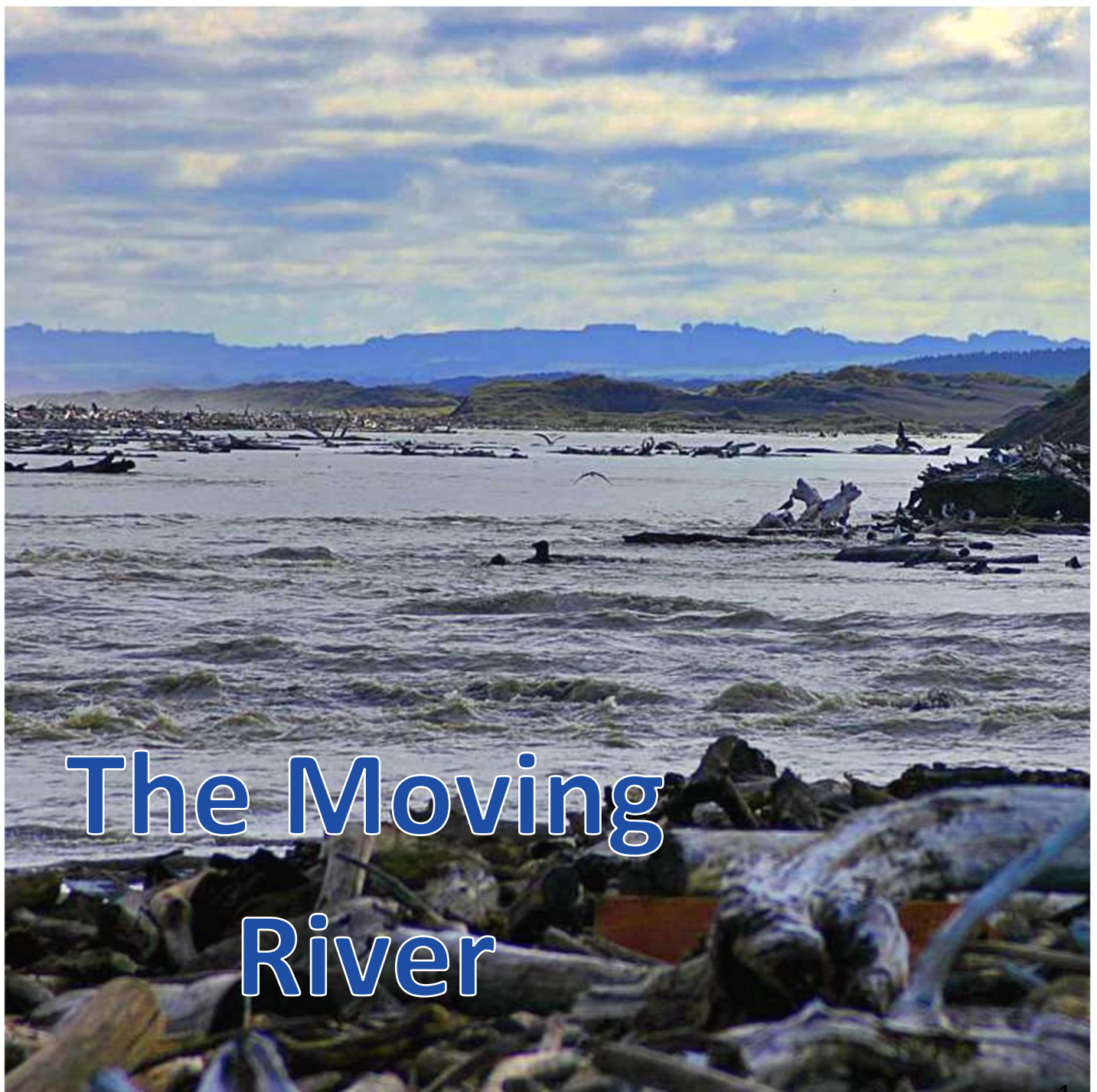




The Moving River



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The Moving River

The river Turakina River has always been entwined in the history and lives of Koitiata residents. When the 'Seaside Resort' was surveyed and designated as the Koitiata Domain in 1915, the river formed the domain's western seaside boundary. When the Koitiata Township was first surveyed, the western boundary was only 150 metres from the river.

Throughout our history the river has provided Koitiata's residents with numerous challenges and has enabled endless speculation as to its future location. Sometimes it has been a target for well-intentioned, but eventually futile, efforts to control the river's pathway and its ever moving mouth location. (*Refer 'River Diversion'*)

Available information shows the river mouth relocating continuously along a 4.5 kms coastal pathway, between a position 1.75km north of the village (at "*the corner*"), and 2.75km south of the village. It has been recorded that when the mouth was at its southern most position, the outlet closed off and the river backed-up to encroach into the seaward edge of the village. (*Refer 'Floods'*)

From '*Recollections*' and aerial photos it appears that the width of the river may have presented a greater challenge in earlier times.

