

# **Draft Minutes Thames**

	SMP Coastal Panel Meeting 11: Coastal Adaptation Pathways
Times & Dates:	Thames Coast 9:00am-12:00pm Wednesday 9/03/22
Venues:	MS Teams
Chairperson:	Coastal Panel Chair: Peter Revell
Attendees:	TCDC - Amon Martin, Jamie Boyle & Karen Moffatt-McLeod SMP Consultants (Royal HaskoningDHV) – Sian John, Coastal Panel Members: April Chang, Clive Monds, Eric Carter, Peter Feran, Ron Jamieson, WRC: Alejandro Cifuentes Waka Kotahi: David Grieg, Jo Wilton, Elizabeth Collins
Apologies:	Chris Dale, Jordan Downs, Cherie Staples, Nick Lewis -RHDHV Jess Andrews – Waka Kotahi, David Spiers – Waka Kotahi
Observers:	TCDC Councillors - Robyn Sinclair, Martin Rodley, Terry Walker Bruce Baker - TCDC, Leanne Irvine & Jamie White - DOC, Dennis Tegg - WRC Councillor,

## **Meeting Objective**

Pathway confirmation, feedback from Waka Kotahi and preparation for community consultation events.

# Agenda Items

- 1. Introduction
- 2. Progress:

a. Minutes of Meeting 10 (January 2022) Moved by Ron Jamieson, that "The Minutes from previous meeting be accepted" seconded by Peter Feran - carried

b. Review of Actions

#13 raised awareness and have climate action committee meeting on Thursday – still a need to go through to regional transport committee.

- #34 Hikuai targeted consultation. (as well as Pauanui, Moanatairi, Kuaotunu, Kennedy Bay, Brophy's Beach), Not scheduled yet, but needs to be done in conjunction with WRC not relevant to this panel
- #40 Still in progress Jamie will chase up
- #41 presenting at this meeting
- #43 will progress when they understand what they need the tool to do and be user friendly
- #44 completed

#45 need to update the Pauanui community – no targeted meeting yet (covid hold up) – not relevant to this panel

- #46 on agenda for today's meeting
- #47 Relevant to Whangamata area only
- #48 Updated pathways and will be presented in today's meeting
- #49 Whangamata South Targeted consultation no meeting as yet (covid hold up) not relevant for this panel
- #50 in progress will be documented in the environment report. Potential interactions between contamination sites and pathways, RHDHV have been looking at none in this coastal panel area. One site in Tairua Harbour which is a good example and will be shown. Some may strengthen the need for a particular pathway.

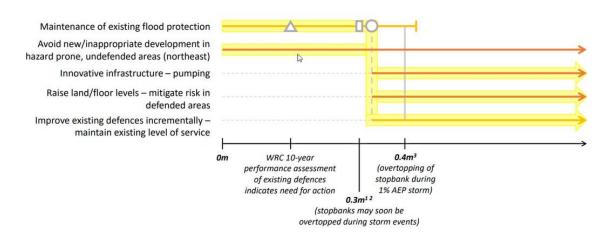
#### 3. Review of updated Adaptation Pathways, Thresholds and Triggers

Following January meetings, comments were taken on board and updated the PU Posters.

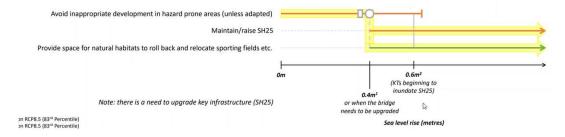
The look of the new posters for public consultation will provide a location map where policy unit starts and finishes to make it clearer. Pathways have been changed to reflect the pathway change/course of action at the 'trigger' rather than at the 'threshold' (which would be too late for action) Key on bottom left gives an indication of timeframes. WRC will need to look at their assets and do consultation process/analysis to make any changes (based on recommendation from SMP report)

Information has also been made available to Waka Kotahi – so they can plan in their regular maintenance for things such as raising the road in some locations.

