

# Whangamata Ratepayers Association Inc.

## Location notes.

1. Moana Anu Anu harbour 1944  
Very little mangroves.  
By 2002 over 90% mangrove coverage.  
Present mangrove coverage causing  
buffering to outfall from Wentworth  
River in partial flood conditions.  
And loss of public amenity.
2. Patiki Bay cleared of mangroves  
over 2000-2010 by volunteers partial  
WRC Consent. Final cleared 2014.  
Remains clear under volunteer  
maintenance to this day.
3. Old Forest H-Q line


Upper Harbour.

Patiki Bay

Early Township

Moana Anu Anu.





Whangamata main harbour no mangroves at all. Early Township - May 1944.

May 1944 Early township.

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Whangamata Moanu Anu Anu Harbour and Township as was May 1944 -

May 1944 Early township.





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## Patiki Bay

Moana Anu Anu

## Early Township


Whangamata Moanu Anu Anu Harbour and Township as was May 1944 - (Centre Right).  
No mangroves - shaded areas central of harbour are Ellgrass - now lost to mangroves forest





200 Aerial Photography Ltd  
10000 100th Ave  
Edmonton, Alberta T6E 6K1  
Canada





Whangamata - Otahu Estuary early Township. Williamson forest centre right- May 1944.

Old Williamson Forest.

Otahu River Estuary 1944.  
No mangroves.

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1-1944/A

Whangamata Moanu Anu Anu Harbour and Township as was May 1944 - (Centre Right).  
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1-1972/B

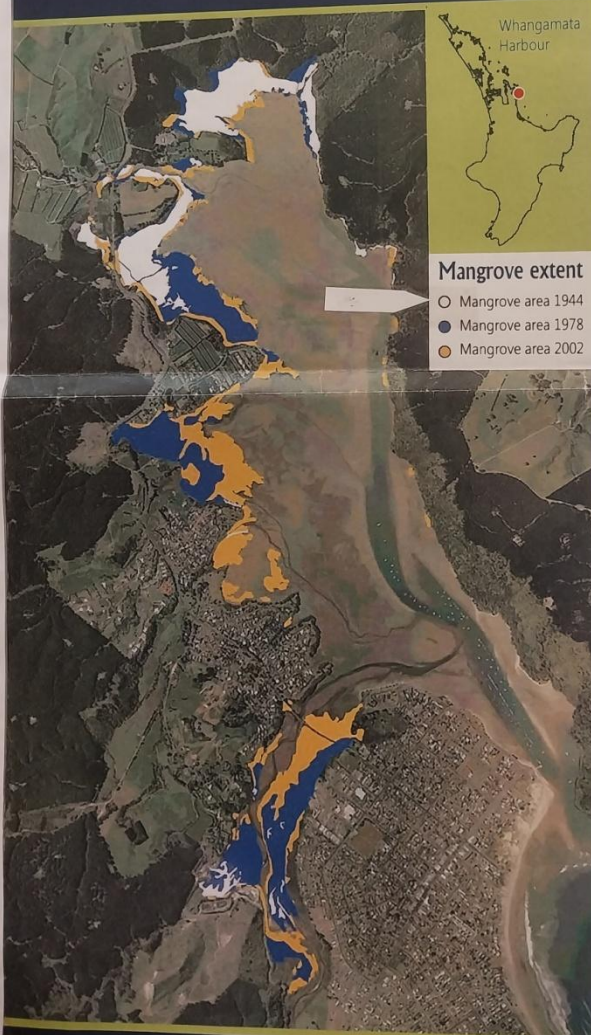
Moana Anu Anu Harbour 1972 - Mangroves spreading across harbour



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# Introduction



The native New Zealand mangrove species (*Avicennia marina* subsp. *australasica*) has been in New Zealand for thousands of years.

Mangroves are distributed within the upper half of the North Island of New Zealand, where warmer temperatures are optimal for survival. Temperate (i.e., not tropical) mangroves are also found in Australia and the United States of America, and comprise about 2% of global mangrove forests.

Over the past half century, mangroves have expanded in extent in New Zealand, mainly seaward across tidal flats (for example in Whangamata Harbour, Figure 1).

Mangrove expansion has been attributed to increased sediment runoff from the surrounding land and catchment, and activities such as causeway construction altering hydrodynamic conditions. This has increased the suitability of many estuarine areas for mangroves, through increasing muddiness, reducing current flows and exposure, and increasing the height of tidal flats.

Research from the Firth of Thames has found that muddy sediments are typically deposited before mangroves expand into new areas, rather than mangroves causing an increase in deposition of muddy sediments (Swales et al. 2015).

Figure 1: Aerial view of Whangamata Harbour and the extent of area occupied by mangroves in 1944 (white), 1978 (blue) and 2002 (orange). Figure: Waikato Regional Council.

Whangamata Moana Anu Anu Harbour and Township May 2012.  
Mangroves well established in all harbour areas due to sediment build up.

