

# CLIFTON TO TANGOIO COASTAL HAZARDS STRATEGY 2120

## MINUTES OF THE SOUTHERN CELL ASSESSMENT PANEL WORKSHOP 4 HELD AT THE HB REGIONAL COUNCIL, DALTON ST, NAPIER, AT 5.00 P.M. ON FRIDAY 3 MARCH 2017

### PRESENT

#### Panel Members:

Martin Bates, Tom Evers-Swindell, Te Kaha Hawaikirangi, Paul Hursthouse, Peter Kay, Brent McNamara, Mark Mahoney, Bruce Meredith, Keith Newman, Sarah Owen, Aki Paipper, Jagwinder Pannu, Duncan Powell, Maurice Smith, Waylyn Tahuri-Whaipakanga, Jamie Thompson, David Wells, Terry Wilson, Mike Harris.

#### Facilitation Team:

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

#### Observers:

Mike Adye, Tom Belford, Mark Clews, Gary Clode, Larry Dallimore, Graeme Hansen, Rod Heaps, Judy Lawrence, Ann Redstone.

#### Technical Advisors:

Richard Reinen-Hamill.

### APOLOGIES

Peter Paku.

### WELCOME AND INTRODUCTIONS

The Chairman welcomed Judy Lawrence from the Living at the Edge team.

After the last workshop concerns were expressed with regard knowledge gaps and it was suggested members go to the website and post questions, which the Technical Advisory Group would take up. Some matters may be able to be addressed during the meeting.

Des Ratima opened the meeting with a karakia.

### CONFIRMATION OF WORKSHOP 2 MINUTES

#### Motion

That the Minutes of the Workshop 2 meeting be confirmed as a true and correct record with the following two amendments:

Change of spelling - Te Kaha Kawaikirangi; inclusion of Sarah Owen under "Apologies".

The motion was moved (Brent McNamara), seconded (Peter Kay) and carried.

## **PRESENTATION – Vulnerability Assessment for Southern Cell & Coastal Unit Prioritisation**

Simon Bendall went through the overhead presentation. Members were presented with a summary of the risk assessment undertaken by T&T and a supplementary vulnerability assessment which built on this work. It resulted in recommendations on which coastal units in the Southern Cell should be considered the highest priority areas.

Key matters discussed:

1. TAG have looked at the T&T information and gone through the vulnerability assessment process and are making a recommendation on the priority areas. Panel members need to agree with these or they may choose to make changes.
2. Archaeological sites at Te Awanga were queried.  
The sites have been identified within the unit but not in the area of hazard. There is a Pa site on a hill, the site identified would most likely relate to a mound containing bones which has been found on the Clifton side of Te Awanga river mouth, on Clifton Station.
3. Defining 'capacity to cope/adapt'.  
Coping is about the community dealing with an event and getting back to normal living. Adapting is making a change to the environment, or a change made by people.
4. Unit N – Ahuriri Estuary and inundation.  
The Pandora/Ahuriri unit was in the Northern Panel area and is exposed to inundation however the mapping of Unit N picked up the bottom of this area, which skews the overall risk assessment for Unit N. For the Southern Panel it would not be a priority, however, this may change in future as there is uncertainty.
5. Immediate or high risk. From the human perspective the impact for people living in these areas was taken into account, but it was questioned whether the community at large, which could be quite wide, was considered.  
The answer was no, it included people within the cells and did not include affects on businesses or infrastructure. A study into the broader aspects has not been carried out.
6. Questioned who will carry out the 10-Year Review.  
Work currently being undertaken would go into a Coastal Hazard Strategy and TAG's expectation was that in ten years a formal review would be carried out. This would take into account new science and is standard practice in local government – e.g. District and Regional Plans are required to be received every 10 years. It is not possible at this time to say whether or not the review will involve all three councils but this is the intention. In addition to formal reviews there will also be trigger points set in the Plan that will trigger a certain responses.
7. Ongoing monitoring and assessment of impacts.  
There are many scientists working for the HBRC and others for HDC and NCC, so there would likely be a monitoring process in place. The panel could make a recommendation as to what information may be required in future. Mike Adye advised beach profiles are monitored and new data is always being collected. The impact on wetlands may not be looked at closely at this stage.
8. The responsibilities of DoC, HBRC, HDC and HCC were questioned.  
Generally HBRC will have responsibility for carrying out physical monitoring, however, there could be some grey areas. An Implementation Plan will be developed and will be available for review as part of the overall strategy.
9. 10-Year Review. Questioned whether it would be on the work carried out by the panel and whether the Plan would be built on of started all over again.  
The Chairman expected the 10-Year Review to be a build-on of the plan developed now. Adaptive pathways will be recommended and this will be a founding base for the strategy.  
Questioned whether it could be cemented in the document that it will come back to a stakeholder group like the current panel.  
This has not been designed at this stage but would be possible and a sensible thing to do, however, in any event a consultation process would need to be undertaken.

