

# CLIFTON TO TANGOIO COASTAL HAZARDS STRATEGY 2120

## MINUTES OF THE NORTHERN CELL ASSESSMENT PANEL WORKSHOP 7 HELD AT THE HB REGIONAL COUNCIL, DALTON ST, NAPIER, COMMENCING AT 9.00 AM MONDAY 10 JULY 2017

### PRESENT

#### Panel Members:

Craig Daly, Douglas Dickson, Garry Huata, Mark Levick, Steve Loughlin, Sarah Owen, Mike Penrose, Oliver Postings, Hoani Taurima, Shaun Thompson-Gray, Michel de Vos.

#### Facilitation Team:

Peter Beaven (Chair), Simon Bendall, Stephen Daysh, Jan Seaman (Minutes), Aramanu Ropiha (Kaitiaki o te Roopu)

#### Observers:

Paul Bailey, Mark Clews, Larry Dallimore, Craig Goodier, Graeme Hansen, Tania Huata, Tania Kerr, Jon Kingsford, James Minehan.

#### Technical Advisors:

Jonathan Clarke (Tonkin & Taylor), Emma Ryan (Edge Research Team).

### APOLOGIES

Dorothy Pilkington, Martin Rockel, Ann Redstone.

### WELCOME AND KARAKIA

Tania Huata was welcomed to the meeting as a Mana Ahuriri Inc. representative. Thanks were extended to those members who attended the Cultural Values Wananga on Saturday 1 July.

Aramanu Ropiha opened the meeting with a karakia.

### CONFIRMATION OF MINUTES

Minutes of workshop 6 held on Friday 16 June 2017 were tabled for review.

#### Motion

That the Minutes of Workshop 6 be confirmed as a true and correct record  
The motion was moved (Sarah Owen), seconded (Craig Daly) and carried.

#### Matters Arising

1. Presentation by the Port of Napier – the report has not yet been filed. Once filed information can be accessed and circulated to the panel.
2. Scoring workshops (optional). Dates not yet firmed up; information to be circulated when dates confirmed.

### WORKSHOP OVERVIEW

1. Simon Bendall went through the process for the day. Tonkin & Taylor (T&T) and the Edge Research Team had been tasked to carry out an option refinement process as directed by the Panel in Workshop 6. Jonathan Clarke from T&T would run through the screening process and how T & T and the Edge team suggested those shortlisted options were then combined to form pathways. The

MCDCA methodology would be reviewed after lunch by the Panel taking part in an example MCDCA process (Octopus Island), followed by the Panel debating and agreeing criteria weighting.

