

**NOTE:** The rule amendments proposed in this draft Plan Change **have no legal effect** until the Council's decision approving the Change is publicly notified (s 86B).

## COASTAL HAZARDS

### Explanation

The purpose of Plan Change 12 is to amend Chapter 5 (Natural Hazards) of the District Plan to manage the development, subdivision and use of land within areas of potential coastal hazards that include inundation, erosion, rising ground water and tsunamis.

Christchurch is one of the most exposed districts to potential coastal hazards, and the impacts of global warming will exacerbate the risk.

Coastal hazards were included as part of the notified District Plan review. However, the Canterbury Earthquake (Christchurch Replacement District Plan) Order in Council 2015 recognised that coastal hazards were not a recovery matter that required an expedited process. The amendment removed coastal hazard provisions from the District Plan review and directed that the Council address this separately.

The District Plan currently relies on the more generic Natural Hazards objective 3.3.6 and associated policies in 5.2.2.1, with provisions managing development, subdivision and land use within areas identified as Flood Management Areas (FMA), and High Flood Hazard Management Areas (HFHMA), including the Residential Unit Overlay (RUO). There are also some legacy provisions from the Christchurch City Plan and Banks Peninsula District Plan.

The plan change will take a risk based approach and introduce new:

- Objective and Policies;
- Rules and methods; and
- Mapping overlays that identify areas of potential coastal hazard risk.

The Plan Change proposes the following **amendments**:

- a. Amend Chapter 5 Natural Hazards introducing a new Objective 5.2.1.2 – Coastal Hazards
- b. Amend Chapter 5 Natural Hazards introducing new Policies:
  - 5.2.2.5.1 – Risk based approach to Coastal Hazards
  - 5.2.2.5.2 – Avoid increasing risk from Coastal Hazards
  - 5.2.2.5.3 – Managing subdivision, development and land use in Coastal Hazards areas
  - 5.2.2.5.4 – Adaptation, alteration and maintenance of existing buildings and properties within areas of Coastal Hazards
  - 5.2.2.5.5 – Innovative forms of development and design within Coastal Hazards areas
  - 5.2.2.5.6 – Hazard sensitive activities
  - 5.2.2.5.7 – Protection from Coastal Hazards

- d. Amend Chapter 5 Natural Hazards, introducing new sections 5.9 Rules – Coastal Inundation, and 5.10 Rules Coastal Erosion that include Activity Status, Matters of Control and Matters of Discretion.
- e. Amend the Planning Maps to include overlays for Coastal Inundation risk (very low, low, medium & high) and Coastal Erosion risk (Low, High-Medium).
- f. Amend Chapter 2 Abbreviations and Definitions – Definitions List inserting new definitions;
- g. Removal of FMA, HFHMA, RUO overlays within the Coastal Hazards areas.
- h. Removal of the Christchurch City Plan and Banks Peninsula District Plan legacy coastal hazards provisions that remain operative following the District Plan review, as notified on 23 November 2015.

There will also be a number of other minor consequential changes.

The draft Plan Change has used the latest information available to inform the development of provisions. This includes the Coastal Hazards Assessment 2021 (T+T) and the Risk Based Coastal Hazards Analysis for Land-use Planning study 2021 (Jacobs).

The mapping data is derived from the 2021 Risk Based Coastal Hazard Analysis for Land-use Planning study (Jacobs). It has been developed at an areas based scale, to establish the concept of the risk based approach for district planning purposes. It does not provide a property specific level of assessment. This is preliminary data that is subject to further review and refinement. Updates to the mapping data will be undertaken in the first half of 2022, prior to notification of the Coastal Hazards Plan Change.

