## Waikato Coastal Database

# Ministry of Works Files – Whitianga and Mercury Bay

# PW1/47 Browns Creek at Buffalo Beach Mercury Bay 1919-1919

Starts with an undated copy of a county engineer's report which refers to a map of the creek outlining areas where the stream was eroding and likely to change course. There is no map in the file only a diagram of the stop bank construction. The blue print plan appears to be filed in the Auckland Office. A letter 16 April 1919 suggests that blue print be forwarded to the County Engineer. Plan number is ADO 1994. The estimated cost of the work was £100.

### 7/17 Harbour and Marine Works:

Whitianga Wharf and Mercury Bay Wharf Road. 1923-1948.

<u>December 1923</u>: A letter suggesting that the public wharf be abandoned, and the Kauri Timber Company's wharf be repaired and used for a public wharf. The present public wharf had 7-8 feet of water at low tide while the Kauri Timber Company's wharf had 20 feet.

<u>October 1928:</u> A plan of the proposed new wharf shows the depth of water under the wharf structure. Plan number ADO (Auckland Drafting Office) 10100.

### 7/1 Harbour and Marine Works Annual Reports 1931-1945. 1931

Plans on file: Preparations for a new wharf at Whitianga. Plans ADO 11420 and MD (Marine Department) 6861.

<u>January 1932</u>: Rice grass Spartina Townsendii. Brief summary of discovery and uses. Lists experts who understand the plant. It was considered that the plant could never become a problem because of its agricultural value for grazing and hay making. The report was compiled by Mr. W. H. Hayes, Glen Eden Auckland. A resident proposed to reclaim 294 acres of mud flats in Manaia Harbour using Spartina. Notes reference: Allen, H.H., 1929. Journal of Agriculture. Vol. XXXIX No.5. This article describes the growth pattern of Spartina planted in the Manawatu estuary. This is one of three reports on the plant.

June 1932: Annual report. The only significant works was the construction of the Whitianga Wharf.

April 1933: Whitianga Wharf completed during the year.

### 7/1 Harbour and Marine Works Annual Reports 1946-1969.

<u>June 10 1960</u>: The effect of the tsunami on the eastern side of the peninsula. Ohinemuri County said that the waves were similar to a high spring tide and a dead low over a short period. Thames County residents of Whangamata were evacuated in the afternoon but no damage was caused by the abnormal tidal action in Whangamata Harbour.

### 7/17 Harbour and Marine Works: Whitianga Wharf, Mercury Bay Wharf Road. 1948-1980.

<u>May 1964</u>: Coromandel County advised the old wharf opposite the hotel had been removed. The resident engineer from Paeroa was to inspect the site for any navigation hazards. The site was cleared by removing piles, or where this could not be done cutting them off below the sand level. There is a note at this point that removal of sand from Whitianga Harbour correspondence was moved to file 7/2. There was a period of discussion about wharf construction and file 21/6/9 discusses the life of steel in a salt water environment.





<u>October 1979</u>: There is reference to a Whitianga Harbour study carried out through Thames Coromandel District Council. No comments about the detail in the report. 7/18 Harbour and Marine Works. Mercury Bay Foreshore. 1924-1924. No environmental information. There is a request to build a wharf in Whitianga Harbour. No further details.

### 12/1 Harbours and foreshores: Harbour and river works general 1926-1937:

<u>July 1930</u>: Regulations for the reclamation of mudflats for agricultural and pastoral purposes passed and gazette May 1930.

# 12/243/1: Harbours and Foreshores: Beach sand and shingle supplies, Auckland and Coromandel Areas:

This file refers to the "Rabone Report" on sand and shingle resources of the Auckland and Coromandel areas. *Rabone, 1950: Beach sand and shingle supplies, Auckland and Coromandel Areas, Special Report November 1950.* File also contains the photos and negatives used in the report. There are also notes on meetings held with sand merchants, land owners, and regulatory authorities.

The Rabone Report described individual beaches and their suitability for supplying sand of shingle aggregate for industrial purposes to Auckland City and some of the supporting investigation information. Much of the file is on the Auckland and Northland region with a later section on Coromandel Beaches. The coverage reflects the reduction in importance of the Coromandel area as a source of industrial sand and shingle for the Auckland area.

