

Minutes: Online Mini-CAP Meeting– Coastal Risk-Based Planning Approach

Date: Wednesday, 6 December 2023

Location: Online (MS Teams – link in invite)

Time: 2.00 pm – 4.00 pm

Attendees: Donald Day, Martin Manning, Susie Mills, Kelvin Nixon, Moira Poutama, Stephen Daysh, Monique Eade, Derek Todd, Kate MacDonald, Jason Holland, Sandhira Naidoo, Yvonna Chrzanowska, Alfred Lison, Oskar Temel and Abbey Morris

Observers: Tim Sutton, Cam Butler, and Sophie Handford

Apologies: Jim Bolger (Chair), Jerry Mateparae, Olivia Bird, John Barrett, Te Rangimārie Williams, Mark Taratoa, Iain Dawe, Kris Pervan, Aastha Shrestha, Glen Olsen, Deanna Rudd, Michael Moore, Deanna Rudd

Agenda Item	Comments
Opening & Introductions	<p>Welcome by Stephen Daysh, Facilitator and Acting Chair</p> <p>Abbey extended a welcome to Cam Butler who was a CAP Observer. Apologies were noted.</p>
Coastal Risk-Based Planning Approach	<p>Stephen Daysh, Mitchell Daysh & Monique Eade, Jacobs (Facilitated discussion session resulting in CAP decision required)</p> <ul style="list-style-type: none"> Stephen introduced the discussion for a risk-based district planning approach and drew the CAP's attention to the <i>Coastal Risk-Based Planning: Thresholds and Scenarios</i> report and <i>Memorandum No. 1 Summary of the Planning Framework Relevant to Coastal Hazards (revised November 2023)</i>. Stephen then handed it over to Monique to walk the CAP through. Monique started by giving CAP a brief overview of what the district plan is and its current status, then provided a summary of the regulatory framework, followed by what a risk-based approach means for Takutai Kāpiti. She shared that Derek will later cover how the science is applied to this approach. Monique reminded CAP that as part of their scope, they are expected to provide recommendations to guide the development of district plan provisions to manage coastal issues. She explained that the district plan only controls the land landward of mean high-water springs (MHWS). As MHWS can change over time, this can create difficulty between regional and district planning. Most of the activities such as development and dwellings occur landward of mean high-water springs. Monique provided a background to the Operative Kāpiti Coast District Plan 2021 noting that it was reviewed and became operative in 2021. However, the operative coastal hazard provisions date from 1999 and need to be updated to reflect the higher order documents. She noted that while adaptation planning (pathways) is encouraged through the legislation, district planning is a statutory requirement, and that district plans need to be reviewed every 10 years. Monique explained the hierarchy of documents that guide district planning including that the overarching document is the Resource Management Act 1991 (RMA) and noted key sections. She noted that an amendment to the RMA in 2017 introduced the management of significant risks from natural hazards as a matter of national importance (section 6(h)). Monique explained that the details of drafting plan change provisions, relating to coastal hazards, requires a Section 32 evaluation report (s32 report). This report and the provision drafting will be worked through by the District Planning team of Council following delivery to Council of the CAP's recommendations.

