**Recommended Decision Report 7** 

## **RESOURCE MANAGEMENT ACT 1991**

## **PROPOSED THAMES-COROMANDEL DISTRICT PLAN**

## **HEARING OF SUBMISSIONS**

## **RECOMMENDED DECISION OF HEARINGS PANEL**

TOPIC:	Section 10 - Natural Hazards Policy Section 34 - Natural Hazards Overlay Section 50 - Open Space Zone
HEARING PANEL:	Mark Farnsworth (Chair) Ian Munro Cr Tony Fox
HEARING DATE:	18–20 November 2014
Submissions were also presented on	14–16 April 2015

### 1.0 INTRODUCTION

- 1.1 The Panel was appointed by the Thames-Coromandel District Council to consider submissions and further submission on the Proposed District Plan. This decision report relates to:
  - Section 10 Natural Hazards;
  - Section 34 Natural Hazards Overlay;
  - Section 50 Open Space Zone.

#### 2.0 CONFLICT OF INTEREST DECLARATION

2.1 Commissioner Farnsworth tabled a potential conflict with regards to any determination involving the Te Puru River Delta, brought about by the recent purchase of a property on the delta by a close family member. Commissioner Farnsworth took no part in any decision involving a hazard consideration on the Te Puru River Delta.

#### 3.0 OFFICER'S REPORT

- 3.1 The Panel received a comprehensive Section 42A Report/Section 32AA Further Evaluation Report<sup>1</sup> on Sections 10, 34 and 50 prepared by Mr Andrew Wharton, Senior Policy Planner.
- 3.2 The Report considered the submissions and further submissions received on the provisions relating to Natural Hazards grouping them into the following topic areas:
  - Current Coastal Erosion Line (CCEL);
  - Future Coastal Protection Line (FCPL);
  - Tsunami;
  - Flood Hazard Maps;
  - Natural Hazard Policies;
  - Flood Hazard Rule;
  - Current Coastal Erosion Line Rules;
  - Future Coastal Protection Line Rules;
  - Tsunami Rules; and
  - Flood Defence Rules.
- 3.3 A full list of the submitters and further submitters can be found on pages 78-87 of the Section 42A/Section 31AA Report of 18-20 November 2014.

#### 4.0 HEARING

- 4.1 During the hearing process the following submitters appeared to speak in support of their submission point on natural hazards:
  - Sue Edens and Others (#791) represented by Sue Edens.
  - Brian Sharp and Sue Edens (#755) represented by Sue Edens.
  - Mr Alan Ogden (#816).
  - Graeme and Gloria Ready (#799).

