8.2.5. Coastal hazard overlay code

8.2.5.1. Application

This code applies to the assessment of development if it is identified as an applicable code for development, as specified in the assessment benchmarks column in the tables of assessment located in Part 5 of the planning scheme.

When using this code, reference should be made to section 5.3.2 and where applicable, section 5.3.3 located in Part 5.

All subject matter in this code is applicable to the development assessment, unless the following circumstance arises:

(1) The heading of a specific benchmarks for assessment table specifies otherwise; or

(2) A heading within a specific benchmark for assessment table specifies that the outcomes apply to a specific type of development or to development at a specific location; or

(3) A performance outcome or acceptable outcome specifies that the outcomes apply to a specific type of development or to development at a specific location.

In the circumstance where point (2) or point (3) above arises the following applies:

(1) the development assessment outcomes apply only to the type of development specified or only to development at the location specified; and

(2) the development must still be assessed against all other general subject matter of the code.

The coastal hazard overlays include the following:

(1) storm tide hazard inundation areas; and

(2) erosion prone areas.

Storm tide inundation areas:

(1) The storm tide hazard inundation areas mapping includes:

  (a) areas where detailed storm tide hazard modelling has been undertaken*; and

  (b) areas where detailed storm tide hazard modelling has not been undertaken.

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(2) In areas where detailed storm tide hazard modelling has been undertaken, Council has adopted the following planning assumptions for the minimum floor levels of habitable rooms:

  (a) the 1% annual exceedance probability (AEP) modelling;

  (b) an assumed 0.8m sea level rise to account for climate change to 2100;

(3) In areas where detailed storm tide modelling has not been undertaken, the defined storm tide hazard level is identified as two (2) metres above highest astronomical tide, which includes a sea level rise factor of 0.8 metres to account for climate change projections to 2100.

Schedule 9 of the planning scheme provides further detailed information relating to storm tide modelling and adopted hazard resiliency levels.

Erosion prone areas:

(1) The erosion prone areas shown on the coastal erosion prone overlay map are declared by the Department of Environment and Heritage Protection (EHP) under section 70 of the Coastal Protection and Management Act 1995, commencing 8 July 2015.

(2) The erosion prone areas mapping includes a 0.8 metre sea level rise to account for climate change projections.

Editor's notes:
- Applicants must be aware that in storm tide hazard areas, flood hazard may also affect land.
- For development located in both the storm tide inundation and coastal erosion prone areas, all performance outcomes below are applicable.

8.2.5.2. Purpose

The purpose of the coastal hazard overlay code is to ensure that development in the coastal zone is planned, designed, constructed and operated to:

(1) avoid, or minimise and mitigate risk to people and property from coastal hazards including storm tide inundation and coastal erosion, taking into account predicted effects of climate change; and

(2) protect coastal resources and allow for natural fluctuations in coastal processes as far as possible.

8.2.5.3. Overall outcomes

The purpose of the code will be achieved through the following overall outcomes:

(1) foreshore ecosystems and biological diversity are protected and managed to maintain their natural protective functions and allow for natural fluctuations to continue as far as possible;

(2) risk from coastal hazards (including predicted effects of climate change) is avoided or mitigated and managed to acceptable levels;

(3) matters of State or local environmental significance are not adversely impacted on in order to achieve hazard minimisation or mitigation;

(4) coastal dependent land use and infrastructure is undertaken in a manner which minimises impacts on coastal resources and mitigates risks to people and property;

(5) emergency services facilities and vulnerable community uses are located and designed to function effectively during and after coastal hazard events;

(6) development does not create an unacceptable burden on disaster management response or recovery capacity and capabilities;

(7) development avoids the storage of hazardous materials in a coastal hazard area;

(8) public access to the foreshore is maintained and enhanced; and

(9) development does not include canals and artificial waterways that connect to tidal waterways.

