

21.04 ENVIRONMENTAL RISKS

29/11/2018
C75

21.04-1 Flooding

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Flooding presents risks to the development of land. Planning should consider the risks associated with flooding and seek to ensure that use and development is commensurate with flood risk. Further to this, development can also impact on the capacity of the floodplain to contain and convey flood waters, as such it is important to consider the impact of development on the flood storage function of floodplains.

Several flood investigations have been undertaken within the municipality. These investigations identify areas of high flood risk and low flood risk. These include the Horsham Flood Study, Wimmera Catchment Management Authority (WCMA) 2003, Wimmera River and Yarriambiack Creek Flow Modelling Study 2009, Natimuk Flood Investigation 2013, Mount William Creek Flood Investigation 2014, East Horsham Drainage Recommendations Report 2013, East Horsham Flood Intelligence Report 2013, Horsham East (Drung Riverside Longerenong) 2013. The WCMA Floodplain Management Strategy 2002 is also a reference document relevant to the consideration flood related issues.

The settlement of Dadswells Bridge on the Western Highway south-west of Horsham is known to be located within a floodplain. Further development in this locality adjacent to the National Park should be prevented until detailed flood level information can be provided by the WCMA.

Objectives and Strategies

Objective 1 To minimise flood risk and promote sustainable use and development of the floodplain.

- Strategy 1.1 Ensure all new development is compatible with flood risk.
- Strategy 1.2 Within the urban area of Horsham, where appropriate, support inclusion of land that is at high risk from flooding within the Public Park and Recreation Zone to form part of the city's open space network.
- Strategy 1.3 Encourage a precautionary approach for consideration of new development in flood prone areas where flood modelling data is limited.

Objective 2 To recognise the natural flood carrying capacity of rivers, streams and wetlands and the flood storage function of floodplains.

- Strategy 2.1 Ensure that development and works do not result in the net loss of floodplain storage capacity.
- Strategy 2.2 Ensure that development and works do not reduce the capacity of rivers, streams, and wetlands to convey flood water.
- Strategy 2.3 Maintain, to the maximum possible extent, the free passage and temporary storage of floodwaters.

Scheme Implementation

Apply the Land Subject to Inundation Overlay to areas identified as being at low risk from flooding during the 1% Annual Exceedance Probability flood event.

Apply the Floodway Overlay to areas identified as being at high risk from flooding during the 1% Annual Exceedance Probability flood event.

Apply Clause 22.10 Floodplain management policy to all applications for development in the Floodway Overlay, Land Subject to Inundation Overlay, and Design and Development Overlay Schedule 9.

Apply the Land Subject to Inundation Overlay to areas that are known to be affected by flood water, but where modelling data identifying the depth and velocity of flow is unavailable.

Apply the Design and Development Overlay Schedule 9 to areas where stormwater flow exceeds the capacity of the storm water drainage network and overland flow of storm water occurs.

Apply the Design and Development Overlay Schedule 4 to require the filling of several parcels of land subject to inundation prior to further development.

Further Strategic Work

Undertake further flood investigation projects throughout the municipality in association with the Wimmera Catchment Management Authority and the Glenelg Hopkins Catchment Management Authority. Ensure that the effects on overland drainage patterns and flooding resulting from the decommissioning of former water supply channels are factored into flood modelling.

Undertake investigation of the Wimmera River floodplain in Quantong to provide directions for future development of the area.

Reference Documents

East Horsham Drainage Recommendation Report, 2013

East Horsham Flood Intelligence Report, 2013

Horsham Flood Study, Wimmera Catchment Management Authority, 2003

Natimuk Flood Investigation, Water Technology Pty Ltd, 2013

Upper Mount William Creek Flood Investigation, Water Technology Pty Ltd, 2014

Wimmera Floodplain Management Strategy, Wimmera Catchment Management Authority, 2012

Wimmera Regional Catchment Strategy 2013-2019, Wimmera Catchment Management Authority, 2013

Wimmera River and Yarriambiack Creek Flow Modelling Study 2009

21.04-2 Stormwater Management

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Some land within Horsham is affected by overland flow associated with stormwater flooding. New development in this area needs to be managed to ensure that risk is minimised and any new development does not exacerbate stormwater flooding of adjacent land. Further mapping of overland flow paths is required to identify the full extent of storm water management issues occur.

