



# Minutes

## SMP Coastal Panel Meeting 12: Draft Coastal Adaptation Plans

Times & Date:	Thames Coast 9:00am-12:00pm Monday 23/05/22
Venues:	Thames Council Chambers or MS Teams
Chairperson:	Peter Revell (Thames)
Attendees:	TCDC - Amon Martin, Jamie Boyle, Karen Moffatt-McLeod SMP Consultant (Royal HaskoningDHV) – Sian John, Nick Lewis – Via Teams Coastal Panel Members: Clive Monds, Peter Feran, Ron Jamieson, Chris Dale, Jordan Downs, Cherie Staples (had to leave at 11am) WRC: Rick Liefing via MS Teams,
Apologies:	April Chang, <b>Eric Carter</b>
Observers:	TCDC Councillors - Robyn Sinclair, Martin Rodley, Tony Fox TCDC – Bruce Hinson

### Meeting Objective

Review and sign-off of draft Coastal Adaptation Plans for submission to the SMP Committee of Council and public consultation.

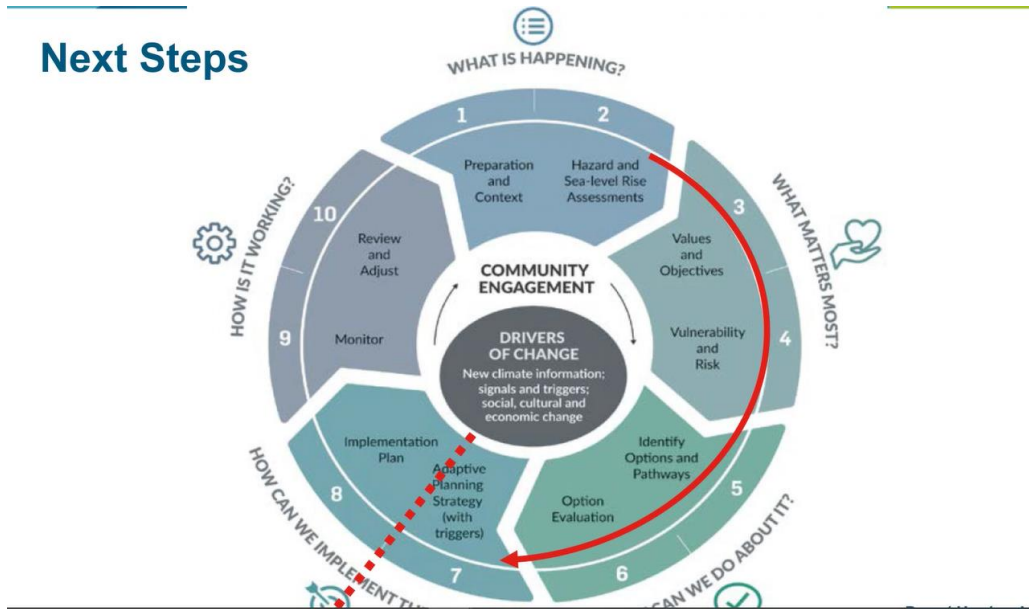
### Agenda Items

#### 1. Introduction

Intro from Bruce Hinson

#### 2. Next steps

## Next Steps



## Next Steps

1. "Last" Coastal Panels Meeting (Today)
2. Public Meetings Starting (June 17)
3. Place holder Coastal Panel Meeting (July 7,8)
4. SMP Committee Adoption (August 18)
5. Council Adoption (September 13)

See timeline calendar for more details

PR – suggests Thames Business Association should be updated? Or encourage them to attend the public meeting.

AM – yes they can attend the public meetings, also open to speak with them directly on issues.

### 3. Progress:

- **Minutes of Meeting 11 (March 2022)**  
Moved to be accepted – RJ, 2<sup>nd</sup> PF
- **Review of Actions**

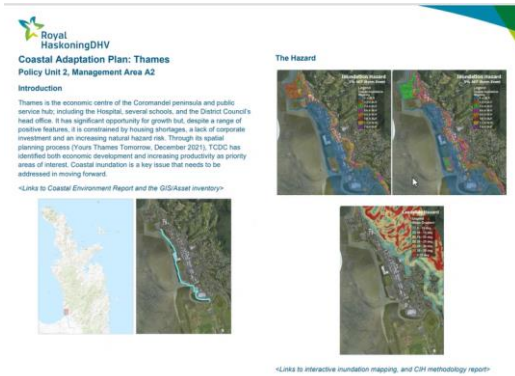
Updated as per action table below

### 4. Feedback on draft Coastal Adaptation Plans

- **Comments from the community** – circulated prior to the meeting
- **Comments from the Coastal Panel**

- Agree any updates

This first on is a summary map.



