

**21.04**06/07/2017  
C178**ENVIRONMENTAL RESILIENCE**

This clause provides local content to support Clause 13 (Environmental Risks) of the State Planning Policy Framework.

Clause 21.09 (Local Areas) provides local content for individual suburbs and towns.

**21.04-1**22/12/2016  
C194**Sustainability and a changing climate**

Built form and the pattern of land use can contribute substantially to the overall sustainability of the municipality. A compact settlement can reduce the need for people to use transport, improve access to services, support inclusion and social connections, enhance recreation opportunities, education and employment, and reduce the impact on the environment.

In terms of climate change, weather extremes pose great risks, but generally a changing climate is expected to open up significant opportunities. Planning policies in Ballarat are designed to encourage resilience to negative impacts, while embracing the change as an opportunity for new industries, ways of doing business and a trigger for innovation.

**Objective 1**

To reduce energy consumption and greenhouse emissions.

**Strategies**

- 1.1 Support innovative development approaches which achieve energy conservation and emissions reduction.
- 1.2 Support on-site renewable and low emission energy generation, such as solar hot water, photovoltaic cells, wind powered turbines or combined heat and power generation systems in new developments.
- 1.3 Evaluate proposals with a view to limiting their potential greenhouse effects.

**Objective 2**

To make the built environment resilient to heatwaves, water shortages, extreme weather events and a changing climate.

**Strategies**

- 2.1 Encourage new development to maximise the use of passive systems to achieve comfortable indoor conditions.
- 2.2 Ensure new development incorporates water sensitive urban design features including stormwater harvesting, water recycling and reuse.

**21.04-2**06/07/2017  
C178**Flood plains**

Flooding has many environmental benefits, including the replenishment of water within wetlands, supporting flora and fauna habitats and contributing to soil fertility. It is important that the capacity of floodplains to convey and store flood water is maintained and enhanced while also implementing management measures which reduce flood risk and damage cost. There are conflicting pressures on the use of floodplains within the Ballarat region. These include urban expansion in floodplain areas; water quality associated with development, including urban, industrial and agricultural runoff; construction of private levees; infrastructure management (levees and utility assets); and the loss of wetland and flood storage areas.

Some urban areas are subject to flooding including the CBD. The opportunity for growth and redevelopment in these areas is important for Ballarat's long term prosperity.

The Glenelg Hopkins Catchment Management Authority has completed the *Burrumbeet Creek Local Floodplain Development Plan 2015*. This Plan will help inform changes to the flood mapping and associated controls for land generally north of the Western Highway.

**Objective 3**

To ensure the natural functions and values of the floodplain environments are preserved while minimising loss or injury to life or property.

**Strategies**

- 3.1 Discourage inappropriate development and works within floodprone areas which present an unacceptable risk to life or property.
- 3.2 Avoid inappropriate development and works within flood prone areas that will impact on flood flow, water quality and river health.
- 3.3 Encourage the use of 'constructed wetlands' as a means of storing floodwater, improving water quality and adding to natural habitats.
- 3.4 Ensure flood risk by stormwater surges and waterway flooding is mitigated and managed.
- 3.5 Maintain the capacity of the floodplain to store and convey floodwater.

**Objective 4**

To ensure the risks associated with flooding and inundation are addressed.

**Strategies**

- 4.1 Ensure that development and subdivision demonstrates how the risks associated with flooding and inundation are addressed.
- 4.2 Discourage the intensification of land use in areas of high risk from flooding.

**21.04-3**

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**Implementation**

The strategies will be implemented through the planning scheme by:

**Application of zones and overlays**

- Apply the Floodway Overlay to areas identified as subject to flooding by the Floodplain Management Authority.
- Apply the Land Subject to Inundation Overlay to areas identified as subject to flooding by the Floodplain Management Authority.

**Further strategic work**

- Work with Aboriginal stakeholders and agencies to deal with climate change impact on indigenous sites and cultural elements.
- Investigate a new local policy for introducing environmentally sustainable design guidelines.