 – None, 2024 – 4 times.

Dredging is not carried out “typically monthly” as stated in the application. Nor is it “exercised by WBOPDC every one or two months” as stated in the S42 Report. And the claim by Davis Coastal Consultants (DCC) that the creek “still requires groynes and manual clearing (typically monthly and after storm events) to maintain flow” is also wrong, but has not been challenged by staff.

SLIDE 3 is the map from the “Dredging Consent” document that shows where the dredged material should be put.

Condition 6.2 of the consent requires that *“sand material excavated under this consent shall be deposited in the active mid to upper beach system and shall not be removed from the coastal marine area.”*

SLIDE 4A shows sand excavated but placed inside the groynes. My experience is that the dredged material is not normally deposited immediately south of Three Mile Creek but dumped on the creek banks from where it is washed back into the creek. It either accumulates on the stream bed or is washed out to sea. The sand that is not washed out to sea starts to build up in the stream bed and eventually has to be dug out again. There is no incentive for the contractor to place the sand against the dunes.

SLIDE 4B Usually the excavation is only large enough to allow the built-up water to escape. This is typical of the way WBOPDC’s contractor clears the mouth of Three Mile Creek. A trench is dug along the creek just wide enough to restore the flow.

SLIDE 5 Compliance officers from both WBOPDC and BOPRC on the job in 2020. In 2020 Veolia were contracted to supervise operations under this consent. We were advised by Council that the staff of both Veolia and Beach Contractors were aware of the conditions of this consent. So, there were four organisations that knew the conditions of the consent but not one of them made any effort to ensure compliance.

We contend that failure to comply with the conditions of this consent has been responsible for most of the degradation of the dunes adjacent to the mouth of Three Mile creek. If the conditions of the “dredging consent” were enforced the dunes would be replenished regularly. If the creek was not there this sand would continue to move along the beach

and some of it would be added to the dunes. The sand that accumulates in the creek is beach sand. It belongs on the beach or in the dunes. Large quantities should not be allowed to accumulate in the creek or be washed out to sea. Nor should it be trucked away.

SLIDE 6 shows a truck being loaded with sand on 19.9.2020. Over 100m³ of sand was dug out of the creek that day.

Sand in the creek bed currently occupies an area about 100m long by from 10 to 15m wide. If it is one metre deep that is about 1200m³ of sand that could be added to the dunes.

There are other claims in the DCC report that are of questionable validity which have not been queried by either council. For example: *“It is hypothesised that Three Mile Creek represents a reasonable sediment source to the beach system, which has assisted as in (sic) input to the sediment budget at the site.”* We are not aware of anywhere in the catchment of Three Mile Creek that would be supplying a significant amount of sediment to this creek. The source of the sediment is extremely important so why have staff accepted this hypothesis without questioning the applicant’s consultant.

And, *“Since construction of the groynes, sand has tended to accumulate on the southern side of the southern groyne, indicative of a net northerly longshore transport of sediment (at least in the period since construction was undertaken in 2011).”* This is just as likely to be because the southern groyne extend further out across the beach, or because on the very rare occasions when dredged material is put outside the groynes it is placed south of the creek.

ENGINEERING CONSIDERATIONS

CONSTRUCTION

The Assessment of Environmental Effects states: *“Vegetation removal will be minimised as far as practicable. In principle, it will be limited to the area of disturbance, being the footprint of the structure and the sloping sides of the construction trench. The ‘northern spinifex foredune’ area will be fenced, and disturbance of this area will be avoided.”* The accompanying plan shows the area of disturbance to be 13m wide.

SLIDE 7

We don’t agree with this statement. The type 2 revetment will require a channel to be excavated which will have average dimensions of 4.0m

deep, 5m wide at the bottom and 13m wide at the top. Thus for every metre of length there will be at least 36m³ that needs to be stored until the rocks can be put in place. Although sand can sometimes stand at quite steep angles the vibration from tracked vehicles means that its angle of repose is not likely to be steeper than 45 degrees. The spoil heap will therefore be at least 6m high and 12m wide. That means the existing vegetation will be destroyed over a combined width of 25m. That's as wide as the strip of vegetated dune at the north end.