**Date Publicly Notified:** DD Month YYYY

**Date Operative:** DD Month YYYY

**Council Decision Notified:** DD Month YYYY

**File No:** PL/DP/X

**Plan Details:** Chapter XX, Planning Map XX

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## DISTRICT PLAN AMENDMENTS

### Amend the District Plan as follows:

Introduce the following new sections to Chapter 5 Natural Hazards:

### Objectives & Policies:

#### **Objective 5.2.1.2 – Coastal Hazards.**

- a. Development, subdivision and land use does not increase the risk of coastal inundation, coastal erosion, rising groundwater or tsunami causing physical, social, economic or environmental harm.
- b. Existing communities potentially affected by coastal hazards are able to continue to develop and use land, natural and physical resources where the risk of adverse effects from coastal hazards is not increased and the level of risk can be managed to an acceptable level.

#### **Policy 5.2.2.5 Policies for Coastal Hazards**

##### 5.2.2.5.1. Risk based approach to Coastal Hazards

A. Map areas for coastal hazards based on:

Coastal inundation risk category	Flood depth based on 60 cm of sea level rise (higher certainty)	Flood depths based on 1.2m of sea level rise (less certainty – higher consequence)
Very low	Dry	$d < 0.5\text{m}$
Low	$d < 0.5\text{m}$	$0.5\text{m} < d < 1.1\text{m}$
Medium	$0.5\text{m} < d < 1.1\text{m}$	$d > 1.1\text{m}$
High	$d > 1.1\text{m}$	$d > 1.7\text{m}$

d represents the depth of coastal flooding in a flood event, which factors in the sea level amount considered i.e. 60cm of sea level rise does not equate to 60 cm of flooding.

Coastal erosion	Risk Category
Otautahi Christchurch urban area open coast	a. High Hazard Zone covering the whole current beach-dune width
	b. Low Hazard Zone to a lowland limit defined by the 10% probability erosion distance with 1.2 m SLR by 2130 and an additional area required for “future healthy beach factors”.
Ihutai Avon-Heathcote Estuary	a. High-Medium Hazard Zone to a landward limit defined by the 66% probability erosion

	<p>distance with 0.6 m SLR by 2080, which for consistency is to be 45 m wide</p> <p>b. Low Hazard Zone to a lowland limit defined by the 10% probability erosion distance with 1.2 m SLR by 2130, which for consistency is to be 20 m wide.</p>
Banks Peninsula beaches and bays	<p>High-Medium Hazard Zone:</p> <p>a) For Probabilistic assessment cells, the 10% probability of erosion distance for 1.2 m SLR by 2130</p> <p>b) For deterministic assessment cells, the limit of the areas susceptible to coastal erosion (ASCE) from the 1.5 m SLR by 2130 scenario, which has an assumed probability of 1-5%.</p>
Banks Peninsula coastal cliffs	<p>High-Medium Hazard Zone for the coastal cliffs of the Banks Peninsula, Lyttelton Harbour and Akaroa Harbour; a single Banks Peninsula Cliff Erosion Zone of 20-30 m width as defined by the generic T+T cliff erosion setback in the Coastal Hazards Assessment 2021</p>
Hard Edges	<p>High-Medium Hazard Zone for assessment cells along the southern shore of the Avon-Heathcote estuary, Sumner Beach, Lyttelton Port and Akaroa township where there are land reclamation and substantial hard protection structures; a single High Hazard Erosion Zone hazard zone with a generic width in the order of 20 m.</p>

B. Apply controls over the development, subdivision and use of land that are proportionate to the level of risk from coastal hazards.

#### 5.2.2.5.2. Avoid increasing risk from Coastal Hazards

Within areas of coastal hazards avoid development, subdivision and land use that would increase the risk of social, environmental and economic harm from coastal hazards unless:

- i. it is dependent on a coastal location, and
- ii. there are no other reasonable alternatives available, and
- iii. the benefits of the proposed development out-weigh the potential harm, and
- iv. the adverse effects from coastal hazards and the development on people, property, infrastructure, the environment and cultural values are mitigated to the fullest extent practicable.

