#### STATE PLANNING PROVISIONS - COASTAL HAZARDS

#### Overview

Coastal erosion and coastal inundation are natural processes that have the potential to significantly harm people, properties, communities, industries, infrastructure and the environment. This means coastal erosion and coastal inundation are 'hazards'.

Sea level rise is likely to increase the frequency and severity of coastal hazard events in Tasmania.

Land use planning and building regulations work to reduce risk in areas vulnerable to coastal hazards and secure a safe and sustainable working, living and recreational environment on Tasmania's coast.

### How are coastal hazards managed in Tasmania?

The State Planning Provisions (SPPs) include a **Coastal Erosion Hazard Code** and a **Coastal Inundation Hazard Code**. These codes contain provisions and mapping ('overlays') that control use and development within 'hazard bands'. Hazard bands are a mapping feature that indicates the risk posed by each hazard in particular locations and determine what planning and building controls are required.

Hazard bands do not indicate that land will be inundated or eroded, only that the land is susceptible.

#### Useful Terms

#### **Coastal erosion** involves:

- wearing away of coastal areas by water, wind and general weather conditions; or
- long-term changes to coastal land due to sealevel rise.

**Coastal inundation:** the temporary or permanent flooding of land by the sea due to storm surge, tides or sea-level rise.

**Hazard:** something with the potential to cause harm.

**Risk:** the chance of the hazard causing harm.

**Hazard event:** a situation or condition where loss of control of a hazard leads to harm.

**Tolerable risk:** the lowest level of likely risk from the relevant hazard:

- for use or development in the hazard area to be of benefit; and
- which can be managed through routine regulatory measures, or specific hazard management measures.

'Critical', 'Hazardous', or 'Vulnerable' uses: activities that may be significantly impacted by hazard events, or may cause significant issues for a community or the environment if impacted by coastal hazard events. Examples include: hospitals, emergency services, fuel or chemical storage, schools, and residential care facilities.

**Coastal protection works:** any structures or works aimed at reducing risks to land, property or human life from hazard events.



The coastal hazard codes operate alongside:

- the Building Act 2016 and Building Regulations 2016; and
- Determinations issued by the Director of Building Control regarding building requirements in coastal hazard areas.

Box I: Applying the State Coastal Policy 1996

The coastal hazard codes support the following outcomes of the State Coastal Policy 1996:

- I.4.1 Areas subject to significant risk from natural coastal processes and hazards such as flooding, storms, erosion, landslip, littoral drift, dune mobility and sealevel rise will be identified and managed to minimise the need for engineering or remediation works to protect land, property and human life.
- 1.4.2 Development on actively mobile landforms such as frontal dunes will not be permitted except for works consistent with Outcome 1.4.1.
- 1.4.3 Policies will be developed to respond to the potential effects of climate change (including sea-level rise) on use and development in the coastal zone.

### How were the coastal hazard areas mapped?

The coastal hazard areas were mapped as part of the Mitigating Natural Hazards through Land Use Planning Project undertaken by the Department of Premier and Cabinet's Office of Security and Emergency Management.

The data identifies the coastal areas potentially vulnerable to erosion and inundation from now until 2100, taking into account the predicted impacts of climate change. The hazard band for a particular location is determined by reviewing information about the elevation, coastal region, type of ground, sea level rise, exposure to waves, and proximity to the coast. From this mapping, land along the Tasmanian coastline has been classified within one of four Hazard Bands or as an Investigation Area.

This mapping forms the basis of the overlays used to apply the two coastal hazard codes.

### Where and how does the Coastal Erosion Hazard Code apply?

Hazard bands

The **Coastal Erosion Hazard Code**, hazard bands classify risk as:

- ➤ Acceptable: Area unlikely to be affected by coastal recession until after 2100.²
- > Low: land projected to be vulnerable to coastal erosion by the year 2100.
- Medium: land projected to be vulnerable to coastal erosion by the year 2050.
- High: land potentially vulnerable to coastal erosion at the present time.