## T&T AND EDGE PRESENTATION

### Option Screening

1. Jonathan Clarke (Tonkin & Taylor) provided a powerpoint presentation on Option Refinement and Pathway Development. Due to a large number of options in each unit the technical team had been asked by the Panel to reduce the number of pathways for MCDCA scoring and to remove the options that have limited benefit or are considered impracticable from a technical perspective. It was noted that the nominal timeframes were identified as; short = 1-20 years, medium = 20-50 years, long = 50-100 years. The presentation was split into two parts as follows:
2. Part One – Option Screening; Jon discussed each of the 18 options that had originally been developed by the panels and noted reasons those options were recommended to be either included, discarded or grouped with another option for going into the scoring:
  - a. Status quo.
  - b. Planting - would not be a stand-alone option. Would go into a “Beach Maintenance” category.
  - c. Renourishment – gravel is an option to be carried forward.
  - d. Inter-tidal Nourishment - mainly with sand. A short term option if suitable material available.
  - e. Action: To be renamed “Sand Nourishment”.
  - f. Beach Face De-watering - to be discarded as was not a reliable or proven solution.
  - g. Beach Scraping – limited benefits. Not a stand-alone option and will be put into the “Beach Maintenance” category.
  - h. Enhancing the Shingle Crest will also be put into “Beach Maintenance”.
  - i. Wetlands – Lagoons. No room to install these features so removed as a stand-alone option in terms of pathway, but can be added to Manage Retreat pathways and as additional recommendations from the Panel.
  - j. Flood Gates – to be used in conjunction with other flood protection options.
  - k. Install/Enhance Inundation Protection – can be used as a stand-alone option, e.g. Pandora.
  - l. Inundation Accommodation – more of a policy option and discarded as a primary response. It practically would only be useful for new housing due to the difficulties and cost of raising older homes, particularly ones with concrete foundations, so there would not be broad scale resilience. A question was raised whether this would apply to the Pandora industrial area. In response it was noted that the same issues apply; current buildings may be below that level and significant investment would be required to raise them. The council already has something in place for new builds. In addition to determining pathways to be recommended at the end of the process there would be an opportunity to make comments and recommendations outside the actual strategy. This option could be put in as a recommendation to council.
  - m. Vertical Permeable Sill – e.g. railway irons. Not a medium or long-term solution with better options available. This option discarded.
  - n. Groynes and Nourishment. Valid engineering solution, which has been used along the coastline and throughout the world. Would require beach nourishment. This has been grouped into “Beach Control Structures”.
  - o. Breakwater – another valid engineering solution from a technical point of view. Added to the “Beach Control Structures” category.
  - p. Offshore Reef – similar to a breakwater but installed below the waterline. Risks and uncertainties associated with these so discarded. They are more susceptible to sea level rise, harder to

upgrade and do not block all wave energy. A breakwater is above the surface and would be kept that way. An offshore reef would not be constructed along the whole length of the area concerned due to technical difficulties and associated cost. Rip currents can also be created by offshore reefs and wave angles changed. An offshore sand bar (i.e. sand nourishment) is different and is not fixed like a reef. Previously installed reefs in other parts of NZ and the world have not been as effective and not performed as well as originally thought. Rates of sediment transfer would also be changed. Confirmed an offshore reef and sand bar were designed to do the same thing. Offshore reef considered a “Beach Control Structure”.

**Action:** *After further discussion it was agreed that the Offshore Reef option should be retained at this point in the process.*

**Action:** *Jonathan Clarke to put together some examples where an offshore reef has been successful, with information being circulated to the panel.*

Simon Bendall advised that the Southern Panel had agreed to only take forward one form of beach control structure into MCDA scoring and the groyne was felt to be the most suitable in all cases. Jonathan Clarke advised that recently an offshore reef was installed at Mt Maunganui but removed as it caused erosion on parts of the coast.

- q. Sea Wall – noted as a valid engineering solution used widely around the world. Split into vertical concrete sea wall or rock revetment (which is permeable). Large cost difference between the two options and both are “hold the line” options. It was advised that the Southern Panel considered these and in every case a rock revetment was the preferred option over a concrete wall so only this was considered. (The 21 houses at Haumoana were treated as a separate entity due to significant immediate issues.) A question was raised whether it would be possible to switch from a rock revetment to sea wall. It was confirmed it would be technically feasible, however, it would be preferable to make a decision at the start.
- r. Retreat the Line – where the line of defense is moved backwards. A new line is drawn and properties behind the line defended. Those on the seaward side of the new defense line can choose how long to remain but eventually a point will be reached when they will all have to move.
- s. Managed Retreat – would be planned and staged.
- t. The inconsistency between the NCC and HDC in regard to new houses being built near the seashore was raised. Houses in North Shore Rd (HDC) need to be able to be re-locatable (no concrete floors) whereas in Bay View houses are being built with concrete floors (NCC). It was suggested the panel could make a recommendation to the councils to ensure consistency between the councils planning documents (District Plans) in the future.