#### **PU#1** Thames Coast



PR - likes the improvements made to the PU posters



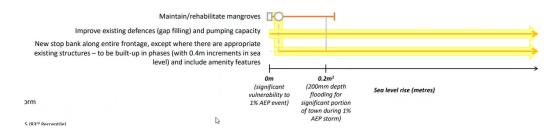
PR – clear and specific requirement for Waka Kotahi to raise SH25 – how is this info going to be presented? Formal response?

SJ – Waka Kotahi have the information on suggestion action that needs to be taken regarding roads in the Coromandel area. Will talk about this in the presentation today

JB - in brackets (unless adapted) needs to be better defined

AM - allowing space for nature - DOC need to be part of the future discussion

#### **PU#2** Thames



Signal was reached in Jan 2018 storm - need to start planning now

RJ - what is the practical realities of maintaining / enhancing mangroves entail?

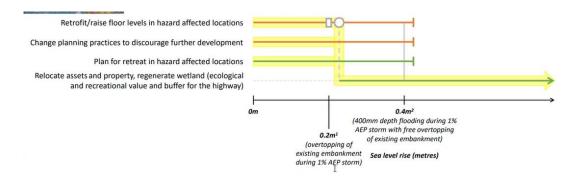
SJ – areas of healthy mangrove system that have a value, so need to enhance them and not loose the ecological value. Habitat, dissipate wave energy etc

RJ – mangroves have been retired from the marina area recently, so doesn't make a lot of sense to keep mangroves.

AM – recognition that mangroves are appropriate in some places and not in others. Which are appropriate will be determined later as lots of factors need to be taken into account.

Need to add 'in appropriate places' after Maintain/Rehabilitate mangrove

#### PU#3 Moanatairi



AM – we have talked with Principal and staff at the school. Some of the hazard is not as imminent for the school as it is a little higher. Targeted consultation will occur in this area. If we could raise the wall at Moanatairi by 0.2 to give another 20 years in this location to manage retreat, at low cost, is this still something we can have as an option?

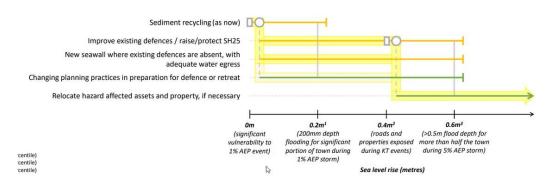
PF – need to consider one of the major employers in Thames is A & G Price. Would they stay in Thames if they had to move location? Need access to skilled people, so may look at moving out of the area if they had to relocate. Do we do something to protect A & G Price as an essential employer.

AM - A & G Price is at a lesser risk than the Moanatairi area

EC - they are on a higher ground (like the school). Land is sinking as well as SLR

SJ – will look specially if A & G Price building is at risk

#### PU#4 Tararu – South

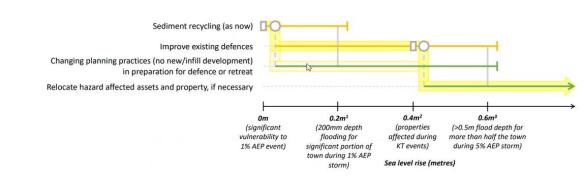


Another area where signal has been reached and need to plan now

PF – all defences already in existence is on private land and they have indicated that they do not want to add to them and impede their view. New defences would have to go into regional council territory.

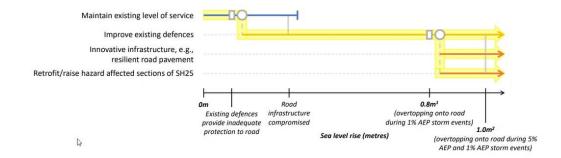
AM – the pathway here is appropriate and will deal with that challenge when we start to look at design and work with the property owners.