- Monique noted that in district planning the terminology used is important. She explained that “give effect to” means “to implement”, whereas “have regard to” means “needs to be considered - but not necessarily give effect to”.
- Monique noted that there are some uncertainties with legislation as the RMA has been repealed, and a review is underway. With the new government, there is no clear indication of any changes to new legislation. [Note: after this meeting the previous replacement legislation, the Natural and Built and Environment Act and Spatial Planning Act, was repealed. Government has indicated a plan to repeal and replace the RMA but timing details have yet to be advised].
- Stephen checked if CAP members had any questions so far. He clarified that RPS refers to Regional Policy Statement which applies to the whole Greater Wellington Regional Council (GWRC) area (including all of the Kāpiti district). He explained that the District Plan needs to give effect to the RPS, New Zealand Coastal Policy Statement (NZCPS), and RMA. He explained that the NZCPS requires councils to take a 100-year planning approach.
- Monique highlighted Section 10 of the RMA (slide 7 of presentation), which deals with existing use rights (i.e. in certain circumstances existing land uses can continue even where that contravenes a rule in a district plan). This point is important for housing stock, because over time, as the hazard risk increases, exposure increases. So effectively as sea level rises then if floor levels are not being raised, then the risk to properties will increase. A key point is what is already there can continue to stay there if that land use was lawfully established and the effects of that use don’t change.
- She noted that while the CAP to date has not included managed retreat as a short-term action in any preferred pathway, implementation of managed retreat would require a plan change to both the Natural Resources Plan (at GWRC level) as well as the Operative Kāpiti Coast District Plan 2021. Both of these plan changes take time.
- Stephen added that the District Plan currently still relies on the 1999 provisions for coastal hazards and needs updating to deal with the risk issue, in tandem with GWRC’s Natural Resources Plan (NRP).
- Monique explained that Council is required to give effect to the NZCPS. She stressed that the whole policy is relevant and covered the policy requirements for CAP, including using a precautionary view, and 100-year outlook, and noted Policy 25. She added that the NZCPS does not preclude hard protection, but it does encourage the use of soft engineering solutions.
- Monique explained that Council needs to give effect to the RPS. She advised CAP that this requires addressing: Policy 29 to identify areas at high risk from natural hazards and include provisions to avoid development in those areas; and Policy 51 that requires mapping of areas subject to a 1:100-year flood (1% AEP).
- In summary, Monique explained that to give effect to the higher order documents, the future coastal environment district plan change needs to:
 - identify high coastal hazard areas;
 - identify areas subject to a 1:100-year flood (1% AEP), and
 - consider the 100-year time frame.
- Monique then covered documents that Council needs to “Have regard to”. The first is Change 1 to the RPS as notified which is change currently underway. This is still at the hearing stage and GWRC has yet to make decisions – appeals may also prolong the process.
- Abbey explained to CAP that the words within the presentation (eg slide 10) that have strike throughs and underlines, show the changes being proposed. She explained if wording is struck out, this shows it is proposed to be removed, and the underlining shows what is being proposed to be added. Abbey encouraged CAP to ask for clarification on any

	<p>planning terminology if unsure when it is being spoken about – eg <i>notified, further submissions, consultation</i>, etc.</p> <ul style="list-style-type: none"> • Monique added that in RPS Policy 29 Council is required to use a risk-based planning approach, as drafted on Slide 10, and this is a more directive than the previous wording. It requires using a 100-year planning time frame, and to classify risks as assessed (from low, moderate, high, and extreme). • Monique highlighted examples from three different councils' (Porirua City Council, Wellington City Council and Horowhenua District Council) approaches to coastal hazards. This gives an example of how these councils have interpreted the "have regard to" for the RPS. Key points include: <ul style="list-style-type: none"> ○ The Porirua District Plan will become operative December 2024. It gives effect to RPS with a risk-based approach, classifying risk categories (Low – High) based on 1m sea level rise (SLR). Their district plan also has provisions to identify hazard sensitive activities. She noted that Porirua's SLR data is less refined than Kāpiti. ○ The Horowhenua District Plan gives effect to the Horizon Regional Council's RPS. Horowhenua's district plan is an older generation plan with a combined coastal natural character and hazard area, and pre-dates the inclusion of RMA s6(h), which is "the management of significant risks from natural hazards". ○ Council needs to "have regard to" Horowhenua Council's district plan, therefore the Council will need to decide whether to give greater regard to Porirua's or Horowhenua's district plans. She advised that Policy 4 of NZCPS will need to be considered which requires a coordinated approach across local authority boundaries. Because the Horowhenua District Plan does not implement the National Planning Standards (NPS), or give effect to higher order documents, she suggested that the Porirua and Wellington examples are more relevant, due to giving effect to the Greater Wellington RPS, and being more recent plans that include risk-based planning. These considerations would be part of a s32 report that a council officer would prepare. ○ The Wellington district plan is the most recent DP to be notified. It uses a similar risk-based planning approach, noting an updated 1.43m SLR for coastal inundation extent (not 1.49 as shown in the slide). It also rates hazard sensitive activities, with the aim to avoid highly sensitive activities in high-risk zones. • Martin noted that infrastructure and hospitals were missing as examples of highly sensitive activities, shown on the Porirua and Wellington slides. He noted that the risk range used in many reports often consider the middle (17 – 83%) range, instead of incorporating the lower and higher ranges. Overseas, e.g. California has been looking at risk-based planning for 30 years and plans for the 95% likelihood, particularly planning for major infrastructure issues. He urged Council to consider higher SLR scenarios and to look at other extensively peer reviewed research available. • Monique clarified that each region has its own regional policy statement. Councils must give effect to the NZCPS, which requires Councils to take account of national guidance. She drew CAP's attention to the role of guidance documents, noting that Council has sought and received clarification from MfE and DoC about the appropriate usage of SLR scenarios. • Monique explained that the Council future coastal environment plan change will require a s32 analysis. As plan changes are statutory, there is separate consultation beyond the scope of Takutai Kāpiti process following the process set out in Schedule 1 of the RMA. • Stephen asked Derek to comment on Martin's query on risk bands being used by different district plans (conservative vs higher SLR scenarios). • Derek noted that adaptation planning looks at a range of future scenarios. Whereas district planning requires a demarcation line where rules for development will or will not apply. For this, councils will need to decide on scenario and a probability (planning threshold). The level chosen indicates how much risk the council is comfortable to project
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into the future, and their appetite for controlling development. Either way, councils and their district plans will be criticised for either being too lenient regarding risk, or too conservative and restricting development too much.

