

Your Comment on the Bream Bay Sand Extraction project

Please include all the contact details listed below with your comments and indicate whether you can receive further communications from us by email to substantive@fasttrack.govt.nz.

1. Contact Details			
Please ensure that you have authority to comment on the application on behalf of those named on this form.			
Organisation name (if relevant)	Bream Bay Coastal Care Trust		
First name	Roberta		
Last name	Jones		
Postal address	[REDACTED]		
Home phone / Mobile phone	[REDACTED]	Work phone	
Email (a valid email address enables us to communicate efficiently with you)	[REDACTED]		

2. We will email you draft conditions of consent for your comment			
Yes	I can receive emails and my email address is correct	<input type="checkbox"/>	I cannot receive emails and my postal address is correct

Please provide your comments below, include additional pages as needed.

Bream Bay Coastal Care Trust (BBCCT) have been invited to make a submission to the Fast Track Panel on the Sand Mining application by the McCallum Brothers (MBL).

BBCCT supports applications from Patuharakeke and the Bream Bay Guardians.

1. **Cumulative Ecological Effects have not been addressed.**

The application does not assess the cumulative ecological effects of dredging in the context of two potentially active consents including the existing consent for the Whangarei Channel Infrastructure Project. Those combined effects are therefore unknown.

Ecological Effects in the proposed dredging area

MBL maintains that the area proposed for mining is devoid of life, consisting only of sand and seashells. However, photographs from Bream Bay Guardians research dive in the area clearly shows rich marine life including scollops, crayfish and other crustaceans.

Threat to Shore Birds and Seabirds.

Changes in the topography and ecology of the area, which includes a Wildlife Refuge, will create disturbance of roosting, nesting and feeding patterns of shorebirds and seabirds.

Migratory birds such as Bar Tailed Godwits, Red Knots, Ruddy Turnstones, and Wrybill regularly visit this area for roosting and feeding.

The New Zealand Dotterel, Fairy Tern, White Fronted Tern, Caspian Tern, Oyster Catcher all nest and raise their chicks on beaches in Bream Bay Bay.

Many of the shore birds and seabirds that feed, roost and nest in Bream Bay are under threat of extinction.

Conclusion

Bream Bay Coastal Care Trust has been monitoring, and protecting the habitat of shorebirds and seabirds on DoC reserves Bream Bay for over 20 years, and strongly opposes any sand mining in Bream Bay.

Bream Bay Coastal Care Trust supports submissions from The Fairy Tern Trust and David Lourie, who has dedicated a great deal of time observing and recording the shifting estuary and sand dunes in the Waipu Wildlife Refuge. Both attached.

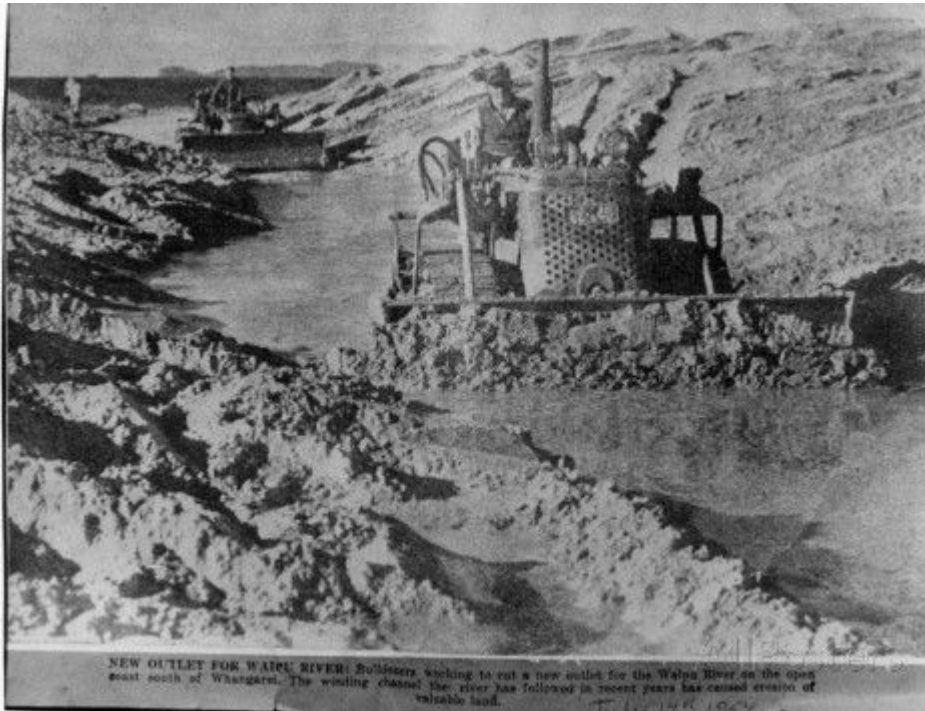
MBL destructive activities in Pakiri, does instil any confidence in their record. Local resident opposition is extremely high as indicated by the turnout at “NO Sand mining” events.

Thank you for your comments

Shore sand at Waipu Rivermouth .

The effect that mining sand several kilometers off shore in Bream Bay will have on the shore sand is not fully understood.