RJ - this is where future RMA act comes into form - will address these difficult issues



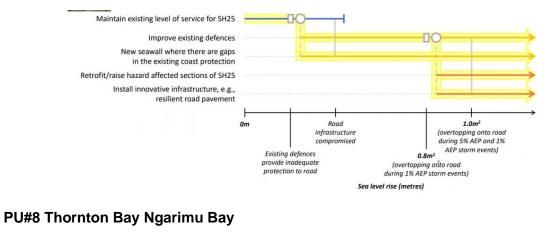
#### PU#5 Tararu – North

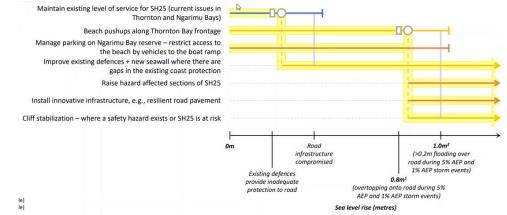
#### PU#6 Tarau to Whakatete bay



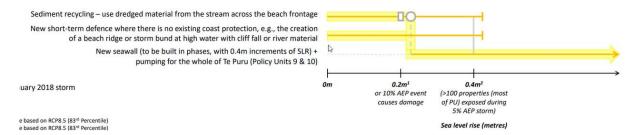
Many of the coastal PU's have a similar recommendation as tend to involve the road and the raising of

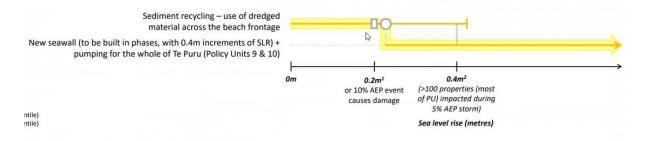
#### PU#7 Whakatete Bay





#### PU#9 Te Puru South





April's email comments have been added at the end of the minutes

AC -NZ's leading climate scientists (Judy Lawrence/Belinda Story) say the natural reaction is to build a wall, but this can give a false sense of security due to perceived permanence. Should consult more with the residents and look at climate lease options etc, so people have the option of what they wish to do.

CM – agrees with what April is saying. For seawalls there is an assumption that power will be available for pumping when there is a storm event is a risky strategy.

EC – any place that is affected by inundation and residents don't want to do anything; insurance will perhaps address that. Sea wall at Tarau is not the answer, some form of lease retreat would be better.

PF – issue is not just properties, but also protection of SH25 – SH25 needs protection otherwise it is underwater

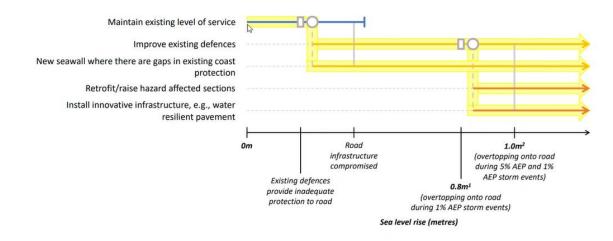
AM – if the area is protected it can result in move development which in turn adds risk long term if retreat is needed at some point in the future. Maybe Te Puru fits in the Tararu scenario?

SJ – A seawall protects the road so we don't need to split the PU – but if we don't go to the defend option then you need to raise SH25

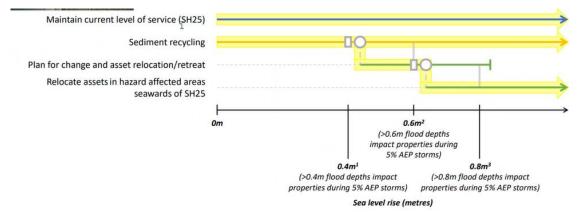
AC – if there is protection works to protect the road, could adjust the planning settings to limit development behind a protected area, a management of residual risk as part of the pathway and can run concurrently

PR - in favor of outlining the 2 separate pathways for further consultation with the residents