8.2.5.4. Specific benchmarks for assessment

Table 8.2.5.4.1 — Outcomes for development that is accepted subject to requirements and assessable development

Performance outcomes	Acceptable outcomes
Storm tide hazard areas	
PO1 Development of an existing lot is designed and constructed to avoid adverse impacts on people and property from storm tide inundation.	**AO1.1** Where an existing lot, development (including additions and alterations) achieves the following: (a) the floor level of habitable rooms is located at or above the defined minimum habitable floor height for the site (refer Schedule 9, Table SC9.1.1); (b) the floor level of non-habitable rooms is located above the adopted inundation levels for the site and intended use (refer Schedule 9, Table SC9.1.2, Table SC9.1.3, and Table SC9.1.6 as relevant to the development); (c) other than AO1.1(d) below, parts of a building below the floor level of habitable rooms are completely unenclosed to allow for flow-through water movement; (d) a lower level enclosure of no more than five

Performance outcomes	Acceptable outcomes
	(5) square metres may accommodate a laundry or workshop use and is constructed from flood resilient materials; and (e) water tanks located below the minimum floor level of habitable rooms are constructed of reinforced concrete with sufficient footings or supports to resist wave forces. Note: Not all locations within the planning scheme area have detailed modelling. Where detailed modelling has not been undertaken, the defined storm tide hazard level is identified as two (2) metres above the highest astronomical tide, which includes a sea level rise factor of 0.8 metres to account for climate change projections to 2100. An additional freeboard allowance may be required for habitable room floor levels. Editor's note: To assist with determining the suitability of the development, Council may require that a coastal hazard risk assessment is undertaken as part of a development application in accordance with SC7.4 Coastal hazard planning scheme policy.
PO2 Development involving essential electrical services is located and designed to ensure public safety and minimise consequences of damage due to storm tides. Editor's note: Essential electrical services include any area or room used for fire control panel, telephone PABX, sensitive substation equipment including transformers, low voltage switch gear, high voltage switch gear, battery chargers, protection control and communication equipment, low voltage cables, high voltage cables, and lift or pump controls.	**AO2.1** Essential electrical services are located: (a) at or above the defined minimum habitable floor height for the site (refer to Schedule 9); or (b) within an existing basement only where: (i) the basement is a waterproof structure with walls and floors impermeable to the passage of water; and (ii) all entry points are located at or above the defined minimum habitable floor level for the property.
PO3 A basement (excluding basement storage used only for bike storage, or change room, or building maintenance storage) is suitably located and designed to ensure public safety.	**AO3.1** If development involves a basement (excluding basement storage used only for bike storage, or change room, or building maintenance storage), the basement is located and designed to achieve the following: (a) the basement is a waterproof structure with walls and floors impermeable to the passage of water; and (b) all entry points are located at or above the defined minimum habitable floor level for the property.
PO4 The development does not change storm tide characteristics, which may cause adverse impacts external to the site.	**AO4.1** The development does not involve the following: (a) new buildings or structures or additions to existing buildings or structures (including any impermeable parts thereof) located below the defined storm tide hazard level if: (i) having an enclosed space having a volume exceeding fifty (50) cubic metres; or (ii) resulting in a net increase in building materials resulting in a volume exceeding fifty (50) cubic metres; or (b) a net increase in filling on the site greater than