Final report & Maps will be able to be clicked on when online, plus a link to the interactive maps, link to modelling, methodology, PR – are we thinking about accessibility for the older age groups (feedback regarding older people & technology)?

SJ – there will be a written report – may need to print at A3 size for people to look at.

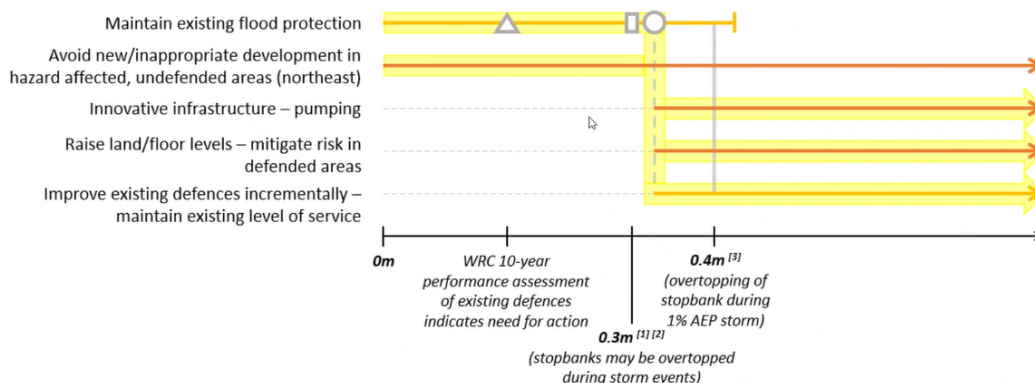
RJ – have there been significant differences to PU’s since Meeting 11?

SJ – some changes have been made since the last CP meetings and online feedback. Now includes landslide mapping. ‘Completing’ the package

## PU1a – Kopu Industrial Area & Village

### Strategy

The strategy for this Policy Unit in the short to medium term is to maintain the existing flood protection to WRC’s existing level of service. In the undefended area to the east of the Kauaeranga River (the old racecourse), development that is not adapted should be avoided. With 0.4m of sea level rise, it is predicted that the existing stopbanks (if they are not raised) will be overtopped by a 1% AEP storm event and this could cause significant harm. Therefore, it is proposed that (where appropriate) land and floor levels in the locations exposed to the hazard should be raised and the height of the existing defences increased in advance (the latter would be delivered by WRC in line with their normal operating practices).



RL – WRC process in accessing performance of stop banks every 10 years – will maintain level of service. WRC is looking at how to manage the future better (with SLR). Will look at level of service/cost implications etc on raising stop banks.

RJ – Katikat raised the levels and used for residential housing – would be keen to look at the racecourse being raised and using as a potential site for residential housing.

SJ – in undefended areas – adapted development could occur.

JD – it would be an extensive process to change the level of service e.g. costs/benefits, so can understand why WRC can not guarantee that they could do this without more research.

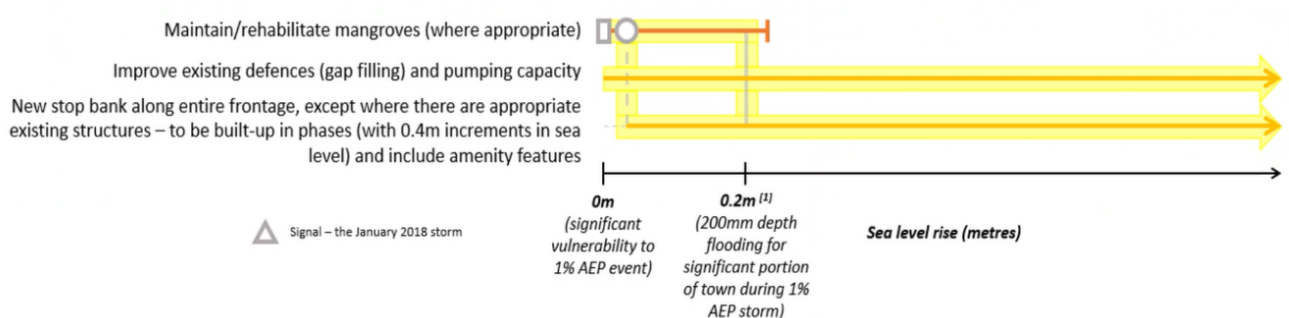
AM – racecourse not included in special planning at this stage