In July 1998 the river broke through 'up at the corner'. Records suggest that this was a reasonably regular event, indicating that when the Turakina floods a new mouth is usually created providing a more direct path to the sea.

After the 1998 'break-out' the northern inlet gradually blocked up and cut off the river from its usual course. The southern outlet across the beach also sanded up and a 3.5km long lagoon was created. (*Refer to 'Causeway & Ford'*)

And since 1998 the mouth has continued to drift south, and to the delight of the village residents, retreat north again. Usually overnight, without notice.

Will the river flow back through its old pathway through the lagoon again?

We don't know.

But that's a subject which enables endless speculation by the many 'hydrological experts' among Koitiata's population.

The Rangitikei Advocate

January 14, 1918

SITES FOR BEACH TOWNSHIP

On Thursday morning Messrs B. P. Lethbridge, chairman, H. H. Richardson and A. Thoms, county clerk and overseer of the Rangitikei County Council, visited the Koitiatia Reserve, on the banks of the Turakina River, and selected sites for the proposed township. The land will be surveyed and then opened up for selections on lease as seaside allotments. At the present time there are fifty people camped on the river bank.

The southerly winds prevailing on Friday banked up the mouth of the Turakina River and closed the course of the river to the sea. The river rose about five feet and spread over an extensive area of the sand flat, at one place the river being about a quarter of a mile in breadth. Yesterday afternoon, however, the river found an outlet to the sea, and quickly emptied itself into the ocean.

The Rangitikei Advocate

June 2, 1923

NEW MOUTH FOR TURAKINA RIVER

Owing to heavy rain Turakina River has from time to time been in high flood, and in consequence a new mouth has been formed about a mile and a half north of the old one, and comparatively close to Kaitiaki sea-side resort. It is to be hoped that the change will be permanent, as under present conditions easy access will be obtained to the sea beach.

