

Optional Thresholds

Based on the CAP discussions the following optional thresholds have been developed. It is recommended these are used as a starting point to engage with communities post Takutai Kāpiti. The table below records CAP's view on which thresholds might be applicable within the Adaptation Areas. The table attempts to bring consistency to the thresholds developed in the Northern and Central Adaptation Areas and those recommended in the Raumati and Paekākāriki Adaptation Areas. Tracked changes have been used to show how thresholds have been merged. The blue footnote text has been provided by TAG to provide commentary on these changes for the CAP's consideration. All other blue text shows where TAG have made additions for CAP's consideration and confirmation.

Optional Topics	Optional Thresholds	Applicable?							
		NAA Erosion	NAA Inundation	CAA Erosion	CAA Inundation	RAA Erosion	RAA Inundation	PAA Erosion	PAA Inundation
Insurance	<p>X properties not able to get insurance in x years. (NAA/CAA) First property loses insurance. (NAA/CAA) ___ dwellings are unable to obtain insurance for coastal hazards.¹</p> <p>OR</p> <p>Insurance premiums increases to become unaffordable. (NAA/CAA) The cost of X properties has increased to unaffordable rates. (RAA/PAA) The cost of insurance for ___ properties exceeds \$_____ per annum making it unaffordable for the community.²</p>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
¹ Wording differed between NAA/CAA and RAA/PAA although the intent was the same. The wording from RAA/PAA was more measurable and grammatically correct so has been included here. ² Wording differed between NAA/CAA and RAA/PAA although the intent was the same. New wording is proposed to ensure the threshold is measurable and consistent between all Adaptation Areas.									
Frequency of coastal flooding	___ m or more of water ponds at _____ (specified location/s) for a continuous period of more than ___ days. ³	No	Yes	No	Yes	No	Yes	No	Yes
³ No similar threshold developed for NAA/CAA. Could be applicable for all inundation units.									
Depth of flooding	Water enters ___ dwellings within _____ (specified community) ___ times in ___ years. ⁴	No	Yes	No	Yes	No	Yes	No	Yes
⁴ No similar threshold developed for NAA/CAA. Could be applicable for all inundation units.									
Water infrastructure	Drinking water and wastewater infrastructure is within ___ m of <u>the position</u> of Mean High Water Springs position . ⁵	Yes	No	Yes	No	Yes	No	Yes	No
⁵ Wording amended to correct grammar. No similar threshold developed for NAA/CAA. Could be applicable for all areas. Note: There is no public water supply infrastructure in Te Horo and no public wastewater infrastructure in Te Horo, Peka Peka or Paekākāriki however, this threshold could be developed to cover private and public infrastructure.									
Road access	<p>X times in x years that people loose road access to their property. (NAA/CAA) X times in x years that people loose road access and/or services to their property. (RAA/PAA)</p> <p>Access to properties is unavailable for more than _____ hours, ___ times in ___ years.⁶</p>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
⁶ RAA/PAA threshold included roading and services. Specific thresholds on water services and telecommunications/power services were also included so services have been removed from this threshold and a new threshold was added to separate these topics. Reworded to ensure the threshold is measurable and provides for discussion on length of outages.									
Telecommunication / power services	<p>X times in x years that people loose services to their property. (RAA/PAA)</p> <p>Coastal hazards result in telecommunication and/or power outages for more than ___ hours ___ times in ___ years.⁷</p>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
⁷ No similar threshold developed for NAA/CAA but could be applicable for all Adaptation Areas. Wording amended to ensure it is measurable provides for discussion on length of outages.									