TRANSPORT IMPACTS

It appears that the applicant intends to use tractor-trailer units to cart rocks from the quarry to the site of the revetment. While the use of these units means that there may be less vibration from dumping rocks that caused structural damage to houses in the past, there are other problems with the use of tractors.

SLIDE 8

The contractor that the applicant proposes to do the work has used these tractor-trailer units on other contracts at Waihi Beach, usually carting rock from the quarry or spoil to the quarry. These units with big cleated tyres damage the seal on the roads. The ones we have observed have not displayed registration plates and so their owner does not pay Road User Charges. The reference in the application to the use of "road legal" tractors appears to be a response to community concern about the use of un-registered vehicles around the beach. If this consent is granted we ask that WBOPDC includes a condition requiring all vehicles carting to or from the site to be registered.

SLIDE 9 Shows an overloaded truck on Wilson Road carting rock to a development site less than a kilometre south of Glen Isla Place.

When it was proposed that a large quantity of material would be carted from the Waihi Beach Quarry to a site south of the village several years ago Council's consent specified a route for these trucks which avoided the "The Village". The cartage contractor on this project ignored this condition until eventually Council served them with an abatement notice. The case went to court, the abatement notice was upheld, but the contractor continued to disregard the consent condition. The quantity to be carted for this proposal is less than the previous one but we don't want more overloaded vehicles going through our shopping centre again.

VIBRATION

The AEE states that the WBOPDC District Plan contains the Explanatory Statement: *“Vibration from activities has not been an issue in the District. In many cases Council can manage vibration effects through the management of noise emissions or through the provisions of the Health Act. Specific standards to manage vibration are therefore not proposed.”*

This statement is only partly true. Council does not have vibration standards but vibration has been an issue in the district and council has been either unable or unwilling to manage it.

We understand that at least one house on the creek side of Glen Isla Place previously suffered severe structural damage because of vibration from similar activities north of the creek to those proposed for south of the creek.

SLIDE 10 Summary of Vibration Exceedances

We have some experience with WBOPDC when it comes to vibration damage. Council required the developer of a block at 8-10 Wilson Road to have a vibration monitor on site to protect Council’s infrastructure. But when vibration from this development caused damage to neighbouring properties Council compliance officers did not want to know about it. The affected neighbours had to take the contractor to court to get compensation.

The vibration records for this project show that although this machine could operate for long periods without exceeding vibration limits it was capable of exceeding the limit by up to 60 times the allowed peak particle velocity. So, we don’t accept that the limited test-work carried out by the applicant’s consultant proves there will not be damage to property if this proposal goes ahead.

ROCK QUALITY

The andesite rock from the Beach Quarry is not of good quality because of the number of zenoliths of weaker rock it contains. The applicant is going to use weathered rock so when the revetment is uncovered the rocks will look natural.

There are three problems with this:

- No rock is going to look natural in the sand dunes

- Weathered rock will break down more quickly than fresh rock (and people are already complaining about all the bits of rock on the beaches backed by revetments), and
- Having weathered rocks indicates the applicant expects the revetment to be exposed on a regular basis.

We cannot find any reference to the quantity of rock that will be required. Our calculations are that at east 3150 cubic metres of rock will have to be imported.

The AEE states (page 30) *“At current sea levels, the proposed structure would only be exposed by a large storm event, for example the scale of the recent Cyclone Gabrielle/Hale storms. This type of storm event is anticipated to expose the top 1.0-1.5m of the structure no more than once every 5-10 years. Natural processes are anticipated to quickly restore sand and dune vegetation as is evident following the recent storm events.”*

If natural processes are anticipated to quickly restore sand and dune vegetation to the revetment it might be anticipated that these same processes will add sand to the dunes even if the revetment was not in place.