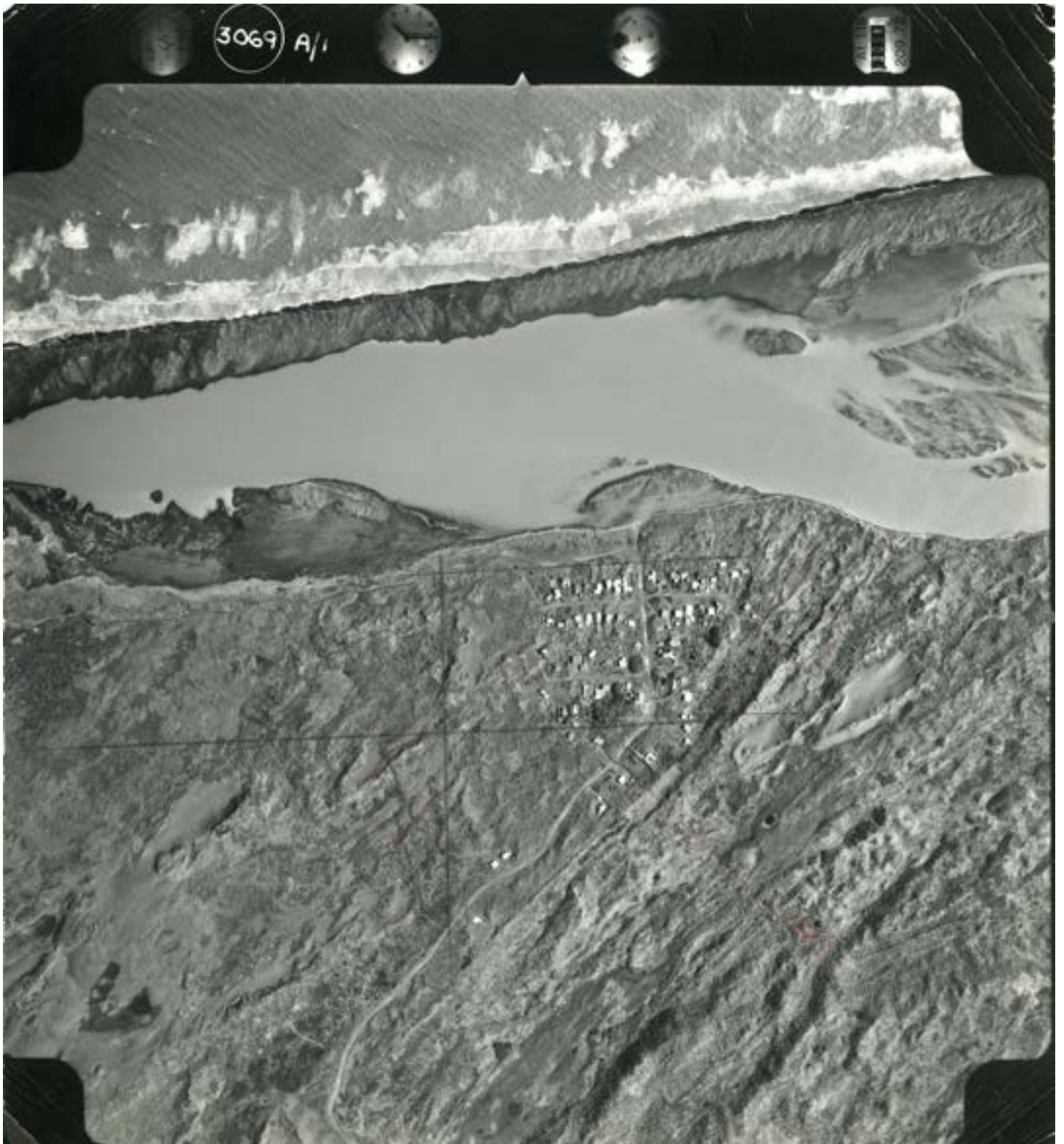
December 1942



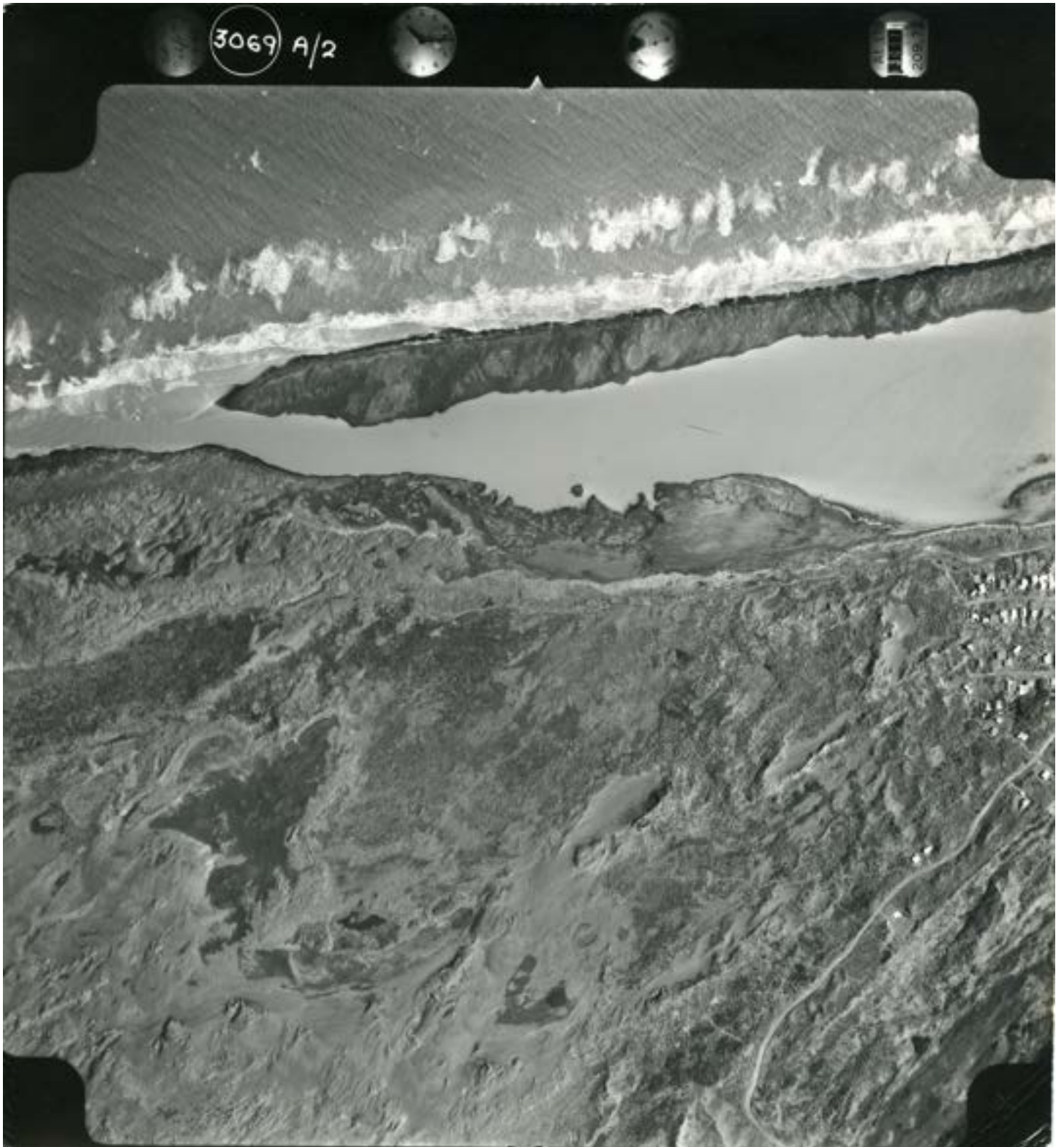
September 1967



November 1968

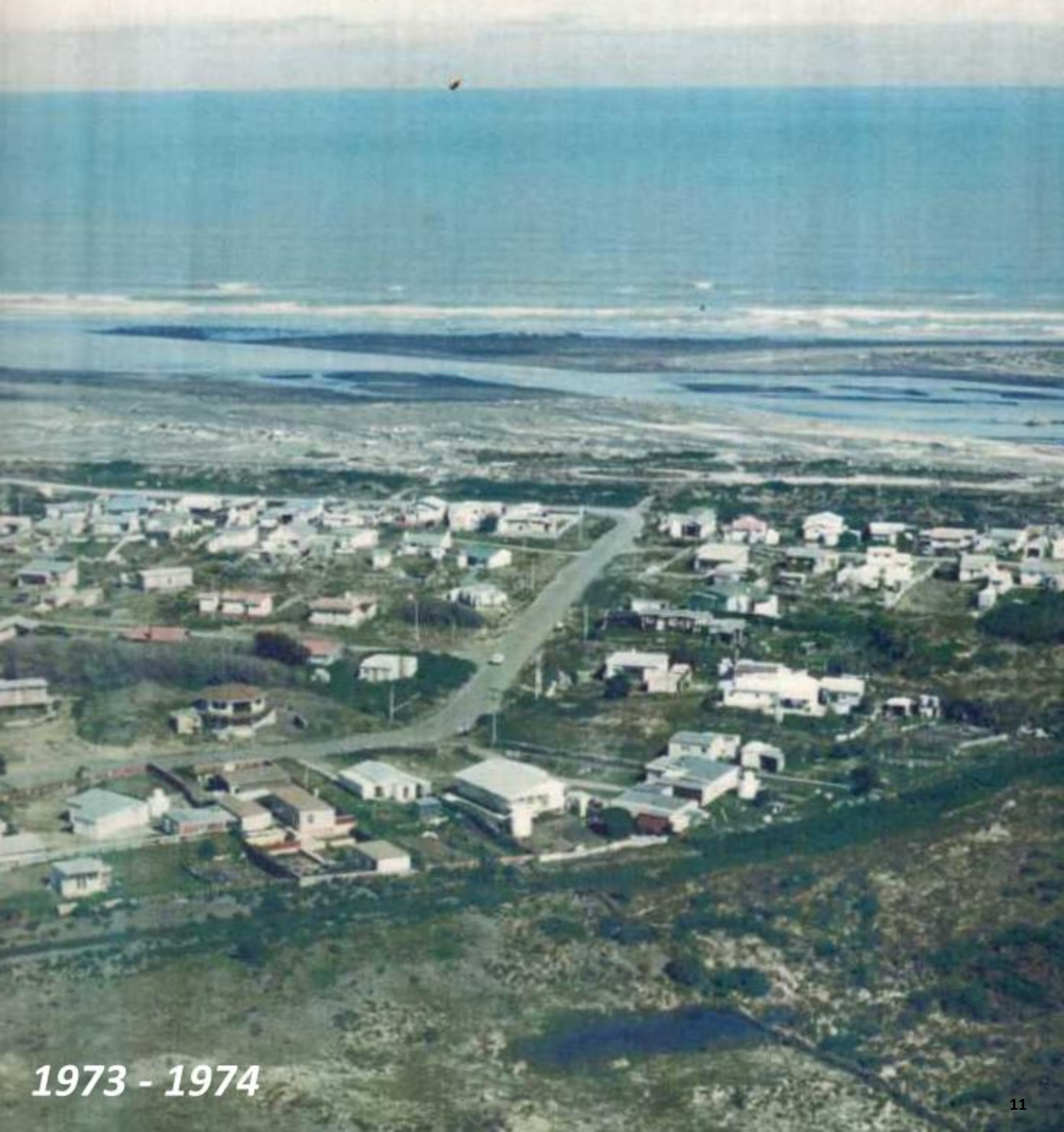


November 1968



November 1979





1973 - 1974

Nature settles rivermouth issue 4/1/92

An "act of God" has resolved the question of where the mouth of the Turakina River should be, at least for the meantime.

