

AMENDMENT C394

LAND SUBJECT TO INUNDATION OVERLAY - BELLARINE PENINSULA AND CORIO BAY



FREQUENTLY ASKED QUESTIONS

1. What is an amendment?

The Planning Scheme controls how land is used and developed. Sometimes we need to change the Scheme to reflect new circumstances, or achieve new planning objectives. Changes to the Planning Scheme are known as 'amendments' and can include changes to zones, overlays and policies.

2. Why is Amendment C394 needed?

The Intergovernmental Panel on Climate Change Fourth Assessment Report 2007 (IPCC) projects sea-levels will rise by around 0.8 metres by the end of the century, and that larger rises cannot be ruled out. On the basis of the IPCC report, Victorian Government policy requires all councils to plan for a 0.8 metre sea level rise by the year 2100.

To help guide our plan, the *Bellarine Peninsula – Corio Bay Local Coastal Hazard Assessment – Inundation Report* was prepared and released in December 2015. As part of the assessment, properties were identified as being in an area that may be subject to future flooding and sea level rise.

Coastal processes (wind, tides, waves) can be hazardous to life and property by causing inundation and/or erosion. This has always been the case and will continue to be. Now that the City has accurate mapping of areas that may be affected by current and future coastal inundation we have a duty of care to act.

3. What will the Amendment change?

Amendment C394 includes a new Land Subject to Inundation Overlay (LSIO2). The overlay will apply to properties that have been mapped in the Coastal Hazard Assessment as being subject to inundation under 0.8m sea level rise plus a 1%AEP Storm Tide Event (or 1 in a 100 year event).

The overlay will require a planning permit for new buildings and works on certain properties, with permit conditions usually requiring floor levels to be above the predicted flood levels.

4. How many properties are affected by Amendment C394?

There are 1614 coastal properties on the Bellarine Peninsula and Corio Bay at Avalon, Lara, Corio, Geelong, East Geelong, Newcomb, Moolap, Leopold, Bellarine, Portarlinton, Indented Head, St Leonards, Swan Bay, Ocean Grove, Wallington, Barwon Heads, Connewarre and Breamlea that will be impacted by the amendment.

5. What mapping and data is the Amendment based on?

The amendment maps are based on the *Bellarine Peninsula – Corio Bay Local Coastal Hazard Assessment – Inundation Report 2015* which is known as a 3rd pass assessment.

The 1st and 2nd pass assessments were undertaken by the CSIRO for the Commonwealth and State Governments starting in 2009. They are known as 'bathtub' models and identified coastal areas that would be subject to inundation under different sea level rise scenarios. They are broad scale assessments useful for regional planning but not accurate at a local level.

The 3rd pass assessment prepared by consultants Cardno in 2015 is much more accurate.

It is important to note that as each assessment (or "pass") was undertaken the extent of the areas shown to be affected by flooding under sea level rise scenarios was reduced.

6. What is the Our Coast Project?

The Our Coast program mapped areas around the Bellarine Peninsula and Corio Bay (from Breamlea to Point Wilson) that will be impacted by sea level rise. It included community consultation in 2016 and publishing of maps and other information on the [Our Coast](#) website. The *Bellarine Peninsula - Corio Bay Local Coastal Hazard Assessment December 2015* was prepared by coastal engineers from Cardno as part of Our Coast.

The agencies involved in the Our Coast project are: City of Greater Geelong, Borough of Queenscliffe, Department of Land Water Environment and Planning, Corangamite Catchment Management Authority, Barwon Coast Committee of Management and Bellarine Bayside Committee of Management.

The Our Coast website states:

"Our climate is changing as a result of global warming. These changes will exacerbate existing coastal hazards such as rising sea levels, storm surges and coastal erosion. The Our Coast project brought local Councils and their communities together to plan for these changes.... the Geelong and Bellarine Peninsula region is one of four Victorian coastal regions to undertake Local Coastal Hazard Assessments."

7. What can be done to help protect areas from future coastal flooding and inundation?

The Our Coast project website does include descriptions of potential adaptation measures that could protect parts of the Bellarine and Corio Bay from sea level rise with examples including:

- Constructing a higher seawall at Ocean Grove
- Raising seaside roads at Portarlington
- Raising the railway line at Point Lonsdale
- Back flow valves on stormwater outlets at Barwon Heads.