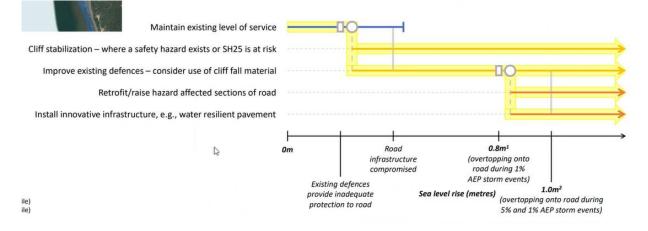
#### PU#11 Te Puru to Waiumu



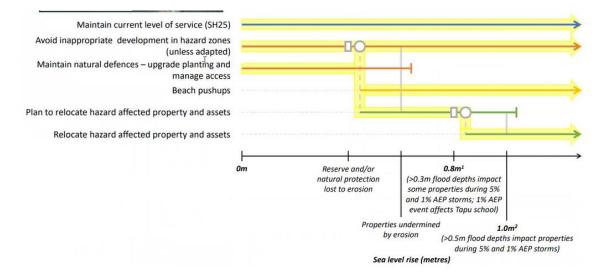
#### PU#12 Waiumu



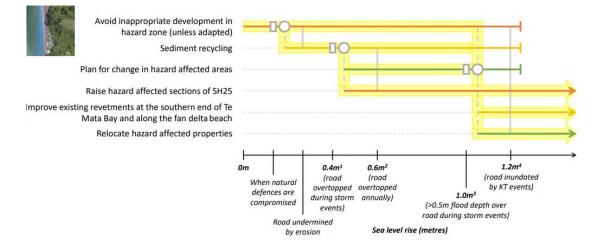
#### PU#13 Waiumu to Tapu



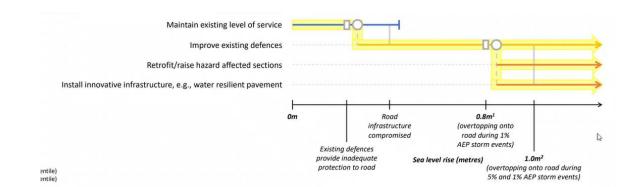
#### PU#14 Tapu



#### PU#15 Te Mata

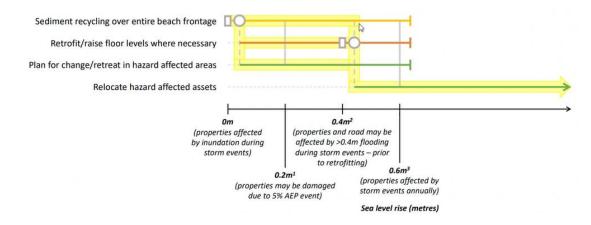


#### SJ - will look at why we suggest improving the revetment and if it has to do with the road



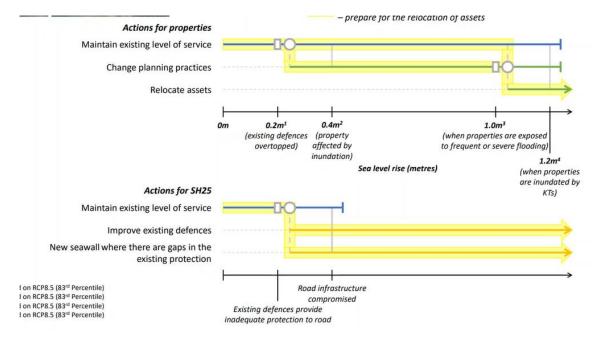
#### PU#17 Waikawau

PU#16 Te Mata to Waikawau



LI (DOC observer) Significant area for bird nesting so DOC will discuss. Would like to be included in the meetings going forward

#### PU#18 Kerata



2 pathways - one relates to SH25

#### 4. Update on options for retreat

Parallel project on Wharekawa Coast occurring – smaller area of coastline. Asked Tim Grafton to present to them about insurance retreat.

NZ insurers take an all-risks approach, NZ is a high-risk environment

# Three fundamentals



**Insurance** transfers risk from the insured to the insurer - it <u>does</u> <u>not reduce the risk</u>

Unless climate change risks are reduced, insurers will respond through price, increasing excesses, exclusions or refusals, so reducing the availability and accessibility of insurance, but this will occur incrementally

Banks rely on insurance to underwrite their mortgage lending risk; if there is no insurance, all the risk falls on homeowners this will likely significantly depress asset values





#### Risk for insurers is a <u>financial</u> sum based on:

Frequency × Severity = Average Annual Damage (AAD)

Frequency based probability of event in any one year

Severity is a measure of actual damage incurred due to any given event; this can be estimated by models using historic events, house type and age