**Action:** *Recommendation be drawn up to highlight the issue and propose that as part of the HBRC Coastal Plan review process there be more consistency of approach between councils.*

### Recommended Options

1. Before the final set of shortlisted options were confirmed, Panel members requested sometime be allowed to consider the options, especially with regard to cultural aspects (e.g. Pania reef). The Chairman noted the comment and advised that the options, once confirmed, would feed into pathways. Each of the pathways would be evaluated at the time scoring was carried out and could be discussed further at that time.
2. Presently there are three types of beach control structures for consideration and two types of sea wall. The technical panel will review and come back with a recommendation at Workshop 8 on how to approach this.
3. Inundation Protection - flood gates. Areas to install flood gates and stop banks would be limited but could be used in the Pandora industrial area for inundation protection.  
**Action:** *Add flood gates as an option to take forward and email a new version to members.*
4. Shortlist Recommendations for each northern unit were discussed.

## PRESENTATION T&T AND EDGE – Recommended Pathways for Each Priority Unit

1. Jonathan Clarke (Tonkin & Taylor) provided a PowerPoint presentation on how the recommended shortlist of options were proposed to be combined into pathways for each priority unit
2. It was confirmed that ideally the number of pathways should be limited to six or less for each priority unit, but it is up to the Panel to determine the final number and make up of pathways to progress through to MCDA scoring.

### Ahuriri

1. Inundation levels shown on the hazard mapping tool are where properties would be at risk of waves that may come into that area, however, water will not be ponding for significant periods of time. Coastal erosion/inundation - in 100 years the road and some properties would be affected in Ahuriri. The rock revetment would need to be upgraded to reduce the risk of failure if this path was taken. A large storm would damage the structure and the area behind. Sea level rise could also cause erosion. A full survey of the wall and foundation would be required in order to get some idea of when it might fail.
2. The following comments arose from consideration of the proposed pathways.
  - a. Pathway 1. Status quo would essentially be to do nothing apart from minor beach maintenance work. Minimal increase in standard of protection.
  - b. Pathway 2. Managed retreat would be staged, however, with the problem that there is no space to move back to. Agreed to keep on the table for the time being, noting there is uncertainty as to how it would work.
  - c. Pathway 3. Breakwater/reefs probably viable, which would be maintained for about 50 years.
  - d. Pathway 4. Gravel renourishment. It was confirmed Westshore is the only area which has received renourishment in the past. Suggested it be considered with a control structure, e.g. groyne which could help maintain sand/gravel. At some point renourishment would become impractical.
  - e. Pathway 5. Sea wall – the beach would probably be lost if it was not maintained.
  - f. Pathway 6. This would require a commitment to defending at all costs for full term of Strategy. The sea wall would need significant raising in the long term.
3. The definition of short term, medium term and long term was queried. All pathways are 100 year pathways (for planning purposes short term relates to the next 20 yrs, medium term 20 – 50 yrs, and long term 50 – 100 yrs). However it was noted the exact duration of each stage was uncertain, as the rate of climate change is uncertain so some options may last shorter or longer in response.
4. Questions were raised whether the Councils would be bound by the decisions made, which would be based on the recommendations. The Chairman said the reason for the process with a joint committee formed with representatives from all 3 Councils and Iwi is with the intention that all will agree and buy in to the solutions. However, a guarantee cannot be provided that the three councils would agree and ratify all recommendations (as was set out in the Terms of Reference), although it would be difficult for them to completely ignore the recommendations.
5. Clarification was sought as to how things would be paid for, e.g. whether rates would pay for the different solutions including moving houses. The Chairman said pathways would be assessed and preferred pathways agreed. After that time costings will be prepared and there will be opportunity for review. Cost of the preferred pathway and how it would be split between the local and larger community will need to be analysed and discussed as part of the parallel Funding Model work.

*The meeting broke at 10.35 a.m. and resumed at 10.50 a.m.*

6. It was suggested that Status Quo be the first choice for all options. After discussion, it was recommended that rather than try to introduce it as an extra short-term pathway, it should be regarded as a part of the first short term option for all pathways. It was suggested and agreed that

members consider the pathways further after the Octopus Island MCDA exercise. The panel can then re-evaluate, make any changes required and confirm pathways.