10. Awatoto businesses. If adaptive pathways are agreed that accelerate inundation in another area, ten years was thought to be a long time to wait for a review.  
Trigger events may cause a change in pathway. Criteria would be applied to assessing options in the next session which requires a consideration of impacts on other units - the coast would need to be looked at holistically and not unit by unit in isolation.
11. NCC stormwater network was queried, and whether this had been taken into consideration when assessing the city.  
Catchment flooding with high water levels had not been included in this Strategy but has been mapped and analysed by NCC. This would be an additional overlay on Napier and would be in addition to the Coastal Erosion and Inundation Strategy. Noted that a lot of Napier is pumped.
12. Queried whether recommendations made by the panel would affect the work already being carried out.  
It was felt it should not impact on other work being carried out along the coast. The Chairman said this was a separate issue and outside the strategy of the coastal erosion and inundation strategy development.
13. Questioned whether a national coastal strategy would impact on the autonomy of regions making decisions about how to manage their areas.  
Anything done would be under the overall authority and guidance of the NZ Coastal Policy Statement. Under the RMA the function of regional and local governments is to look at identifying hazards and the TLA's look at how to manage them.
14. Ngaruroro River/Clive and river mouth blocking was a concern, especially in relation to endemic fish species.  
Mike Adye advised that river mouths do block up, however, it is not usually for any length of time. The challenge is when the mouth is not actually blocked but almost blocked. Putting in a new channel did not mean the water would necessarily go through the new channel. Maintenance and management of the river system and access to and movement of shingle will be part of the panel discussions.  
Presence of worms on the bridge was raised.  
It was confirmed these were a fan worms invading the waterways.  
Relevance of the river mouths will need to be considered in regard to knock-on effects and impacts.
15. It was confirmed that Winstone Aggregates had not applied for renewal of their consent to extract gravel at Awatoto.

The presentation concluded with recommendations for priority units. The priority units for recommended further assessment and adaptation pathway development were Clive/East Clive, Haumoana/Te Awanga and Clifton.

## **Motion**

1. That the recommendation of priority units for further assessment and adaptation pathway development be approved as: East Clive (J), Haumoana /Te Awanga (K), Clifton (L)
2. Confirm the following units for assessment and possible adaptation pathway development at the next strategy review point: Awatoto (I), Clive/Whakatu (O)
3. Based on current information, Napier CBD (G), Napier City (N), Marine Parade (H), Raymond Road – Tukituki (P) may not require adaptation responses for inundation or erosion over the next 100 years. This interim position will be reviewed at the next Strategy review point

The motion was moved (Brent McNamara), seconded (Waylyn Tahuri-Whaipakanga) and carried.

Further questions on option development were raised.

1. Beach crests move back naturally over time and it was queried whether it would be possible for these to be physically moved back towards the sea.

These are rather like icebergs, with the larger portion being beneath the crest. The sea would also try to push the crest back again. Adding shingle would be beach nourishment, which had been done and would be an option. There would be ongoing maintenance, however, due to the 60,000 cu m being moved north annually.