- Derek spoke to principles relating to the relative sea level rise (RSLR) scenarios. He explained there are two parts to risk-based planning, one is defining the spatial extent of where those zones might apply, and the second is which provisions do you apply in them. With spatial extent, Council needs to pick a scenario and be consistent with higher order documents and guidance. He provided an example of the considerations used by Christchurch City for plan changes for intensification and the upcoming plan change around coastal hazards. He noted that National Adaptation Plan directs councils to use SSP5-8.5 SLR scenario and NZCPS requires 100-year time frame. For inundation scenarios, he advised CAP to be consistent and use the same scenarios for both erosion and inundation. Timeframes are important for coastal erosion extent because it considers the rate of SLR and the amount of time that existing processes carry on for that determine the extent of erosion. However, this is not the case for inundation.
- Martin addressed concerns about the IPCC report, saying that SLR scenarios are now more credible and that more uncertainties exist related to temperature increases. The increased sea level rise certainty is because the Western Antarctic ice sheet has crossed thresholds of stability, and there is now more consensus from scientists that SSP5 8.5 is appropriate. Derek agreed that it was valid for CAP to suggest using SSP5 8.5 in their report. He noted that planning for land use needs a 100-year time frame.
- Derek explained the graph (slide 17) showing relative sea level scenarios and increments being used (0.45m SLR by 2070, and 1.25m SLR by 2130). The black squares are what was first assessed in the first Jacobs report. The red dots reflect updates incorporating vertical land movement (VLM) and NZ Sea Rise data and the updated IPCC 2021 AR6 report and what is now recommended by MfE guidance for adaptation planning for climate change risk assessments.
- Martin responded that the IPCC report numbers on the likely range are higher than what is being proposed for Takutai Kāpiti. Martin suggested to look at the range, based on international standards. Derek said Jacobs estimates come from IPCC, also incorporated into NZ SeaRise data, adding VLM, and use the median range to predict RSLR for Kāpiti. He noted that in district planning, ranges are not used, so councils need to choose a demarcation line. Monique added that councils also need to have regard to the National Adaptation Plan which includes use of the SSP5-8.5 scenario.
- Martin did not agree with the numbers being used by Jacobs and disagreed with using median range. He noted that New Zealand should follow the example of many overseas countries and use at least the 83% likelihood (SSP5-8.5 H+ scenario) which is the top end of the confidence range. The higher scenario will result in a true risk management approach.
- Abbey reiterated that guidance from MfE and DoC is being followed. If CAP have concerns about guidelines coming from Central Government and if the CAP believe they are too conservative, this can be added to the CAP recommendation report.
- Martin reiterated that CAP's TOR states that CAP need to use robust, transparent, technical evidence to support their recommendations. He stated that the last MfE report did not cover the uncertainty ranges in the IPCC report, and this omission has been criticised. He stated that planning only for the most likely scenario is not risk management.
- Jason said if that scientists agreed that the new information had come to hand and the previous science was outdated, it is reasonable to expect MfE would reissue new NAP guidance to reflect this. These changes would eventually filter into district planning. Stephen commented that the District Plan needs to respond to relevant guidance adopted by New Zealand. He reiterated that a range cannot be included, however he noted that the CAP report could recommend including a range of scenarios.