#### 5.2.2.5.3. Managing subdivision, development and land use in Coastal Hazards areas

Subject to policy 5.2.2.5.2, any subdivision, development and land use within coastal hazards areas shall:

- A. be located in the lowest risk category possible;
- B. not rely on mitigation provided by private coastal management works outside the site;
- C. be designed, constructed and located to avoid harm, or where this is not possible, effects are mitigated to an acceptable level and harm to people, property, infrastructure and the environment is minimised;
- D. ensure outcomes are compatible with the anticipated environmental characteristics of the area and its cultural values;
- E. identify an appropriate risk based trigger point when it will be necessary to:
  - i. review use of the site, or
  - ii. remove or relocate the development or activity;
- F. provide for appropriate remediation of the site subsequent to the removal, relocation or cessation of the activity. This shall have particular regard to an adaptation plan for the area, or where no adaptation plan exists, be in keeping with the local environment at the time.

#### 5.2.2.5.4. Adaptation, alteration and maintenance of existing buildings and properties within areas of Coastal Hazards

Provide for maintenance, replacement, adaptation and alteration of existing structures, and associated earthworks within areas affected by coastal hazards, subject to criteria A – F in Policy 5.2.2.5.3.

#### 5.2.2.5.5. Innovative forms of development and design within Coastal Hazards areas

Innovative forms of design and methods of construction to address coastal hazards risk are encouraged where they avoid an increased risk of harm or provide enhanced mitigation of adverse effects.

#### 5.2.2.5.6. Hazard sensitive activities

- A. Activities and development that provide accommodation or services for users that are more vulnerable to the adverse effects of coastal hazards than the general population shall be avoided within areas of coastal hazards, unless within areas of low or very low risk, there is an identified need that cannot be met elsewhere and mitigation based on an evaluation of the vulnerability of users is provided to an acceptable level.
- B. The evaluation of the vulnerability of users shall include considerations of:
  - i. the level of exposure of occupants and users to risks from coastal hazards;
  - ii. the operational period and practices for the activity;
  - iii. the nature and number of users, their mobility and ability to safely evacuate; and
  - iv. the potential level of social and economic harm and risk to life.

#### 5.2.2.5.7. Protection from Coastal Hazards

- A. Development, subdivision and land use shall avoid causing harm to the integrity of existing:
  - i. coastal management works, and
  - ii. natural features, including dune systems and coastal wetlands that provide defence from coastal hazards.

unless they form part of a planned renewal, replacement or adaptation process.

- B. Coastal management works to manage the effects of coastal hazards on people, property, infrastructure and the environment shall:
  - i. prioritise natural and nature based options over hard engineering solutions; and
  - ii. have particular regard to the implementation methods in a relevant Coastal Adaptation Plan for the area.

#### **5.7.4 Additional information requirements for resource consent applications within Coastal Hazard areas**

All resource consent applications within:

- A. areas of Medium and High coastal inundation hazard risk, and
- B. areas of Low and Medium/High coastal erosion hazard risk

shall be accompanied by a detailed site specific risk assessment that is commensurate with the level of risk, and includes allowance for the effects of climate change.

**Rules:**

**Chapter 2 Abbreviations and Definitions**

**Definitions List:**

Coastal Hazards comprise coastal inundation, coastal erosion, rising groundwater and tsunamis. They are influenced by climate change and sea level rise.

Coastal Management Works: means activities or development intended to mitigate the risk of coastal hazards on adjacent land.

Hazard sensitive activities means the following activities that provide accommodation or services for users that are more vulnerable to the adverse effects of hazards than the general population due to their more complex needs.

- i. Education activities, including pre-school facilities;
- ii. Health care activities providing physical and mental health services, or health-related welfare services, for people by registered health practitioners (approved under the [Health Practitioners Competence Assurance Act 2003](#));
- iii. Elderly and disability care services and residential accommodation; and
- iv. Any other activity in which users are more vulnerable to the adverse effects of hazards than the general population and less capable of taking action to provide for their safety in the event of a hazard occurring.

Strategic/Critical Coastal Infrastructure means strategic and critical infrastructure that by its nature requires a coastal location.