## PU2 – Thames

### Strategy

The strategy advocated for Thames over the 100-year timeframe of the project is to 'Protect' the estimated near \$1 billion of assets at risk. The hazard exposure mapping indicates that, if a foreseeable set of circumstances arise (in terms of wind direction and tide levels), Thames is vulnerable to inundation now from any storm larger than and including a 5% AEP event (approximately a 1 in 20-year event). Given this, the trigger for adaptation is considered to have been met already. That is, the status quo cannot be maintain and a new option needs to be progressed.

The action proposed is to improve the existing defences and plan to construct a new stop bank along the entire coastal frontage in the short term. This should be designed from the outset to provide protection against 1.2m of sea level rise and a 1% AEP event, but can be built-up in phases. The opportunity should also be taken incorporate amenity features and public realm space (including maintaining mangroves where possible).



RL – WRC is committed to working with TCDC on a combined model. Would be a comprehensive model.

SJ – issues with subsidence on some of the foreshore area – need to talk about 'relative' SLR with the land sinking and sea raising

The Risk

Type	Year/SLR	Storm	Exposure	Vulnerability	Consequence
Erosion	2010	1% AEP	Low	Negligible	Minor
Erosion	2040	1% AEP	Low	Moderate	Major
Erosion	2070	1% AEP	Moderate	High	Moderate
Erosion	2100	1% AEP	Moderate	High	Moderate
Inundation	0 m SLR	1% AEP	Extreme	Extreme	Extreme
Inundation	0.4 m SLR	1% AEP	Extreme	Extreme	Extreme
Inundation	0.8 m SLR	1% AEP	Extreme	Extreme	Extreme
Inundation	1.2 m SLR	1% AEP	Extreme	Extreme	Extreme
Inundation	0.4 m SLR	5% AEP	Extreme	Extreme	Extreme
Inundation	0.8 m SLR	5% AEP	Extreme	Extreme	Extreme
Inundation	1.2 m SLR	5% AEP	Extreme	Extreme	Extreme
Inundation	0.4 m SLR	King tide	Low	Low	Insignificant
Inundation	0.8 m SLR	King tide	Extreme	High	Major
Inundation	1.2 m SLR	King tide	Extreme	Extreme	Extreme

<Link to the detailed risk assessment>

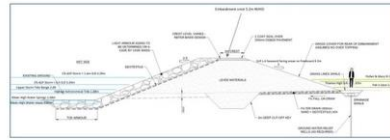
The Response

At the option assessment stage, the following adaptation options were considered:

Policy	Options
Be Prepared	Provide regular information to affected stakeholders on hazards, risks and management measures.
Be Prepared	Implement hazard warning systems and prepare emergency response plans.
Accommodate	Maintain natural defences through dune management; maintenance of sediment supply; maintaining foreshore vegetation and wetlands; and managing stock access to the foreshore.
Protect	Improve the resilience of existing coastal defence assets, including seawalls, revetments, stop banks, groynes and cliff stabilisation works.
Protect	Construct a new seawall or revetment.
Protect	Construct a new stop bank and drain.
Managed retreat	Changing planning practices.
Managed retreat	Relocate assets.

<Links to the option viability assessment and CP values report >

To provide context for the option assessment and inform the Thames Spatial Plan, the feasibility of protecting Thames against a 1% AEP storm event and 1.2m of sea level rise was investigated.