Back in the 1960s Waipu Rivermouth was opened by heavy earthmoving machinery and the rock groyne was constructed as an undocumented community project. A rumour persists that in order to keep the rivermouth open sand was mined from here.



Since then the rivermouth location stabilized within a band of a few hundred meters from the rock groyne north to a few meters south of the southern limit of the dunes on the northside of Waipu river mouth.

Waipu Rivermouth was proclaimed as a wildlife refuge in 1969. By the 1990s south of the Waipu Rivermouth was a major nesting site for shorebirds who staked their nesting territories on the spit which extended from the northern limit of the southern dunes and also in those dunes and along the beach.

The rock groyne trapped sand on its southern side, building up the sand level 2 or 3m above the floor of the channel a few meters away on the other side of the groyne. This effected the flow of tidal waters in the southern arm of the estuary which had to flow between the seaward end of the rock groyne and the spit to make its way to and from the sea. This slowed down the speed of the outgoing current coming from the southern arm of the estuary. Slower water speed reduced the capacity to carry sediment creating a sediment build up south of the groyne.

As a result of the minor tsunami event 15 January 2022 following an eruption at Hunga Tonga-Hunga Ha'apai volcano in Tonga, rips and strong current surges created a new opening on a weak spot on the spit opposite the rock groyne. This dramatically changed the dynamics of the rivermouth.

Long story short, the southern spit retreated south while the northern spit advanced south keeping the rivermouth at a constant width. The southern migration of the river mouth has continued into eroding the dunes south of the rivermouth. The dune eroded by incoming tide deposits dune sand in the estuary and sand from the dune face on the outgoing tide is washed into the surf and deposited on the northern spit through wave action and the northern longshore current.

Wave action during storms can erode meters of dune on the southern bank of the rivermouth per day. Sand is carried by storm wave action lining the landward side of the estuary with sand creating beaches. This sand is lost to the dune system.

As the Waipu river mouth migrates south directly eroding the river mouth face of the southern dune system, the dune sand either ends up in the estuary or on the northern spit. These losses of sand from the dune system will take decades to restore. It is probable that if this process continues the dunes will be replaced by the northern spit, either for a significant period of time or permanently.

From a shorebird perspective the spit is a favourable nesting and roosting area for resident shorebirds as well as migratory and vagrant birds. As the dunes south of the river are eroded and replaced by the northern spit as it migrates south, the shorebirds who have lost territory on the southern side occupy the northern spit. As time progresses the northern spit provides the primary nesting and roosting site for the Waipu Rivermouth Wildlife Refuge which is an area of national significance for shorebird protection.

Although the spit is a preferred nesting area for shorebirds, the adjoining dunes are important refuge areas during storms and over topping events once eggs are hatched and chicks are mobile.

We see the fragility of the seabed, foreshore, beach, and dune systems and how little is required for this delicate dynamic to permanently change. There is a popular illusion that the dynamics of the fluid sand systems are self correcting as a closed system. But once sand is removed from the closed system, the self correction process continues, but at a lower threshold commensurate with the amount of sand lost from the system.

The long term effects of sea bed mining for sand in this closed system is predictable although the time frame for these effects to occur less so.

Notes re sandmining Bream Bay from New Zealand Fairy Tern Charitable Trust

The New Zealand Fairy Tern Charitable Trust (NZFTCT) supports the Bream Bay Guardians in their opposition to the sandmining proposed in Bream Bay.

All the arguments put forward in the Environment Court against sandmining in the Pakiri-Mangawhai embayment are applicable to the situation in Bream Bay.

Main threats to tara iti/New Zealand Fairy Tern from proposed sandmining at Bream Bay:

1. Potential loss of breeding habitat

Waipu Sandspit has been a reliable breeding site for the critically endangered tara iti since the Wildlife Service (later the Department of Conservation) records began in the 1980s. Two to three pairs have nested there every year since. It is one of only four regularly used breeding sites for tara iti. Loss of sand or changes to the topography of the Sandspit caused by sandmining could jeopardise breeding at Waipu.

Ruakaka was until the 1970s a regular breeding site for tara iti. Audrey Williams, formerly a member of the Ornithological Society of New Zealand (OSNZ) and formerly secretary and patron of NZFTCT reported seeing the last tara iti nest at Ruakaka destroyed by young boys (Audrey Williams pers. comm.) It has been identified as one of the most likely places for future tara iti breeding. An enormous amount of effort and resources are being put into tara iti recovery by DOC and other groups in the expectation that tara iti will need to expand beyond the currently used breeding sites when their numbers increase.

Until recently little was known about how far afield tara iti ventured. It was known that they flew from their breeding sites on the east coast to the Kaipara Harbour where they spent the winter months. The captive rearing programme started in the 2021-2022 breeding season has meant that DOC staff have been able to fit trackers to young birds reared in captivity before they are able to fly. The extent of the travels of three of these young, inexperienced birds showed that they are quite capable of travelling long distances. **See Figure 1**

2. Disturbance to feeding

While much of tara iti foraging during breeding takes place in estuaries and water bodies close to their breeding grounds, little is known about how much tara iti rely on marine foraging during breeding and at other times. Given the difficulty of reliable observation of a small, rare bird out at sea, little is known about how far out to sea they travel. Observations at breeding sites do support the theory that tara iti do fish at sea.