<sup>&</sup>lt;sup>1</sup> Hearing Agenda – 18 -20 November 2014 pages 10 186

- Mr Scott Storey (#731); Mr Greg Semmens (#368); Ms Teena Robinson (#379); William and Sophie Black (#581); and Clive & Sue O'Halloran (#902 represented by Michelle Paddison, Legal Counsel, Dr Willem De Lange, Mr Zac Swift.
- Buffalo Beach Home Owners Association (#604) represented by Ms Tracey Lamason Planning Consultant.
- Cooks Beach Protection Wall (#251), Hendrik Coenraadts (#257) and Raymond Bird (#259) represented by Raymond Bird.
- Coromandel Property Owners Alliance Incorporated (#1357) represented by Mr Graeme Ready and supported by Bruce and Christine Vickerman and Sue Edens<sup>2</sup>.
- Environmental Defence Society Incorporated (#320) represented by Ms Madeleine Wright Legal Counsel, Mr David Serjeant, Planning Consultant.
- Matarangi Future Coastal Protection Line Objection Group (#692) Graeme Osborne (#692) represented by Graeme Osborne, Dr Willem De Lange.
- Pauanui Residents and Ratepayers Association (#353) represented by Ms Kim Coppersmith
- Tasman Buildings Ltd (#421) represented by Mr Martin Williams, Legal Counsel.
- Waikato Regional Council (#534) represented by Ursula Lehr Policy Advisor, Rick Liefting Senior Regional Hazards Advisor, Megan Kettle Senior Policy Advisor.
- Buffalo Beach Home Owners Association (#604) Represented by Ms Tracey Lamason, Planning Consultant.
- Federated Farmers of New Zealand (935) represented by Ms Sally Millar Regional Policy Advisor.
- Spark New Zealand Trading Ltd (878) and Chorus New Zealand Ltd (877) represented by Mr Tom Anderson, Planning Consultant.
- 4.2 A copy of tabled representations, the written representations presented to the Panel and the minutes from each of the hearing days can be viewed at <u>www.tcdc.govt.nz/dpr</u>
- 4.3 The Reporting Officer noted that GNS Science (#433) referred to Section 34 Rule 16 requiring the vertical evacuation structures to be designed for a '1:100 year tsunami' to be changed to 'a maximum credible event'; the reference should have been to Table 4.1a the change was supported. The Reporting Officer suggested that the Panel may consider the scope of the submission to make consequential changes to Policy 3b.
- 4.4 The Reporting Officer tabled<sup>3</sup> a correction to the S.42A recommendation in the Natural Hazard Report<sup>4</sup> relating to the submission of Mr Keith Vernon. The report's discussion, analysis, recommendation and reasons remain the same but the concluding tables need to be changed.
- 4.5 The Reporting Officer tabled<sup>5</sup> an addition to the recommendation on the Section 42A Natural Hazard Report<sup>6</sup> to show the Coastal Erosion Residual Risk Area on the Planning Overlay Maps between the former CCEL (as notified) and the Cooks Beach and Buffalo South coastal defences. The Panel were also advised that the definition of 'Residual Risk' in the Plan could be aligned with the definition in the RPS.

<sup>&</sup>lt;sup>2</sup> CPOA EiC, 20 November 2014, Part II Overlay Issues Section 10 Natural Hazards pages 1 – 11

<sup>&</sup>lt;sup>3</sup> Andrew Wharton 11 June 2015 Correction to RMA Section 42A Natural Hazards Report.

<sup>&</sup>lt;sup>4</sup> Hearing Agenda of 18-20 November 2014

<sup>&</sup>lt;sup>5</sup> Andrew Wharton 19 November 2014

<sup>&</sup>lt;sup>6</sup> Hearing Agenda of 18-20 November 2014 *Residual risk zones for coastal hazards – addition to Section 42A Staff Report on Natural Hazards Topic.* 

- 4.6 The Reporting Officer tabled<sup>7</sup> a written report *CCEL relocation confirmation at Cooks Beach* regarding recommendation R 10.4 and R 10.5.
- 4.7 The Reporting Officer provided a report on the outcomes of the Panel requested caucusing between the Council and representatives of the Buffalo Home Owners' Association. The criteria for assessing the relocation of the CCEL have been rewritten so that they are black and white for Plan users. Two changes were recommended:

"Where a property has a CCEL but meets the criteria proposed in Section 34.5.2, the FCPL rules apply to the CCEL portion of the property, instead of the CCEL rules (up to 10 m from the coastal erosion defence).

Amend the proposed CCEL relocation criteria to become threshold tests for application of FCPL rules, rather than expert assessments to guide a Plan change."

- 4.8 As noted above, the Reporting Officer has recommended the setting of criteria which can allow for the adjustment of the CCEL; the Section 42A Report/Section 32AA Further Evaluation Report sets out the criteria.
- 4.9 The Section 42A Report/Section 23AA Further Evaluation Report contains useful commentary and both technical and general information<sup>8</sup>. The Panel were told<sup>9</sup>-

"The Thames-Coromandel District is subject to a number of natural hazards, particularly floods and coastal erosion. New data and models on coastal inundation, and liquefaction and tsunami from a Kermadec Trench earthquake, are emerging. Volcanic ash, forest fire, and strong winds are also occasional threats. The Proposed Thames-Coromandel District Plan has land use controls for river flooding, coastal erosion and tsunami (and some yards and vegetation clearance standards for forest fires).