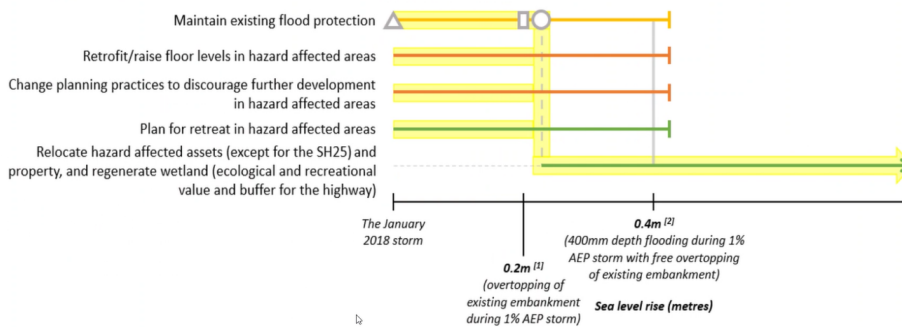
<Link to Coastal Protection Feasibility Study>

PU3 – Moanataiari

Strategy

In Moanataiari, sea level rise, subsidence, rising groundwater, and contamination create an environment where the residual risk/risk to life associated the existing (or enhanced) defences being overtopped in a storm event will be significant. Vulnerability is high and adaptive capacity low. Relatively significant overtopping of the existing embankment is predicted to occur during a 1% AEP storm event with just 0.2m of sea level rise. Consequently, 'managed retreat' is advocated as the appropriate adaptation strategy in the medium to long term.

In the short term, the existing flood protection should be maintained and, where possible, floor levels raised/properties retrofitted. New infill development should be discouraged. Next steps should include the investigation of options for managed retreat, including the concept of 'climate leases'.



PR – have we taken into account the acceptable amount of over-topping (which the pumps can cope with) and at what point will the pumps not mitigate this?  
 AM – the amount of water (static water) at 0.2m during a large storm event, the pumps will no longer be effective. Pumps can cope with the 'splash' over-topping, not consistent pouring over of water.

CM – They would start getting water coming in from Kuani Bay coming in behind the wall with SLR and storm event.

SJ – talking about relative SLR – the signal to plan for retreat has happened (2018 storm). People didn't think that was fair as they weren't flooded in 2018. Feedback was they (the public) want to see a signal e.g. 0.1m SLR  
Reality is that the council should be planning for this now (0.2m SLR is possibly only 20 years away). If we don't start to plan for change now, we could start too late. Council should consider planning for this now.

AM – Tonkin & Taylor are doing a review (2023 report). Insurance trigger is generally 'susceptible to flooding in a 1 in 20 year storm event' – current defences can cope with a 1 in 100 year event (so should still be able to get insurance) We need to ascertain if the wall can be raised or not – once T&T have reviewed.

SJ – improving the defences would 'buy' time.

PF – is the seawall undergoing 'settlement'

AM – need to provide 'level of service' so would need to build up if the seawall or parts of have settled. There may be the opportunity to build up the wall more at that time if it was cost effective.

CD – is there a plan to take the people from managed retreat areas and relocate them to?

AM – this would be part of the longer-term planning once the strategies have been adopted.

CD – if you can't raise the wall – would this not be the best trigger? YES

Discussion on Denis Tegg's comments in a conversation he had with PR, that he believes that Moanataiari will have 8 years, not 20 years (based on paper published by Richard Levy & Tim Naish)

Levy and Naish predict SLR predictions need to be doubled.

### Moanataiari

Tonkin and Taylor Report June 2018¶  
Executive Summary¶  
The top of the seawall protecting the Moanataiari subdivision is currently below its design level and is settling at a rate of 6-10 mm each year. This, coupled with anticipated sea level rise, indicates that the seawall will become increasingly vulnerable to overtopping during future storm events. Current indications of continued average sea wall settlement and sea level rise are 8 mm per year and 14 mm per year.....¶  
If borne out, these projections will mean that the seawall could lose 0.22 m of freeboard over the next 10 years, and 0.66 m over 30 years.¶

PR – there is always going to be to be new information coming through, which the plan will need to adapt to.

Is comfortable with the process that the panel has been through based on the information that was available at the time.

AM – there is a need to look at the specific areas where the settlement is occurring as it is not consistent over the whole area. T&T report shows a range of benchmarks of settlement of the seawall.

Needs to be reviewed once the T&T Report is available.

AM – would advocate for doing the planning work (on managed retreat in any area) sooner rather than later, so that if the trigger is sooner, TCDC are prepared.