Traditionally, risk rated on historic losses

#### Data is changing the game

Multiple sources – councils, NZGD (geo-technical database), GNS, LINZ, mix of open source/specialist suppliers, e.g. CoreLogic or models

**Type of data** – flood maps, hydrology, topography, Lidar, coastlines, landslips, fault lines

**Insurers' own models** – some larger insurers have their own models

#### Move from community to risk-based pricing or a mix of the two

**Community based -** all pay the same regardless of likelihood of risk, e.g. EQC levy

**Risk-based** - differentiated pricing reflecting risk + financial incentive to manage it

AC - can mean insurance goes down for some and up for others with greater granularity

# Retreat

#### (1) Retreat

- will occur incrementally, but pick up pace if climate impacts accelerate

- first steps will involve premium increases/increases in excess, then limits to cover, e.g. flood exclusion
  - there will be signals from other sources too, e.g. local council
  - Climate Change Adaptation Bill/Act (2024?) will empower councils to manage retreat regardless of insurance signals

#### (2) When?

- depends on the local impacts of climate change
- because it is incremental and each insurer has a different risk
- appetite and commercial responses it will not happen uniformly

- academics have tried to estimate when this might occur using basic assumptions

# **Storey Research**



Te Kāhui Inihua o Aotearc

Reviewed international patterns to see when insurers start to partially retreat (apply higher excesses/premiums) and when they fully retreat from flood cover

63

Concluded that

- the 1:50 year flood recurrence triggers partial retreat
- the 1:25 year flood recurrence triggers withdrawal of cover

Reviewed climate change scenarios (RCP 2.6, 4.5 and 8.5) and concluded

- until 2040 little difference in sea-level rise impact
- but a small sea-level change (e.g. 5-7 cm) can double flood recurrence, e.g. 1:100 year event becomes a 1:50 year event (NB this is just SLR and does not account for storm surges)

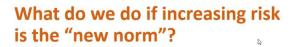
# Do resilience measures affect insurability?

# What affect do climate change adaptation strategies have on insurance?

# Impact of resilience measures

**Yes**, risk reduction measures can reduce premiums/excesses – examples being Flockton Basin in Christchurch, Roma in Queensland, but remember though:

- house insurance is based on all perils, so premium is not just about flood
- premiums will reflect how granular the risk is assessed property, suburb, post code or regional level
- what level of resilience are we talking about? How affordable is this, specially for small communities and low rateable base? How much will central government contribute?
- what will a cost-benefit analysis conclude?
- there are many other much better reasons to become resilient than insurance - socio-economic disruption, asset value decline, loss of amenity values





(1) Apply a risk management framework - control, avoid, transfer or accept

(2) Accept climate change requires a paradigm shift in thinking – we can't continually react, clean up and stay put

(3) If we protect – what are the limits to this approach, acknowledging some risk will always exist?

(4) Anticipate and adapt – build back better or somewhere else

(5) Take an adaptive pathway – work with uncertainty, think about timely interventions and investment (not too soon nor too late)

(6) Rethink land use planning – reduce, hold or avoid the increasing risk

PF – insurance is there because they make a profit out of it. Not too much inspection of the honesty/dishonesty of the insurance network. If the going gets too rough, they will bail.

Presentation has been uploaded to the shared drive

AC - <u>https://www.georgetownclimate.org/adaptation/toolkits/managed-retreat-toolkit/leasebacks.html</u> info on how lease back work in the USA

Wharekawa Coast Community Meeting – project is very similar to our, but a smaller stretch of coastline

All risks approach by NZ insurers

#### **Belinda Storey Presentation is found here:**

https://www.waikatoregion.govt.nz/community/whats-happening/council-meetings/climateaction-committee-agendas-and-minutes/#e9608

#### 5. Presentation from Waka Kotahi – Jo Wilton

#### **Adaptation and Land Transport**

Waka Kotahi commends TCDC and panels on the work and where they have got to. Well ahead of anyone else including Waka Kotahi, so are taking the lead & learnings from TCDC



Climate change is changing the risk to New Zealand's transport networks

We recognise the importance of **access** for communities

We know climate change will increasingly challenge some parts of the transport system and the fitness of current approaches in Waka Kotahi

National Resilience Programme Business Case - June 2020 • An evidence base and risk prioritisation methodology that identified and rated nationally important natural hazards risks (including climate change-related) in the <u>New Zealand land transport system.</u>



# Today

Maintain level of service on SH25

We will continue to maintain the current level of service on SH25

We will:

- respond to events as they occur
- reinstate SH25 access to current levels of service.