## Chapter 5 Natural Hazards

### 5.9 Rules – Coastal Hazards

#### 5.9.1 Activity status for Coastal Hazards inundation areas

- a. The activities listed below have the activity status listed within each Coastal Hazard risk area, and are subject to any activity status, rules and any standards specified elsewhere in the District Plan for that activity.
- b. In relation to controlled activities, discretion to impose conditions is restricted to the matters over which control is reserved as set out in Rule 5.9.4 as applicable.
- c. In relation to restricted discretionary activities, discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in Rule 5.9.5.
- d. Where subdivision is specified, a subdivision consent is also required under the provisions of Chapter 8.

**Table 5.9.1.a**

Key: P = Permitted; RD = Restricted Discretionary; D = Discretionary; NC = Non-complying; PR = Prohibited.

Inundation		Risk Area				Activity Specific Standards (permitted activities only)
		Very Low	Low	Medium	High	
Activity						
a.	Subdivision	RD1	RD2	NC1	NC2	Nil
b.	Building not otherwise included in this table	P1	C1	D1	NC3	a. Minimum floor levels shall be the level specified in the Minimum Floor Level Certificate (refer to Rule 5.9.2); and  b. The maximum ground floor area of all buildings on the site shall be 200m <sup>2</sup> in total.
c.	Replacement residential unit	P2	P3	C2	RD3	a. Minimum floor levels shall be the level specified in

						<p>the Minimum Floor Level Certificate (refer to Rule 5.9.2); and</p> <p>b. The ground floor area of the replacement residential unit shall not be greater than the ground floor area of the existing residential unit; and</p> <p>c. The residential unit on the site shall be located in a position on the site that is no lower than the existing building.</p>
d.	Accessory buildings	P4	P5	C3	RD4	<p>a. Minimum floor levels shall be the level specified in the Minimum Floor Level Certificate (refer to Rule 5.9.2); and</p> <p>b. The maximum ground floor area of all buildings on the site shall be 200m<sup>2</sup> in total; and</p> <p>c. The residential unit shall be located in a position on the site that is no lower than the existing building.</p>
e.	Additions/extensions to buildings that increase the building footprint at ground level	P6	P7	C4	RD5	<p>a. Minimum floor levels shall be the level specified in the Minimum</p>

						Floor Level Certificate (refer to Rule 5.9.2); and  b. The maximum ground floor area of all buildings on the site shall be 200m <sup>2</sup> in total.
f.	Strategic/Critical coastal Infrastructure	C5	C6	RD6	RD7	Nil
g.	Critical Infrastructure – new	C7	RD8	RD9	RD10	Nil
h.	Infrastructure and utilities – new	C8	RD11	D2	NC4	Nil
i.	Repair and maintenance of infrastructure, utilities and buildings.	P8	P9	P10	P11	Nil
j.	Coastal management works - new	C9	C10	RD12	RD13	Nil
k.	Coastal management works – maintenance (excluding upgrades)	P12	P13	P14	P15	Nil
l.	Outdoor storage area and warehousing and distribution activities	C11	RD14	D3	NC5 (except Lyttelton Port)  D4 (Lyttelton Port)	Nil
m.	Temporary outdoor storage	P16	P17	C12	D5	Nil
n.	Hazard sensitive activities	RD15	RD16	NC6	NC7	Nil
o.	Recreation facilities (excluding recreation activities)	C13	RD17	D6	NC8	Nil
p.	Recreation activities (excluding buildings and structures used for recreation activities)	P18	P19	P20	P21	Nil

q.	Fences	P22	P23	P24	P25	Shall consist of no greater than 20% solid structure.
r.	Signage	P26	P27	P28	P29	Nil
s.	Demolition of buildings (excluding seawalls and other coastal management work)	C14	C15	C16	C17	Nil
t.	Demolition of seawalls and other coastal management work	C18	C19	D7	D9	Nil
u.	Earthworks and retaining structures	RD18	RD19	RD20	D8	Refer to 8.9.2.1 for the permitted activity standards.
v.	All activities not listed above	C20	C21	RD21	NC9	Nil

e. Any resource consent application arising from C1-21, or RD1-21 set out in Rule 5.9.1 above shall not be limited or publicly notified.

