

# C031gol Flood Study Amendment in Carisbrook and Dunolly



**NORTH CENTRAL**  
Catchment Management Authority  
*Connecting Rivers, Landscapes, People*

## Frequently Asked Questions

### What does c031gol Flood Study Amendment do?

Council is working with the North Central Catchment Management Authority (NCCMA) to update existing planning controls for land in Central Goldfields Shire that is liable to flooding, to ensure they are accurate and up-to-date and reduce the impact of flooding and flood damage to properties.

Since the controls were first introduced into the Central Goldfields Planning Scheme, the NCCMA has undertaken the North Central Regional Floodplain Management Strategy 2018-2028. After the floods of 2011-2012, flood studies were conducted in Carisbrook and Dunolly in 2013-2014. These studies model the impact of flooding in both townships. Both the Strategy and flood studies recommend that the planning scheme be updated to reflect the extent of flooding in the updated mapping.

The proposed changes to the planning scheme will affect approximately 765 properties, including:

- Some land will have a Land Subject to Inundation Overlay (LSIO) now. The new mapping might change the extent of the LSIO boundary.
- Some land will have the new Flood Overlay (FO) applied.
- Some land will have the new LSIO applied.
- Some land will be removed from the LSIO.

### What does an overlay mean?

An overlay is a planning control that indicates where special consideration by Council may be required when building or development is proposed. In this case, the overlay is aimed at addressing the impact of flooding. An overlay controls buildings and works and subdivision. The new overlay may result in a planning permit being required to develop or subdivide land. The process of changing the overlay boundaries and controls has been labelled Central Goldfields Planning Scheme Amendment C031gol.

### What is the difference between the LSIO and the FO?

The LSIO is applied to land affected by flooding associated with waterways and open drainage systems. The FO is applied to land at a higher risk of flooding than LSIO land. It is normally where mainstream flooding occurs, where flooding is likely to be deep and flooding occurs most frequently.

### What are the flooding overlays based on?

The probability of flood occurring within a year, called the Annual Exceedance Probability (AEP) is an industry standard. The LSIO has a 1% AEP, which means each year the flood level has a 1% chance of occurring (previously referred to as a 1-in-100 year flood). The FO is where the depth of flooding in a 1% AEP exceeds 0.5 meters. The FO generally has a 10% AEP, i.e. each year the flood level has a 10% chance of

occurring.

#### **What does it mean for me?**

The amendment will only affect you if you have land in one of the proposed overlays. The amendment then only affects you if you want to undertake buildings and works that are not exempt from a planning permit, or subdivide your property. The intent of the amendment is to reduce flood risk, flood impact and property damage by managing future development.

#### **Do all buildings and works need a planning permit?**

No. There are a number of exemptions for minor works and where certain conditions are met.

#### **How will this impact building or development within the overlay?**

The LSIO and FO do not prevent building or development from occurring. The controls form part of the planning scheme and aim to ensure that flooding issues are addressed early in any building or development process. This is most commonly achieved through requiring raised floor levels within a new building or extension and ensuring development does not divert or obstruct flood waters.

#### **My place hasn't flooded in years, why will it flood in the future?**

It cannot be assumed that flooding will not occur simply because there are no recollections of previous flooding at that property. The overlays are based upon scientific modelling and checked for accuracy against flood events that occurred in September 2010 and January 2011.

#### **I am already affected by an LSIO on my property, what will the difference be with this amendment?**

The current LSIO already requires a planning permit for buildings, works and subdivision, as only outbuildings under 120m<sup>2</sup> are exempt. The proposed LSIO Schedule 2 introduces new exemptions from some types of development. If an FO is being applied to your land the regulations around subdivision will change. For example, new (additional) lots are not allowed on land wholly within the FO.

#### **If my property is only partially affected, would I need a permit for buildings or works outside the area covered by the overlay?**

The overlay only applies to buildings and works proposed within its boundaries. However, as the boundary follows flood paths across properties, it may not be clear to the property owner whether a permit is required.

It is therefore strongly recommended that landowners seek advice from Council and



North Central Catchment Management Authority for any proposed buildings and works on land partially covered by the overlay.

#### **Are options being developed to address the cause of flooding?**

The Carisbrook Flood and Drainage Management Plan 2013 recommended a levee to be constructed in Carisbrook to divert the overland flows from the local catchment that frequently inundate parts of Carisbrook. Council is currently undertaking the planning and budget requirements to complete these works.