- Derek spoke about the appropriateness on how conservative to be (referring to slide 18). He stated there is a high degree confidence that both the 0.45m and the 1.25m SLR increments within the SSP5-8.5 scenario will occur at sometime within a reasonable planning time frame and are unlikely to be exceeded within the regional planning time frame. Whereas SSP2 4.5 is optimistic as it relies on political and global action to address climate change.
- Martin expressed concerned that these rates are too conservative SLR predictions – particularly at the upper end (1.25m).
- Derek discussed risk-based planning thresholds (or probabilities) related to erosion. The consequence of erosion is that land gets lost. To identify planning thresholds related to erosion, the methodology used in the risk assessments shows lines of probabilities, using specific SLR scenarios and over specified timeframes.
- Derek noted that Jacobs considered various models to develop a statistical probability distribution of what the horizontal erosion distance might be. He added that modelling is more certain for a piece of open coastline compared to hydro systems (e.g. river mouths) where there is more uncertainty.
- Derek went over a range of risk-based planning thresholds to consider for erosion, e.g. dune resilience, appropriate minimum widths etc., and what makes sense for land use planning.
- Derek explained a diagram (slide 20) that showed examples of potential erosion planning thresholds, showing high, medium and low hazards and based on 66% probability of occurrence (i.e. likely to occur), showing projected shorelines over various timeframes.
- He explained that in high hazard zones, storm erosion could come part way through a frontal dune. In this case, it is appropriate to identify a high hazard zone for planning. This would involve including a dune resilience factor, and other factors like natural character, ecology, etc, to identify where a high hazard zone might end on its landward boundary. Another consideration will be the appropriate level of development or restricted activities in this zone, and what understanding there is on good management of dune systems.
- Derek explained that dunes that are not confined don't tend to migrate with erosion, particularly if they are well-vegetated. As the toe of dune erodes slower than the front of the dune, also need to consider if the width of dune would be wide enough to provide resilience over time in high hazard zones, for both erosion and inundation.
- He summarised saying that for all three hazard zones, it is important to think about how prescriptive or restrictive any provisions will need to be within each zone, and what sensitive activities, e.g. hospitals, etc, are permitted in each zone. This explains a risk-based approach to coastal erosion. He added that in contrast, the current district plan still relies on an arbitrary 20 metre setback (the "coastal building line restriction" from the 1999 version of the District Plan) to restrict activity, no matter what coastal processes exist along the coast.
- Martin added that science shows storm wave heights are increasing particularly at the latitude that NZ is in, and that the long-term trend is that energy in storm surges is increasing.
- Derek advised that the scenarios being considered should be consistent between inundation and erosion. He covered the principles to develop a set of the risk-based thresholds and categories for inundation. He covered what are the probabilities (thresholds) for inundation and what level of inundation will cause risk (based on depth, duration and frequency).
- Derek reminded CAP that in setting planning thresholds, Council will have to be consistent with those higher order documents, using a 1: 100-year model is required (AEP 1% within a 100-year period). He added that the planning thresholds that can be applied to the data using a simple bathtub approach, and it need to consider the sensitivity of activities to inundation.