### 5.9.2 Minimum floor level certificate

a. For P1 – P7 in Table 5.9.1a, new buildings or additions to existing buildings within the Coastal Hazards inundation area shall have a floor level that is greater than or equal to that specified in a Minimum Floor Level Certificate. The Council will issue a Minimum Floor Level Certificate (which will be valid for 2 years from the date of issue) which specifies the design floor level for a building calculated as the highest of the following:

- (i) Christchurch City Council's most up to date estimate of a 200 year flood level from any source, including tidal sources, and including 1.2m sea level rise plus 400mm freeboard as set by Christchurch City Council flood modelling and any relevant field information; or
- (ii) 12.7 meters above Christchurch City Council Datum

### 5.9.3 Activity status for non-compliance with standards in Coastal Hazards inundation areas

Activities that fail to meet Activity Specific Standards for P1 – P29 Rule 5.9.1 shall be Restricted Discretionary Activities.

### 5.9.4 Coastal Hazards Inundation Areas Matters of Control C1 – C21:

Areas of Control		Control criteria
a.	Buildings and structures	The <ul style="list-style-type: none"> <li>a) number and size of building and structures;</li> <li>b) siting of buildings and structures; and</li> <li>c) building materials</li> </ul>

		with regard to the level of mitigation of the potential adverse effects from inundation and tsunami.
b.	Floor levels	Setting of minimum floor levels to mitigate the effects of inundation.
c.	Earthworks	The <ul style="list-style-type: none"> <li>a) timing, scale and location of earthworks; and</li> <li>b) method of earthworks</li> </ul> to mitigate the effects of inundation and avoids the transfer of risk to another site.
d.	Fences	Design of the fence to mitigate the effects of inundation on and off the site.
e.	Outdoor storage areas and warehousing and distribution activities	The location, size, duration, layout, and design of storage areas to mitigate the effects of inundation, including the risk of pollution and damage from spillage or movement of goods and material.
f.	Activity and use – vulnerability of occupants/users	The use, design and operational practices to adequately mitigate the risk to vulnerable users, including children, the elderly, and people with physical or mental disabilities.
g.	Stormwater management	The proposed stormwater management for the site to: <ul style="list-style-type: none"> <li>a) take into account the effects of sea level rise;</li> <li>b) mitigate the effects on water quality;</li> <li>c) mitigate increased run off to areas outside the site boundary to the greatest extent reasonable; and</li> <li>d) avoids the transfer of risk to another site</li> </ul>
h.	Rising groundwater	Mitigation of the effects of rising groundwater and effects of the activity on groundwater.
i.	Coastal management work	Natural and nature based options shall be prioritised over hard engineering solutions.
j.	Amenity	The proposal is consistent with the anticipated amenity of the surrounding environment in terms of visual amenity, landscape context and character, views, outlook, overlooking and privacy.

#### 5.9.5 Coastal Hazards Inundation Areas Matters of Discretion RD1 – RD21:

Matters of Discretion		Assessment matters
a.	Suitability of site for intended use	Whether the development or use of the site can adequately mitigate the adverse effects of coastal