**Figure 1:** Coastal Erosion Hazard Bands and investigation area (green) at South Burnie

<sup>&</sup>lt;sup>1</sup> Director's Determination – Coastal Erosion Hazard Areas and Director's Determination – Coastal Inundation Hazard Areas issued under the Building Act 2016

<sup>&</sup>lt;sup>2</sup> Land within the 'Acceptable' hazard bands is not included in the overlays for the codes as these areas are not considered sufficiently susceptible for the purpose of planning and building controls.

The code applies to land within a 'Low', 'Medium', or 'High' hazard band, and includes standards for certain types of use and development dependant on their location, that should be addressed in a planning application related to that land. The code also requires that a suitably qualified person prepare a coastal erosion hazard report<sup>3</sup> for submission with any planning application.

#### **Investigation Areas**

Land identified as a *Coastal Erosion Investigation Area* indicates that landform data is incomplete or unavailable. The Coastal Erosion Hazard Code requires that a suitably qualified person conduct a site assessment<sup>4</sup> and prepare a report for submission with any application for a planning permit. The report must:

- (a) categorise the site in the relevant coastal erosion hazard band following site assessment; and
- (b) consider any matter specifically required by Performance Criteria in the Coastal Erosion Hazard Code.

If a site assessment concludes that the land is in the 'acceptable' hazard band, then no further assessment is required under the *Coastal Erosion Hazard Code*, but evidence of this should be submitted with any planning application.

If a site assessment of land in a coastal erosion investigation area determines that the land is within a 'Low', 'Medium', or 'High' hazard area then the relevant standards of the code apply, including the requirement to

provide a Coastal Erosion Hazard Report in addition to the Coastal Erosion Investigation Area Report. It is an option to combine the site assessment report and hazard report in a single document where both are required.

## Where and how does the Coastal Inundation Hazard Code apply?

#### Hazard bands

The Coastal Inundation Hazard Code, hazard bands classify risk as:

- ➤ Acceptable: The area will be unaffected by coastal inundation until after 2100<sup>5</sup>.
- Low: land projected to be vulnerable to a 1% annual exceedance probability (AEP)<sup>6</sup> storm surge event by the year 2100.
- Medium: land projected to be vulnerable to a 1% AEP storm surge event by the year 2050.
- High: land potentially vulnerable to the current mean high tide and sea level rise by the year 2050.



**Figure 2:** Coastal Inundation Hazard Bands along Emu River near Wivenhoe

<sup>&</sup>lt;sup>3</sup> A sample template for the preparation of a coastal erosion hazard report is available on the Department of Justice's Planning Reform website.

<sup>&</sup>lt;sup>4</sup> Information on how to undertake a site assessment to determine the coastal erosion hazard band is available in the 'Coastal Erosion Investigation Area – Site Assessment' document, which is available on the Department of Justice's Planning Reform website.

<sup>&</sup>lt;sup>5</sup> Land within the 'Acceptable' hazard bands is not included in the overlays for the codes as these areas are not considered sufficiently susceptible for the purpose of planning and building controls.

<sup>&</sup>lt;sup>6</sup> One per cent (1%) annual exceedance probability (or AEP) means there is a 1% probability of the event occurring in any given year.

The code applies to land within a 'Low', 'Medium', or 'High' hazard band, and includes standards for certain types of use and development, dependant on their location, that should be addressed in a planning application related to that land. These standards include the requirement that a suitably qualified person prepare a coastal inundation hazard report<sup>7</sup> for submission with any planning application.

#### **Investigation Areas**

Land identified as a *Coastal Inundation Investigation Area* indicates that elevation data is incomplete or unavailable. The Coastal Inundation Hazard Code requires that, for new use or development to occur, a land survey must determine which hazard band applies to the land. It will be necessary to engage a surveyor to:

- determine the elevation of the site;
- classify the site into a hazard band by reference to the Coastal Inundation Hazard Bands AHD Levels in Table C11.1 of the relevant Local Provisions Schedule; and
- map the hazard bands on a site plan showing the proposed use or development.