We won't be able to commit to a long term pathway for some time.



Currently can't commit to what a long-term pathway looks like. Funded in 3 year cycles we are in 21 – 24 NLTF (over-committed) next funding cycle is 24-27

RJ – couple of corners south of Wilsons Bay area that can only accommodate one lane of traffic at the corner especially with the large trucks – and will result in a serious accident at some time.

JW - Will talk to Rob Campbell (who maintains the network)

EC – takes that Waka Kotahi have 30 years to look at the funding that may be needed in the future.

#### Looking to change ahead

Legislative, planning and policy changes

We're in the middle of many changing systems

This includes a **new Natural and Built** Environments Act and a new Strategic Planning Act

These Acts will encourage adaptation pathways planning over a 100-year timeframe, across the range of adaptation options to reflect different community needs

New requirements under the Zero Carbon Act

- · Emissions Reduction Plan
- National Adaptation Plan

### Looking to change ahead

Assessing transport network risk from climate change hazards

Need our own detailed understanding of local risks

We are currently developing our Risk Assessment Framework to assess climate change risk

We're building our adaptation capability



Very broad look at the issues – National Climate Adaption Action plan by end of 2022 (will be at a high level, rather than specific issues)

#### **Building evidence – SH25**

#### Looking to learn

How the SMP is helping us

The SMP is valuable to help guide our potential options for climate change nationally

Need to work closely with and through WRC and TCDC to:

- integrate the work and insights in our own assessment process to ensure we are all aligned
- engage with iwi and communities

SH 25 has every example of a risk that could be found anywhere in the country

Money for maintenance, but not for the scope of raising / re-directing roads etc in the current cycle. Need to look at reallocation of money for future cycles. Will integrate TCDC work into their next NLTP.

# Working together

Specific risks identified through SMP

Both Waka Kotahi and local government have a critical role in planning and developing the land transport system to keep everyone moving



6. Proposed approach to community consultation events - March/April and June 2022

Committee meeting on Friday – 4 items, Feasibility study, pathways, progress update and comms & engagement strategy update (which is the key one)

Challenging with Covid situation.

Topic	Jan 22	Feb 22	March 22	April 22	May 22	June 22	July 22
Outputs	Updated Comms Plan and Protection Feasibility Study	Draft Adaptation Plans	Draft SMP / Revised Adaptation Plans	Revised SMP / Adaptation Plans	Final draft SMP / Adaptation Plans	Asset pathways RPT / j-Report	Final SMP / Coastal Adaptation Plans
TAG meetings	TAG M11	TAG M12	TAG M13	TAG M14	TAG M15	TAG M16	
SMP Governance Meetings		SMP CoC M5 – 10 <sup>th</sup> February (cancelled)	SMP CoC M5 Presentation 1 to WRC Climate Change Committee – 10 <sup>th</sup> March		SMP CoC M6 – Draft Plan and commitments Presentation 1 to Regional Transport Committee		SMP CoC M7 - Adoption of the SMP Presentation 2 to WRC Climate Change Committee
Coastal Panels	M10: Thresholds and triggers; comms; 17 <sup>th</sup> – 20 <sup>th</sup> Jan		M11: Pathway wrap-up and preparation for community events; 8 <sup>th</sup> – 11 <sup>th</sup> March		M12: Draft Adaptation Plan review		
Wider Community involvement			On-line Targeted Public Consultation – Moanafäiari, Hikuai & Ohuka	On-line Public Consultation – Thames, Te Puru, Colville, Kuaotunu, Kennedy Bay, Whitianga, Tairua, Pauanui & Whangamata		Face to face Public Consultation – various locations across the District – opportunity for written feedback	

3 specific targeted consultations – not all the areas that may need them, will look at Te Puru and Mania

Face to Face meeting to finalise the draft in June.