File discusses problems of coastal stability at Omaha Beach. Cause was thought to be excessive sand dredging. One group claimed a change in climate was the cause of the erosion. An investigation of the long term wind characteristics of Mechanics Bay, Auckland was carried out in 1961. Wind charts are in the file. General findings were that winds had generally decreased over the last 20 years but the winds from the east and north-east had increased.

Results were summarised as: (a) A drop in winds over 13 knots since 1855 and an increase in winds from the northeast 3-27 knots over the last 20 years. (b) Slight increase in frequency of easterly winds 3-27 knots over last 20 years. Also an increase in easterly winds from 28-49 knots in the last 20 years with the frequency in 1959 and 60 the highest for the 20 year period. (c) Winds from SE, S, SW, W and NW showed a gradual reduction in frequency, especially in the 28-40 knot velocities. (d) Prevailing winds were south-west and west and predominantly 3-27 knots, while prevailing winds over 27 knots were from the east and north-east. Wind scales used were: Over 40 knots, 28-40 knots, 14-27 knots, 3-13 knots and calm less than 3 knots.

The Rabone (1950) report contains a number of recommendations for the Coromandel, including:

- Simpson's Beach (Wharekaho). Rabone (1950) recommended closure to mining and also prohibition of mining inland area even though the owners do have riparian title. •
- Buffalo Beach (Whitianga): This was a popular holiday spot. Sand mining of the dunes beside the highway was taking place. Rabone (1950) recommended that the practice be stopped as it was considered that future development could become more costly if it continued. Rabone also noted that there was a real danger that the Taputaputea Stream could change course and affect the beach stability if mining continued.
- Cooks Beach: Rabone (1950) commented that this beach had recreational potential and should therefore remain closed to mining.

Notes sourced from the Waikato Coastal Database www.waikatocoastaldatabase.org.nz



Note: Marine Department file:M4/1965. The Marine Department supplied copies of the 1911, 1923 and 1924 reports as background information for the Rabone report.

Following the Rabone report the Engineer in Chief recommended that all beaches on the east coast of Auckland Province be closed to mining. This created strong opposition from the sand mining interests and construction industry in Auckland. A petition was sent to parliament complaining about the beach closures and Mr Sheat (MP) went on a tour of the Firth of Thames and along the east coast of the Northland Peninsula. As a result Mr Sheat came back with the recommendation that that the sand could be removed from Pakiri, Mangawhai Heads and the Waipu River mouth as was being done in 1952, and recommended by Rabone (1950).

There was no comment about Coromandel beaches at this time. A 1961 report suggested wind erosion from the east and north-east was influencing all east coast beaches. Notes in the file refer to a storm 30 June to 5 July 1963. Auckland file 12/210 on Sea protection is mentioned in 1963.

**File 12/243** contains a report dated 1958 which suggests the recommendations by Rabone to close all beaches was too harsh and though sand mining had not stopped after the 1950 report, this report recommended that mining to continue.

# File 6/141. Whitianga Harbour, September 1949 onwards (related file, 96/115000 (River file)).

Proposal to place telephone cable across the harbour floor which was found to be hard packed shell. Part of this work involved a triangulation survey which included surveying of blocks VII, VIII, X, XI; with reference to block X and the trig on Shakespeare Bluff (cross reference files Auckland Survey Office D3.8 and Wellington PW 54/127 p.).

In 1951 a request to install a diesel pump on the wharf came to fruition. It was to go with the existing petrol pump for refuelling fishing boats. A brief history of the Whitianga Ferry is included in the file. Ferry service was commenced before 1900. From 1900 to 1947 a rowing boat was the ferry. In 1947 a launch operation was purchased for the ferry. The operator was paid wages and kept the fares himself to supplement wages. The terms and conditions of the ferry operation together with a locality map are contained in a folder in the file.

It is noted that in 1951 there were problems with the telephone cables. It could not have been buried deep enough and boats anchored in the wrong place were lifting the cable with their anchors (Marine Dept file **M4/938** (1941) and **M4/3213** (1952) and Post and Telegraph file **8/72/1** show that where the cable crossed was not a prohibited anchorage.)

The "old wharf" or "Launchmans wharf" was built in 1910, but by 1953 was high and dry at low tide. This wharf could no longer be used for passengers and freight as it was originally designed. A new wharf was built downstream in 1932 that was usable at all states of the tide.