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		NAA Erosion	NAA Inundation	CAA Erosion	CAA Inundation	RAA Erosion	RAA Inundation	PAA Erosion	PAA Inundation
Septic tanks	<p>Effectiveness of septic system disposal fields are operationally impacted inundated for more than ___ days per year. (RAA/PAA)</p> <p>Septic tank systems are operationally impacted for more than ___ days per year.⁸</p> <p>OR</p> <p>Septic tanks are unable to be used ___ times in ___ years.⁹</p>	No-Yes ¹⁰	Yes	No	No	No	No	Yes	Yes
<p>⁸ Wording adopted from RAA/PAA and amended to improve grammar.</p> <p>⁹ Wording adopted from NAA/CAAA but could be applicable for RAA/PAA too.</p> <p>¹⁰ Propose changing NAA Erosion to “Yes” to be consistent with RAA and PAA. This threshold can be applicable for the erosion units due to potential loss of the septic tank disposal fields from erosion.</p>									
Foreshore access	It is no longer possible to walk along the foreshore of _____ Beach during _____ tide. ¹¹	Yes	No	Yes	No	Yes	No	Yes	No
<p>¹¹ Wording differed between NAA/CAA and RAA/PAA although the intent was the same. The wording from RAA/PAA was more flexible so has been included here.</p>									
Beach access	<p>Safe public access at _____ (specific locations) is damaged ___ times over ___ years.¹²</p> <p>OR</p> <p>Safe public access to launch boats at _____ (specific locations) is damaged ___ times over ___ years.¹³</p>	Yes	No	Yes	No	Yes	No	Yes	No
<p>¹² Location added to ensure the threshold is measurable. No specific words were proposed for NAA/CAA so RAA/PAA words have been included.</p> <p>¹³ Threshold topic from NAA/CAA and not applicable to RAA/PAA. No specific words were proposed in the meeting and the words above aim to capture the intent of the discussion.</p>									
Seawall	The seawall requires significant maintenance and reinforcement exceeding \$_____, ___ times in ___ years. ¹⁴	No	No	No	No	Yes	No	Yes	No
<p>¹⁴ Value included to help ensure “significant” is measurable.</p>									
Dune volume	<p>The dunes at _____ Beach are less than ___ m in width, or height, or m³ in volume.¹⁵</p> <p>OR</p> <p>The distance between Marine Parade (Otaki) and the dune toe is less than _____ m.¹⁶</p>	Yes	Yes	Yes	Yes	No	No	No	No
<p>¹⁵ Changed “and” to “or” as will need a different figure depending on whether we are using width, height, or volume.</p> <p>¹⁶ Deleted as it repeats the threshold above.</p>									
Significant event	<p>Any serious injuries and/or fatalities that occur as a result of a coastal erosion or coastal inundation event.¹⁷</p> <p>OR</p> <p>A coastal storm significantly compromises the effectiveness of the existing inundation (or erosion) protection structures.¹⁷</p> <p>OR</p> <p>Properties being damaged by inundation: X house x times in x years.</p> <p>A coastal storm causes damage to more than ___ dwellings in _____ (specified community).¹⁸</p>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<p>¹⁷ No similar threshold developed for NAA/CAA but could be applicable for all Adaptation Areas.</p>									

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¹⁸ Wording differed between NAA/CAA and RAA/PAA although the intent was the same. The wording from RAA/PAA was more measurable and grammatically correct so has been included here.									
Cost of public maintenance	The overall cost of the current publicly funded _____ (specified) management approach exceeds \$_____ per year. ¹⁹ OR A targeted rate of more than \$__ per year is required to fund the ongoing publicly funded maintenance of current _____ (specified) management approach. ¹⁹	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
¹⁹ No similar threshold developed for NAA/CAA but could be applicable for all Adaptation Areas.									
Cost of private maintenance	The cost to maintain or replace privately owned seawalls exceeds what __ number of property owners are prepared to pay. ²⁰	No	No	No	No	Yes	No	Yes	No
²⁰ No seawalls in the NAA/CAA.									
Recovery time between events	_____ community is required to respond to __ significant coastal storms within __ years. ²¹ OR Emergency works costing over \$___ are required _____ (frequency) to repair protection structures at _____ location. ²¹	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
²¹ No similar threshold developed for NAA/CAA. Could be applicable for all areas.									
Shore bird habitats	_____ (species) habitat is reduced. ²²	Yes	No	Yes	No	Yes	No	Yes	No
²² No similar threshold developed for RAA/PAA and the thresholds were not matched to any adaptation areas. Could be applicable for all areas depending on the species concerned.									
Mahinga kai	Shellfish are no longer able to be gathered at _____ location. ²³	Yes	No	Yes	No	Yes	No	Yes	No
²³ No similar threshold developed for RAA/PAA and the thresholds were not matched to any adaptation areas. Could be applicable for all areas depending on the species concerned.									