

# CLIFTON TO TANGOIO COASTAL HAZARDS STRATEGY 2120

## MINUTES OF THE NORTHERN CELL ASSESSMENT PANEL WORKSHOP 3 – SITE VISIT ON THURSDAY 2 MARCH 2017

### PRESENT

#### Panel Members:

Craig Daly, Douglas Dickson, Garry Huata, Mark Levick, Steve Loughlin, Sarah Owen, Dorothy Pilkington, Oliver Postings, Martin Rockel, Hoani Taurima, Tim Tinker, Shaun Thompson-Gray, Michel de Vos.

#### Facilitation Team:

Peter Beaven (Chair), Des Ratima, Stephen Daysh, Simon Bendall, Jan Seaman (Minutes)

#### Observers:

Mike Adye, Drew Broadley, Mark Clews, Larry Dallimore, Graeme Hansen, Tony Jeffery, Tania Kerr, Dean Moriarty, Emma Ryan.

### APOLOGIES

Paul Bailey, Rina Douglas, Russell Moffitt, Des Ratima, Terry Wilson

### DEPARTURE

Members met at the aquarium car park at 10.45 am and the coach departed at 11.00 a.m. Information relating to the visits was handed out. The original sea wall (opposite the Masonic Hotel) was observed. This was built prior to the earthquake, with the area rising by 1 m during the quake. The site of HBRC's former gravel extraction activity (behind the War Memorial Conference Centre) for Westshore renourishment was also noted.

### PORT/AHURIRI

Michel de Vos updated the group in relation to the Port's activities. Currently discussions are being held and a Resource Consent will be lodged around April of this year for the Port's development plans. This will enable the Port to handle growth at the port/container terminals as well as the longer length of ships. The intention is to build another berth on the northern side of the container terminal and as part of the process the channel into the port will be extended and deepened. To support the resource consent application studies have been carried out which have included wave modeling and coastal processes along the shoreline. Disposal options for 3 million cu m of material from the dredging activity for this project are being considered. The project website, which includes drawings of the proposal and a list of the studies, is on the website ([napierport.co.nz](http://napierport.co.nz)). It was suggested if members had any questions they visit the website, which had an area to submit questions and comments. The reports will become publicly available once the resource consents are lodged. Michel confirmed the beach just north of the road entrance to the Port (Port Beach) will remain in the future, with no proposal to extend the breakwater.

The Port breakwater is porous and as a result there is a small amount of sand that comes through it and enters the drain behind the breakwater. This sand is put on Port Beach, to provide an area for recreational activity.

The new berth will be 350 m long, with two mooring dolphins seaward of the wharf, and will be able to handle the bigger cruise ships.

Currently maintenance dredging takes place every 2 – 4 years depending on the rate of infill. As there is a problem for the barges to get it to the beach the question arose as to whether a pipeline could be used. Michel advised that it may be technically possible but has not been considered in detail. The inshore dumping area was incorporated at the request of the Westshore community and the good sand was dumped as close as vessels could safely get to the shore. A lot of material is very fine sand and is easily mobilized by the sea. It is therefore not suitable for Westshore beach replenishment. Advanced modeling work will be done to find out where the fine material that ends up in the channel comes from. A member of the panel suggested the material could be taken out of the channel and dumped on the Westshore side.

The rock wall along the beach at Hardinge Road was discussed. Only maintenance work is being carried out, as required and is being done by the HBRC Works Group on behalf of the NCC. In a major sea event the area would be afforded some protection from the Port, however, there would be a risk of erosion so it would be necessary to keep up maintenance of the area.

## **WESTSHORE**

Beach renourishment costs amount to \$240,000 annually.

Larry Dallimore talked about the renourishment of Westshore Beach. Various materials have been used for this including pea metal and river materials, which contain silt. Alternative sources are being trialled, however, cost is a consideration. Some nourishment has come in from channel dredging in the past and was considered to be successful, however the benefit was relatively short lived as the sand is fine and therefore mobile. The draught of the new barge is 4 m so it would not be able to deposit sand close to the beach.

Westshore beach is in a permanent state of erosion due to the northerly drift. It was noted that the type of sand (very fine from dredging) and northerly drift could see this material lost, however, it was questioned whether it might change the beach gradient. There is an inshore deficit of material but beyond 300 m the sea bed is stable. Until the deficit is made up the beach, houses and infrastructure will be at risk. There are options, but they are expensive. Hard engineering is the last option and may need to be considered.

Whakarire Avenue - NCC has a resource consent for work in this area, with engineers proposing a simple revetment. This will be put in to provide protection for the houses. The revetment will be limestone rock, the same as that used in Hardinge Road, at a cost of \$1.4 m.

Over time, if no nourishment were done, the shoreline would reach equilibrium, however with sea level rise equilibrium is unlikely to be reached. The sea will find a natural point where erosion stops and this is due to the wave movement, i.e. when waves are parallel to the beach.

Re-profiling of the beach was a consideration – it could dovetail with the work being done at Whakarire Avenue and provide added strength to the renourishment programme. Suggested the panel ask questions of the technical experts, identify what needs to be done over a period of time (thinking out to the 100 year timeframe) and explore the options. Noted that the Tutaekuri River used to come out in this area pre-earthquake, however, it is difficult to identify one cause for the erosion as it is a dynamic process.

It was questioned whether there was an area elsewhere in the world where similar problems have been faced and work carried out to mitigate the impacts. The answer was that this type of beach (mixed sand and gravel) is quite unusual and no other directly comparable examples are known. It was felt that big events would damage the beach and repair work would be needed.