Would rather do the targeted consultations in person than online – so if we pushed this out for 1-2 months, would push out consultation and a final meeting for Coastal Panels. We don't know how long the wait would be so feel we should push on with the online consults.

PR – agree that Te Puru needs to be a targeted consultation area as well. Face to Face consultation is important, but if all we can do today is an online consultation immediately and

then back up with Face to Face as soon as we are able, particularly with targeted areas – more information and consultation is better. If we can do the F2F in April it is critical to do.

RJ- agrees with PR and thinks SMP#12 needs to be face to face.

AM – on adoption of the Plan – allows understanding of all the work required and seek funding for that work. More face to face consultation with public when work phase is to come in.

CM – agrees with PR on Online and hopefully F2F if we can. Also agrees with RJ and AM comments.

#### **Observer Comment**

Terry – on review panel. Very comprehensive plan put together, well done. Will require buy in for WRC & Waka Kotahi. Agrees walls may not be the only answer

Dennis Tegg – thanks to the panel, work done well beyond what may have been expected. Thanks to RHDHV – best thing to come out of project is the hazard maps.

Wonders why hazard maps are no longer available on website. (SJ - council website had a link to the RHDHV folder – which had an expiry date on the link – which is being sorted)

Adaptation pathways reliance on 1% AEP – perhaps this is now redundant as based on older data and are they now arcuate.

Need to include subsidence in the timeframes for Moanatairi. (AM yes, we should highlight there is an element of subsidence. Periodic protection takes into account both SLR and subsidence. Trigger set is appropriate)

Mangrove management – coastal plan review will be out for public consultation in July.

Cost of hard structures along Thames coast are 623 million – how much has cost come into deliberations.

Excellent work but is a non-statutory plan and needs to go through planning process, signed off by regionals and district council. Then needs to be managed by one of the parties. Hawkes Bay issue – Judge determined Regional Council should take over.

Both councils have joint responsibility for coastal areas.

RJ - why is the risk of rising ground waters not considered as part of the brief?

AM – have considered ground water risk which has been presented to council recently in a report.

DG – waka Kotahi are doing some technical risk assessment along the Thames coast road – would like to see the ground water report to add info into their assessment.

AC – re roles and responsibilities point from DT – have looked at Asher Report from Hawkes Bay process, there is a need to commission a similar report specific to this area.

Final Comments:

RS – really appreciates the work the coastal panels have been doing over their time.

#### 7. Next Meeting (May 2022) and Meeting Closed 12.05pm

\*Note – April's email comments from 8.3.2022

I cannot support a sea wall defence for Te Puru. With due respect to Chris's conscientious efforts, I believe few residents with full consultation would choose a prohibitively expensive and imposing wall (& who pays?) that will not be a permanent solution; compared to a climate lease arrangement that offers some autonomy and choice over their future. Belinda Storey's presentation on this is compelling and recommended viewing.

As we approach the end of our contribution to the coastal panel, I continue to read & listen to climate commentators, including our consultant's reports, further convincing me that hard engineering is not a magic bullet for our low-lying communities.

Some recent quotes that stand out:

- **'It's a hard, dead rat to swallow but we have to do it ...'** Dr Judy Lawrence, climate change adaptation expert summing up the difficult decisions required to support NZ's climate change response, on RNZ last week following the latest IPCC report.
- 'Australians need to have an honest conversation about where and how people build homes. The taxpayer and the ratepayer cannot continue to pick up the bill for these huge, catastrophic damage events,' federal disaster recovery agency head Shane Stone, following historic flooding in NSW & Queensland (different rainfall scenario, I know, but similar core challenges).
- 'Because the extent of the threat to Te Puru in 2120 is significant. The cost of defending (at around \$115M ...) would be large compared to the scale of the community. If defence is pursued, the residual risk associated with overtopping or total failure during an event greater than the design event, must also be considered.' TCDC Coastal Protection Feasibility Study, Royal Haskoning, January 2022