7. It was confirmed that the panel will not be considering works associated with the Port of Napier area but will include considerations for the remaining Ahuriri area, however, access to the port would be key. Depending on pathways it may involve the loss of some infrastructure etc. and the panel may wish to make recommendations in relation to this.
8. It was confirmed inundation accommodation could form part of the council policy approach and will be in addition to all the pathways, but it will not form part of a pathway as a standalone option.
9. Events such as earthquake/flooding were queried. The Chairman advised original hazard assessment work included erosion, inundation and tsunami. It was felt a one-off event (e.g. earthquake or tsunami) would be best left in the hands of Civil Defence.
10. Sand/gravel renourishment was queried. It was confirmed that if a crest was to be built up then gravel would be more suitable. There would not be room for a dune system in this area. Sand is put into suspension more easily than gravel with the associated losses by erosion.

**Recommendation:** *That both sand and gravel be looked at when considering renourishment at Ahuriri.*

### **Pandora**

1. Pathway 1. No erosion problem, however, potential for inundation of the whole area in the 100 year time frame. This pathway mitigates against inundation in the medium term but no declaration of intent to extend protection to the area for the full 100 years.
2. Pathway 2. Similar to the above but with inundation protection installed in the short term. No intent to maintain for the long term.
3. Pathway 3. Protection in the form of stopbanks for the long term, so stopbanks may need to be raised over time in response to sea level rise. It was queried whether the Pandora bridge would need to be raised. This is possible but it would be based on information from the design inundation event and There would be very limited wave action past the bridge.
4. Pathway 4. This option includes a floodgate on the Pandora bridge. The bridge could be considered at that time. If the floodgate was installed then stop banks would not necessarily need to be as high, but would be higher on the seaward side. The potential for the loss of the boat ramp at the Napier Sailing Club was queried if a hard solution was built around the sailing club. It was confirmed when designing the defensive structures that a boat ramp would need to be incorporated. The flood gate would offer some protection to the airport as well as the industrial area.

### **Westshore**

1. The main issue for Westshore is erosion and in the long term there is risk to most properties along the sea frontage. There is slight inundation potential only.
  - a. Pathway 1. Renourishment could be gravel, sand or both, which would likely be employed in certain points and allowed to drift northwards. It is important to note nourishment would include both the beach and the near shore area. A question was raised why renourishment was included when it would move northwards. The reason is that if the beach was not renourished then the erosion would be much worse than it is now. Over time however it becomes less effective at preventing erosion losses, although it is currently having a positive effect further up the coast. At present it is not completely holding the line at Westshore, however, the amount of nourishment could be increased. There could be difficulty in sourcing material for nourishment over a large number of years so volumes of supply would have to be considered. The trigger to move from renourishment options may be lack of material supply or cost of supply. Confirmed renourishment would be like enhanced status quo, as nourishment already occurs at Westshore and has been factored in to the current modelling for erosion losses.

- b. Pathway 2. Renourishment plus control structures in the medium term. By adding control structures the need for renourishment would be reduced.
  - c. Pathway 3. As above but with the intent to carry on with the same option long term providing material is available. More control structures would be required than the previous option.
  - d. Pathway 4. Similar but accepting some of the supply issues, increases uncertainty and risk. Moving to a sea wall structure as and when required. Groynes versus sea wall queried. A groyne would maintain the beach as the primary defense, whereas a sea wall holds the coast in place as a fixed structure.
  - e. Pathway 5. Design includes sand nourishment in the 0 – 20 year time frame.
  - f. Pathway 6. Sea wall all the way through which would require upgrading in the longer term. Practically the sea wall would be constructed at some time within the first 20 years, and unlikely to be immediate. There are implications for the beach being lost with this pathway.
2. A sand bar option was queried and it was confirmed that this option is included in the first four pathways. It is described as “inter-tidal sand renourishment”.  
**Action:** *Agreed wording should be changed to “sand bar”.*
  3. There is no pathway that is purely renourishment due to the increasing quantities of material that would be required through future sea level rise as well as reaction time required to respond to significant losses from big storm events. It would be necessary to introduce some type of structure to hold the beach due to the size of waves and their potential to move the material, especially in the case of back-to-back storms.
  4. There will need to be a trigger point with current renourishment when another option will need to be pursued, and this trigger could be availability of material, cost, or amount of inundation occurring. If the trigger point is not reached then renourishment will continue – time frames are flexible.
  5. The option presented in the proposal from the Westshore Residents’ Association was raised and confirmed it is included in the first four pathways.