It is recognised that hard infrastructure (seawalls, etc.) could significantly change the nature of the coast (including amenity and access) and would not occur without significant community consultation.

, The aspect of Our Coast that is ready for implementation is the Local Coastal Hazard Assessment (LCHA) prepared by Cardno and the associated flood modelling and mapping of different sea level rise and storm event scenarios. This is the aspect that Amendment C394 is seeking to implement.

In some cases the overlay mapping does take into account potential adaptation measures. For instance, the Our Coast hazard, mapping showed isolated pockets of land some distance from the coast at Barwon Heads (around Hitchcock Ave) as being inundated. This is due to sea water backing up the stormwater outlets under extreme tides and storm surge. However, it is anticipated that backflow valves on the stormwater outlets can be installed in the future to address this issue.

8. Will there be some buildings and works I can do without a planning permit?

Yes, a planning permit is not required to construct a building or carry out works for:

- An extension to an existing dwelling, provided the gross floor area of the extension does not exceed 20 square metres.

- Outbuildings and works normal to an existing dwelling, including a deck or verandah that does not exceed 20 square metres, landscaping, a pergola, driveway, carport, barbecues and water tank.
- Agricultural and farm buildings less than 100 square metres in gross floor area.
- A building which is open on all sides including a domestic shed, animal enclosure, stockyard or agricultural shed.
- An upper storey extension to an existing building within the existing building footprint.
- A footpath, bicycle path, boardwalk, tennis court or sports ground provided that they are constructed at ground level.
- An in-ground domestic swimming pool or spa and associated mechanical and fencing equipment where the excavated spoil is removed and the perimeter edging of the pool is finished at natural ground level.
- An elevated boardwalk, provided that the new surface levels are above the applicable levels set by the relevant floodplain management authority.
- Repairs and routine maintenance of existing fences if the fence design and materials remain the same.
- A radio mast, telecommunications tower, antenna, power pole or light pole.
- An outdoor advertising sign/structure.
- Earthworks that do not change the rate of flow or the discharge point of water across a property boundary.
- Works carried out by any water authority to maintain and replace infrastructure related to sewer and water supply.
- Works carried out under the Marine and Coastal Act 2018 or the Crown Land (Reserves) Act 1978 that have had regard to the Bellarine Peninsula – Corio Bay Local Coastal Hazard Assessment and are conducted by a public land manager or a coastal committee under the Marine and Coastal Act 2018.

9. What flood levels and floor levels will apply to buildings?

This will be assessed on a case by case basis and be informed by state and local coastal development guidelines.

The Overlay will require planning permits to be referred to the Corangamite Catchment Management Authority (CCMA) for advice including levels.

Floor levels will include a minimum freeboard determined by the CCMA and be assessed against the relevant 1% AEP storm surge level. Intensification such as subdivisions and new estates will require floor levels to be assessed against future sea level rise scenario of not less than 0.8 metres. Infill development such as single dwellings will also be assessed against sea level rise with a minimum freeboard requirement.

If you want to know the likely floor levels for a specific property or development please seek Flood Advice from the CCMA.

10. Will this overlay stop development or redevelopment of my property?

Generally not. The overlay will trigger the need for a planning permit. It will ensure that any future development or redevelopment of your property is carried out in a manner that recognises the location of areas that may be subject to flooding. Requirements for any proposed development will depend upon the flooding characteristics of the land such as water depth and flow velocity, and the nature of the development proposed

11. Is the overlay going to affect property values or saleability?

Designation of an area as 'subject to inundation' does not cause or change the likelihood of flooding, but recognises the existing condition of land and its potential to be inundated in storm tide events and when sea levels rise.

The value of any property is determined by the complex interplay of many different factors such as location, streetscape and amenity, and it is difficult to assign what effect if any, the identification of land as liable to flooding may have on the value of a property. Properties are not uniformly affected by flooding and this may depend upon the frequency or severity of flooding, any implications for development or redevelopment, historical flood events, etc.