

**KCDC comments for Kāpiti Coast Coastal Hazard Susceptibility and Vulnerability Assessment Vol-1 Methodology Report**

Reviewer Comments	Response/ Action
<p>The name of report has changed from Kāpiti Coast Coastal Hazard Exposure and Vulnerability Assessment to Kāpiti Coast Coastal Hazard Susceptibility and Vulnerability Assessment. However Figure 1.1 notes exposure assessment.</p>	<p>This has been addressed in final version.</p>
<p>Inconsistencies present when referencing the coast.eg:</p> <ul style="list-style-type: none"> <li>• Kāpiti Coast District Coastline (Section 1.1, 6.3)</li> <li>• KCDC shoreline (1.1, 2, 6.1.1, 6.1.2)</li> <li>• Shoreline (1.5)</li> <li>• Kāpiti District shoreline (2.1, 6.1)</li> <li>• District coastline (2.1,5.1.2)</li> <li>• Kāpiti Coast shoreline (2.1, 5.1.2.3, 6.3)</li> <li>• District shoreline (2.1)</li> <li>• Kāpiti District coastline (fig 2.2)</li> <li>• Mainland Kāpiti coast (2.3.1)</li> <li>• Kāpiti Coast (2.3.2)</li> <li>• Kāpiti site (3.3)</li> <li>• District's coastline (5.1.1)</li> <li>• Kāpiti Coast District (5.2.1, 6.1, 6.4.3, 7.1)</li> <li>• Kāpiti coastline (7.1, 7.4.4)</li> <li>• Kāpiti district coast (7.3.1)</li> </ul>	<p>Most references have be adjusted in the final report to be "Kapiti Coast District Shoreline". A few that have been left due to the context they are written in:</p> <ul style="list-style-type: none"> <li>• Mainland Kāpiti coast (2.3.1)</li> <li>• Kāpiti Coast (2.3.2)</li> <li>• Kāpiti district coast (7.3.1) - leaving as coast as they are not on the shoreline, they are in the nearshore/offshore.</li> </ul>
<p>Inconsistencies present when referencing assessment cells for inundation and erosion methodology. Eg:</p> <ul style="list-style-type: none"> <li>• Coastal compartment (2.2)</li> <li>• Figure 6.2: Legend states coastal cells and caption states open coast cells.</li> <li>• Table 6.2: table header needs to include what cells are listed (coastal or hydro cells?).</li> <li>• Kāpiti Coast coastal compartment (2.2)</li> <li>• Location (Table 4.1, 4.2)</li> <li>• Coastal cell (2.2, 6.1.1, 6.1.2)</li> <li>• Open coast cell (6.1.2)</li> <li>• Hydro system erosion cells (6.1.2)</li> <li>• Kāpiti site (3.3)</li> <li>• Hydro system erosion assessment cells (fig 6.2)</li> <li>• Assessment cell (6.2, 8)</li> <li>• Reference to units instead of cells (section 7 onward).</li> <li>• Coastal inundation units (7.2)</li> <li>• Reference to sites instead of cells (7.3.1)</li> <li>• Figure 7.1: shows the 4 coastal inundation cells but doesn't state it in the caption (legend also says inundation unit)</li> </ul>	<p>All of these points have been addressed except for:Table 6.2: table header needs to include what cells are listed (coastal or hydro cells?). - I believe this does.Location (Table 4.1, 4.2) - these are within the context of the report.Coastal cell (2.2, 6.1.1, 6.1.2 - These are correct.Kāpiti site (3.3) - This is appropriate in its context.</p>
<p>Acronyms need to be checked and made consistent across sections and in tables/ figures. Eg Figure 3.2 and Table 3.3. (Attachment 1 refers)</p>	<p>This has been addressed in final version.</p>
<p>Section 6.1 general approach - "continuation of long term trends and patterns of shoreline movements (e.g retreat, accretion, dynamic equilibrium)" - footnote definitions of these processes.</p>	<p>Following footnote (13) has been added in: Long term retreat is the long term erosion of the beach causing the shoreline to move landward. Long term accretion is long term beach growth which results in the shoreline moving in a seaward direction. Dynamic equilibrium is the long term fluctuation of shoreline position about an equilibrium position.</p>
<p>Figure 7.3: X and Y axis are not labelled.</p>	<p>This figure has been removed in the updated methodology.</p>
<p>Inundation results/ maps are shown. This should be in Vol. 2 alongside coastal hazard exposure/ Vulnerability results.</p>	<p>Inundation maps not shown - the maps in Section 7 show areas of potential elevated groundwater not inundation and have been reviewed as part of the methodology for inundation assessment so have been retained.</p>
<p>Macrons required in figure 1.1, 7.1 and inundation maps.</p>	<p>Figure 1.1 is fixed. Figure 7.1 and groundwater maps (not inundation maps) fixed</p>
<p>Minor grammatical and formatting amendments (Attachment 1 refers).</p>	<p>These have been addressed in final report.</p>
<p>Coastal hazard definitions need to be uniform across report i.e there is reference to erosion/ beach retreat and shoreline advancement/ accretion. This could be confusing for the reader. If the processes are different they should be footnoted with a definition.</p>	<p>The processes are not really different. These terms can generally be used interchangeably, however have changed 'advancement' to 'accretion' where applicable and a footnote has been added.</p>
<p>Year axis required for Figure 3.1</p>	<p>This has been addressed in final version.</p>
<p>Please ensure referencing (assuming you're using APA?) and in-text citations are uniform. Current references: Hume, T, et al. (2016). A Classification of New Zealand's coastal hydrosystems. NIWA client report HAM2016-062, for the Ministry for the Environment, 120p, Ramsay et al (2012) Defining coastal hazard zones for setback lines: A guide to good practice - inconsistent with others (Attachment 1 refers).</p>	<p>This has been addressed in final version.</p>