		inundation and tsunami on people, property, infrastructure and the environment.
b.	Buildings and structures	<p>Whether the:</p> <ul style="list-style-type: none"> <li>a) number and size of building and structures;</li> <li>b) siting of buildings and structures; and</li> <li>c) building materials</li> </ul> <p>are appropriate for the site considering the risk of coastal hazards, and provide appropriate mitigation to the potential adverse effects from inundation and tsunami.</p> <p>The extent to which the proposal utilises innovative forms of design or methods that adequately mitigate coastal hazards risk.</p>
c.	Floor levels	Whether the proposed floor levels will mitigate the effects of inundation including with sea level rise.
d.	Earthworks	<p>Whether the:</p> <ul style="list-style-type: none"> <li>a) timing, scale and location of earthworks; and</li> <li>b) method of earthworks</li> </ul> <p>are appropriate to mitigate the effects of inundation, and avoids the transfers risk to another site.</p>
e.	Fences:	<p>Whether the:</p> <ul style="list-style-type: none"> <li>a) design of the fence mitigates the adverse effects of inundation within the site; and</li> <li>b) avoids the transfer of risk to another site.</li> </ul>
f.	Outdoor storage areas and warehousing and distribution activities	Whether the location, size, layout, duration, and design of storage areas mitigates the effects of inundation and tsunami, including the risk of pollution and damage from spillage or movement of goods and material.
g.	Activity and use – vulnerability of occupants/users	Whether the use, design and operational practices adequately mitigate the inundation and tsunami risk to vulnerable users, including children, the elderly, and disabled people.
h.	Stormwater management	<p>Whether the proposed stormwater management for the site:</p> <ul style="list-style-type: none"> <li>a) can take into account the effects of sea level rise;</li> <li>b) can mitigate the effects on water quality; and</li> </ul>

		c) mitigate increased run off to areas outside the site boundary to the greatest extent reasonable.
i.	Rising groundwater	Whether there is adequate mitigation to address the effects of rising groundwater and effects of the activity on groundwater.
j	Time limits and trigger points	Whether there is adequate provision for the timely relocation or removal of buildings and structures, or cessation of activity, and remediation of the site and mechanisms to ensure this occurs.
k.	Adaptation	Whether an adaptation plan has been prepared to manage coastal hazards in the area, and whether the use of the site is consistent with that plan.
l.	Infrastructure	a. Where critical infrastructure is involved, whether the infrastructure is designed in a way to continue to operate safely, taking into account the inundation and tsunami hazard risk at the site.  b. For all infrastructure:  i. the extent to which there are benefits associated with that infrastructure;  ii. whether there is a functional or operational requirement for that location; and  iii. whether there are any practical alternatives.
m.	Innovative development	Whether the proposal utilises innovative forms of design or methods, and to what extent the design or methods adequately mitigate coastal hazards risk.
n.	Hazard sensitive activities	Whether there is a need for the activity in the area, and the availability of suitable alternative locations with a lower level of risk.  Whether an evaluation of the vulnerability of users has been undertaken and contains sufficient detail including potential methods of mitigating risk.
o.	Coastal management work	Whether the proposal prioritises natural and nature based options over hard engineering solutions.
p.	Flood protection	Whether off site coastal management works provide reliable and appropriate mitigation.
q.	Amenity	The degree to which the proposal is consistent with the anticipated amenity of the surrounding environment in terms of visual amenity, landscape context and character, views, outlook, overlooking and privacy.

### 5.9.6 Activity Status for Coastal Erosion areas

- a. The activities listed below have the activity status listed within each Coastal Hazard Erosion risk area, and are subject to any activity status, rules and any standards specified elsewhere in the District Plan for that activity.
- b. In relation to controlled activities, discretion to impose conditions is restricted to the matters over which control is reserved as set out in Rule 5.9.7.
- c. In relation to restricted discretionary activities, discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in Rule 5.9.8
- d. Where subdivision is specified, a subdivision consent is also required under the provisions of Chapter 8.

**Table 5.9.6a**

Key: P = Permitted; RD = Restricted Discretionary; D = Discretionary; NC = Non-complying; PR = Prohibited.