2. It was queried whether any suggestions would help the council assess a Resource Consent Application which may be forthcoming.  
Suggested if there was something that had been thought about it should be included on the list. Application for a Resource Consent would be received by the relevant people who would then make a determination as required by the RMA. They may seek advice but it is done at arm's length from the engineering side and would be treated differently from this process.
3. Clifton wall – HDC are progressing this and are approaching Resource Consent stage. Queried whether it should be considered or other alternatives considered in the Southern Panel process. The Panel should continue its consideration of Clifton. Any recommendations developed by the panels can be factored in e.g. plan changes could look at making Resource Consents easier in some parts of the coast for certain activities. It was felt that if the three councils were working together and open to having their processes changed then it would make this process meaningful.
4. Questioned who was on TAG – includes technical and regulatory people. Representatives include Mark Clews (HDC), Dean Moriarty, James Minehan (NCC), Mike Adye (HBRC), Simon Bendall and others from time to time.
5. "Status quo" queried.  
This would be continuing the existing management activities and doing the same things currently being done. Remedial work being carried out after damage would be included but not a new response.
6. Managed retreat queried.  
This would mean that over a period of time a set of processes would be put in place to move property and infrastructure. It would be a long process and could be an addition in some places for homes under threat. If a managed retreat scenario was to be considered there could be a number of things making up that process. Members should think about and factor in the elements they would like to see as part of that process, e.g. subsidy, purchase of land to relocate, proactive way of relocating the infrastructure, priority for relocators above new comers, etc.

Steven Daysh outlined the process for brainstorming and option development, prior to panel members splitting into groups. Options and ideas for adoption should be conceptual at this stage, i.e. groups should not come up with a recommended or preferred option and should only consider the areas they were representing. Observers were welcome to join a group or move around groups. Graeme Hansen replaced Dean Moriarty in the Clive/East Clive Focus Group.

Each group received a form to be completed and it was suggested one person from the group be assigned to report back at the end of the session. Ideas would be taken up and reviewed by the TAG group, who would develop information and link them into pathways. New options may also be suggested if any gaps are identified. Information would then come back to the next workshop for debate by the panel who would ultimately decide which options / pathways to proceed with to the next stage.

#### Boundaries

Unit K (Haumoana / Te Awanga) has been split for the purposes of this options development workshop. The boundary between Haumoana and Te Awanga should be the white bridge in front of Elephant Hill Winery, with the boundary between Te Awanga and Clifton being the Maraetotara River.

Panel members split into small groups at 6.25 pm and reported back to the meeting at 7.15 p.m.

## REPORT-BACK FROM SMALL GROUP SESSION

### Clifton Group

Maurice Smith reported.

#### Identified Risks

- Erosion leading to inundation; significant risk.
- Storm event. Over the timeframe of 1 – 10 years. It can affect access to public facilities, boat ramp, two camping grounds, access to Cape Kidnappers and the Clifton café.

#### Considerations

- Building a sea wall – it will last 30 – 60 years, plus maintenance. Potential loss of No. 2 camp at Clifton. The flood plain on private property susceptible to inundation.
- Construction of a groyne at the end of the sea wall by No. 2 camp.
- A holding-the-line groyne field out from the boat ramp/Clifton camp.
- Offshore reef.

#### Soft Options

- Looking at potential erosion – planting and identifying plants which could grow in the environment. A short-term fix.
- Longer term – 60,000 cu m of gravel nourishment which could flow down if it is dumped at the top end. May be difficult to source material.
- Managed retreat – possibly move the boat ramp but there would be issues (sea currents, problems with the surf break).
- Move the camp to higher ground.
- Maintenance of the coastal road with a road raised on piles (e.g. Manawatu Gorge).

Status quo is an option but there would be significant losses and problems.

Questioned the suggestion of 60,000 cu m of gravel and whether it would be as simple as just moving it back to where it came from, e.g. moving it back down the beach. If groynes were constructed the gravel would fill in behind and the material could be recycled. It was felt this could be possible. The volume would need to be topped up, which would mean recycling with augmentation as an option. TAG could look into the technical aspects.

Questioned whether material from Cape Kidnappers could be pushed straight into the sea. Storm events will bring slips down and it would end up in the sea, however, a lot of sediment in one place may not be a good idea.

### Te Awanga Group

Mark Clews reported.

#### Risks

Inundation. The most significant hazard, which would be the priority.

#### Options

- Use the lagoon and deepen it to create a levee. Possibly pump water out.
- Possible construction of a revetment which would bring consistency of approach with Clifton.
- Event management planning - having council ready to come in when there are storm events e.g. to maintain the crest. Inundation can result when the mouth of the river blocks and is not cleared quickly. Event management would mitigate a lot of the problems.
- Tree planting just South of Maraetotara Stream (Norfolk pines?) to hold the crest and create an amenity.