For several years the rivermouth has been moving south along the coast as a result of natural coastal drift.

That caused the residents of the beachside settlement of Koitiata some concern especially when the river was in flood and threatened lower lying properties in the settlement.

Last year residents asked the Rangitikei District Council to obtain a resource consent for the Manawatu-Wanganui Regional Council to "divert" the river by cutting through the

sand dunes where the rivermouth used to be.

That step was taken after the Department of Conservation refused permission for the residents, with the help of the Army, to divert the river themselves.

The resource consent application was later withdrawn when Koitiata residents were told that the consent process and the preparation of environmental impact reports could cost several thousand dollars which would have to be met from local rates.

However, at yesterday's meeting of the Rangitikei-Hawke's Bay Conservation Board, Wanganui regional con-

servator Bill Carlin said the rivermouth was back to its original place.

"The river now goes where the residents wanted it," he said.

Mr Carlin said he had no idea what had happened.

"Theoretically the problem

has been resolved by nature. God has intervened on behalf of the settlement," he said.

The diversion is likely to be only temporary though as winter storms and the natural southward drift of sand would close the gap again, Mr Carlin said.



A massive sandbar stretching several kilometres down the Wanganui coast has trapped an estimated 3km area of water near the Turakina Beach settlement. The trapped water can be seen at the top centre of the picture, with the arrow indicating the spot where a digger was used to cut a channel yesterday. The small channel at the bottom centre was formed naturally, allowing some water to escape.









Volume 6 Number 36

24 July 1998

History in the Making

When the Turakina River broke through to the sea last Thursday it was an unbelievable sight - and history in the making.

The river mouth, for many years, has been slowly edging south. The major contributing cause has been the prevailing nor-westerly winds. As these winds blow sand toward the mouth, the mouth would continue to head south along the beachfront. This has seen the river flow along directly in front of the beach houses and the mouth of the river turning towards the sea many hundreds of metres south of the settlement.

The river, before last week's flood had turned south as it came across the huge sand dunes that had built up and effectively blocked its natural passage to the sea.

All this changed when the river built up after torrential rain fell throughout its catchment.

It is believed that it has been over 100 years since the river mouth was where it now exists.

An eyewitness to the event said that the sand dunes where the river cut through were up to 50m high. The river found the lowest point in the dunes and began to spill over. Soon the trickle turned into a torrent and the water began to scour out a passage where it roared over the dunes sweeping all before it. Logs and trees that had been buried for many many years were hurled into the air as the break in the dunes widened. A huge volume of water had naturally 'backed up' and flooding on the alluvial ground along the river was extensive. The water was across the road in places many miles up the Turakina River road. Once the river broke through the levels fell dramatically.