On the 10th October 1956, a letter was sent to Mr Kinsella, local MP, noting problems with beach erosion. The letter stated that prior to development there was no notice taken of wave damage to the coastline. The note goes on to say that now the road was 12 feet (4 m) from the storm high water mark was 3 feet (1 m) below the road level. This letter is followed by a request for building a sea wall of "proven success" for half a mile (800 m) along the beach front (Works file 96/096000 notes continued easterly gales June 1956.)



In 1956 the Whitianga Boating Club applied for a license to erect a slipway (Marine Dept file **M4/3585**). On February 14<sup>th</sup>, 1961 a proposal was made to erect a seawall for coastal protection some 18 chains (360 m) long from SH 25 to just west of the new wharf. The estimated cost is £1652 (\$3,304). A subsidy was requested of 2 for 1. Note: SH 25 had already been protected by rockwork in 1961. The erosion in 1961 was just inside the estuary entrance (File Works Wellington **PW49/198**). A debate ensued as the erosion was inside the estuary it possibly did not qualify for a subsidy. However, the Esplanade Road was on the beachfront. At this time the County were spending 74% of its budget on roading. Government action was deferred (no funding available). In May 1962 the County reapplied for funds. By December the County was applying for more funds to extend the wharf. Refer to the MOT (Ministry of Transport) files for details of the justification for the extension. Also Works (Paeroa) 7/17.

In May of 1964 the old Whitianga wharf was removed. In 1964 there was a proposal for a cool store and fish processing plant to be built at the wharf together with improved access for fishing vessels. The file includes an undated aerial photograph of the wharf, some of the sea wall and some of the harbour (Marine Dept file reference M4/2535).

Proposals for wharf extensions again become an issue in 1971. Reclamation by White Street (See file **54/1/32**).

### File 96/115 000: Mercury Bay 1931-1971

In 1931 there was an application to drain 1000 acres (404 ha) of Moewai Swamp inland of Whitianga. Note: Mud flats reclamation practice was based on experiences gained in reclaiming mudflats in Kaipara Harbour. The Moewai Swamp consisted of 2,200 acres drained by the Taputaputea in the north and the Ngarahutunoa stream in the west. Original suggestion was to widen and deepen streams in order to drain the swamp. One problem was that the Taputaputea mouth was often blocked during easterly weather.

Note: At this stage the town of Whitianga was known as Mercury Bay Township. (Additional files: Works Paeroa **1/116**, Auckland Works **12/149**, and Lands and Survey **3/1703** and **21/738**). The file then goes to a request for a subsidy for coastal protection on Buffalo Beach. The local council wanted groynes placed in front of the rock wall. The justification was that if Highway 25 is closed at Buffalo Beach there is no alternative route (Cook Drive had not been constructed then).

A letter from Paeroa on the 5th December 1969 gives a bit of history of the beach (PW 7/21). In 1924 the locals were pulling logs out of the dunes and also taking shells off the beach for roading and a local source of lime fertiliser. This apparently commenced a period of dune instability with sand drifting onto the highway several feet deep. The Coromandel County Council staff did the best they could to prevent continued sand removal. By 1929 A. P. Grant, Works Paeroa, reported that the road was still in danger. Either the County action was ineffective, or the damage had already been done by the time action taken.

In 1957 the Coromandel County Council was concerned about erosion at Buffalo Beach and Omaru Bay: this was dealt with by Tauranga Residency. Erosion occurred again in 1960 and the County commenced placing rock protection.

In 1968 the Wahine Storm caused serious damage. Coromandel County Council provided a summary of erosion events from 1960 to 1968 (Files: Works Paeroa 1/2 October 1968, Works Hamilton 63/2 November 1968 and HO 49/198 Feb 1969).

Post 1969, the beach eroded and the rock work slumped in places. The County engineer started experimenting with Manuka groynes in front of rocks to try and trap sand. In August



1969, the Whitianga County Town Committee expressed concern that the rock wall would be entirely washed away. The resident engineer in Paeroa thought that this erosion was part of a cycle and that a calmer period would follow at some time in the future. A local suggested that the erosion was caused by river flows from the estuary swirling around the bay.

In 1970 the County applied for a subsidy to install rock gabions at right angles to the rock wall. The County in August 1970 proposed to control the mouth of the Taputapuatea Stream. The installation of the gabions and the training wall for the Taputapuatea were carried out during the early 1970s.