OTHER CONSENTS

We contend that if the conditions of two current resource consents were enforced it would ensure that the dunes south of Three Mile Creek would regularly get additional sand.

Consent 62913 was granted to WBOPDC on 14.2.2008 and expires on 30.11.2032. It allows WBOPDC to "Carry Out Large Scale Earthworks in the Erosion Hazard Zone.

Advice note 5 of this consent states: *"The consent holder is advised to consider alternative sources of sand material for any ongoing reinstatement of Dune Restoration and Management works. This could include sand material periodically removed from Two and Three Mile Creeks and land based storage of appropriate sand material until such time as it is required."*

Consent RM19-0613 granted to WBOPDC on 17.12.2019 for “coastal dredging” requires *“sand material excavated under this consent shall be deposited in the active mid to upper beach system and shall not be*

removed from the coastal marine area.” The consent applies to Three Mile creek as well as the other three creeks at Waihi Beach.

As mentioned above the condition requiring sand excavated from the creeks to be placed in the active mid to upper beach system is more honoured in the breach than in the observance. If it was honoured more often there would probably be no need for this consent. We think it is more important that Council ensures compliance with existing consents issuing new ones.

FINANCIAL CONCERNS

Council's Reserves Department has apparently agreed to this proposal, but we do not know what they have agreed to. WBOPD Councillors agreed to this proposal in principal without any idea of what it will cost ratepayers. They had no indication of the costs to maintain it, or how much ratepayers will be liable for if it causes damage to adjacent properties.

If this consent is granted the revetment will vest in Council so it will be an on-going cost to ratepayers.

SUMMARY

- Installing hard structures to prevent coastal erosion is contrary to just about every bit of legislation designed to protect the coastal environment.
- Installing hard structure is contrary to the District Plan
- If this hard structure is really necessary it should be located on the applicants properties.
- WBOPDC Projects and Monitoring Committee decision of 31.10.23 to agree in principle was based on biased information, was contingent on a non-existent agreement and has not been confirmed at a meeting of full Council. It may not comply with Council's rules
- The proposal to instal a buried rock revetment to protect these same Glen Isla Place properties was refused by the Environment Court in about 2010
- There are a number of statements made in the various consultant's reports that are misleading and an independent consultant with coastal processes expertise should be engaged to provide an expert opinion

- Damage from wave surge and/or overtopping of the revetment is not considered in the AEE
- The construction methods are not described adequately, particularly where the spoil will be placed
- Our experience is that staff do not ensure consent holders comply with the conditions of their consents so any conditions the commission impose are unlikely to be complied with
- There are too many unknowns with the proposal.
- If the conditions of Resource Consent RM19-0613-CC01 had been enforced we contend that the dunes to the south of Three Mile Creek would have been replenished with sand often enough that the dunes would be much more resilient than they are now. Furthermore if the conditions of RM 19-0613 are enforced in future there will be no need of hard protection structures which interfere with natural coastal processes.

We request that you reject this application.

Keith Hay
Chairman

Katikati – Waihi Beach Residents and Ratepayers Association
(Incorporated)



One Mile Creek

Waihi Beach

Two Mile Creek

Three Mile Creek

Edit: Title and Description

WAIHI BEACH

THREE MILE CRE



Earth

Technologies

Seafo

Glen Isla Pl

The Loop

100 m















VIBRATION MONITORING AT 8-10 WILSON ROAD, WAIHI BEACH					
DATE	NUMBER OF	DAILY MAXIMUMS			NOTES
	EXCEEDANCES	X	Y	Z	
May					
3					Rig arrives
4					
5					
6	16	47	58	104	
7					
8	8	1041	830	957	
9	8	236	214	167	
10					
11	68	384	544	401	
12	5	369	151	192	
13	36	388	553	628	
14					
15					
16	12	542	367	262	
17					
18	8	418	804	1082	
19					
20					
21					
22					
23	6				
24					
25	6	88	105	175	
26	1	22	13	27	
27					
28					
29					
30	51	337	330	771	
31					
June					Rig Departs June 12
TOTAL	225				