The structural mitigation works that were identified for Dunolly in the Dunolly Flood Investigation 2014 (levees and contour channel upgrades) have been completed by Council. The proposed overlays for Dunolly reflect these mitigation works.

#### **If I am in a Flood Overlay or Land Subject to Inundation Overlay will my insurance premiums increase?**

Insurance premiums are based on the most up-to-date available flood studies rather than planning scheme controls. The insurance industry has its own National Flood database where this information is kept. In many cases insurance premiums will go down due to the availability of more reliable and accurate information. However, in some cases where deep flooding is identified, premiums may go up. For further information go to the Insurance Council of Australia at [www.ica.com.au](http://www.ica.com.au)

#### **If I am in a Flood Overlay or Land Subject to Inundation Overlay will my construction costs increase?**

It is likely there may be an increase in construction costs to meet any planning permit conditions where a permit is required under the overlay. However, it is likely that these costs would be offset over time as buildings or works would have been constructed in a way that reduces or avoid impacts by flooding.

#### **If I am in a Flood Overlay or Land Subject to Inundation Overlay will this impact the value of my property?**

The impact upon individual property prices is unclear. The Flood Overlay does not cause or change the likelihood of flooding on your land. It recognises the existing risk, and improves information transparency. It will appear in planning certificates attached to Section 32 vendor statements when selling a property.

#### **How can I find out if my property is included in the overlay?**

The proposed maps associated with the amendment are available on Council's website at <https://www.centralgoldfields.vic.gov.au/Planning-and-Building/Strategic-Planning/Planning-Scheme-Amendments>

For more technical information, the North Central CMA has developed an online mapping tool – Flood Eye – that enables you to obtain a free report that contains flood information specific to your property. <http://www.nccma.vic.gov.au/flood-eye>

### What if I want to sell my property?

When you sell your property you are required under the Sale of Land Act 1962 to prepare a Section 32 statement (or known as a Vendor's statement) that includes any information affecting the property. This includes council planning scheme information that will inform the purchaser if there are any zone and overlay controls applying to the property which may restrict the land-use and development of the land.

A Planning Certificate should be obtained online from LANDATA® which provides property titles and certificates. This provides any amendments that have been placed on exhibition and well as current information within the council planning scheme.

### What is North Central Catchment Management Authority's role in planning schemes?

North Central CMA is a recommending referral authority in the planning system under Section 55 of the *Planning and Environment Act 1989* and receives applications for subdivisions and other developments within the floodplain. This allows North Central CMA to comment on applications and if necessary, recommend conditions on town planning permits. These ensure that new developments are adequately designed to protect occupants against the risk of future flood events.

## Flooding

### Who is responsible for Floodplain Management and Stormwater Drainage in Central Goldfields Shire?

North Central CMA is the Floodplain Management Authority by delegation from the Minister responsible for the Water Act 1989. Consequently, North Central CMA is responsible for determining the potential inundation of land from rivers and creeks within the North Central region. Central Goldfields Shire Council is responsible for the provision and maintenance of drainage, levees and the management of any stormwater from its drainage system.

### Why does flooding occur in Central Goldfields Shire?

Flooding is a natural process intrinsic to all waterways. Flooding occurs periodically as a result of heavy rainfall within a catchment and is generally defined by the runoff from the storm event exceeding the capacity of the bed and banks of a waterway or local drainage system. The effects of flooding in Central Goldfields are magnified by the proximity of urban development to natural or modified creeks and channels resulting in damage to roads, residential, commercial and industrial properties. Whilst the flow from the local catchment contributed less than 5% of the total flow that impacted upon



the township of Carisbrook, the overland flow is significant and causes frequent flooding to a number of properties in Carisbrook

#### **Where did the funding come from for the Flood Management Plan?**

The Flood Management Plans have been jointly funded by the Victorian and Australian Governments under the Natural Disaster Resilience Grants Scheme (NDRGS), and via additional funding provided by Central Goldfields Shire. The North Central Catchment Management Authority (NCCMA) is leading the development of this Plan in partnership with the Central Goldfields Shire. Central Goldfields have taken the lead in implementing the recommendations of the Plan.