If a land survey concludes that the land is higher than land in the 'Low' coastal inundation hazard band, then the *Coastal Inundation Hazard Code* does not apply as it is considered to be within the 'Acceptable' coastal inundation hazard band. However, the results of the land survey should be submitted with any planning application.

If a land survey determines that the land is within a 'Low', 'Medium', or 'High' hazard

area then the standards of the code apply to certain types of use and development, including the requirement to provide a Coastal Inundation Hazard Report. It is an option to combine the evidence and results from the land survey with the hazard report in a single document.

### Can the coastal hazard area overlays be modified?

The overlays for the codes are required to reflect the state-wide coastal hazard area mapping produced by the Department of Premier and Cabinet. However, modifications to the coastal hazard area overlays may be made to:

- depict an equivalent overlay under a current interim planning scheme, or
- in accordance with a report prepared by a suitably qualified person which justifies the change.

The **Coastal Erosion Hazard Code** may also be applied to any land that a planning authority reasonably believes is an actively mobile landform within the coastal zone<sup>8</sup>.

Any of the above modifications must be justified against the relevant coastal hazard guidelines detailed in *Guideline No. 1 – Local Provisions Schedule (LPS)*: zone and code application.

<sup>&</sup>lt;sup>7</sup> A sample template for the preparation of a coastal inundation hazard report is available on the Department of Justice's Planning Reform website.

<sup>&</sup>lt;sup>8</sup> The coastal zone is defined in the State Planning Provisions according to section 5 of the State Coastal Policy Validation Act 2003 and applies to Tasmanian waters and to all land to a distance of one kilometre inland from the high-water mark.

# What types of use and development do the coastal hazard codes regulate?

Most development that requires any form of building authorisation under the *Building Act* 2016<sup>9</sup> is not regulated under the codes. Such development is instead regulated through the *Director's Determinations* which provide standards for building work and associated work within the relevant coastal hazard area.

The codes mainly apply to use or development that is:

- for a critical use, hazardous use or vulnerable use:
- located within the 'high' hazard band;
- > for coastal protection works;
- for the Coastal Erosion Hazard Code, located on an actively mobile landform in the coastal zone; or
- for the Coastal Inundation Hazard Code, located within a non-urban zone and within the 'medium' coastal inundation hazard band.

In general, the coastal hazard codes regulate use and development on land outside existing settlement areas (or urban zones<sup>10</sup>), unless within the 'high' hazard band or for critical, hazardous or vulnerable uses. This approach acknowledges that strategic planning decisions have already been made to provide for urban development within these areas.

Appendix I provides more information about the relevant land use planning requirements, including the types of use and development that are exempt from assessment against the codes.

### How do the coastal hazard codes affect use and development?

The codes require that any use or development must demonstrate that a tolerable level of risk can be achieved and maintained in the future.

A coastal hazard report must be prepared by a suitably qualified person for any use or development subject to the codes. A coastal hazard report must address all requirements outlined in the relevant code and be prepared in accordance with any specified methodology.

Appendix I provides more information on the relevant planning requirements.

## What happens in areas at risk of a combined inland flooding and coastal inundation event?

The **Coastal Inundation Hazard Code** and associated mapping do not specifically address the impact of a combined – or 'coincident' – event that involves both coastal inundation and inland flooding.

Local planning authorities may modify the statewide coastal inundation hazard area mapping and AHD levels in the relevant *Local Provisions Schedule* to address coincident flooding for specific localities. Alternatively, a specific area plan may be prepared to manage coincident flooding issues.

The Tasmanian Government is working to enhance Tasmania's inland flood hazard mapping.

<sup>&</sup>lt;sup>9</sup> This refers to any Low-risk, Notifiable or Permit building work as described under the Building Act 2016.

<sup>&</sup>lt;sup>10</sup> Urban zones are the General Residential Zone, Inner Residential Zone, Low Density Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone, General Business Zone, Central Business Zone, Commercial Zone, Light Industrial Zone, General Industrial Zone, Major Tourism Zone, Port and Marine Zone, Community Purpose Zone, Recreation Zone and any particular purpose zone.