## PU4 - Tarau South

### Strategy

Although a defence solution for Tararu was investigated, it is not advocated as part of the adaptation pathway. That is, its extent would be extensive (affecting properties on the seafront) and potentially prohibitively expensive (relative to the economic value of the assets at risk). The strategy advocated, however, does include continued sediment recycling and enhancement (including gap filling) of the existing earth embankments to extend the period over which it will be viable to remain in Tararu (into the medium term and potentially 50 or more years, dependant on the rate of sea level rise). Once this approach is no longer sufficient, managed retreat would need to occur. Albeit it is envisaged that SH25 will be maintained (providing access to the rest of the Coromandel north) into the long term.



CS – will Waka Kotahi, WRC have the same strategies when theirs are finished, will they align and will everything to come together at the same time?

AM – Waka Kotahi have said they we will maintain their level of service but are still working on their plan.

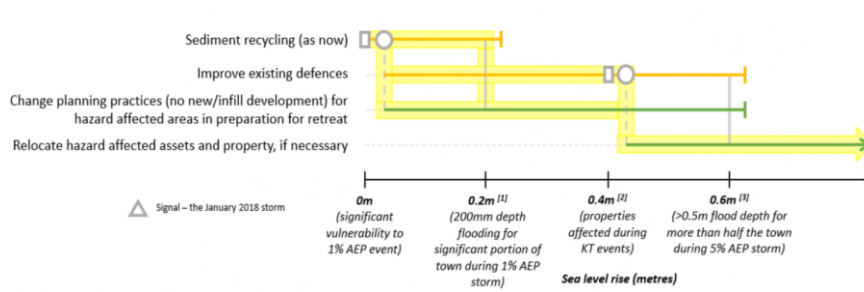
AM – 2023 will be to understand the long term costs of the plans for the LTP – Waka Kotahi are on the same funding cycle. Still a lot more work to be done on implementation. Once we have our plan, hopefully Waka Kotahi will collaborate with the TCDC plan, taking the lead from the TCDC work.

## PU5 - Tarau North

Although a defence solution for Tararu was investigated, it is not advocated as part of the adaptation pathway. That is, its extent would be extensive (affecting properties on the seafront) and potentially prohibitively expensive (due to the need to cross SH25 and relative to the economic value of the assets at risk). The strategy advocated, however, does include continued sediment recycling and enhancement of the existing earth embankments to extend the period over which it will be viable to remain in Tararu (into the medium term and potentially 50 or more years, dependant on the rate of sea level rise).



Once this approach is no longer sufficient, managed retreat would need to occur.



PR – spoke to AM and are looking at doing a specific briefing for the BUPA residential village.

PF – 90% of the people who live in Tararu North are retired – so these timeframes are not really of concern to them.

CM – there are rules around disposal of their properties when they die (BUPA residents) so their families have a vested interest.

RJ – what was the timeline for the 0% SLR and how much has it increased since?

SJ – 2020 when modelling was done. JB – predictions would say approx. 0.024 SLR per year is occurring.

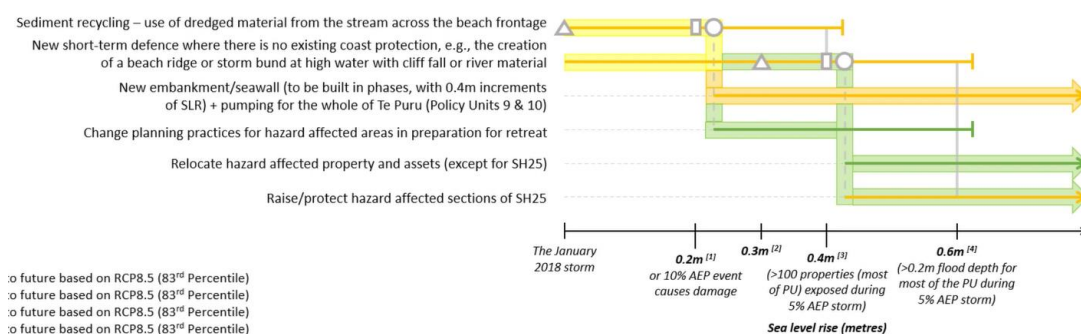
RL – updating predictions are being reviewed and information should be released soon.

**PU 9 - Te Puru South** (not as well defended as Te Puru North currently – a gap in their defences)

**Strategy**

In the short term the strategy for adaptation in Te Puru south is clear – sediment recycling should be undertaken (using the dredged material from the creek) and a storm bund or similar built where there is no existing coast protection. This should address the more immediate risk and “buy time”.