Coastal Erosion		Risk Area	
		Low	High-Medium / Single zone
a.	Subdivision	NC1	NC2
b.	Building not otherwise included in this table	D1	NC3
c.	Replacement residential unit	C1	RD1
d.	Accessory buildings	C2	RD2
e.	Additions and extensions to buildings	C3	NC4
f.	Strategic and Critical coastal Infrastructure	RD4	RD5
g.	Critical Infrastructure - new	RD6	RD7
h.	Infrastructure and utilities - new	D4	NC5
i.	Repair and maintenance of infrastructure, utilities and buildings.	P1	P2
j.	Coastal management works - new	RD8	RD9

k.	Coastal management works – maintenance (excluding upgrades)	P3	P4
l.	Outdoor storage area and warehousing and distribution activities	D5	NC6
m.	Temporary outdoor storage area	C4	D6
n.	Hazards sensitive activities	NC7	NC8
o.	Recreation facilities	D7	NC9
p.	Recreation activities (excluding buildings and structures used for recreation activities)	P5	P6
q.	Fences	P7	P8
r.	Earthworks and retaining structures	RD10	D8
s.	Signage	P9	P10
t.	Demolition of buildings (excluding seawalls and other coastal management work)	C5	C6
u.	Demolition of seawalls and other coastal management work	D9	D10
v.	All activities not listed above	RD11	NC9

e. Any resource consent application arising from C1-6, or RD1-11 set out in Rule 5.9.6 above shall not be limited or publicly notified.

#### 5.9.7 Coastal Hazards Erosion Areas Matters of Control C1 – C6:

Areas of Control		Control criteria
a.	Buildings and structures	The <ul style="list-style-type: none"> <li>a) number and size of building and structures; and</li> <li>b) siting of buildings and structures</li> </ul> with regard to the level of mitigation of potential adverse effects from erosion.
b.	Earthworks	The <ul style="list-style-type: none"> <li>a) timing, scale, duration, and location of earthworks; and</li> </ul>

		<p>b) method of earthworks</p> <p>to mitigate the effects of erosion and avoid the transfer of risk to another site.</p>
c.	Outdoor storage areas and warehousing and distribution activities	The location, size, duration, layout, and design of storage areas to mitigate the effects of erosion including the risk of pollution and damage from spillage or movement of goods and material.
d.	Activity and use – vulnerability of occupants/users	The use, design and operational practices to adequately mitigate the risk to vulnerable users, including children, the elderly, and people with physical or mental disabilities.
e.	Stormwater management	<p>The proposed stormwater management for the site to:</p> <p>a) mitigate the effects of erosion;</p> <p>b) mitigate increased run off to areas outside the site boundary to the greatest extent reasonable;</p> <p>c) avoid discharge of contaminants into the environment; and</p> <p>d) avoid the transfer of risk to another site</p>
f.	Rising groundwater	Mitigation of the effects of rising groundwater and the effects of the activity on groundwater.
g.	Level of risk	The proposal is located within the area of least risk on the site.
h.	Reduced risk	Any new assessment undertaken by a suitably qualified person/s which confirms that the land is either subject to a lesser degree of risk or no risk of erosion.
i.	Adaptation	An adaptation plan has been prepared to manage coastal hazards, and the use of the site is consistent with that plan.
j.	Innovative development	The proposal utilises innovative forms of design or methods, and the design or methods adequately mitigate coastal hazards risk.
k.	Coastal management work	Natural and nature based options shall be prioritised over hard engineering solutions.
l.	Amenity	The proposal is consistent with the anticipated amenity of the surrounding environment in terms of visual amenity, landscape context and character, views, outlook, overlooking and privacy.