Natural hazard maps, policies and rules are strongly linked in the Proposed District Plan. Rules give effect to Plan policy, although some rules lag behind full effect of the policies because of the time and consultation needed to incorporate new central government guidance and regional council modelling and other data. For example, natural hazard rules do not yet address costal inundation (except in Thames), despite it being a major hazard in the future for many coastal areas."

4.10 The Report comprehensively addresses submission points: that challenge and support the Proposed Plan's methods (lines, overlays, etc.) to manage natural hazards; on specific natural hazard policies and on specific natural hazard rules.

### 5.0 ANALYSIS OF SUBMISSIONS

#### Screening Process

5.1 In making decisions on the relief sought in submissions factors that influenced the Panel's decision included:

<sup>&</sup>lt;sup>7</sup> Andrew Wharton 19 November 2014 Correction

<sup>&</sup>lt;sup>8</sup> Hearing Agenda 18 20 November 2014 pages 14 -77

<sup>&</sup>lt;sup>9</sup> Ibid page 15

- Minor corrections and additions that will assist the Plan readers.
- Submitters, including the experts, who suggested changes to issues, objectives, policies and rules, but did not provide any justification cogent reason or a Section 32AA evaluation.
- The direction provided by the RPS and the need to give effect to that direction.
- Government guidance on climate change and sea level rise.
- 5.2 The Panel also set aside changes sought by submitters during the Hearing process that went beyond the scope of submissions or the PDP. Relief sought in submissions is also rejected by the Panel where the submitter failed to provide justification or reasons to support the relief sought, and could not rely on other similar submissions or Council S.42A recommendations.

#### Summary of evidence

### Current Coastal Erosion Line (CCEL)

- 5.3 Submissions and submitters' representations included:
  - Requests to relocate the CCEL.
  - Requests for the removal or modification of the CCEL.
  - Personal observations and questions on the approach of the Council in developing the CCEL.
  - CCEL should not be included on LIM Reports.
  - Council's responsibility is to manage not draw lines on properties.
  - Observations on the need to gather data that is reliable and robust and the need for an on-going programme of monitoring.
- 5.4 The Panel was presented with competing expert opinions; with briefs of expert evidence from Dr Willem de Lange for submitters in opposition to the current location of the CCEL on both the east coast and west coast beaches and the technical reports of Jim Dahm and Bronwen Gibberd<sup>10</sup> underpinning the Council's approach on both coasts. The Panel requested that the experts caucus about their advice for the Te Puru South beach; the net result was that while the experts agree on much of the underlying data they draw different conclusions from it<sup>11</sup>.
- 5.5 There was general agreement that robust monitoring of shoreline change, sea level rise and climate change is essential for ongoing adaptive management. The District and Regional Council should continue to work together with the support of research providers to develop and maintain robust monitoring and continue relevant research.
- 5.6 The Panel gained the very clear perception from both the experts' evidence and the lay representations, that the coastal environment is a highly dynamic one that has the potential to be subjected to rapid change, if the right conditions prevail a storm from an unusual quarter etc. Given the competing expert evidence, but more importantly the government directions on sea level change the Panel believe that a conservative, cautious approach is required. The Panel accept that in terms of Te Puru, the river delta is experiencing accretion at the moment; but there have also been periods of erosion in recent times. To help the Panel understand the expert evidence a site visit was undertaken and the Te Puru coast line was

<sup>&</sup>lt;sup>10</sup> Coromandel Beaches – Coastal Hazards – Review of Primary Development Setback at Selected Beaches. Jim Dahm (Eco Nomos Limited) & Bronwen Gibberd, (4D Environmental Limited) October 2009.

<sup>&</sup>lt;sup>11</sup> Andrew Wharton – *Conclusion of written exchange between Jim Dahm, Bronwen Gibberd and Dr Willem de Lange, 3 March 2015.* Coastal Development Setbacks at Matarangi- Notes from Meeting: 18 August, 2015

walked. The Panel saw the mix of old hard wall, coastal erosion defences and building platform walls. In the final analysis of the evidence the Panel came to the conclusion that it had not been demonstrated, with any certainty, that accretion is sustainable over a long period.