There is evidence that there are benefits from the renourishment scheme being identified as far north as the Esk River mouth. Works being carried out are interfering with nature's process and the impact of this seems to show that it is accreting further north but further discussion is required. The focus will be on solution options.

**Action: Detailed plans of the proposed Whakarire Ave work, including landscaping will be shown at the next meeting on 21 March.**

The group stopped at Westshore Beach for lunch at 12.10 p.m. and resumed the site visits at 1.00 p.m.

The process forward was outlined. The next workshop will look at vulnerability assessment, what should be focused on and prioritising coastal units for option development. Discussion groups will be formed and there will be an opportunity to get some conceptual options drafted up. The technical team will look at how the options may work over time and report back in Workshop 5.

**Action: Any technical questions from Panel members should be written up and submitted to the HB Coast website.**

Willingness of ratepayers to fund responses will be looked at as part of the cost/benefit and affordability process. A funding formula will be required and the councils are working on building up a funding model to deal with costs relating to any of the options.

## **TANGOIO**

Rivers in the area and the significant cultural value to the local hapu will need to be taken into account as renourishment can impact on the reef due to material moving north and smothering reefs / kai moana gathering areas. There is no coastal erosion threat in the Tangoio area, however, sea level rise and rivers could cause problems, especially in regard to the marae.

Tim Tinker outlined the history in relation to the baches at Tangoio, which had been moved back from the crest where they had originally been built. There is consent for development on the other side of the baches, however, no titles have been issued. The valley is a high flood-risk area, which is recognised by the marae. As part of the Treaty settlement in 2014 an amount of \$2 m was awarded to relocate the marae, however, the challenge is where this should be moved to and this is currently under discussion.

Some work was done 8 – 9 years ago to protect the sub structure of the road around the bluff at Whirinaki, which has proved successful. If people will need to retreat from the coast at some time in the future then relocation of the infrastructure will need to be taken into consideration.

## **FRANKLIN ROAD**

Dean Moriarty spoke about a previously proposed housing development and its appropriateness along this part of the coast (Franklin Road to Bay View). There was a court process followed with regards to the development and the Environment Court made the call. The scientists agreed there would be erosion in the area, but the disagreement arose in relation to how far in it would extend. Hazard assessments have been carried out and there is a hazard zone on the area (in the Napier City District Plan), however, it has been moved seaward from what the council identified to allow for some development. The area is subject to erosion. Under the Napier District Plan it is quite restrictive as far as building goes.

*Dorothy Pilkington left the bus, which continued to the Aquarium where Peter Beaven, Larry Dallimore, Stephen Daysh, James Minehan, Emma Ryan and Michel de Vos also left. The bus continued to Te Awanga.*

Mike Adye updated the group in relation to the extraction of gravel at Awatoto by Winstone Aggregates. Over the last ten years of the consent 30,000 cu m per annum had been extracted from the site. That part of the coast is accreting, however, there has been insufficient science on the potential impact elsewhere along the coast and this has been an issue for the Southern Cell. The consent expires at the end of May 2017 and there has been no request for renewal.

The gravel is not likely to move north past the Port, however, there will be further information available when the Port applies for its Resource Consent. If sea walls or other protection were put in it would potentially have an impact on the material moving north. In the southern cell there is a deficit of some 60,000 cu m per annum (i.e. more material is being lost to erosion than is being supplied), which is benefitting the Napier foreshore where this material is accreting.

Mike Adye outlined the RMA process and the following points were noted.

- The HBRC has a function as a consent authority (regulator) and if anything has a potential impact on the environment then a Resource Consent is required.
- All applications must be processed and if Winstone Aggregates wanted to renew their consent they would be entitled to apply. They would need to put forward scientific arguments around potential impacts (or not).
- As this is a legal process consent applicants (or submitters) can take their case to the Environment Court if there is disagreement with the outcome.

The Northern panel will be tasked with coming up with a series of priorities and options, as will the Southern panel.

The three councils (HBRC, HDC and NCC) are going through this process jointly and in future there will need to be decisions around the funding process once priorities have been identified, i.e. what is affordable/cost effective and what is not. Part of the process would be to look at what the community could afford.

The bus stopped for a short visit at Te Awanga Reserve. The protection walls could be seen in front of the houses that were at risk should a significant event occur. If additional protection was constructed it could impact on the properties further north at Haumoana.

The bus departed at 2.45 to return to Napier.

## **QUESTIONS/COMMENTS**

Although the government bought properties in the red zone in Christchurch it was not considered they would do the same in this area i.e. to advance a managed retreat option. That was a response to the earthquake, where the government felt they had some liability. Whether there is any liability here (in terms of coastal hazards) would be debatable. EQC insure for significant events but not coastal erosion. There are some grey areas around inundation and flooding events.

The willingness of the rest of the region to help contribute towards protection of the houses and other erosion prone areas was questioned. At present HBRC and NCC contribute 50% each towards renourishment of Westshore. This is still continuing, although a review has been suggested. HDC and the beneficiaries fund the Flood Protection Scheme, however, residents feel there is benefit to the whole region in protecting the coast. Other matters for consideration include if hard engineering is put in, how would the potential for public money to go into private benefit be managed, e.g. an increase in property values?

Contribution of hill country farmers to any protection works was raised, as there would be no perceived benefit to them. It was felt there would be a portion of public good. It is possible for ratepayers to make submission on the Annual Plan and Long Term Plan (which outlines how Council funds will be spent) in this regard.

The Komar report can be found on the HBRC website, however, if a hard copy is required members should contact Monique.

The bus arrived back at the aquarium at 3.15 p.m.