April Greenlaw Chang

Actions	Table –	<b>SMP 11</b>	March	2022
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No.	Action	Responsible	Status
13	Awareness of the SMP Project to be raised with WRC / the Regional Transport Committee	TCDC/WRC officers	In progress - presentation to be provided to the WRC Climate Action Committee first (10 March 2022). Presentation to the Regional Transport Committee to follow.
34	Further work required re. combined flooding events in Kuaotunu West (Kennedy Bay and Hikuai)	RHDHV AM	For Kuaotuna West and Kennedy Bay, see Agenda re. updated adaptation pathways. Targeted consultation planned for Hikuai in February 2022 and Kennedy Bay in March 2022. – delayed due to Covid
40	WRC to provide a frequency assessment for Whitianga Tide Gauge (to be assessed by NIWA)	RL (WRC)/JB	Still to come. Waiting to hear back from WRC.
43	Look at adding filter to online comment tool to group by age/location etc.	Project Office	Not progressed (to date) due to the aspiration to keep the tool simple. Could be revised for March 2022 consultation events.

45	Need to inform Pauanui of the re- analysis of data prior to any specific meeting. Pauanui Post & rate payers Association. URGENT	AM	New hazard lines to be made available to community ahead of the March/April on-line meeting for Pauanui.
47	Concept design to be produced for Whangamata	RHDHV	Concept to be presented as part of SE CP Meeting
49	PU# 140 Whangamata South – may need to engage with specific property owners	Project Team	Held up due to covid
50	Review contaminated site data to determine influence on adaptation pathways (e.g., PU#29 – Wharf Rd Coromandel, regarding mullock from the mines)	RHDHV	In progress - will be documented in the environment report
51	Add a box indicating a combined river/coastal analysis needs to be considered to refine the pathways	RHDHV/WRC	
52	Change wording from 'seawall' to protection to better reflect all of the options available	RHDHV	
53	Adjust PU#127 Pauanui Beach trigger as signal has been reached (SE)	RHDHV	
54	PU#136 Wentworth River East Will update poster to show longer term pathway more clearly (SE)	RHDHV	
55	PU#140 Whangamata Beach South. Re-look at the retrofit storm water trigger (SE)	RHDHV	
56	PU#1 in brackets (unless adapted) needs to be better defined	RHDHV	
57	PU#2 Need to add 'in appropriate places' after Maintain/Rehabilitate mangrove (Thames)	RHDHV	
58	PU#3 SJ – will look specially if A & G Price building is at risk (Thames)	RHDHV	
59	PU#15 look at why improving the revetment was suggested and if it has to do with the road (Thames)	RHDHV	

60	PU#110 need another line added as need to deal with southern end of the beach differently than the northern/carpark end. (MB)	RHDHV	
61	*Note MB area description should be New Chums to Hot Water Beach on all paosters	RHDHV	
62	PU#102 'avoid development in Hazard prone areas' should be now – will be adjusted – make trigger restriction of access e.g. flooded 4 times a year	RHDHV	
63	PU#99 Change to show alternatives (MB)	RHDHV	
64	PU#98 reflect it is a 'live' situation in terms of the resident's rock wall (MB)	RHDHV	
65	Meeting to confirm approach at Kennedy Bay & plan going forward	AM/JA/SP	
66	Follow up on Patukirikiri work with contamination team (Coro)	JB	
67	PU#26 another layer of info from Geo Tech maps has identified there is a slip risk in this area. Will look to see if this has been overlayed on this PU & Review this area and look at raise the road being added to pathway. (Coro)	RHDHV	
68	PU#30 update pathway to add issues as discussed (Ruffin's Bay access is private rd) (Coro)	RHDHV	
69	PU#31 update pathway regarding the Campground and inundation, overlay Geo Tech erosion map & consider that pathway looks like we can maintain the defences to longer than we can (Coro)	RHDHV	
70	PU#32 update pathway we are missing 'maintain natural defences' here as well	RHDHV	

71	PU#36 update pathway to reflect relocation strategy – and Urupa inundation (Coro)	RHDHV	
72	PU#38 plan for change when signal is reached' doesn't mean anything - update wording	RHDHV	