- Derek noted that some activities are more sensitive to lower depths than others. The categories for coastal flood risk recognise that there will be a change in likelihood and types of consequences in the future. Derek explained the bands in the consequence graph (slide 22) with H1, being generally safe for people and buildings, to H6 (Unsafe). He noted that any depth over 1m (H3) is a risk to life, and structural integrity of buildings are at risk above depth of 2 metres. He explained the Likelihood table, showing that over time rare events will change to become very likely events.
- Derek summarised that to tie up factors of ‘likelihood’ and ‘consequence’, risk categories based on scenarios and time frames are used. As the level of depth related to SLR over time increases, so does the risk. Planners drafting provisions would need to be aware of the likely depth of inundation that may occur.
- Kelvin noted that the added impact of high ground water on inundation depths. Derek confirmed that regardless of the source of inundation, the depths are relevant for categorising risk levels.
- Monique stated that part of CAP’s scope is to provide recommendations to guide the future coastal environment plan change. She presented CAP with a set of broad principles (slide 25) for CAP to consider for their recommendation report, including to take a risk-based planning approach based on the relevant national and regional direction.
- Kelvin noted that CAP should include a caveat in their report that recognises the need for continual review of district planning provisions and spatial extent of the zones, and the need to reflect any updates to science.
- Monique said that CAP recommendations need to be aware of other changes related to RMA and any changes that may occur in guidance over the time it takes for a plan change to go through the planning process and to be notified.
- Stephen noted that if CAP is wanting a more precautionary approach with recommending a higher sea level rise scenario from what Takutai Kāpiti is using, this could be stated in their report.
- Stephen suggested that despite some of the CAP disagreeing with the suggested level of risk that the future coastal environment plan change could be based on, CAP should consider the three bullet points on the CAP Endorsement slide as a starter for discussion (slide 25).
- Kelvin checked that CAP agreed with the points. Susie suggested that ‘relevant’ means up to date national and regional direction. Don added that CAP does not have an issue with the three principles, but their recommendations may possibly vary in some respects. For example, on what we incorporate to qualify on how we approach those principles.
- Monique noted that in the NZCPS Policy 24, it is necessary for Council to take into account the best available information on the likely effects of climate change. Stephen added that this could theoretically include more up to date science that may have not made it into guidance.
- Susie asked why is agreeing to these principles important. Jason reminded the CAP if Takutai Kāpiti arose from difficulties following the 2012 notification of the District Plan. This included attempting to update the coastal hazard provisions within the District Plan. Those provisions were withdrawn, partly due to not bringing the community along on the journey. The unsuccessful attempt by Council to include those provisions was the genesis for the Co-Design Working Group to establish Takutai Kāpiti and the Coastal Advisory Panel, its agreed scope and ToR, ensuring the Council would have a panel to consider the approach to future coastal hazard provisions and undertake early engagement about the approach with the community. He noted the importance of CAP’s role.
 - For the CAP recommendations report, Stephen brought CAPs attention to the ToR, specifically Paragraph 13b) and 13c):

13) *Deliver recommendations to Council that:*

a) are consistent with national and regional direction and requirements; and

- b) strike an appropriate balance of providing enough direction to make the desired policy intent clear, whilst leaving the detail of plan drafting and section 32 evaluation of proposed provisions to be worked through by the Council following delivery of the Panel's recommendations.*
- c) have been consulted on with the wider public, giving the "social licence to proceed" with the coastal plan change.*

He reminded CAP that Paragraph 13b) talks about leaving the detail of plan drafting and section 32 evaluation of provisions to the later process, which is post the CAP recommendations report. At Paragraph 13c) that beyond the CAP's engagement on the risk-based planning approach, and post Takutai Kāpiti, further engagement (consultation) will occur after the coastal hazard provisions have been drafted - firstly with the draft plan change which will have all the provisions and draft maps. That will be the first time that the community gets to see the coastal hazards provisions. This will be followed by public notification and further consultation on all those details at that stage.