### **Bay View**

1. Erosion is the issue at Bay View, rather than inundation and not many properties are affected, except in Le Quesne Road.
  - a. Pathway 1. Note there is a benefit received from renourishment and possibly from whatever pathways are chosen for Westshore.
  - b. Pathway 2. Control structures would be required in front of at-risk properties at some point. After discussing the Whirinaki Pathway 2 it was agreed to have both these pathways the same – Renourishment, Renourishment + Control Structures, Managed Retreat.
  - c. Pathway 3. The same to the medium term but committing into the long term.
  - d. Pathway 4. Sea wall could be staged – in front of the most at-risk properties initially and then added to the remainder of the area.
  - e. Pathway 5. Would provide temporary structure prior to managed retreat.
  - f. Pathway 6. Moving immediately to adjust height of sea wall as required.
2. Payment to property owners in the event of managed retreat was questioned. Policies would need to be put in place so that residents would know (in the next ± 50 yrs) how and when they would be required to move and how costs would be attributed. It was pointed out this is a national challenge and local councils were working on a funding model to look at how the cost would be dealt with. A national debate would be required on this matter. It was confirmed in the UK and USA central government is fully involved.

## Whirinaki

1. Similarities with the Bay View priority unit, being primarily an erosion issue. With regard to the highway and bluff, it was noted NZTA may need to do additional work in the future to protect State Highway 2. It was confirmed since the rocks have been placed on the coastline by NZTA to protect the highway there haven't been any further problems at that point. With regard to erosion, presently there is accretion at Tangoio but with sea level rise it will mean the level of the sea will move higher. At North Shore Road the issue is erosion.
  - a. Pathway 1. Relocating the highway would be difficult. Agreed this pathway should be Status Quo, Managed Retreat, Managed Retreat – the same as Bay View Pathway 1. Confirmed that the Panpac mill at Whirinaki will not be at risk.
  - b. Pathway 2. Short Term to be changed to Renourishment only. Control structures would be added when necessary. Pathway for Bay View to be the same as that for Whirinaki.
  - c. Pathway 3. Renourishment only for the short term consistent, with Bay View.
  - d. Pathway 4. Renourishment only for the short term, consistent with Bay View. It was noted there is a lot of inter-dependency with the different units.
  - e. Pathway 5. Change short term to Status Quo. Queried control structures in the short term and noted if the money was to be spent then any control structures would need to last more than the short term. The sea wall proposed for the medium term would be a rock revetment which would slow down erosion.
  - f. Pathway 6. Agreed to change to Status Quo, Sea Wall, Sea Wall. Resources of rock required for constructing groynes and revetments was queried and it was confirmed that concrete units would also be an option if local supply of suitable rock could not be secured. If big swathes of the coastline were to be protected then it would be necessary to go to concrete as there could be difficulty sourcing the larger sized limestone rocks.
2. A query was made regarding whether work carried out further south along the coastline (particularly nourishment) would impact on the reefs north of Whirinaki. It was noted that this has been taken into account and was one of the reasons sand was not considered for units higher than Westshore.
 

**Action:** *Last paragraph of Notes on Pathway 6 – suggested this be changed to read “State Highway 2 would be impacted”.*
3. It was agreed that Pathways would be confirmed at the end of the day.