Performance outcomes	Acceptable outcomes
	fifty (50) cubic metres; or (c) filling material with a height greater than one-hundred (100) millimetres; or (d) block or solid walls or fences; or (e) garden beds or other structures with a height more than one-hundred (100) millimetres.
PO5 Development is located, designed and constructed to avoid adverse impacts on people and property from storm tide inundation.	**AO5.1** Development: (a) does not result in: (i) an increase in the number of dwellings at the site; or (ii) an increase in the number of people permanently employed at the site; and (b) is located, designed, constructed and operated to ensure structures can withstand wave action, inundation and recession of flood waters from a defined storm tide event.
PO6 Land, buildings and structures used for the manufacture, transport or storage of hazardous materials in bulk, are located and designed to prevent hazardous materials, whether loose or in containers, from entering any water body, waterway or storm tide inundation area.	**AO6.1** Land, buildings and structures used for the manufacture, transport or storage of hazardous materials in bulk, are located outside a storm tide inundation area.
PO7 Emergency services facilities or vulnerable community uses are located and designed to function effectively during and after coastal hazard. Editor's note: Emergency services and vulnerable community uses include: emergency services facilities, emergency shelters, hospitals and associated facilities, major switch yards and substations, fire and police facilities, power stations, sewage treatment plants, communication network facilities, retirement village, homes for the aged, hospice, child care centres, educational facilities, stores of valuable records or items of historical or cultural significance (for example galleries and libraries), water treatment plants and works of any electricity entity not listed in this table.	**AO7.1** Development of emergency services or vulnerable community uses are: (a) located above the storm tide event resiliency level for the specific use as specified in Schedule 9,Table SC9.1.6; or (b) designed to ensure any components of the infrastructure that are likely to fail or may result in contamination when inundated by storm tide inundation, are located above the storm tide event level for that activity in specified in Schedule 9, Table SC9.1.6.
PO8 Development is located, designed and operated to maintain or enhance existing levels of public access to and along the foreshore.	**AO8.1** Existing public access ways or roads which provide public access to the foreshore: (a) are retained in place; or (b) are re-located subject to Council approval.
PO9 Minor public marine development minimises disturbance of the natural environment within waterways.	**AO9.1** New minor public marine development: (a) relies on a natural channel of a depth adequate for the intended vessels; and (b) is designed and located such that maintenance dredging following initial construction is not required.
Erosion prone areas	

Performance outcomes	Acceptable outcomes
PO10 Development is located, designed and constructed to avoid adverse impacts on people and property from coastal erosion.	**AO10.1** Development is: (a) essential community infrastructure which cannot be located elsewhere; or (b) coastal-dependent development; or (c) temporary, readily relocatable or able to be abandoned. **AO10.2** Where involving an additional building or extensions or alterations to an existing building, the development does not extend any further seaward than existing buildings or structures.

Table 8.2.5.4.2 — Additional outcomes for assessable development

Performance outcomes	Acceptable outcomes
Storm tide hazard areas	
PO11 New lots and development associated with reconfiguring a lot does not create an unacceptable risk of adverse impact to people, property, and infrastructure due to storm tide hazard and inundation.	No acceptable outcome is nominated.
PO12 The development does not directly, indirectly or cumulatively increase the severity of the coastal hazard and the potential damage of other properties.	No acceptable outcome is nominated.
PO13 Development does not include man-made canals or artificial waterways that connect to tidal waterways.	No acceptable outcome is nominated.
PO14 Development maintains existing natural environmental features such as mangroves and wetlands to mitigate impacts from storm-tide inundation and permanent inundation due to sea-level rise.	No acceptable outcome is nominated.
Erosion prone areas	
PO15 Development avoids or mitigates any increase in risk to people and property from adverse coastal erosion impacts by: (a) minimising the area of the development footprint within the erosion prone area; (b) locating development as far landward as possible; (c) maximising the ability for buildings or structures to be abandoned, or	No acceptable outcome is nominated.

Performance outcomes	Acceptable outcomes
disassembled for relocation either on the site or to another site; (d) installing and maintaining on-site coastal protection works.	
PO16 New lots and development associated with reconfiguring a lot does not create an unacceptable risk of adverse impact to people, property and infrastructure due to erosion resulting from storm tide hazards.	No acceptable outcome is nominated.
PO17 Where used, coastal protection works are: (a) consistent with a shoreline erosion management plan that has been prepared for the area; or (b) undertaken in response to a demonstrated need to protect existing permanent structures from an imminent threat of coastal erosion, where abandonment or relocation of the structures is not feasible, and a relevant shoreline erosion management plan has not been prepared.	No acceptable outcome is nominated.
PO18 Development in an erosion prone area: (a) maintains, protects or enhances vegetation on coastal landforms; (b) maintains sediment volumes of dunes and near-shore coastal landforms; or (c) mitigates any increased risks from erosion through the location, design, construction and operating standards of development; (d) maintains physical coastal processes beyond the development including longshore transport of sediment along the coast; and (e) prevents increasing the risk of shoreline erosion for areas adjacent to the development, unless the development is an erosion control structure. Editor's note: Applications are to be supported by a report certified by a registered professional engineer that demonstrates this performance outcome will be achieved	No acceptable outcome is nominated.