5.7 The Panel's viewpoint was influenced by Rick Liefting, WRC's Senior Regional Hazards Advisor who noted, when addressing amendments to the CCEL behind coastal erosion structures that:

"Coastal erosion protection structures such as Rock Revetments are only a short to medium term solution and are NOT a permanent solution.

Coastal erosion protection structures are also at risk of failure; therefore, there is Residual Risk behind any coastal erosion structures."

- 5.8 This reinforced a need for a cautious approach.
- 5.9 The Reporting Officer recommended setting criteria which can allow for the adjustment of the CCEL. The Section 42A Report/Section 32AA Further Evaluation Report sets out<sup>12</sup> the criteria which may result in the relocation of the CCEL. The report provided a location specific analysis for different situations such as: the Te Puru Group; the Otautu Bay Group and the Cooks Beach Group. Tracey Lamason, Planning Consultant for the Buffalo Beach Home Owners Association (Submission 604) noted that they acknowledge and support the eight criteria that if met would allow the CCEL to be relocated seaward of an approved WRC coastal erosion defence structure. They did not support the requirement for a Plan Change to be undertaken in order for the CCEL to be relocated.<sup>13</sup>
- 5.10 The final hearing of 19-21 May addressing residual matters provided further comment and recommendations on natural hazards, in particular that the CCEL apply over specific Council reserves that adjoin CCELs in the Plan. The Panel have adopted this recommendation along with the others in the Report<sup>14</sup>.
- 5.11 The CCEL is predicated on sound technical evidence. The Panel accepts that there is a counter expert viewpoint, and also accepts the need for a cautious approach that has full regard to: the Government's directions on climate change and the WRC's RPS directions on coastal hazards.
- 5.12 The Panel have made the following amendments:
  - a) Accepted the Reporting Officers request to correct a Section 42A Natural Hazard Report<sup>15</sup> recommendation relating to the submission of Mr Keith Vernon. No amendments are required.
  - b) Depict the Coastal Erosion Residual Risk Area on the Planning Overlay Maps between the former CCEL (as notified) and the Cooks Beach and Buffalo Beach South coastal defences.
  - c) Align the definition of 'Residual Risk' in the Plan with the definition of 'Residual Risk' in the RPS.

<sup>&</sup>lt;sup>12</sup> Ibid at [14] page 17

<sup>&</sup>lt;sup>13</sup> Tracey Lamason Evidence in Chief for The Buffalo Beach Home Owners Association submitter 604 at [3.1]

<sup>&</sup>lt;sup>14</sup> Hearing Agenda 19 -21 May 2015 Page 25 -26

<sup>&</sup>lt;sup>15</sup> Hearing Agenda of 18-20 November 2014

- d) Accept the rewritten criteria for assessing the relocation of the CCEL in the interests of Plan certainty.
- 5.13 The Panel has adopted the Reporting Officer's discussion and recommendations<sup>16</sup> with regards to the CCEL and, with the amendments noted above, will not be making any further adjustments to the CCEL as a result of considerations.