*The meeting adjourned for lunch at 12.30 p.m. and resumed at 12.50 p.m.*

*Stephen Daysh joined the meeting.*

## **OCTOPUS ISLAND: TRIAL MCDA**

1. The exercise was carried out to assist panel members to see how the MCDA process would be carried out for pathway scoring. It would enable members to work as a group on a scoring process across different criteria and assign weightings. Panel members and observers split into groups to carry out the exercise. Groups reported back at 1.40 p.m. Weightings and their relativity was discussed and the exercise finished at 2.30 p.m.

## **LOOKING AHEAD TO WORKSHOP 8**

1. Workshops 8 and 9 were outlined, with a report-back on how the Southern Panel found Workshop 8. Results from Workshop 8 will be pre-circulated and scores recommended by a technical group for the first four technical criteria for all pathways. The proposed technical scores will be debated by the panel and the recommendations will be able to be challenged and changed after discussion with the technical advisors if appropriate. Cultural Criteria will have been pre-scored so will be presented as recommended scores for discussion. The remaining three “effects” criteria will be scored without any pre-scoring. Some specific responses can be captured with recommendations made, which will be recorded.

2. At Workshop 9 the economics of each pathway will be looked at, along with a benefits/cost analysis and a real options analysis. The order of pathway preferences developed through the MCDA process can be reconsidered at that time. Workshop 9 will be held on 5 September 2017.
3. After Workshop 9 a community feedback meeting, similar to the last one will be held, with a draft output from the panels presented to the community and feedback would be sought. At Workshop 10 a draft report will be received, and community feedback responded to. The draft report will outline the process the panels have taken and will confirm the panels recommendations to the Councils. Once endorsed by the Panel the final report will go to the councils.
4. Deriving costs of the pathways and how the panel would make a decision was queried. It was noted the time frames were long so some (expensive) items may not happen for 50 years or more. Councils will be looking at development and implementation of a contributory fund with money being put aside to help offset future costs. A funding model is in development to assist with setting out public/private split of costs. If there are large differences in cost without the associated benefit, then the preferred pathways could possibly change.
5. Simon Bendall provided a brief report on the Southern Panel Workshop 8. He advised that scoring three criteria for four units took the full day for the Southern Panel. They will reconvene for a further 3-hour workshop to complete the MCDA process. Based on the Southern Panel's experience, a lay day may be required as a back-up for the Northern Panel to ensure we can fully complete the MCDA scoring process. Either Workshop 9 could be used to complete the process, with another day being set aside for that, or another workshop scheduled prior to Workshop 9.
6. It was confirmed that one pathway only per unit would be recommended to councils in the final report.
 

**Action:** *Doodle poll to be circulated for extra workshop a week or two either side of Workshop 9. This to be an evening session and preferably not on a Friday.*

**Action:** *Invitations to attend the Technical Criteria Workshop to be circulated.*

### **CONFIRMING MCDA CRITERIA AND ASSIGNING WEIGHTINGS**

1. The panel went through the MCDA paper, with a PowerPoint being presented by Simon and Stephen. All criteria needed to be weighted on a scale of 1 – 3:
  - a. 1 = important
  - b. 2 = very important
  - c. 3 = critical.
2. Relativity checks would be carried out as scoring proceeded.
 

*The meeting broke at 3.15 p.m. and resumed at 3.30 p.m.*
3. It was pointed out that criteria 1 and 2 related to how effective the options were and the remainder were about the effect of the options. The following weightings and reasons were agreed after debate.