With 0.4m of sea level rise, however, over 100 properties across Te Puru will be exposed to a 5% AEP storm event. Prior to this point, a decision will need to be taken (and it is proposed that this decision point should be when 0.2m of sea level rise has occurred) regarding whether the community would rather construct large (and expensive) embankments and seawalls (over time) – thereby losing the beach – or maintain the existing defences for as long as possible and plan to retreat/retreat. When sea level rise reaches 0.6m, it is unlikely to be viable to remain in the hazard zone in Te Puru (without new defences).



o future based on RCP8.5 (83<sup>rd</sup> Percentile)  
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CD – last 9 properties are ‘riparian’ right properties. At what point do we say the riparian rights properties are the responsibility of the owner? Or does the council need to provide protection (on private land)?



PR – Chris is raising issues on implementation, where we need to be talking about the ‘strategy’.

CD – undefended area is the northern most part from reserve to the boat ramp.

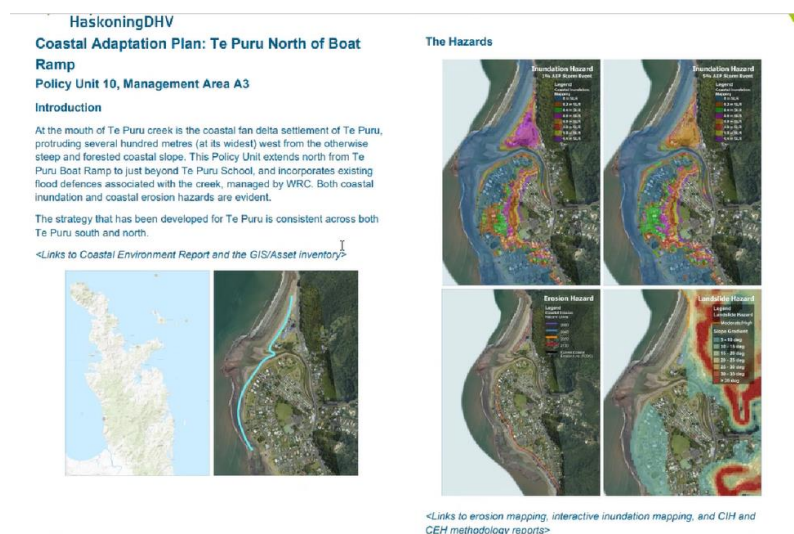
AM – other house’s south, have erosion protection rather than flood protection, so still have the potential to flood, and may need to relocate in the future. Implementing the strategy will have a lot of central government input.

JB – central government may be looking at removing the existing use rights (e.g. riparian rights)

JD – if one PU in Te Puru shows a different pathway, will that effect the other?

SJ – yes it would

## PU10 - Te Puru North

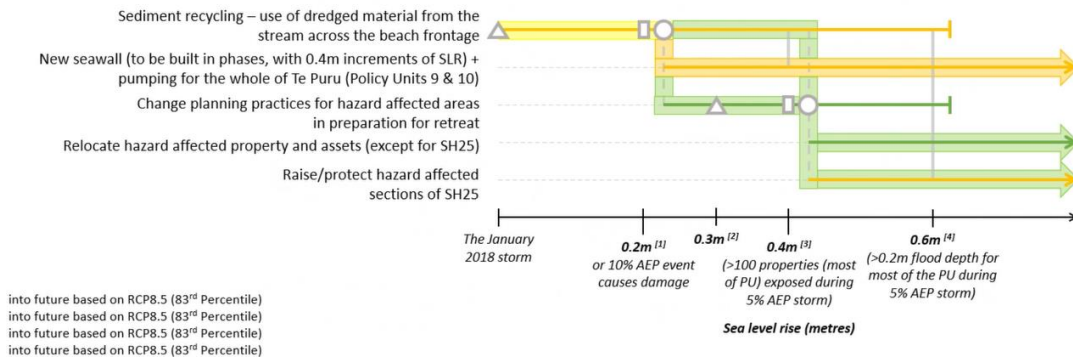


## Strategy

In the short term the strategy for adaptation in Te Puru north is clear – sediment recycling should be undertaken (using the dredged material from the creek).