### Future Coastal Protection Line (FCPL)

- 5.14 Given the submissions on the CCEL the Panel found it interesting that there was some support for this line, with the Whangapoua Group largely concurring with the line location because it allows for one house per lot to remain permitted. By way of contrast the Matarangi group provided a comprehensive submission opposing the FCPL.
- 5.15 Council had the FCPL peer reviewed and one of the issues to emerge was the way the 'Bruun Rule' has been used to calculate the location of the FCPL. Dr de Lange noted that the rule is very likely to have overestimated shoreline erosion. Council provided an alternative viewpoint via the technical reports of Bronwen Gibberd and Jim Dahm<sup>17</sup>. Council also tabled peer reviews of the Gibberd/Dahm Technical Reports, and the caucus meeting between Jim Dahm, Bronwen Gibberd and Dr de Lange. The Section 42A Report of 18-20 November 2014 at pages 34–41 provides a commentary on the various viewpoints and opinions. The Panel do not intend to repeat or summarise them here.
- 5.16 Once again, faced with competing expert evidence the Panel were helped by a reminder that the NZCPS (Policies 24, 25 and 27) and the RPS (methods 4.1.9, 4.1.14 and 13.2.1A) combine to give strong directives. Removing the FCPL will not meet these policy requirements. The FCPL needs a rational basis and the Panel were not convinced that the Bruun Rule was unsuitable to generate an indicative FCPL. The Panel accept the Reporting Officer's opinion that the FCPL is the first start in giving effect to the NZCPS and RPS policies. The Panel therefore agree with the Reporting Officer's viewpoint that any decision on the FCPL, and plan policy and rules, should reflect Ministry for the Environment guidance and RPS method 4.1.14 recommending planning for 0.8 metre sea level rise by 2090 and a 0.1 m sea level rise per decade from a 1990 baseline. The Panel was also of the mind that there be a change in terminology from 'Future Coastal Protection Line' to 'Future Coastal Process Line' and 'Future Coastal Protection Area' to 'Future Coastal Process Area' to better reflect the fact that 'protection' may not be needed or in place in the future.
- 5.17 The final hearing of 19-21 May addressing residual matters provided further comment and amendments on natural hazards, in particular that: the FCPL apply over Council reserves. The Panel has adopted this recommendation along with the others in the Report<sup>18</sup>.

<sup>&</sup>lt;sup>16</sup> Hearing Agenda – 18 -20 November 2014 at [248] pages 69-70.

<sup>&</sup>lt;sup>17</sup> Coromandel Beaches – Coastal Hazards – Review of Primary Development Setback at Selected Beaches. Jim Dahm (Eco Nomos Limited) & Bronwen Gibberd, (4D Environmental Limited) October 2009 Coromandel East Coast Beaches – Potential impact of Projected Climate Coastal Erosion over the next Century and Review of Associated Coastal Setback- FOCUS Report 2012. Bronwen Gibberd, (4D Environmental Limited) and Jim Dahm (Eco Nomos Limited). November 2012 Coromandel East Coast Beaches – Future Coastal Erosion Setback, Response to Peers Review. Bronwen Gibberd, (4D Environmental Limited) and Jim Dahm (Eco Nomos Limited). September 2013.

<sup>&</sup>lt;sup>18</sup> Hearing Agenda 19 -21 May 2015 Page 25 -26.

5.18 The Panel have accepted the S.42A recommendations<sup>19</sup> that the FCPL and associated provisions should be retained as notified with the amendments suggested.

#### Tsunami

- 5.19 The Panel were told<sup>20</sup> that the methods of land use control for tsunami risk in New Zealand are still being theorised, and there is little consensus about the value of various land use controls to avoid or mitigate possible tsunami damage when discounted against their rare occurrence. It was pointed out to us that Section 10 Policy 3b and associated rules in Section 34.15 are not the perfect planning approach for managing tsunami risk in the Coromandel. However as interim provisions they are better than the WRC provisions proposed. Tsunami is a high consequence but low probability event. It is worthwhile taking time to form appropriate planning responses for the District's east coast communities.
- 5.20 GNS Science (#433) had referred to Section 34 Rule 16 requiring the vertical evacuation structures to be designed for a '1:100, year tsunami' to be changed to 'a maximum credible event'. The reference should have been to Table 4.1a. The change was supported. The intent of GNS Science is very evident to the Panel and it makes good sense that a consequential change is made to Policy 3b. GNS Science's original submission provides the scope to make the change.
- 5.21 The Panel have accepted the S.42A discussion and recommendations<sup>21</sup> that the Tsunami provisions should be retained as notified with the amendment suggested.

### Flood Hazard Maps

- 5.22 The Reporting Officer addressed<sup>22</sup> and discussed the submissions on the Flood Hazard Maps in the Section 42A/Section 32AA Further Evaluation Report. A number of submitters questioned the mapping, but none provided the level of information that would allow the Panel to make changes.
- 5.23 The Panel have accepted the Reporting Officer's discussion and recommendations<sup>23</sup> that the Flood Hazard Maps should be retained as notified with the amendment suggested.