### How are natural values managed in coastal areas?

Natural values in coastal areas are largely managed through the waterway and coastal protection area overlay and future coastal refugia area overlay within the Natural Assets Code in the State Planning Provisions.

The application of appropriate zoning to coastal areas – such as Environmental Management Zone, Landscape Conservation Zone or Open Space Zone – also assists in protecting the natural values of coastal areas.

### Where can I find more information?

General information about the *Tasmanian Planning Scheme*, including the Coastal Erosion Hazard Code, Coastal Inundation Hazard Code, and the Natural Assets Code is available on the Tasmanian Planning Reform website.

### **Enquiries about the** *Tasmanian Planning* **Scheme** should be directed to:

Planning Policy Unit Department of Justice GPO Box 825 HOBART TAS 7001

Telephone: (03) 6166 1429

Email: planning.unit@justice.tas.gov.au

**Determinations issued by the Director of Building Control** are available on the Department of Justice's Consumer, Building and Occupation Services website.

Coastal hazard areas mapping can be viewed on the Tasmanian Government's Risk Ready website for property based searches (http://alert.tas.gov.au/RiskReady/SitePages/Home.aspxor) or the LISTmap website.

The Department of Premier and Cabinet's Office of Security and Emergency Management website can provide more information on coastal hazards and inland flooding in Tasmania.

Detailed information on the **application of State Planning Provisions zones and codes** is available in *Guideline No. I — Local* **Provisions Schedules (LPS): zone and code application.** 

August 2021

#### APPENDIX 1 – SUMMARY OF PLANNING REQUIREMENTS IN COASTAL HAZARD CODES

Code	Exempt Use or Development	Use Standards	Buildings and Works Standards	Subdivision Standards
Coastal Erosion Hazard Code	The following use or development is exempt from the requirements of the Coastal Erosion Hazard Code if not on an actively mobile landform in a coastal area:  • Use or development that requires authorisation under the Building Act 2016, unless it is:  • for a critical use, hazardous use, or vulnerable use;  • located within a high coastal erosion hazard band; or  • for coastal protection works.  • Intensification of an existing use, excluding a critical use, hazardous use, or vulnerable use.  • Alterations or extensions to an existing building located within a high coastal hazard band if:  • the site coverage is not increased by more than 20m² from that existing at the effective date; and  • not a critical use, hazardous use, or vulnerable use.  • Use or development for:  • Natural and Cultural Values Management;  • Passive Recreation;  • Port and Shipping in a proclaimed wharf area;  • Resource development, excluding use or development in the high coastal erosion hazard band that requires authorisation under the Building Act 2016; or  • minor utilities.  • Planting or disturbance of vegetation on existing pasture or crop production land.  • Subdivision for the consolidation of lots.	<ul> <li>High Coastal Erosion Hazard Band</li> <li>Must rely on a coastal location to fulfil its purpose.</li> <li>Coastal erosion hazard report required to demonstrate that a tolerable risk can be achieved and maintained.</li> <li>Non-urban zone and Low or Medium Coastal Erosion Hazard Band</li> <li>Coastal erosion hazard report required to demonstrate that a tolerable risk can be achieved and maintained.</li> <li>Must rely on a coastal location to fulfil its purpose if within a non-urban zone or high coastal erosion hazard band.</li> <li>Coastal erosion hazard report required to demonstrate that a tolerable risk can be achieved and maintained.</li> <li>Coastal erosion investigation area</li> <li>Coastal erosion investigation area report required to determine coastal erosion hazard band and compliance with relevant requirements in the Code.</li> </ul>	Buildings and works (excluding coastal protection works)  Coastal erosion hazard report required to demonstrate that a tolerable risk can be achieved and maintained and that it does not contribute to increased risks.  Buildings and works must not be located actively mobile landforms, unless for engineering or remediation works to protect land, property or human life.  Coastal protection works  Coastal erosion hazard report required to demonstrate that it is appropriately located, fit for purpose and kept to a minimum.  Must be for the protection of a use that relies upon a coastal location to fulfil its purpose if in a non-urban zone.  Coastal erosion investigation area report required to determine coastal erosion hazard band and compliance with relevant requirements in the Code.	Permitted subdivision  Provided it is not located on an actively mobile landform:  Subdivision which contains a building area, vehicle access and services wholly located outside the coastal erosion hazard area.  Subdivision for the creation of separate lots for existing buildings.  Subdivision required for public use.  Subdivision required for the provisions of Utilities.  Discretionary subdivision  Coastal erosion hazard report required to demonstrate that it does not create an opportunity for use or development that cannot achieve and maintain a tolerable risk.  Works must not be located on actively mobile landforms, unless for engineering or remediation works to protect land, property or human life.