# File 47/16. Maramaratotara

The beach is described as "the small bay west of Shakespeare Cliffs". Apparently, the Coromandel County took material from the beach and the locals claimed that the beach had become rocky and in places almost muddy and unsatisfactory for children to swim at. It was noted that locals had removed material at will from the beach so that the condition of the beach was not all the County's fault. Locals had used the beach for building sand and one group had had a loader on the beach taking several truck loads. It was recommended that no further sand be removed from this beach.

# File 47/16. Whitianga River Sediment Removal

In 1958, an application was received to remove sediment from between the wharf and immediately upstream to use for fill around town. It was noted that the planned bridge was to be above this point so that there were no engineering objections to the excavation. The recommendation was that the sand should be taken upstream of the old wharf site where it was finer and could help in keeping the anchorage safe. There should be no more than 2,000 yds<sup>3</sup> (1530 m<sup>3</sup>) extracted per year. It was noted that the supply of good beach sand was not great in the area and therefore the lower quality finer material would be best as fill. Works Engineer Hamilton did not agree with taking the sand, as a lot of floundering was carried out in the area and someone was likely to fall into a hole while fishing.

### File 74/30/28 Part 1. Coastal erosion surveys.

Covers period 1974 to 1983. BOPCC file 21/4. The file notes the existence of the Bay of Plenty Coastal Erosion Survey (1977) and the Coromandel Coastal Survey (1981). The storms of July 1978 appear to have started a review of protection works around the coast. The list includes; Kawhia 1953, Ohope 1954 (Tropical cyclone) Maketu Domain 1965, Waihi Beach 1968 Ohiwa 1969 Whitianga Esplanade 1969 Whangamata 1970, Kawhia 1970, Whitianga 1970, Waihi Beach 1971, Ohiwa 1972, Aotea 1972, Whitianga 1972, Ohope 1973, Miranda 1975, Waihi 1975, Kawhia community shore 1975, Waihi estuary 1977, Marakopa estuary 1974.

The Thames Valley Gazette in August 1978 gave a review of beach conditions. The eastern end of Cooks Beach was eroded and exposed foundations on one building. Rocks were placed in front of threatened houses. One the houses had had its foundations exposed by the storms of 21-22 July 1978.

At Hahei there was erosion around the stream mouth and stones were brought in to protect three houses nearby. At Whitianga, the storm surge caused water to flow across the state highway between the wharf and the hospital and also around the Taputapuatea Stream (Mother Brown's Creek). The highway was sand-bagged to prevent further damage. No information was present concerning the beaches north of Whangapoua.





MWD (Attwood) suggests that beach profiling is expensive and sometimes misleading and therefore recommended the use of aerial photographs to determine the position of the dune toe on each beach. No further information.

# File 37/32 Removal of Sand Cooks Beach, Whitianga, Coromandel County, File Starts March 1959.

A Cooks Beach resident hired a bulldozer to push the dune material on to the beach thus lowering the beach to the level of a "bench" which he said appeared along the whole length of the beach. This levelling enabled the landowner to get a view of Mercury Bay. A complaint was made by persons unknown to Coromandel County Council. Coromandel County Council condemned the actions.

<u>March 1959</u>: The same resident wrote to the Minister of Marine suggesting that bach owners be permitted to lower the dune level in front of their sections at their own expense. Advantages seen as view of Mercury Bay, reducing sand over the road when storms occur. The excess sand was pushed onto the beach and washed away. Access to the beach was seen as much easier. An opening to beach level was made further along the beach and was seen as there were no problems. Argument was that there were no sand hills further along the beach so that flooding from high tides and storms cannot occur. The dune vegetation was poor and his intention was to plant Norfolk Pines to beautify the area. The resident also noted dune removal had occurred at Mount Maunganui in the past and there had been no adverse effect.

The Minister requested a Ministry of Works Engineer go to Cooks Beach to inspect the damage. The engineers report includes a schematic cross section of the changes made. The engineer reported that the bulldozing had left a width of bare sand which would be prone to wind erosion. The height of the levelled dune was thought to be above storm level.

The report also noted that recent storms had been from ESE and E, a direction that Cooks Beach was relatively protected from. The engineer hypothesised that more erosion would occur with a NE storm. He noted that the section was fronted by a one chain (20 m) road reserve and two coastal esplanade reserves each of one chain; a total of three chain (60 m) from the section boundary to the legal high-water mark. He stated that there was a need to plant the bare dune area with adequate plants to protect the sand from erosion. He estimated that about 500 Yd<sup>3</sup> (425 m<sup>3</sup>) per chain (20 m) of sand had been pushed onto the beach and washed away by wave action. There is no outcome recorded in the file but the recommendation was that the planting be carried out by the council and that the cost be charged to the landowner who undertook the works. The Minister's response is not in the file.