#### Section 50 – Open Space Zone

5.24 The Panel were provided<sup>24</sup> with the explanation that the Section 50 Open Space Zone was different from the rest of the natural hazard provisions in that it is a zone, not an overlay. Excluding the Matarangi Golf Course open space provisions, the Open Space Zone covers land that is known to flood or have coastal erosion risk; however the likelihood and consequences are unknown and the spatial extent of the risk is often not known. The Open Space Zone can be removed once a natural hazard overlay refines and replaces land use controls for that area. The Council received only one minor submission point on this zone. Most of the submissions on the Open Space Zone do not address natural hazards, but instead focus on the Zone's

<sup>&</sup>lt;sup>19</sup> Hearing Agenda – 18 -20 November 2014 at [95] pages 41-2

<sup>&</sup>lt;sup>20</sup> Ibid page 46

<sup>&</sup>lt;sup>21</sup> ibid pages 46-47

<sup>&</sup>lt;sup>22</sup> Ibid pages 47 - 51

<sup>&</sup>lt;sup>23</sup> ibid pages 46-47

<sup>&</sup>lt;sup>24</sup> ibid page 76

second role of maintaining open space areas in Matarangi. Holes 1 and 2 of the Matarangi Golf Course attracted considerable submitter attention; this topic is addressed in its own Decision Report 24.

- 5.25 The final Hearing Agenda of 19-21 May 2015<sup>25</sup> provided the Panel with further analysis on Section 50. In particular commentary was provided on the submissions addressing the open space at Matarangi. The Report records<sup>26</sup> that polices contained in Section 27.3 Matarangi Structure Plan address open space to ensure it is retained. No amendments are required.
- 5.26 The Panel have accepted the Reporting Officer's discussion and recommendations<sup>27</sup> that Section 50 and associated provisions should be retained as notified with the amendments suggested.

### 6.0 PANEL'S RECOMMENDED DECISIONS

- 6.1. It is the Panel's recommended decision to adopt the Reporting Officers' discussion and recommendations in the Section 42A Report/Section 32AA Further Evaluation Reports<sup>28</sup> on Sections 3, 10, 34 and 50 with:
  - a) amendments to depict the Coastal Erosion Residual Risk Area on the Planning Overlay Maps between the former CCEL (as notified) and the Cooks Beach and Buffalo South coastal defences as shown on the overlay maps in Attachment 1; and
  - b) amendments to Section 3 definition of 'Residual Risk' as shown in Attachment 2; and
  - c) amendments to Section 34.5.2, 34.5.5 and Rule 15B to read as shown in Attachment 3; and
  - d) a consequential change to Policy 3b as a result of adopting GNS Science submission on 'a maximum credible event' as shown in Attachment 4; and
  - e) amendments to change the 'Future Coastal Protection Line' to 'Future Coastal Process Line' and 'Future Coastal Protection Area' to Future Coastal Process Area'; and
  - f) any other consequential changes necessary to give effect to this decision.

### Reasons for the decision:

- a) The Panel is satisfied that based on RMA S.6, the NZCPS, the RPS and MfE guidance it is desirable and appropriate for the Plan to include coastal hazard lines and maps.
- b) The community has a strong interest in the coast and the provision of hazard lines on maps will enable social and economic well-being while providing certainty and assistance to help individuals evaluate risk.
- c) The potential adverse effects in terms of health and safety and economic costs associated with coastal hazards are substantial and will in the Panel's view be most appropriately avoided, remedied or mitigated through the adoption of the hazard lines and maps.
- d) In light of the potential adverse effects identified above the imposition of the proposed framework is appropriate and provides for the reasonable use of coastal land.