Jacob Ball's extensive study of tara iti foraging at Mangawhai points out:

On numerous occasions tara iti were observed by DOC staff to depart the nest on a foraging trip but not visit their estuarine territory, implying foraging is also occurring in another habitat. The role of marine foraging has been largely overlooked for tara iti and we suggest that marine habitat may be a potentially important foraging location for tara iti, as it has been found within Australian fairy tern.

Reference: Ball, J.J.; Beauchamp, A.J.; Brunton, D.H. 2026 Adult New Zealand fairy tern/tara iti (*Sternula nereis davisae*) foraging trips to estuarine feeding territories during chick provisioning. *Notornis* 73: 61-72

Tara iti are plunge divers, feeding only on fish and need clear water to be able to see their prey. Their foraging at sea is likely to be disturbed by sandmining activities, specifically the disturbance to the seabed resulting in a lack of clarity in the water. Furthermore, sandmining will adversely affect the viability of fish stocks in the area.

Figure 1: Satellite tracking of three tara iti fledglings April, 2025

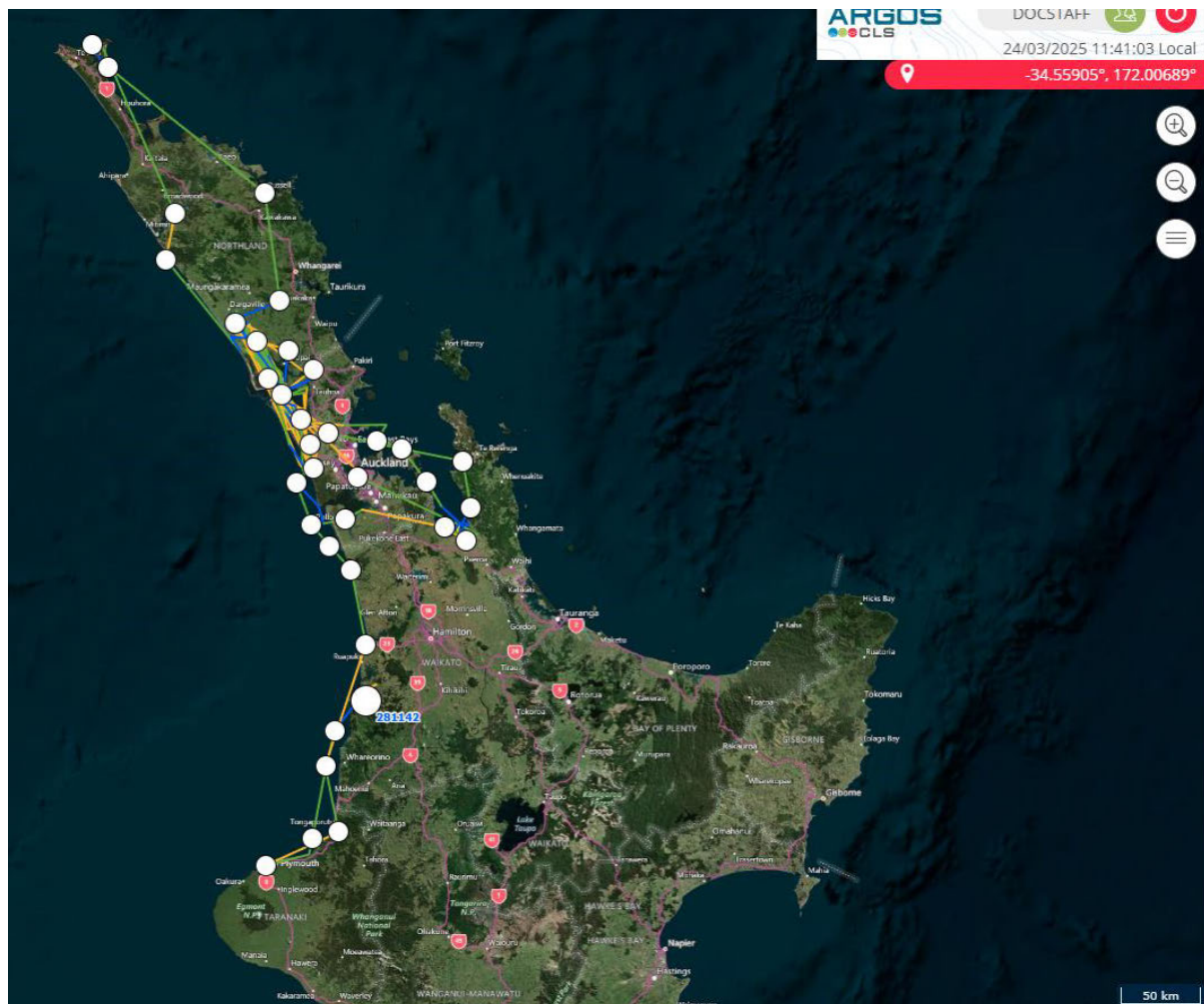


Image courtesy of DOC