# 7/21 Harbour and Marine Works: Buffalo Beach Whitianga. 1924-1979.

<u>June 1929</u>: A complaint was received that sand and logs embedded in the beach were being removed causing an erosion threat from Eyres Corner to Mercury Bay Hospital (Auckland file no. 22/401). The local engineer records that locals were taking sand, shells and logs from the beach. Shell was being used for paths, sand for gardens and logs for firewood. There was a comment that the sand at the north end of Buffalo Beach drifts considerably and has covered the Mercury Bay to Kuaotunu road to a depth of several feet. The Coromandel County Council erected a notice prohibiting sand removal.

<u>July 1929</u>: The Marine Department has been advised of hundreds of tons of sand being removed from in front of the Mercury Bay Hospital.



<u>August 1929:</u> The resident engineer in Paeroa replied that the sand removal was not in the area protected by the Marine Department. Removal was north of the Mercury Bay Hospital. Also the borrow pit was entirely within the road reserve. Between the borrow pit and the sea there was a 40 foot (12 m) strip of land on which the road is built which would have to be eroded before the borrow pit was reached. There was no sign of erosion of the beach at the time of inspection.

The Public Works Department had taken 860 yds<sup>3</sup> (660 m<sup>3</sup>) for the Mercury Bay-Kuaotunu Highway. Coromandel County took 1,000 yds<sup>3</sup> (765 m<sup>3</sup>) for the Mercury Bay Township.

<u>October 1951</u>: A landowner had plans to remove the dunes and place spoil in swampy areas as fill to create sections at the northern end of the beach. He intended to take the sand hills to road level but leave a strip 18 feet (5.5 m) wide by 3-6 feet (1-2 m) high between the road and the development. He required 1,500-2,000 yds<sup>3</sup> (1,150-1,500 m<sup>3</sup>) of extra sand to complete the work. One third of the sand was to come from County road reserve. County granted the request provided there was approval from the Soil Conservation Council (sketch plan scanned). This file outlines land ownership in the area.

Mr Wells wanted to take sand from Dr Makareth's property. There were unspecified quantities of sand being removed from the beach through the Kauri Timber Company's land. The County was trying to buy the Timber company land to turn into a coastal reserve.

<u>December 1951</u>: The proposal was approved provided that blue lupin was planted on sand to prevent wind-blown sand problems.

October 1957: The County was concerned about sea erosion at Whitianga. There are no further details.

<u>September 1963</u>: A resident of north Buffalo Beach applied to the council for help to plant up an area in pines to protect his farm entrance from erosion. Mr Makereth had attempted to prevent erosion by wiring 12 Macrocarpa tree heads together. Mr Makereth had an access on the south side of the Tarapatiki Stream at the south end of Ohuka Beach (note; this stream is sometimes called Ohuka Stream). The plan was to plant the hillside with pines as a separate action to the beach protection.

<u>August 1969</u>: The County Council notes erosion of Buffalo Beach near Halligan's Camp and suggests that SH25 could be eroded. Works engineers visited and commented. 1. The beach may be going through a cycle of low sand volume. 2. The protection work on Wharf Road is settling and if no sand comes ashore the rock wall may need to be extended north to protect the highway. 3. Suggested Manuka fascines to trap sand.

<u>September 1969</u>: The resident engineer in Paeroa noted: 1. The protection work not only protected the highway but also private land and public reserves and therefore qualified for a soil conservation subsidy. 2. The original wall was probably built with a Marine Department subsidy. 3. A protection wall similar to Waihi should be considered. A recommendation was given to use rock gabions at right angles to the beach (groynes).

<u>November 1969</u>: District Water and Soil officer requests resident engineer at Paeroa for information after two letters from locals about beach erosion. December 1969 resident engineer reported:

The erosion between the Hospital and the wharf has a long history:

<u>1924</u>: Complaint of fire wood removal enhancing erosion.

<u>1929</u>: Mr A. P. Grant reported this length of beach was still in danger and would require protection before long.





<u>October 1957</u>: the County Council wrote expressing concern about erosion at Buffalo and Omaru beaches. The resident engineer Tauranga dealt with these matters and there is no record on the Paeroa files of the outcome.