<sup>&</sup>lt;sup>25</sup> Hearing Agenda 19 -21 May 2015 Pages 26 - 29

<sup>&</sup>lt;sup>26</sup> Ibid page 27

<sup>&</sup>lt;sup>27</sup> ibid pages 46-47

<sup>&</sup>lt;sup>28</sup> Hearing Agendas: 18 -20 November 2014 & 19 -21 May 2015

- e) It is necessary to acknowledge the uncertainty associated with long term dynamic coastal processes. The S.42A provisions successfully balance a justifiably conservative prudence whilst minimising impositions and red tape.
- f) The evidence presented to the Panel opposing the S.42A approach was not convincing in addressing the matters described in points a)-e) above.

### 7.0 SECTION 32AA EVALUATION

7.1 For the purposes of S.32AA, the S.42A version of the Plan has been considered in terms of S.32(1) to S.32(4). The Panel accepts the Reporting Officer's recommendations and finds that Sections 10, 34 and 50 as amended in the S.42A report are the most appropriate in terms of the potential costs (including effects) and benefits. The changes proposed by the Reporting Officer to the notified version of the Plan will make the Plan more efficient and effective.



## **RESIDUAL RISK AREAS FOR BUFFALO BEACH, COOKS BEACH**



### Section 3 - Definitions

**Residual Risk** means the level of risk that remains after risk avoidance or mitigation measures have been implemented. For flooding, also refer to 'Natural Hazard Terms'.

**Residual Risk** also refer to the main definition. In relation to flooding, residual risk means the remaining level of flood hazard risk after risk mitigation measures have been implemented. Risk remains from flood events larger than the design flood, channel blockages, debris flows, channel re-alignment, bank collapse, or modifications to catchment land use.

Residual Risk has the same meaning as in the Waikato Regional Policy Statement.

"Residual risk – the risk associated with existing natural hazard structural defences such as stopbanks and seawalls, including the risk of failure of a defence or of a greater than design event occurring."

Residual Risk Area has the same meaning as Residual Risk Zone in the Waikato Regional Policy Statement.

"Residual risk zone – an area subject to residual risk – that is the area that would be at risk from a natural hazard event but for a structural defence."

#### 34.5.2 Current Coastal Erosion Line

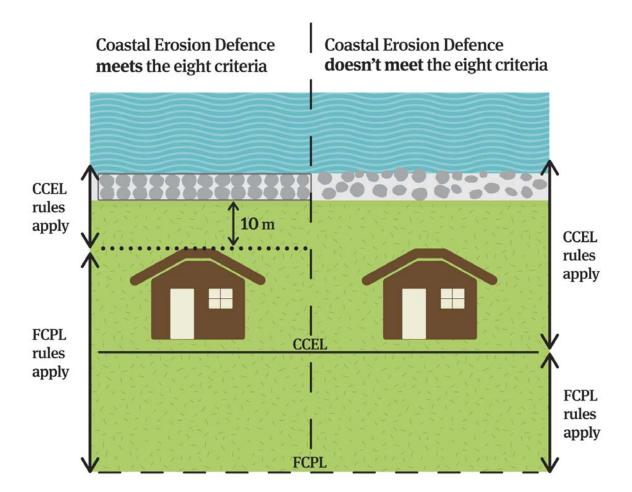
The Current Coastal Erosion Line (CCEL) indicates the most landward extent of current coastal erosion. This would only occur in a severe storm or series of storms when the coastline was already nearing the peak of an erosion phase. The line includes a 5 m buffer to give space for coastal defence reconstruction/beach restoration after an erosion event, and to give residents a feeling of safety that house foundations will not be undermined. A 5 m buffer was also included in dune toe erosion estimates to ensure they were precautionary, which provides for uncertainties in data and current knowledge on dune fluctuation.

The CCEL is based on existing coastal erosion risk. It does not factor in any sea level rise or other climate change effects such as increased northeasterly storms and summer droughts. It also does not address coastal inundation by the sea.

The approach adopted is to avoid any major structures, especially dwellings, between the CCEL and the ocean. Existing structures within this area are still protected through existing use rights. Site-specific assessment of coastal erosion and coastal inundation risks is recommended for resource consent applications triggered by the CCEL.