Objectives and Strategies

Objective 1 To minimise risk associated with overland flow of stormwater.

Strategy 1.1 Ensure development does not exacerbate stormwater flooding.

Objective 2 To improve the municipality's performance in area of storm water harvesting.

Strategy 2.1 Promote Water Sensitive Urban Design initiatives for new development.

Scheme Implementation

Apply the Special Building Overlay to areas affected from overland flow of stormwater.

Further Strategic Work

Prepare guidelines for stormwater harvesting.

Undertake further investigation of areas where overland flooding of stormwater occurs to inform application of the Special Building Overlay.

21.04-3

Climate Change

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Climate change projections for the municipality predict:

- Increased temperatures with the greatest increases occurring in summer.
- Drier conditions with greater decreases in rainfall expected in spring.
- Increases in the intensity of rainfall but a decrease in the number of rainy days.
- Increased risk of bush fire and a lengthened fire season.

With increased temperatures and a decreased amount of rainfall, water will be a key issue in the future for the community, council, primary producers and businesses.

Objectives and Strategies

Objective 1 To provide leadership and direction in response to climate change.

Strategy 1.1 Consider the impact of climate change in our key planning and building decisions.

Scheme Implementation

Apply the Environmental Significance Overlay to protect sites, areas and corridors of current and potential future environmental significance.

Further Strategic Work

Prepare a Climate Change Strategy to assist future development in responding to risks associated with climate change.

21.04-4

Bushfire

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Much of the Horsham municipality is subject to bushfire risk. The form of bushfire attack across the municipality varies based on vegetation type, topography and seasonal influences. A forest fire risk exists around the Grampians National Park, Black Range State Park and other State Parks across the municipality.

A grassfire risk exists through much of the remainder of the municipality, with the potential for grassfires to impact on Horsham and a number of smaller township and settlements.

In 2009 Horsham, Haven and surrounding bushland were affected by the Black Saturday bushfires. The Wartook Valley was impacted by fire in 2013 and Dadswells Bridge has been threatened by fire on a number of occasions over the last few years.

New development should be managed to ensure that risk is minimised and any new development is commensurate with that risk, and does not unduly increase the exposure of the community to risk.

Objectives and Strategies

Objective 1 To ensure new development is compatible with bushfire risk.

Strategy 1.2 Ensure new development employ design and development responses that address fire risk.

Objective 2 To improve community resilience to bushfire.

Strategy 2.1 Ensure the protection of human life is a key policy consideration when creating or expanding a settlement at risk from bushfire.

- Strategy 2.2 Apply a precautionary approach to planning and decision-making when assessing the risk to life, property and community infrastructure from bushfire.
- Objective 3 To ensure new development does not expose the community to increased risk from bushfires.**
- Strategy 3.1 Utilise existing settlement patterns to reduce the communities exposure to increased bushfire risk.
- Strategy 3.2 Direct development to locations of lower bushfire risk.
- Strategy 3.3 Ensure developments in areas of known fire risk provide a design response to fire risk.
- Strategy 3.4 Avoid development in locations of high bushfire risk.
- Strategy 3.5 Avoid development in areas where planned bushfire protection measures may be incompatible with other environmental objectives.
- Strategy 3.6 Carefully consider development in locations where there is significant bushfire risk that cannot be avoided.

Scheme Implementation

Apply the Bushfire Management Overlay to areas of high bushfire risk.

Reference Documents

Regional Bushfire Planning Assessment – Grampians Region, Department of Planning and Community Development, 2012