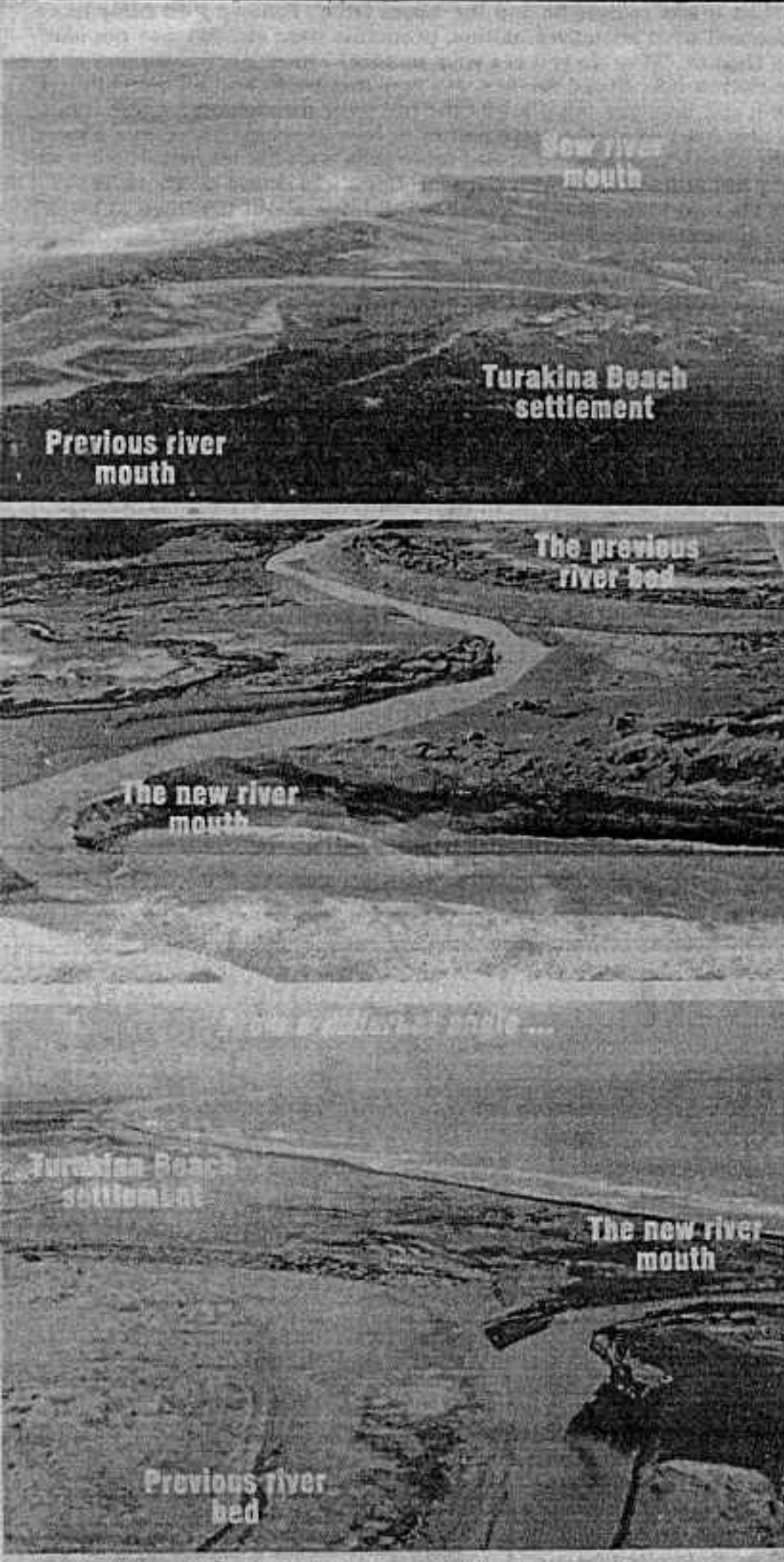
The eyewitness to the event said the noise was 'thunderous and it was a roaring foaming torrent that was almost frightening - it had to be seen to be believed'.

All that is left of the 'old' river bed is a mud coated lagoon that stretches right along where the river had flowed up until a week ago.

The history of the Turakina river is well recorded. Where it now flows is almost the exact spot where it flowed the day the Rev Mason was drowned in 1843. He had been travelling along the beach with the Rev Octavious Hadfield when his horse became bogged in soft sand. Rev Mason was swept out to sea. Since then the river has been closely watched and its movement accurately recorded.

Local resident Mr Bruce Attwell said that he has lived at the beach settlement for nine years and the river is the topic of many conversations. Mr Attwell is the Civil Defence warden and watched things very carefully from the emergency angle but once the river broke through the dunes there was no worry. 'The main concern will be the ecological implications. This river area in front of the beach houses is a haven to countless birds, insects and animals.

Now, with springs upon us, then summer the lagoon will no doubt dry up. At the moment the original mouth of the river is still open and the lagoon left behind is tidal but when the winds whip up sand it will soon form a bar and close the area off to the sea" Mr Attwell said.



Flood breaks down sandhills

by Hamish White

LONG-time Turakina farmer Bob Major had been up all night monitoring flood levels on his river flat farm and keeping an eye on the safety of stock when he stumbled across the fierce onslaught of a river intent on cutting a new track to the sea.

Comparing flooding on his own land to that at Koitiata during the night he sensed the Turakina River was altering course.

Early in the afternoon of the following day, July 16, he and a couple of employees neared the beach north of Koitiata and encountered the "odd" sight of "broken sand" on the side of a sandhill.

"I went to where I thought the river was most likely to go through — to where logs went through on the last flood.

"As we got there, the sandhills were being chewed down just like butter through a knife.

"Logs that might have been in the sand for 50 years were being broken out of the sand and thrown up like matchsticks.

"I saw one log — quite a big one — I would say in the vicinity of the width of a road. It just

got picked up like a pencil.

"Then the old river started to flow through the cut — it was the most unusual thing to see.

"All of a sudden it looked as if it was pulled back the other way, which it was.

"We just sat down on a log and watched — none of us wanted to move. We watched for about half an hour.