Upper Harbour.

Patiki Bay

Moana Anu Anu.

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Mangroves well established in all harbour areas due to sediment build up.

Upper Harbour.

Patiki Bay

Moana Anu Anu.





Whangamata - Partiki Bay - 2012.

Silt from Wentworth River poured into Patiki Bay after mangroves were removed - silt eventually cleared by the washing of tides



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Whangamata Moanu Anu Anu Harbour and Township May 2012.

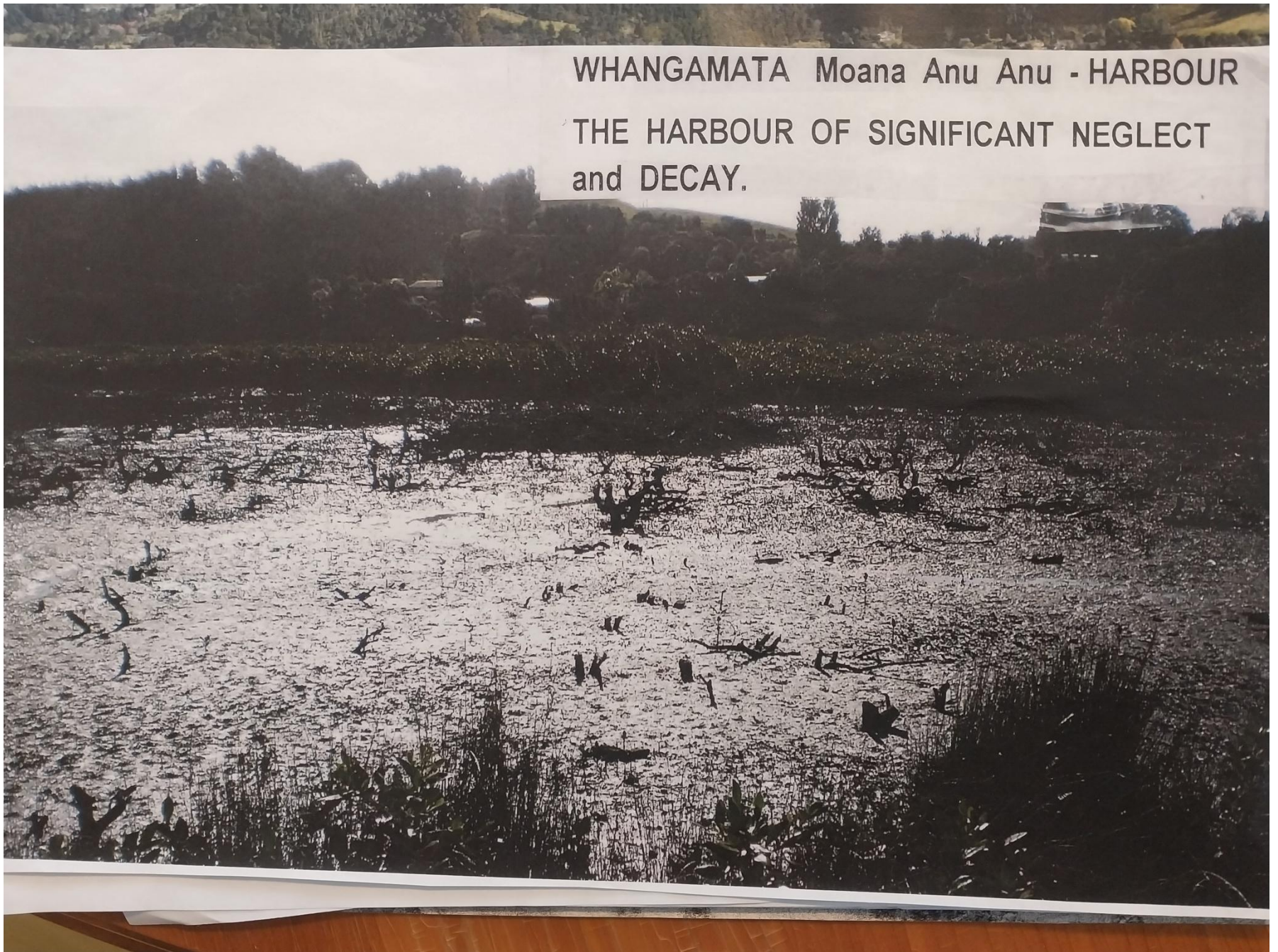
Mangroves well established in all harbour areas due to sediment build up.



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WHANGAMATA Moana Anu Anu - HARBOUR  
THE HARBOUR OF SIGNIFICANT NEGLECT  
and DECAY.

















## WHANGAMATA TOWNSHIP

Whangamata Harbour Moana Anu Anu. The 10 metre Zone.

4-12-20

Taken 4<sup>th</sup> December 2020.