#### Erosion

#### Options

- Steel poles and tyres, or a modern version of it e.g. an anchor to dissipate the wave energy which would lessen the impact of erosion.
- Groynes.
- Retreat or relocation. Relocation point not reached until 2120 for inundation, so the group focused on erosion. Phased exercise, as properties become more at risk. Would require councils to take the lead with relocation of the road. Emphasis would be on keeping the community together and growing it. Current residents to be given first option on land available,

with relocation being done at the appropriate time. People may choose to move their houses or build new. People would move to the top of Gordon Road, which is private land. Further work required on this option.

### **Haumoana Group**

Mike Harris reported.

#### Risks

- Inundation, which looked to be severe.
- 30 – 50 years out, erosion linked to inundation.

#### Options

- Status quo unacceptable.
- Hold the line – restore the shingle crest. Scrape back from inland spillover and plant up the bank to hold the shingle. Have a reserve management plan and involve the community with plantings. In a severe event it would fail.
- Renourish the shingle bank to protect at-risk areas in particular (erosion and inundation). Could access shingle from the Tukituki River bed. An ongoing commitment required 5 – 15 years and out to 30 years.
- Impending consent for a sea wall for the houses. Goal could be 15 – 30 years with managed retreat after that. Mitigate northward drift after that.
- Groyne field at East Road corner with renourishment. Risk of increased events.
- Maintenance programme for drains and looking after wetlands, lagoons and spillways. Increased frequency risk.

#### Soft Engineering

- Creation of wetlands, i.e. buffer zones for inundation after 2065. Questions with regard to science around this.
- Tukituki river mouth would require monitoring and maintenance.
- Currently vehicles drive on the crest. Can we prevent this? Collaboration would be required.
- Leeway to speed up the consent process/support local initiatives and make it more affordable. Questioned what residents could do in terms of their own soft or hard engineering.
- Some residents may be happy to offer the lower part of their sections to create wetlands. Would require co-operation from residents.

#### Managed Retreat

- The most vulnerable residents could refuse and this strategy would be a last resort. Managed retreat could be staged, following soft/hard engineering.
- Houses in Clifton Rd and one on Beach Rd at high risk and would require short term management.

Questioned whether there would be any way to keep the community together. Inundation is primarily through existing waterways. If they were protected better the inundated area would reduce, meaning potentially that protection of these areas would see more land available, that would be at risk.

Shingle – plenty in the upper reaches of the Tukituki River, which is a vital resource. Could the councils work together to move it to the coast?

The beach is quite dynamic along the coast and sometimes there is a lot of shingle deposited. Could this be used when it's in abundance to build up the crest?

Beach scraping is an option. Richard Reinen-Hamil replied that beach nourishment may need to be considered, along with keeping the riverways flowing.

Inundation maps and level of inundation show differences between Haumoana and Te Awanga. Flood cut-off depth was 0.1 of a metre. There was an elevation change at Te Awanga so anything shallower than 0.1 m was not mapped. Drainage times following an inundation event had not been measured but would be days rather than weeks or months.

### **Clive/East Clive Group**

Graeme Hansen reported.

Risk: Erosion focused.

Levels of protection were already in place, with a pump station network draining Muddy Creek and three groynes in the area. The current protection has performed well, but there could be further retreat of the sea exclusion bank.

Options:

- Plantings on the top of the crest.
- Additional groynes.
- Strengthening of the sea exclusion bank and adding to what has been done previously.
- The wastewater treatment plant may be relocated (or not required) in the future so that asset may not be of concern.

Risk: Inundation

Options:

- There are currently two pump stations – would look at improvements, upgrading, enhancement, reinstatement of plantings (Boxthorn, Tamarisk).

Inundation in Clive would come from a breach in the sea inundation bank as a result of erosion after 2065. It would not be from the river mouth.

## **EDGE EVALUATION SHEET**

Judy Lawrence handed out an evaluation sheet to be completed at the meeting. There was also an online link to the survey, with the same questions.

## **SUMMING UP/NEXT STEPS**

Stephen Daysh advised the completed sheets would be examined, ideas refined and perhaps more detail added. They would then be looked at for technical assessment. Pathways would be developed using the Pathway Planning approach. There would be a break between now and Workshop 5 in order to complete this work with report-back at Workshop 5. Panel members were referred to the HB Coast website should they have any questions or comments.

## **NEXT MEETING**

The next meeting will be on 3 May, commencing at 5.00 p.m.

Des Ratima closed the meeting with a karakia.

The meeting closed at 8.00 p.m.