Criterion	Weighting (1-3)	Reasons
Manages the risks of storm surge inundation	3	Responding to this hazard is a primary reason for the Strategy
Manages the risks of coastal erosion	3	Responding to this hazard is a primary reason for the Strategy
Ability to adapt to increasing risks	1	The Strategy has a 10 year review process which will enable it to be responsive to changing science etc. The pathways have a degree of adaptability “built in” – i.e. no pathway is itself inherently inflexible
Risk transfer	2	The pathways will be considered as a whole at the end, therefore risk transfer between units will be considered – given this will be taken into account this lowers the weighting but still an important consideration. Note that anything done in the south will impact further up the coast.
Socio-economic Impacts	3	Everything we are doing here is about the community – if there was no one living here we wouldn't even be having this discussion. The parks, sportsgrounds the beach etc – there is a lot of valued assets along the coast that are hugely valued by people. Note: this weighting went to a vote, with 6 / 5 in favour of a weighting of 3. Those favouring 2 felt that it was more important to have an effective option at controlling erosion and inundation and this should outweigh other considerations.
Relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga	3	The coast is highly significant for tangata whenua as a place to live, gather food, travel, etc. There is both the heritage (past) values of occupations and use, and the present day cultural values associated with access and use – this criteria must have the highest weighting accordingly
Natural Environments Impacts	1	Whatever we do to deal with inundation and erosion will have an affect on the natural character of the coast. The coast in this area is also already modified. The NZCPS favours natural responses but doesn't discount hard engineering. Some of these factors will also be considered in the criteria above (cultural) Note: this weighting went to a vote, with 6 / 5 in favour of a weighting of 1. Those favouring 2 felt that a 2 is relative to the other impact assessment criteria i.e. it is less important given the reasons stated but not so significantly that it should be weighted a 1

*Jonathan Clarke left the meeting at 3.40 p.m.*

## CONFIRMATION OF PATHWAYS

1. Ahuriri
  - a. Pathway 1 - agreed.
  - b. Pathway 2 – confirmed the beach would be lost with a sea wall and it will be scored on that basis.
  - c. Pathway 3 – start with Status quo at the outset and follow with Renourishment (gravel or sand).
  - d. Pathway 4 – Status quo, Renourishment (gravel or sand).
  - e. Pathway 5 – Status quo at the start.
  - f. Pathway 6 – Status quo at the start. Agreed to retain six options.
2. Pandora
  - a. Pathway 1 – agreed.
  - b. Pathway 2 – agreed.
  - c. Pathway 3 – add comment re boat ramp being provided for all options.
  - d. Pathway 4 – agreed.
3. Westshore
  - a. Pathways 1 – 4 agreed to be “Sand nourishment”. Extra descriptive to be added.
  - b. Pathway 5 – agreed.
  - c. Pathway 6 - agreed. NB. The beach was key – if a sea wall was constructed there would not be beach for very long.
4. Bay View
  - a. Pathway 1 – agreed.
  - b. Pathways 2, 3 and 4 – Remove Control Structures and effect changes in comments.
  - c. Pathway 5 – Status quo, Sea Wall, Managed Retreat.
  - d. Pathway 6 – Status quo, Sea Wall, Sea Wall.
5. Whirinaki
  - a. Pathway 1 - Status quo, Renourishment, Managed Retreat.
  - b. Pathway 2 – Renourishment (remove + control structures) for Short Term.
  - c. Pathway 3 - As above for Short Term.
  - d. Pathway 4 – As above for Short Term.
  - e. Pathway 5 – Status quo for Short Term.
  - f. Pathway 6 – Status quo for Short Term – note comment that SH 2 will be impacted.

### Motion

1. That the agreed Pathways to go for evaluation and scoring subject to the changes agreed at this meeting be adopted.  
The motion was moved (Shaun Thompson-Gray), seconded (Steve Loughlin) and carried.

### EDGE EVALUATION SHEET

1. Evaluation sheets were handed out for completion at the meeting, or online.

### NEXT MEETING

1. The next meeting will be on Tuesday 15 August commencing at 9.00 a.m.

Aramanu Ropiha closed the meeting with a karakia.

The meeting closed at 5.00 p.m.