<u>1960:</u> further erosion took place and the County Council began placing rock protection.

<u>1960s</u>: Since then there have been further problems with damage to the protection. The 1968 Wahine storm damaged the rock work. The County applied for Soil Conservation subsidy with a history of what had been done since 1960. File record does not make it clear whether the subsidy was approved nor the length of beach it was to be applied to. Possibly a Marine Department subsidy applied to the area between the wharf and Eyres Corner and a Soil Conservation subsidy to the beach north of here. Also State Highway flood damage funds have been applied to repair rock work.

<u>1968 onwards:</u> the beach continued to cut causing the rocks to slump in places. This slumping allowed road damage to occur during high seas. Rock was placed to prevent further erosion.

<u>August 1969</u>: Residents wrote letters complaining of erosion. The area was inspected by the county engineer and the PW inspector of works. Both did not think the problem that serious but that something needed to be done to prevent further erosion. Since then a further storm has damaged the rock work.

The resident engineer concluded that before settlement the beach went through cycles of erosion and accretion, building and destroying dunes. Land settlement seems to have destroyed this balance. He previously considered that wind storms were the main cause of erosion cycles. Recently the engineer had been informed that river flow could be a major cause of the problem, and that the river swirled around the bay returning to the river mouth and causing a scour to the beach. Also there had been an offshore bar develop that seemed to have enhanced this movement. Therefore if the present is part of a cycle there could be a period of little change. However, if the erosion had been caused by sea/river changes that are permanent then there would be problems until major repairs are undertaken. The resident engineer and the County Engineer favoured groynes.

<u>February 1970</u>: The County requests an expert to be sent up to examine the Buffalo Beach problem.

<u>July 1970</u>: The county engineer and resident engineer Paeroa (Mr Stewart) sent photos of damage from storm of 14-18 May (photos scanned). The erosion was moving north of the rocks scouring material from the beach in front of the rocks and placing it south of the Taputaputea Stream. The County had a quote for groynes and some strengthening of the beach. Because of the cost the engineer suggested building only six groynes. The Paeroa engineer voiced concerns about the spacing of groynes (1:2 or 1:3), the number of groynes (the engineer favoured eight but county wanted six), and the proportion of funding from various groups. Groups included Soil Conservation Council, National Roads Board and County. Ratio of funding \$1 for \$1.

October 1970: Soil Conservation Council approves funding.

<u>November 1971</u>: Six groins built and a request to extend the work by six further groins and to install five smaller groins between those already constructed.



<u>December 1971</u>: A new proposal was made after the existing groyne field was eroded after a storm in November. The proposal suggested three new groynes north of the original construction and one to the south. These groynes were to be 20° off perpendicular to the beach with the groyne snout being set southwards. The offset groynes were to stop the effects of waves that arrived perpendicular to the beach.

Check Paeroa Office file ½ October 1968.

<u>March 1972</u>: Resident engineer provides a summary of costs to SH25. Total cost \$12,000 paid from flood damage money.

1. Wahine Storm caused damage: 800 yds<sup>3</sup> (610 m<sup>3</sup>) spawls and rubble dumped along beach.

2. Sept 1969: 1000 yds<sup>3</sup> (765 m<sup>3</sup>) more material placed.

3. May 1970 2,000 yds<sup>3</sup> (1,530 m<sup>3</sup>) placed.

4. Oct. 1971 600 yds3 (469 m3) placed.

<u>March 1972</u>: Some suggestion that the stone in the gabions was of poor quality. In the same month Soil Conservation Council approved funding for additional groynes. Sea Wall History as supplied to R. A. Simpson Ministry of Works Department Marine Engineer:

<u>2nd August 1960</u>: Owing to serious damage on sea front the County decided to place rock fill.

<u>6th September 1960</u>: Filling suspended because of lack of funds. County decided to try for a subsidy. 4th

October 1960: County decided to go ahead with work at an estimated cost of £600.00. The town Board to give £100 towards cost.

<u>2nd January 1961</u>: Serious erosion after recent storm. County asked to do the work and draw on County Town kerb and channelling funds provided they reimburse the County Town fund when they had the money.

<u>9th May 1966</u>: Engineer explained that the work was not complete due to a lack of funds.

<u>13th June 1961</u>: County Town asked for details of work done and why £300 remaining in the account had not been used.