#### APPENDIX 1 – SUMMARY OF PLANNING REQUIREMENTS IN COASTAL HAZARD CODES

Code	Exempt Use or Development	Use Standards	Buildings and Works Standards	Subdivision Standards
Coastal Inundation Hazard Code	<ul> <li>Development that requires authorisation under the Building Act 2016, unless it is:         <ul> <li>for a critical use, hazardous use, or vulnerable use;</li> <li>located within a high coastal inundation hazard band;</li> <li>located within a non-urban zone and within a medium coastal inundation hazard band; or</li> <li>for coastal protection works.</li> </ul> </li> <li>Intensification of an existing use, excluding a critical use, hazardous use, or vulnerable use.</li> <li>Alterations or extensions to an existing building located within a high coastal hazard band if:         <ul> <li>the site coverage is not increased by more than 20m² from that existing at the effective date; and</li> <li>not a critical use, hazardous use, or vulnerable use.</li> </ul> </li> <li>Use or development for:         <ul> <li>Natural and Cultural Values Management;</li> <li>Passive Recreation;</li> <li>Port and Shipping in a proclaimed wharf area;</li> <li>Resource development; or</li> <li>minor utilities.</li> <li>Planting or disturbance of vegetation on existing</li> </ul> </li> </ul>	<ul> <li>High Coastal Inundation Hazard Band</li> <li>Must rely on a coastal location to fulfil its purpose.</li> <li>Coastal inundation hazard report required to demonstrate that a tolerable risk can be achieved and maintained.</li> <li>Non-urban zone and Medium Coastal Inundation Hazard Band</li> <li>Must rely on a coastal location to fulfil its purpose.</li> <li>Coastal inundation hazard report required to demonstrate that a tolerable risk can be achieved and maintained.</li> <li>Non-urban zone and Low Coastal Inundation Hazard Band</li> <li>Coastal inundation hazard report required to demonstrate that a tolerable risk can be achieved and maintained.</li> <li>Critical use, hazardous use or vulnerable use</li> <li>Must rely on a coastal location to fulfil its</li> </ul>	Buildings and works (excluding coastal protection works)  Coastal inundation hazard report required to demonstrate that a tolerable risk can be achieved and maintained and that it does not contribute to increased risks.  Coastal protection works  Coastal inundation hazard report required to demonstrate that it is appropriately located, fit for purpose and kept to a minimum.  Must be for the protection of a use that relies upon a coastal location to fulfil its purpose if in a non-urban zone.	Permitted subdivision  Subdivision which contains a building area, vehicle access and services wholly located outside the coastal inundation hazard area.  Subdivision for the creation of separate lots for existing buildings.  Subdivision required for public use.  Subdivision required for the provisions of Utilities.  Discretionary subdivision  Coastal inundation hazard report required to demonstrate that it does not create an opportunity for use or development that cannot achieve and maintain a tolerable risk.
	pasture or crop production land.  • Subdivision for the consolidation of lots.	<ul> <li>purpose if within a non-urban zone or high coastal inundation hazard band.</li> <li>Coastal inundation hazard report required to demonstrate that a tolerable risk can be achieved and maintained.</li> </ul>		