Some of the District's existing urban areas are protected from erosion by coastal defences consented by the regional and/or district council. In some cases, these defences have now reduced current coastal erosion risk to a tolerable level. The Plan allows for reasonable use where lots already exist seaward of the CCEL and the risk is tolerable. If a lot behind a coastal erosion defence meets all eight criteria below, the FCPL rules (Sections 34.13 and 34.14) apply to the land between the CCEL shown on the Planning Maps, and 10 m landward of the landward edge of the coastal erosion defence. The CCEL rules (Sections 34.11 and 34.12) still apply between the 10 m mark landward of the coastal erosion defence and mean high water springs. The diagram below illustrates

this.



The eight criteria are:

- 1 The lot is in the Residential Area.
- 2 The lot has less than 500 m<sup>2</sup> landward of the CCEL.
- 3 A FCPL is landward of the CCEL.
- 4 The Planning Maps do not show a Residual Risk Area on the lot.
- 5A If seaward of mean high water springs: the coastal erosion defence has, and is in full compliance with, a resource consent of 35 years duration from Waikato Regional Council; or
- 5B If landward of mean high water springs: the defence has, and is in full compliance with, a land use consent of at least 35 years duration from the Council; or
- 5C If the coastal erosion defence crosses mean high water springs: both 5A and 5B above apply.
- 6 The resource consent(s) described in 5 above certify that the coastal erosion defence can withstand a series of severe coastal erosion events, although maintenance may be needed over time, and that coastal erosion at the edges of the defence will not be exacerbated.
- 7 The coastal erosion defence has a long-term management plan registered with the Council that includes: long-term monitoring and maintenance of the defence, provision/triggers for removal or landward relocation of the defence, long-term management of houses and other buildings and structures near the defence, and back-up alternatives to the defence.
- 8 The Waikato Regional Council has assessed coastal inundation risk, and has recommended minimum ground floor heights for dwellings, minor units, other habitable rooms, and storage of hazardous substances.

A Plan change may consider CCEL relocation to account for a coastal erosion defence if all the eight criteria are met, after taking account of the specific beach dynamics and form of the coastal erosion defence. This Plan change should include a Residual Risk Area.

In some situations, existing use rights may apply to maintenance of existing structures seaward of the CCEL. Refer to RMA Section 10 to assess this.

#### 34.5.5 Where the Current Coastal Erosion Area and Future Coastal Process Area rules apply

The Current Coastal Erosion Area rules in Section 34.11 apply between the CCEL shown on the Planning Maps and mean high water springs. The Future Coastal Process Area rules in Section 34.13 apply between the FCPL shown on the Planning Maps and the CCEL.

Where a lot protected by a coastal erosion defence meets all eight criteria in Section 34.5.2, the Future Coastal Process Area rules also apply between the CCEL on the Planning Maps and 10 m landward of the landward edge of the coastal erosion defence. The Current Coastal Erosion Area rules no longer apply in this area while the eight criteria are met. This is illustrated in the diagram in Section 34.5.2.

### RULE 15B Addition to a building in the CCEA

- 1. An addition to a building that is party or fully within the CCEA, but the addition itself is partly or fully within the FCPA, is a **restricted discretionary activity**.
- 2. For a lot that meets all eight criteria in Section 34.5.2, an addition to a building that is partly or fully within 10 m of the coastal erosion defence, but the addition itself is partly or fully more than 10 m landward from the coastal erosion defence, is a **restricted discretionary activity**. This supersedes Rule 15B.1.
- 3. The Council restricts its discretion to matter 4 in Table 4.

### **SECTION 10**

#### Policy 3b

Development of facilities for children, aged care facilities and hospitals within areas at risk of <u>a maximum</u> <u>credible</u> tsunami <u>event</u> with a 0.1% AEP should have vertical evacuation areas that are sturdy enough to withstand a tsunami and elevated above expected tsunami inundation for a 0.1% AEP maximum credible <u>tsunami</u> event.