<u>10th October 1961</u>: Question was raised whether Council agreed to spend £1,000 and if so, where the unspent amount was. 2

<u>3rd October 1962</u>: The Engineer reported the cost of the sea wall would be  $\pounds$ 1,600 and that a subsidy of 1 for 2 was available.

<u>8th April 1963</u>: Engineers plan for a sea wall of 18 chains (360 m). Estimated cost £1,600 and a subsidy of £500 available. A considerable amount had been done and £500-£700 would finish the job. This cost was to be charged to the County Town. An urgent decision was necessary to take advantage of the subsidy.

<u>28th May 1963</u>: Proposals for a proper sea wall were made with cost estimates of  $\pounds$ 5,000- $\pounds$ 6,000.

<u>11th June 1963</u>: The above proposal was not proceeded with.



<u>June 1968:</u> The Wahine Storm did considerable damage to the foreshore and scoured the beach leaving the township vulnerable to serious flooding. The following storm in which the Maranui was sunk caused further damage and the township was in serious danger. At high tide the sea did go over the wall and road in places and scoured away the bank. In places the distance between the sealed road and the bank was only 6 feet (2 m). Urgent remedial action was needed and 700 yds<sup>3</sup> (535 m<sup>3</sup>) of rock spawls were placed along the water front between Albert Street and the wharf. This was back filled with clay.

<u>November 1972</u>: The Simpson Report of Buffalo Beach was released to the County Engineer. NZ Herald March 1973 article "Sand and land keep sliding into the sea". May 1973: Letter from Ministry of Works Department HO (file 75/10/56) requests further information, including:

(a) What effect did the old wharf have on tidal flow in and out of the harbour both prior to and after removal?

- (b) When was the jetty removed?
- (c) Was there any erosion on Buffalo Beach before the removal of the jetty?
- (d) Is there any record of conditions responsible for the formation of the secondary channel parallel with the beach?

<u>June 1973</u>: Harbour Master Mr Ross commented that during the Chilean tsunami the sea receded exposing the inner harbour floor and Buffalo Bay sea floor. Much of the inner harbour entrance channel was scoured out. Many old moorings, previously buried in the harbour floor, were exposed and some were lost.

<u>June 1973</u>: Thames Star reports that the Whitianga County Town Committee was not happy with the groyne construction delays.

<u>June 19-22 1973</u>: Jeremy Gibb visited the Coromandel beaches with a view to assessing their present condition and to make recommendations for management. He was also to inspect Buffalo Beach erosion problems and report on a solution. Report made available August 1973 (scanned link).

<u>July 25 1973</u>: The Hauraki Plains Gazette reported serious erosion at Buffalo Beach. Seas were breaking over the road at high tide. Locals were pushing for action. <u>November 1973</u>: Thames Star report supports the County engineer for chasing the necessary equipment to carry out the recommended observations.

<u>November 1973</u>: A follow-up report following a visit by Mr Gibb was sent to Coromandel County Council. The report notes:

- Sand had been accreting since the June 1973 visit.
- Sand was accumulating under the wharf. The Ferry was being tied up on the channel side of wharf as the usual berth was too shallow.
- Accretion at south end of Buffalo Beach offshore.
- Eddy still present, causing a net flow into the harbour through flood and ebb tides.
- Tidal velocities range from 0.6-2.0 knots towards the harbour during maximum tidal flows. Velocities offshore reached 5-7 knots.

Mr Gibb considered that the 1970s were a period of accretion on the east coast following the erosion events of the 1960s.



Recommendations Whitianga:

- Six sounding lines between the groynes and the wharf surveyed monthly.
- Tidal circulation monitoring for direction and strength of flows.
- Wave climate monitoring; daily height, period and direction.
- County to consider placing 10,000 to 20,000 yds<sup>3</sup> of sand north of the groynes. Sand to be coarser than the existing material. Profiling to monitor effects (there is no evidence that this occurred). This report was summarised in the Thames Valley Gazette in March 1974.

# 7/2 Harbour and Marine Works: Removal of sand Coromandel Peninsula. 1958-1970

In the 1950s the Lands and Survey Department was responsible for all Crown land and this included river and stream beds. Ministry of Works and the local County Councils often used shingle from local streams for roading material. To simplify licensing these activities and Lands and Survey issued a blanket licence to Ministry of works to take shingle from all rivers and Streams. The Ministry of Works then issued permits to the County Councils and sent in a quarterly return to the Lands and Survey Department.