With 0.4m of sea level rise, however, over 100 properties across Te Puru will be exposed to a 5% AEP storm event. Prior to this point, a decision will need to be taken (and it is proposed that this decision point should be when 0.2m of sea level rise has occurred) regarding whether the community would rather construct large (and expensive) embankments and seawalls (over time) – thereby losing the beach – or maintain the existing defences for as long as possible and plan to retreat/retreat. When sea level rise reaches 0.6m, it is unlikely to be viable to remain in the hazard zone in Te Puru (without new defences).

As for Tararu, however, it is important that SH25 is maintained, raised as necessary and protected, as lifeline infrastructure to the Coromandel north.



SJ – with most of the PU’s the panels have settled on a preferred strategy, however for some areas, this being one of them there will come a point where the community will need to make a decision, which is why there are 2 strategies.

CD – surprised retreat option was taken out of the picture, when all the way through this was a suggested option. There will be a point where they can no longer be defended. Managed retreat will need to be a serious option in Te Puru North (about 20% of the housing in Te Puru). We know it is going to happen, but we don’t need to make that decision now. Thinks erosion (long-term) will be more of an issue than the inundation will be. Chris has sat down with around 85% of those at risk and gone over the maps with them. Majority want to stay as long as possible (a little bit of water is ok as long as it can be removed).

SJ – one pathway shown is more likely to get a response from the public at the meetings, than if there is more than one option.

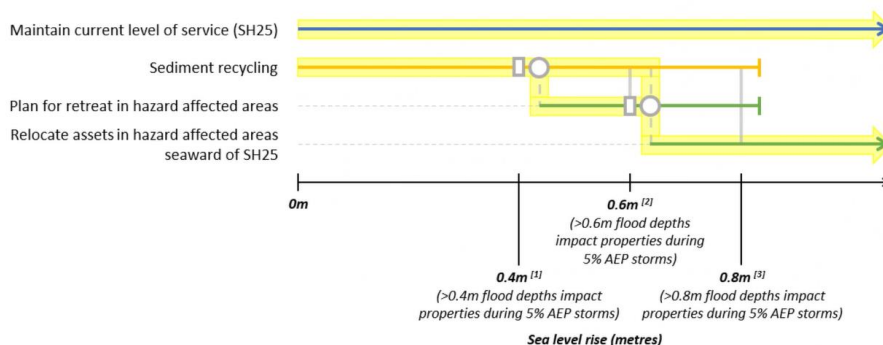
CD – sediment recycling working, change line to when it gets to 0.4m, that is when we retreat.

## PU12 Waiomu Bay

### Strategy

The adaptation strategy advocated for Waiomu, as for Tararu and Te Puru, is to maintain the current level of service of SH25 (and access to the rest of the Coromandel). In the short term, sediment recycling is also proposed (using material from the stream to build up the levels of the beach in the south of the delta).

In time, sediment recycling alone is unlikely to provide sufficient defence to all locations and, with 0.6m of sea level rise, assets in the hazard zone could be affected by over 0.5m of water during a 5% AEP storm event. Therefore, this has been selected as the trigger for retreat (the signal would be 0.5m of sea level rise).



CS – highway is quite low in this area.

**Summary of Round the table comments**

RJ – has been constantly disappointed that everything is very negative focused, and we don't take the positives out of this. No mitigation of the negatives in this process.

CD – biggest positive to come out of this is that Thames has to be saved. Thoroughly enjoyed the discussion

CM – biggest positive was implementing this process. Very incremental process and it is very hard for people to engage. We need to engage people in a positive way moving forward. We need to put a positive spin on it so people understand that it is for their benefit. We still need buy in from people.

JD – congratulations to the team in getting the process done and to Chris in his passionate work in Te Puru – the door knocking etc

JB – very proud of this project, the change from 10 years ago to now has been immense, and very proud of this group.

AM – it has been a journey and takes time to understand all the hazards, pathways etc, this group has done this, it's been a positive group and it has been a pleasure to be part of it.

NL – on a tech front – essential to get everyone's insights on values, questions. And work put in by the group.

TF – hopes there is the same level of commitment with the other groups as this one.