4-12-20

At low tide levels, Despite frequent submissions from Whangamata Harbour Care Inc, to the Waikato Regional Council of the dangers of complying with the WRC directive to establish and to maintain a 10 metre barrier close to the land to allow bird protection. This as predicted by scientific reports would gradually be taken over by the spread of Mangroves and consequent smothering and destruction of the established marsh grasses, which is a protected species. To be preserved. This photo shows an example of this wanton destruction by mangrove and future seedlings destined to completely obliterate the Marsh grasses.

Taken 4<sup>th</sup> December 2020.



Shows foreground cleared of mangroves - which allows clear flood outfall.

Whangamata Inner Harbour - Mangrove Infestation.

Photo 3.



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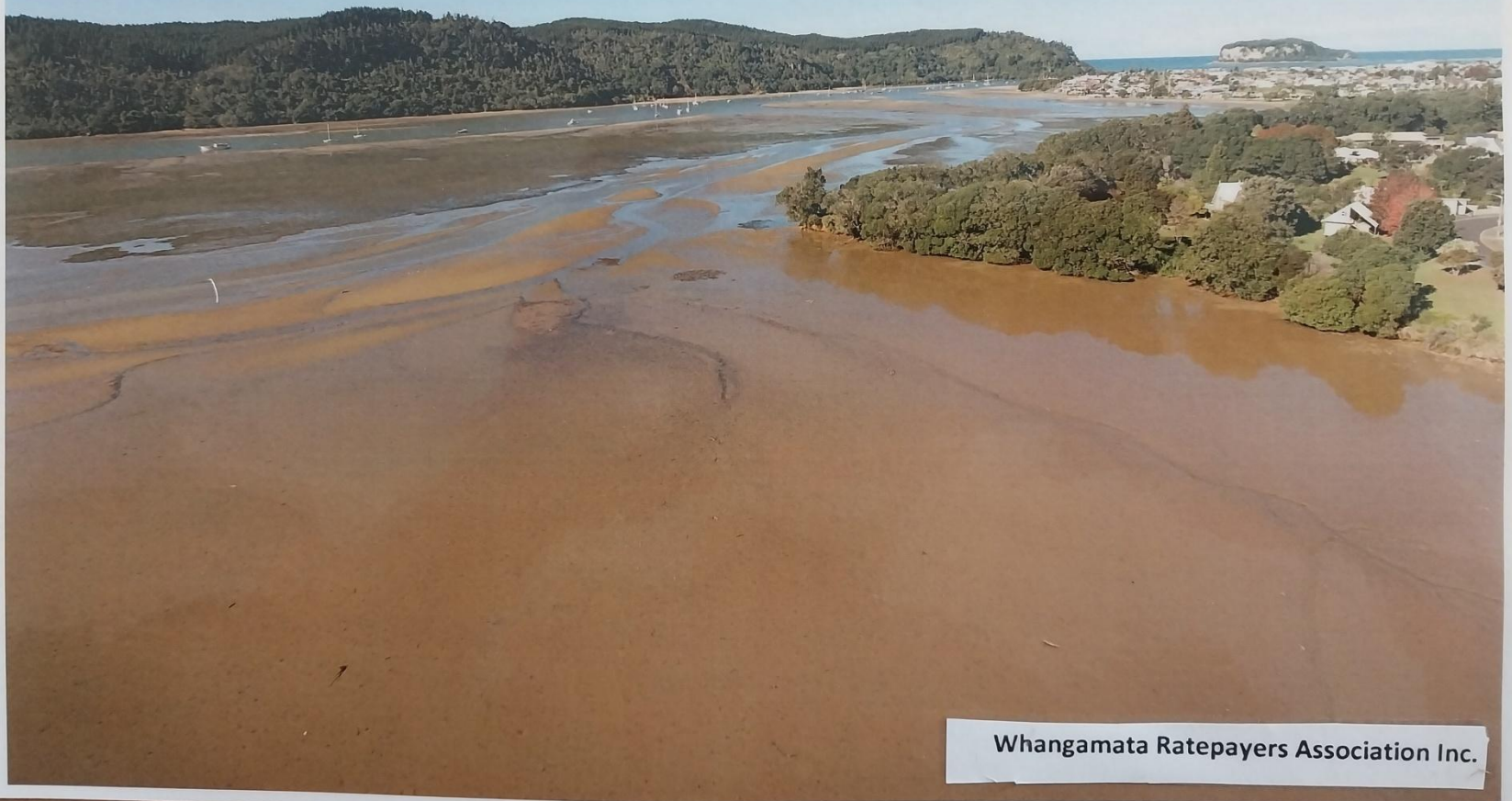


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Taken 4<sup>th</sup> December 2020.

4.12.20



er 2020.



Also shows Wentworth River outlet, top right, which used to contain areas of traditional salt-marsh, are now covered with mangroves due to nutrient feed sediment inflows from the hinterland.

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Whangamata Inner Harbour - Mangrove Infestation.











































































