Much of the contents of this file contains these returns from the different areas of the Coromandel Peninsula and the collated summaries sent to the Lands and Survey Department.

<u>August 1951</u>: There several memos referring to illegal taking of sand and shingle from beaches. Associated files Paeroa 24/256, SH39/1/1 and SH72/25/2C/6 also Paeroa 24/1256 October to December 1960.

<u>April 1967</u>: There was an application by Parry Brothers Ltd. to take sand from Whitianga. The resident engineer again thought that Whitianga not the best place to take sand. He did note that if the permit was given, echo sounding of the area before the operation began and then some time (years) later could give an idea if removal was affecting the beach.

**7/2 Harbour and Marine Works: Removal of sand Coromandel Peninsula. Volume II** <u>1970-1974.</u> Note: This file contains 3 monthly returns of material taken from beaches and streams in the Coromandel Peninsula and sent to the Lands and Survey Department who was responsible for Crown Land. This summary does not include these returns and anyone wanting to know where and when material was taken will need to consult these files at Archives NZ.

<u>July 1971</u>: The MWD applied to take 800 yds<sup>3</sup> (612 m<sup>3</sup>) of sand from the Tarapatiki Stream, Buffalo Beach for road building.

October 1971: Approval for two applications to take sand from Kuaotunu; 75 yds<sup>3</sup> (57 m<sup>3</sup>) for one permit and 600 yds<sup>3</sup> (460 m<sup>3</sup>) for a resident of Whitianga.

<u>October 1971</u>: Coromandel County applied for permits to take material from a number of beaches and streams, specifically Papa Aroha Creek, Goat Bay, Whangarahi Stream, Okahutahi Stream (Sandy Bay), and the Urarimu Stream at Melsops Crossing. A total of 9,760 yds<sup>3</sup> (7,562 m<sup>3</sup>) of material was applied for. At the same time Parry Brothers Ltd applied for 3,000 yds<sup>3</sup> (2,294 m<sup>3</sup>) from the entrance to Whangapoua Harbour and Mr Simpson of Whitianga applied for 500 yds<sup>3</sup> (382 m<sup>3</sup>) from Kuaotunu beach.

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<u>1974-1976. May 1974</u>: The Lands and Survey Department lost control of sand mining in rivers and beaches to the Mines Department. Control of sand removal now came under the Mines Act 1970. Ministry of Works now told that would have to apply to the Mines Department for a blanket approval to take sand and shingle from the catchments of the Peninsula. This was a continuation of the system run by the Lands and Survey Department. Ministry of Works then issued permits to remove material to local bodies and contractors.

<u>May 1974</u>: Ministry of Works were told by the Mines Department that shingle removal from streams etc. was better dealt with under the Lands Act 1948 and that the Lands and Survey should control such licences.

<u>May 1974</u>: An inspection of Buffalo Beach showed that the seaward end of two groynes were covered with sand and that the ends of three others showed only 6-8 inches (150-200 mm) above the sand level. The shore-wards section of the beach showed 1-1  $\frac{1}{2}$  baskets above the sand level at the toe of the rock slope.

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<u>February 1977</u>: The Ministry of Transport instigated a requirement that the local Catchment Authority would have to be involved in approval of any sand mining operations.

<u>June 1977</u>: Ministry of Transport asked the Ministry of Works if there were any other beaches that were suitable for mining out of the public eye.

<u>March 1978</u>: The Hauraki Catchment Board and Ministry of Works agree to work together on matters of coastal sand extraction.

<u>June 1978</u>: The Thames Valley Gazette ran an article that reviewed present sand mining permits. Included was a report by R.W. Harris, on "Sand and Shingle Extraction from Coromandel Beaches and its Relation to Coastal Erosion" The report concludes that the existing licences should be declined.

The Thames Valley Gazette summarised Mr Harris's report on the damaged beaches of the east coast Coromandel Peninsula. Present sand miners were warned that all applications would be reviewed downwards and after a year were likely to be terminated.

<u>August 1978</u>: The resident engineer Paeroa sends a letter to Hamilton District Office indicating that the Hahei storm damage might indicate erosion of a similar magnitude occurred at least twice in the past. He notes that the first concern about Buffalo Beach was expressed in 1924 but the first real erosion took place in 1960. He also noted the traffic ramp at Bowentown was uncovered by the 1978 storms.