#### **What is a Flood Management Plan?**

The first stage in managing floodplain risk for a particular catchment involves a flood study, which is a comprehensive technical investigation of flood behaviour for that catchment. These flood studies show the distribution, extent, levels and velocity of floodwaters across sections of the floodplain for a range of different flood events.

Additional investigations undertaken in Dunolly and Carisbrook known as the *Carisbrook Flood and Drainage Management Plan 2013* and the *Dunolly Flood Investigation 2014*. This Planning Scheme Amendment was a recommendation from those flood studies that plan to manage future risk within those areas.

#### **What are the benefits of the Plans?**

The mapping produced by the plans will improve future land use planning and development decisions to minimise the risks to the community from flooding. The plans also assist North Central CMA, Council and other emergency response organisations in preparing for and responding to a flood in Central Goldfields Shire. The plans will also assist Council in understanding existing drainage problems and in designing new infrastructure.

#### **What works are proposed as a result of the Plans?**

The study is not a mitigation plan, but will assist in further understanding local flood issues, provide information for future investigations into flood mitigation. There is work proposed for an additional levee in Carisbrook. These works will also take into account the completed levee in Carisbrook and Dunolly and additional flood warning devices which are recommendations from the Carisbrook and Dunolly Flood Management Plans.

#### **What is flash flooding?**



Flash flooding occurs following intense rainfall with resulting flood levels rising to their peak within a very short time period, typically between 30 minutes and 6 hours. This tends to occur in steep urbanised catchments such as Carisbrook and gives residents very little warning time to prepare.

### What is a 1 in 100 year flood?

A 1 in 100 year ARI\* flood is a level of flooding that has a 1% chance of occurring in a given year. It is considered to be a very large flood and is used as the minimum design standard for new development in Victoria. If an area experiences a 1 in 100 year flood in a certain year, it does not mean that another 1 in 100 year flood will not occur for another 99 years, it is an average only. The 1 in 100 year flood is technically referred to as the 1% AEP\* flood.

\* Average Recurrence Interval – is the likelihood of occurrence, expressed in terms of the long-term average number of years, between flood events as large or larger than the design flood event. For example, floods with a discharge as large as or larger than the 100 year ARI flood event will occur on average once every 100 years.

\*Annual Exceedance Probability – is the likelihood of occurrence of a flood of given size or larger occurring in any one year. AEP is expressed as a percentage (%) risk and may be expressed as a reciprocal of ARI\* (Average Recurrence Interval).

### I have recently undertaken development on my land. If flood information has been updated is my development considered safe?

Floodplain management and development assessment is undertaken as part of the planning permit process under the *Planning and Environment Act 1987*. In the Central Goldfields Shire, Council currently utilises the Land Subject to Inundation Overlay to assess development against potential or actual flood risk. Applications are then referred to NCCMA for specialist advice on what development is considered appropriate and any conditions that may apply to the development. Most new development is required to be constructed between 300-600mm above the applicable flood level which is known as the 'freeboard requirement'. This ensures that new development is protected from wave action and also provides an allowance for changes to flood levels and rainfall information over time as a result of advancements in technology and accuracy.

Please contact North Central CMA or the Central Goldfields Shire Council if you have any concerns regarding your individual circumstances.

### What can I do to be flood prepared?

The Victorian State Emergency Service's website provides an array of information on preparing for, responding to and recovering from a flood event. Please visit [www.ses.vic.gov.au](http://www.ses.vic.gov.au) for more information.



## How Can I Find Out More?

### Contact Council

For further information on the Planning Scheme Amendment process, please contact the Strategic Planning team on (03) 5461 0685 or email

[strategicplanning@cgoldshire.vic.gov.au](mailto:strategicplanning@cgoldshire.vic.gov.au)

More information is also available at <https://www.centralgoldfields.vic.gov.au/Planning-and-Building/Strategic-Planning/Planning-Scheme-Amendments>

This includes a searchable map showing the existing and proposed overlay boundaries

### Contact NCCMA

Technical information or property specific queries including flood levels, flooding impacts and required floor levels for new buildings or extensions to existing buildings please contact North Central Catchment Management Authority on 5440 1896 or email [floodplain@nccma.vic.gov.au](mailto:floodplain@nccma.vic.gov.au)

Or you can view their online mapping tool - Flood Eye – at [www.nccma.vic.gov.au/flood-eye](http://www.nccma.vic.gov.au/flood-eye)