"The sand was cut away in shelves, probably each one marked a layer of silt from a

previous flood.

"As one washed away the water would begin to chew at another. There were probably six in the finish," he said.

"I've never seen anything so spectacular."



THE placid flow of the Turakina River where it breached the dunes north of Koitiata belies the drama that unfolded two weeks ago.

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Before



After alterations



Shifting river forces whitebaiters north

By Colin Rowatt

Whitebaiters at Turakina Beach will have to head north instead of south to catch their quarry this season as a result of a dramatic relocation of the Turakina River mouth.

As the river reached as estimated five to 10-year flood peak last Thursday morning, the water breached the coastal sand and shingle bank to create a new outlet about 3km up the coast toward Whangaehu.

The event reversed the trend of the past five years which has seen the river mouth steadily moving southward.

A resident of the beachside settlement of Koitiata, Nola Eustace, said where the river used to flow, parallel to the village, there were now only a few puddles.

She said last Thursday morning the water level was high enough to flood the riverside roadway. By mid-afternoon the water had disappeared as the river flowed to the sea through the new outlet.

Mrs Eustace said the change of course would mostly affect the whitebaiters as access to the new mouth was difficult in some places.

However, once the old river bed dried out residents would have direct access to the beach.

Manawatu-Wanganui Regional Council's Marton-based engineer Allan Cook, said while the shift in the river mouth was "quite a leap" it was simply a natural phenomenon.

"It's what the (Koitiata) residents have wanted for years. We have always told them the river mouth was going to come back and it has," he said.

The regional council has no flood control scheme for the Turakina River and no funding for any remedial work so would take no action.

The change of course would cause inconvenience for whitebaiters in terms of access to the river mouth. But as it was not causing any problems for homes and properties and was not causing any land erosion, the council would have no involvement.

Mr Cook said the council's major concern at present was the flood damage along the middle and lower reaches of the Rangitikei River.

Flood warning "trigger" levels in the river had been reached five times in the first 17 days in July, culminating in the five to 10-year flood event last Thursday.

The repeated flood events had caused significant erosion problems in several areas so the council was putting its resources into dealing with those.

The Rangitikei Mail
October 13, 1998

Summer of discontent looms

by Hamish White

KOITIATA firefighters face a nervous summer in the wake of this year's spectacular re-routing of the Turakina River's lower reaches.

On July 16 the flood-swollen river burst through coastal dunes about a kilometre north of the settlement, isolating a river channel which for decades had carried virtually unlimited supplies of fresh water within a stone's throw of the village.

Now, the river, like the sea, is of small value for dousing structural fires, and reservoirs in nearby forests are equally remote.

The Koitiata Rural Fire Party, as volunteers are known, has one appliance capable of carrying 1300

litres, but easily the best plan for village firefighting is to rely on household tanks.

With a dry summer predicted and no river handy, Koitiata fire chief Peter Bamford said: "It's going to be quite drastic. We still get a backwash in the old channel at high tides, but you don't know when that's going to happen and that'll eventually stop."

"Sand blowing back from the dunes towards the settlement is filling up the old river bed quite quickly."

Despite limitations Mr Bamford said: "We've got the houses pretty well covered. They've all got 23,000-litre tanks."

"We've plotted tanks around the village that we can go straight to in the event of a fire."

"Being a close-knit community we've got permission to use tanks owned by people who don't live here all year round."

"We're working on the council to get a 23,000-litre storage tank in the domain, but it's not an urgent project."

Of parallel concern to local firefighters is the possibility of fire in dunes surrounding the settlement.

"Because we're so close to the forest there's a total fire ban from Whangaehu to Santofl all year round, but people just seem to ignore that," Mr Bamford said.

"People come down here to catch whitebait and light little fires to keep their feet warm."

"We quite often go out at night and tell people to put them out."



This shows the old river course, the new lagoon, and how the river mouth has moved south since 1998.

2002

Source: Coastal Systems Ltd

The “100 Year Event”

When the river broke through the beach and formed a new mouth “*up at the corner*” in July 1998, “*it was believed that it was over 100 years since*” it had happened before.

The following are extracts from peoples’ recollections and other sources. They, together with other information now available, support the view that the 1998 event was not a rare occurrence, and the river breaking through ‘up top’, or in that location, had happened previously.

It also appears that having a lagoon or lake formed between the village and beach was also reasonably common. The difference is that after 1998, the river has not (to date) returned to its old pre-July 1998 course.