RS – appreciates the works the Coastal Panels do

MR – endorses what everyone else is saying

PR – wants to say to everyone on the panel – it has been fantastic. Ron's contribution has been fantastic. Wants to pay tribute to Amon who has been a fantastic Project Lead – always accessible and listens to what people say. Sian & Nick have been fantastic for the work they have done.

SJ – thank you Peter, you have been a great Chair.

**5. Meeting closed at 12.25**

**Actions Table – SMP 11 May 2022**

No.	Action	Responsible	Status
13	Awareness of the SMP Project to be raised with WRC / the Regional Transport Committee	TCDC/WRC officers	Completed – Amon presented at the committee meeting Monday last week (Tony Fox in attendance). On

			Tuesday presented at the policy & strategy meeting.
34	Further work required re. combined flooding events in Kuaotunu West (Kennedy Bay and Hikuai)	RHDHV AM	Completed
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. <b>Closed</b>
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.  Item closed but may come into the final delivery of the SMP Project Plan. <b>Closed</b>
45	Need to inform Pauanui of the re-analysis of data prior to any specific meeting. Pauanui Post & rate payers Association. URGENT	AM	Completed
47	Concept design to be produced for Whangamata	RHDHV	Completed
49	PU# 140 Whangamata South – may need to engage with specific property owners	Project Team	Completed
50	Review contaminated site data to determine influence on adaptation pathways (e.g., PU#29 – Wharf Rd Coromandel, regarding mullock from the mines)	RHDHV	Completed
51	Where Appropriate, add a box indicating a combined river/coastal analysis needs to be considered to refine the pathways	RHDHV/WRC	Completed
52	Change wording from 'seawall' to protection to better reflect all of the options available	RHDHV	Completed
53	Adjust PU#127 Pauanui Beach trigger as signal has been reached (SE)	RHDHV	Completed
54	PU#136 Wentworth River East Will update poster to show longer term pathway more clearly (SE)	RHDHV	Completed
55	PU#140 Whangamata Beach South. Re-look at the retrofit storm water trigger (SE)	RHDHV	Completed
56	PU#1 in brackets (unless adapted) needs to be better defined	RHDHV	Completed

57	PU#2 Need to add 'in appropriate places' after Maintain/Rehabilitate mangrove (Thames)	RHDHV	Completed
58	PU#3 SJ – will look specially if A & G Price building is at risk (Thames)	RHDHV	Completed
59	PU#15 look at why improving the revetment was suggested and if it has to do with the road (Thames)	RHDHV	Completed
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	Completed
61	*Note MB area description should be New Chums to Hot Water Beach on all posters	RHDHV	Completed
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	Completed
63	PU#99 Change to show alternatives (MB)	RHDHV	Completed
64	PU#98 reflect it is a 'live' situation in terms of the resident's rock wall (MB)	RHDHV	Completed
65	Meeting to confirm approach at Kennedy Bay & plan going forward	AM/JA/SP	Completed
66	Follow up on Patukirikiri work with contamination team (Coro)	JB	JB will look into this
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	Completed
68	PU#30 update pathway to add issues as discussed (Ruffin's Bay access is private rd) (Coro)	RHDHV	Completed
69	PU#31 update pathway regarding the Campground and inundation, overlay Geo Tech erosion map & consider that pathway looks like	RHDHV	Completed

	we can maintain the defences to longer than we can (Coro)		
70	PU#32 update pathway we are missing 'maintain natural defences' here as well	RHDHV	Completed
71	PU#36 update pathway to reflect relocation strategy – and Urupa inundation (Coro)	RHDHV	Completed
72	PU#38 plan for change when signal is reached' doesn't mean anything - update wording	RHDHV	Completed
73	PU#101 'Guiding Principles & 'Equitability' need discussion (MB)	AM	Completed
74	PU#72 - wording needs to be no development close to shoreline or allowing space for nature	RHDHV	Completed
75	PU#74 Relook at triggers & thresholds for this area – reflect on combination of coastal and river flooding	RHDHV	Completed
76	Re look at PU's with 80% dune loss triggers again to determine earlier trigger and how to determine & monitor	RHDHV/JB	Completed
77	PU#81 Remove 'investment not warranted"	RHDHV	Completed
78	PU#82 Update to indicate preferred strategy needs further thought and change signal to 50%	RHDHV	Completed
79	PU#84 Look at why 'raise the road' was recommended	RHDHV	Completed