**5.9.8 Coastal Hazards Erosion Areas Matters of Discretion RD1 – RD11:**

<b>Matters of Discretion</b>		<b>Assessment matters</b>
a.	Suitability of site	Whether the development or use of the site can adequately mitigate the adverse effects of coastal erosion on people, property, infrastructure and the environment.
b.	Buildings and structures	Whether the <ul style="list-style-type: none"> <li>a) number and size of building and structures; and</li> <li>b) siting of buildings and structure</li> </ul> are appropriate for the site considering the risk of erosion and if they provide appropriate mitigation to the potential adverse effects from erosion.
c.	Earthworks	Whether the: <ul style="list-style-type: none"> <li>a) timing, duration, scale and location of earthworks; and</li> <li>b) method of earthworks</li> </ul> are appropriate to mitigate the effects of erosion, and avoids the transfer of risk to another site.
d.	Outdoor storage areas and warehousing and distribution activities	Whether the location, size, layout, duration and design of storage areas mitigates the effects of erosion, including the risk of pollution and damage from spillage or movement of goods and material.
e.	Activity and use – vulnerability of occupants/users	Whether the use, design and operational practices adequately mitigate the risk of erosion to vulnerable users, including children, the elderly, and disabled people.
f.	Stormwater management	Whether the proposed stormwater management for the site: <ul style="list-style-type: none"> <li>a) can mitigate the effects of erosion;</li> <li>b) avoids discharge of contaminants into the environment; and</li> <li>c) mitigate increased run off to areas outside the site boundary to the greatest extent reasonable.</li> </ul>
g.	Rising groundwater	Whether there is adequate mitigation to address the effects of rising groundwater and effects of the activity on groundwater.

h.	Time limits and trigger points for mitigation	Whether there is provision for the timely relocation or removal of buildings and structures, or cessation of activity and remediation of the site and mechanisms to ensure this occurs.
i.	Level of risk	Whether the proposal is located within the area of least risk at the site.
j.	Transfer of risk	Whether the proposal increases the likelihood or transfers or creates erosion risk beyond the site, or reduces the stability of adjoining land or undermines the ability of adjoining landowners to develop their land in future.
k.	Reduced risk	Whether there is a new assessment undertaken by a suitably qualified person/s which confirms that the land is either subject to a lesser degree of risk or no risk of erosion.
l.	Adaptation	Whether an adaptation plan has been prepared to manage coastal hazards, and whether the use of the site is consistent with that plan.
m.	Infrastructure	<p>a. Where critical infrastructure is involved, whether the infrastructure is designed in a way to continue to operate safely, taking into account the erosion hazard risk at the site.</p> <p>b. For all infrastructure:</p> <p>i. the extent of benefits associated with that infrastructure;</p> <p>ii. whether there is a functional or operational requirement for that location; and</p> <p>iii. whether there are any practical alternatives.</p>
n.	Innovative development	Whether the proposal utilises innovative forms of design or methods, and to what extent the design or methods adequately mitigate coastal hazards risk.
o.	Coastal management work	Whether the proposal prioritises natural and nature based options over hard engineering solutions.
p.	Hazard sensitive activities	<p>Whether there is a need for the activity in the area, and the availability of suitable alternative locations with a lower level of risk.</p> <p>Whether an evaluation of the vulnerability of users has been undertaken and contains sufficient detail including potential methods of mitigating risk.</p>
q.	Flood protection	Whether off site coastal management works provide reliable and appropriate mitigation.

r.	Amenity	The degree to which the proposal is consistent with the anticipated amenity of the surrounding environment in terms of visual amenity, landscape context and character, views, outlook, overlooking and privacy.
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## Planning Maps

Amend Planning Map Legend and Planning Maps introducing Coastal Hazards Inundation and Erosion risk areas as shown on the web viewer:

Inundation:

<https://gis.ccc.govt.nz/portal/apps/webappviewer/index.html?id=ae428b7c5b624f629b2a6c506db1bf0b>

Erosion:

<https://gis.ccc.govt.nz/portal/apps/webappviewer/index.html?id=35fc899707cf43f2a3e10dab1ea40263>.

Note:

The mapping data for the draft Plan Change is derived from the 2021 Risk Based Coastal Hazard Analysis for Land-use Planning study (Jacobs). It has been developed at an area based scale, to establish the concept of the risk based approach for district planning purposes. It does not provide a property specific level of assessment. This is preliminary data that is subject to further review and refinement. Updates to the mapping data will be undertaken in the first half of 2022, prior to notification of the Coastal Hazards Plan Change.