- 1918** *“...southerly winds prevailing on Friday banked up the mouth ... and closed the course to the sea ...river rose five feet and spread over an extensive area of the sand flat, ...being about a quarter mile in breadth...however river found an outlet...and quickly emptied...” (from Rangitikei Advocate; Jan 14, 1918)*
- 1923** *“...river has been in high flood, ...new mouth has formed about a mile and a half (2.4 kms) north of old one.” (from Rangitikei Advocate; June 2, 1923)*
- 1930/48** *“Another memory is when the river diverted going straight to the sea at the bend. This left a large lagoon. Many happy hours were spent making a raft out of willow logs and rafting up and down the lagoon. Then, when I was older, rowing boats on the lagoon.” (from Recollections - 1930 -1948 - Maurice Heidrich)*
- 1940’s** *“The river had changed course and burst out to sea a couple of hundred yards north of the village, leaving a lagoon of several hundred yards long between the cottages and the beach. This was replenished by king tides when the sea would spill over the small dune.” (from Memories From Turakina Beach - 1940's - Charles Harr)*
- 1980** *“They want the river the river diverted onto a straight course to the sea, as it was 10 years ago.” (from Wanganui Chronicle, re river diversion project, 18th Nov 1990)*

The main conclusion is that there are no preconditions being followed by the river as to the location of the mouth, it makes its own rules.



Above: River broke through the beach and formed a new mouth again, in the same location as 1998.

Below: Water remaining in the existing riverbed soon drained out via the new mouth.



River move makes better beach

Wanganui Chronicle
August 13, 2008



Arnold Nation is used to the constantly changing coastline of Turakina Beach. Behind him at left is a small lagoon left by a former riverbed, and drainage from an even earlier riverbed that was inundated again a month ago. The present river mouth is at right (PHOTO: TRACEY GRANT 120808WCTGBEACH)

Wanganui Chronicle

August 13, 2008

BY LAUREL STOWELL

The latest shift of the Turakina River has made for a better beach experience for Koitiata locals and visitors.

The huge waves of the stormy first weekend in July sent the high tide over the top of sand dunes and into a formerly nearly dry lagoon area, bringing with them lashings of logs and branches.

Koitiata resident Jim Mant was watching during that high tide. He said every seventh wave crested the dunes and brought a fresh load of driftwood into the old lagoon, covering a ford that local people had built.

The sight was quite spectacular.

Arnold Nation has had a house at the beach for 36 years and is still involved with dune revegetation projects there. He says the river and coast are constantly changing.

"They reckon it runs in about 110- and 108-year cycles.

"It's impossible to do anything about it. It just does its own thing."

All the beaches along the Wanganui coast were changed by the storm, he said, with dunes washed away further south at Turning In Creek, and also north at the settlement at the mouth of the Whangaehu River.

"Old people say there used to be two or three great big islands [offshore of Koitiata]. The river used to split and go either side of them. Then in 1950 or '51 there was the biggest flood I can remember

‘It’s made a better beach. It’s going to be good for the whitebaiters. Every whitebaiter in the country will be here.

in this river, and the islands disappeared overnight."

In 1998, the Turakina River had its mouth several kilometres south of Koitiata. Then the combination of a storm and a high tide blocked the mouth and it found an outlet kilometres to the north.

Since then it has been working its way back south, on the seaward side of its former sandspit. The storm on July 5-6 brought it north again, almost opposite the track residents have built to the beach.

"It's made a better beach. It's going to be good for the whitebaiters. Every whitebaiter in the country will be here."

This isn't the end of the story, though.

The dunes between river and sea are low in places, and some are so denuded that spring gales could easily demolish them.

"Any size of flood would take [the river] back through."



Tumbes River

Koitata

January 2005

Google Earth: Image Horizons Regional Consortium



Tuakia River

Koitiata

September 2005

Google Earth: Image (c) Maxar Technologies



Waikanae River

Koitiata Koitiata

March 2010



March 2013



Turaia River

Koitia Koitiata

April 2014

Google Earth: Image (c) 2022 Maxar Technologies



January 2015

Google Earth: Image (c) 2022 Maxar Technologies



Turakina River

Koitiata Koitiata

October 2015

Google Earth: Image (c) Maxar Technologies



October 2018

Google Earth: Image (c) Maxar Technologies



May 2019



Koitiata

September 2020

Google Earth: Image (c) Maxar Technologies

An aerial satellite image showing a coastline. On the left, the ocean is a deep blue-green. A wide, light-colored sandy beach runs along the shore. To the right of the beach is a dark, winding river or estuary. Further inland, a town with numerous buildings is visible. A yellow pushpin is placed on the town, with the label 'Koitiata' next to it.

Koitiata

March 2022

Google Earth: Image (c) Maxar Technologies