**AGREED ACTIONS:**

<b>Task</b>	<b>Meeting / Agenda Item</b>	<b>Actions</b>	<b>Resp.</b>	<b>Status/Comment</b>
1.	<b>Workshop 6, DEBRIEF AND FEEDBACK FROM 6 JUNE COMMUNITY MEETING</b>	TAG to incorporate the two submissions for Westshore into the process.	<b>TAG</b>	Completed
2.	<b>Workshop 6, DEBRIEF AND FEEDBACK FROM 6 JUNE COMMUNITY MEETING</b>	Peter to circulate the presentation by the Port of Napier to the panel.	<b>Peter Beaven</b>	Consent Application from the Port of Napier still in the consultation process. A meeting will be held at 1.00 p.m. on 16 August at the Port, to discuss surfing matters.
3.	<b>Workshop 6, MCDA APPLICATION AND WORKSHOP PROGRAMME UPDATES</b>	Monique to invite the panels to the technical teams scoring workshop and the cultural scoring workshop as observers.	<b>Monique</b>	Completed
4.	<b>Workshop 6, MCDA APPLICATION AND WORKSHOP PROGRAMME UPDATES</b>	Monique to create a doodle poll to circulate to the panel to identify the preferred date for workshop 8.	<b>Monique</b>	Completed
5.	<b>Workshop 6, MCDA APPLICATION AND WORKSHOP PROGRAMME UPDATES</b>	Monique to update meeting invites and recirculate for workshop 8.	<b>Monique</b>	Completed
6.	<b>Workshop 6, REPORT ON CULTURAL VALUES ASSESSMENT</b>	TAG to work with Aramanu to arrange this site visit and circulate invite to panels.	<b>TAG</b>	Completed
7.	<b>Workshop 6, REPORT ON SOCIAL IMPACT ASSESSMENT / SOCIAL RETURN ON INVESTMENT</b>	Graeme to provide Cerasela with information on walkways and cycle ways.	<b>Graeme Hansen</b>	Completed
8.	<b>Workshop 7, T&amp;T AND EDGE PRESENTATION</b>	After further discussion it was agreed that the Offshore Reef option should be retained at this point in the process.	<b>Jon Clarke</b>	Offshore Reef option has been incorporated
9.	<b>Workshop 7, T&amp;T AND EDGE PRESENTATION</b>	Jonathan Clarke to put together some examples where an offshore reef has been successful, with information being circulated to the panel.	<b>Jon Clarke</b>	Ongoing

10.	<b>Workshop 7, T&amp;T AND EDGE PRESENTATION</b>	Recommendation be drawn up to highlight the issue and propose that as part of the HBRC Coastal Plan review process there be more consistency of approach between councils.	<b>TAG</b>	HBRC Coastal Plan review and consistency of approach between councils. Some discussions have been held – keep on Action List.
11.	<b>Workshop 7, PRESENTATION T&amp;T AND EDGE Recommended Pathways for Each Priority Unit</b>	Add flood gates to the green section “Hold the Line” and email a new version to members.	<b>Jon Clarke / TAG</b>	Completed
12.	<b>Workshop 7, PRESENTATION T&amp;T AND EDGE Recommended Pathways for Each Priority Unit Pandora</b>	The Port of Napier to consider the concern about logs raised above.	<b>Port</b>	Confirmed the concern was about logs (and containers) which may be carried into built-up areas in the event of a tsunami.
13.	<b>Workshop 7, PRESENTATION T&amp;T AND EDGE Recommended Pathways for Each Priority Unit Westshore</b>	Agreed wording should be changed to “sand bar proposal”.	<b>Jon Clarke / TAG</b>	Completed
14.	<b>Workshop 7, PRESENTATION T&amp;T AND EDGE Recommended Pathways for Each Priority Unit Whirinaki</b>	Last paragraph of Notes on Pathway 6 – suggested this be changed to read “State Highway 2 would be impacted”.	<b>TAG</b>	Queried whether wording had been changed
15.	<b>Workshop 7, LOOKING AHEAD TO WORKSHOP 8</b>	Doodle poll to be circulated for extra workshop a week or two either side of Workshop 9. This to be an evening session and preferably not on a Friday.	<b>TAG</b>	Completed
16.	<b>Workshop 7, LOOKING AHEAD TO WORKSHOP 8</b>	Invitations to attend the Technical Criteria Workshop to be circulated.	<b>TAG</b>	Completed