- He added that the planning principles presented for CAP to consider relate to the ToR and provide CAP with background to discuss with community what the future coastal environment district plan change could look like. He added that once the CAP recommendations report is received, the detailed planning discussion will be worked through by Council. So, the CAP report is not expected to delve into objectives, policies and rules, and in fact the ToR makes it clear that that's not what the CAP is to do.
- Abbey confirmed the ToR wording is based on the final agreed version with CAP and signed off by Sean Mallon, Group Manager Infrastructure.
- Stephen noted that this discussion on CAP's scope is important regarding the planning approach that the detailed planning that will be implemented post Takutai Kāpiti. He added that this is what everyone is working towards, as well as the adaptation planning pathways.
- Stephen asked CAP to look at starter for discussion endorsement wording (slide 25). He suggested that the third bullet point needs to include some reference to "best available information".
- Regarding ToR Paragraph 13c), Kelvin raised a concern about consultation with the wider public, saying that concerned that the messages are not getting across to the wider public, and there is a misconception that the CAP is focussed on managed retreat, which is not the case. CAP wants to bring the public along with them, and CAP is willing to have direct discussions with groups like C.A.L.M. and CRU, on what CAP are trying to achieve.
- Susie queried why CAP was asked to endorse the planning approach, concerned that this may limit the ToR for the CAP. Abbey replied that CAP's engagement ahead of the future coastal plan change to the District Plan is a way of testing with the community if they like this approach. Abbey stated that this reflects CAP's scope and ToR, and that TAG has advised that a risk-based approach is an appropriate approach for our district which aligns with national and regional level statutory directions.
- Susie asked if CAP then needs to consult with the community on whether they want a risk-based approach. Jason responded saying said that if CAP agrees with the approach, it will assist them in their tasks to produce a recommendation report. He added that in April next year, CAP could test the risk-based approach with community. After community feedback is received, their feedback will be helpful and will assist in a foundation for the CAP recommendations.
- Abbey expressed that this meeting was to provide CAP with an overview of what district planning covers regarding coastal hazards and how CAP could approach their recommendations about this.
- Stephen suggested adding defined terms from NZCPS to clarify today's discussions on the third bullet point as part of the endorsements. CAP discussed the changes. Martin expressed concern that national guidance is not enough and should at least mention New

	<p>Zealand's agreement with IPCC. Stephen suggested this be incorporated and CAP agreed with the modified wording.</p> <ul style="list-style-type: none"> • Abbey reiterated that MfE and DoC have confirmed that the Jacobs modelling has appropriately used national guidance. Derek added that the guidance is based on IPCC information, as well as interim guidance related to sea level rise (2022). • Stephen asked CAP if they are happy with where the CAP landed with their endorsement wording for the risk-based planning approach for the future coastal environment plan change – the CAP agreed.
Next Steps	<p>Abbey Morris (KCDC)</p> <ul style="list-style-type: none"> • Abbey confirmed that Ecoreef will be doing a presentation to CAP, as requested by the CAP, on Thursday 7 November 2023, 2-3pm. • Abbey confirmed that the next CAP meeting will be an in-person Extended CAP Meeting CAP meeting from 1-6pm on 13 December 2024, covering <i>RAA MCDA Scoring</i>. • In 2024, the first CAP meeting is on Wednesday 17 January 2024. It is an online meeting and the purpose is to exclude options for the long list for PAA.
Closing Karakia	By Abbey

ATTACHMENTS

- Coastal Risk-Based Planning: Thresholds and Scenarios Presentation (PowerPoint)
- Coastal Risk-Based Planning Thresholds and Scenarios Report

Appendix 1: CAP's Planning Approach Endorsement

The following planning approach is endorsed by the CAP for as part of their CAP recommendation report:

- *Use of a risk-based approach similar to that adopted by Porirua City Council and Wellington City Council in their recent District Plan reviews.*
- *Coastal hazards planning rules and provisions will constrain subdivision, use and development according to levels of risk.*
- *Risk areas will be mapped based on the best available information including relevant national and regional direction (NZCPS & RPS) and the most up to date IPCC information and relevant national guidance.*

Note: The mapping, planning provisions and rules will be developed by Council district planners after Takutai Kāpiti in partnership with mana whenua and consultation with the community.