<p>To assist the Council in the next phase of the coastal work please ensure all important conditions, assumptions and limitations/challenges of the data and the approaches used in the methodology are pulled-together into one section as a summary. This information should include the level of precaution adopted, and explain the different scenarios that will be presented in the results maps in as simple language as possible. This will avoid the requirement for non-expert Council staff having to attempt to identify this information from the report to inform the Council processes moving forward. Having this information in an easy to understand and simple form is a requirement identified by the Courts for related Council legal obligations and processes that require the assembly and summarising of this information upon its release (please contact me to discuss if necessary).</p>	<p>Sections 6.9 and 7.6 have been added in to summarise the limitations of each assessment. These are still included in the above sections, but are consolidated into one section to cover off this review comment.</p>
<p>Please ensure District Planning are included in discussions regarding how the results are to be shown on maps once that step has arrived. This is also in relation to point 1 above. This may n</p>	<p>We agree with this and will engage with KCDC to organise this.</p>
<p>Section 2.1 – Geomorphologic setting. Third paragraph notes the presence of nine notable breaks in the coastal dune system being the mouths of various sized streams and rivers. It may be one of these waterways has been deemed not significant enough to include, however in case one has been missed please note there are 10 streams and rivers as follows:</p> <ul style="list-style-type: none"> <li>a. Wainui Stream</li> <li>b. Whareroa Stream</li> <li>c. Wharemauku Stream</li> <li>d. Tikotu Creek</li> <li>e. Waikanae River</li> <li>f. Ngarara Stream</li> <li>g. Hadfield Stream</li> <li>h. Mangaone Stream</li> <li>i. Otaki River</li> <li>j. Waitohu Stream</li> </ul>	<p>We have referred to the Ngarara Stream as the Waimeha Stream. Will confirm with KCDC that they want they want this named. We have now included the Mangaone Stream. We have also renamed out 'peka peka inlet' to Te Kowhai Stream</p>
<p>The limitations sections 6.9 and 7.6 are really good to see. This information will be very useful moving forward as it will focus interested parties on any aspects of the science that may be able to be improved via the consideration of additional data. This will save people from having to try to find these matters which otherwise might be spread throughout the report.</p>	
<p>Bulleting format appears to be inconsistent. Eg: the use of ';and'. We didn't want to play around with this too much as what might appear as an inconsistency to us might be common practice in your field. Might be worth having a sense check.</p>	<p>Some bullets end with a full stop and others end in the following format. Example for reference: The inundation pathways in the Peka Peka and Waimeha cell are:</p> <ul style="list-style-type: none"> <li>§ Te Kowhai Stream, Waimeha Stream and the drains which outfall to these streams;</li> <li>§ The stormwater outfalls from small drainage catchments along the coast which outfall directly to the sea; and</li> <li>§ Direct inundation of the shoreline.</li> </ul>
<p>some sentence structures requires revision - Notable examples highlighted in yellow in tracked changed version.</p>	