

GREATER SHEPPARTON FLOODPLAIN DEVELOPMENT PLAN

PRECINCT OF BROKEN CREEK, OCTOBER 2006

1.0 Application

This local floodplain development plan applies to the Broken Creek and effluent tributaries floodplains as shown on the attached plan, and which is within either the Floodway Overlay or Land Subject to Inundation Overlay of the Greater Shepparton Planning Scheme or any other area known to be subject to inundation by flooding. This local floodplain development plan has been prepared to provide a performance-based approach for decision making that reflects local issues and best practice, including flood risk assessment, in floodplain management.

2.0 Flood History

Major regional floods in the Broken Creek floodplain have occurred in 1939, 1974 and 1993. For the 1974 and 1993 events, floodwaters from within the catchment were supplemented with effluent flows from the Broken River. For the smaller floods, floodwaters are confined to the numerous drainage lines and depressions that exist. In October 1993, widespread flooding is estimated to have cost around \$45 million.

3.0 Flood Information

The extent of flooding has been determined from flood mapping completed by NRE in 2000. The project made use of historic flood levels documented in past floods, aerial flood photography, and surface level information. FO and LSIO areas are based on the relative flood risk assessed for different parts of the floodplain, considering factors such as flood depth, velocity, natural storage, flood frequency and flood duration.

The Broken Creek catchment is generally flat. Relatively minor storms, generating 50 mm or less of rainfall, can result in widespread flooding. There are a number of significant flood storage areas in the catchment, where only minor changes in flood levels can lead to significant changes in the flood extent. This has implications for works that obstruct flows.

Flood flows and velocities are generally small when compared with other catchments within the Shire (eg, the Goulburn and Broken Rivers). However, flood depths can be significant particularly along depressions, upstream of obstructions and in areas of flood storage.

The duration of flooding can also be significant in major floods, taking at least several days for floodwaters to recede. Flooding will persist for longer periods in natural flood storage areas.

Except for localised flooding from storms, there is ample flood warning time for this area.

4.0 Flood Impacts

Flood impacts in the area are significant, resulting in road closures, loss of access for residents, property isolation, risks to emergency personnel during sand bagging and evacuation operations and damage to buildings constructed below flood level. During major floods, there are also likely to be substantial rural and infrastructure flood damages.

Flood impacts for FO areas are generally greater than LSIO areas, as the velocities, depths and frequency of flooding are generally greater.

5.0 Development Requirements

An application to construct a building, construct or carry out works or subdivide land, must be accompanied by four sets of plans and supporting documents that demonstrate the following relevant development requirements have been met.

Where relevant, the supporting documents and plans (drawn to scale) must show the following:

- The boundaries and dimensions of the property.
- A regional locality plan showing the property whereabouts within the region, including roads, streams and other prominent land marks.
- The layout plan of the existing and proposed building, works or subdivision boundaries.
- Floor level of any existing and proposed buildings to Australian Height Datum.
- Natural ground levels of the proposed dwelling site to Australian Height Datum, taken by a licensed surveyor.
- Natural ground levels along access routes to flood free land (as indicated by the planning scheme flood overlays and zone) to Australian Height Datum, taken by a licensed surveyor. The access route includes access along any relevant government road to the property and then to the proposed dwelling location.

6.0 General Development Requirements for FO or LSIO

6.1 Dwellings

- new buildings must not obstruct natural flow paths or drainage lines.
- the construction of a dwelling, including a replacement dwelling, must not be located closer than 50 metres to an existing river levee, unless the purpose of the levee is to protect a dwelling, or the levee is less than 1 metre in height.
- the floor level of any dwelling, is set at least 300 mm above the 100-year ARI flood level or a higher level set by the responsible authority.

6.2 Dwelling Extensions

- where a ground floor dwelling extension (or multiple ground floor dwelling extensions) is greater than 20 m² and below the nominal flood protection level the owner must:
 - use water resistant materials up to the nominal flood protection level.
 - within the **FO** areas obtain approval from the responsible authority and the floodplain management authority.
- the construction of the ground floor area of any dwelling extension (single or multiple), which is more than 300 millimetres below the 100-year ARI flood level and greater than 20 m² to the existing dwelling at 29th July 1999, must be set at least to the nominal flood protection level as determined by the floodplain management authority or a higher level as determined by the responsible authority.
- the construction of the ground floor area of any dwelling extension (single or multiple) between the 100-year ARI flood level and 300 millimetres below the 100-year ARI flood level, must not be more than 40 m² greater than the existing dwelling at 29th July 1999. Where a dwelling extension (or multiple extensions) is greater than 20 m² and below the nominal flood protection level the owner must:
 - enter into an agreement with Council under Section 173 of the *Planning and Environment Act 1987*, stating that combined ground floor area of the constructed extension together with any future extensions, must not be lower than the highest existing ground floor level, and must not exceed 40 m². Extensions beyond 40 m² must be set at least to the nominal flood protection level.
- the construction of the ground floor area of any dwelling extension (single or multiple) between the 100-year ARI flood level and the nominal flood protection level, must not be more than 80 m² to the existing dwelling at 29th July 1999. Where

a dwelling extension (or multiple extensions) is greater than 20 m² and below the nominal flood protection level the owner must:

- enter into an agreement with Council under Section 173 of the *Planning and Environment Act 1987*, stating that combined ground floor area of the constructed extension together with any future extensions, must not be lower than the highest existing ground floor level, and must not exceed 80 m². Extensions beyond 80 m² must be set at least to the nominal flood protection level.

7.0 Particular Development Requirements for Residential, Industrial, Township and Business Zone areas

None specified.

8.0 Particular Development Requirements for FO or LSIO within rural areas

8.1 Dwellings

- the construction of a dwelling must be sited on land where the 100-year ARI flood depth is less than 0.5 metres above the natural surface level, and is less than 0.8 metres above the natural surface level along the defined access route to the dwelling site, unless a lot is greater than 80 hectares.
- the construction of any new dwelling, including a replacement dwelling must be sited on the highest available ground unless the applicant can demonstrate to the satisfaction of the responsible authority and floodplain management authority that an alternative site is more suitable.

8.2 Buildings (other than dwelling, Industrial, Shop, and Retail Buildings)

- the construction of any new non habitable building must be sited on the highest available ground unless the applicant can demonstrate to the satisfaction of the responsible authority and floodplain management authority that an alternative site is more suitable.
- any non habitable building must be aligned so that their longitudinal axis is parallel to the predicted direction of flood flow.

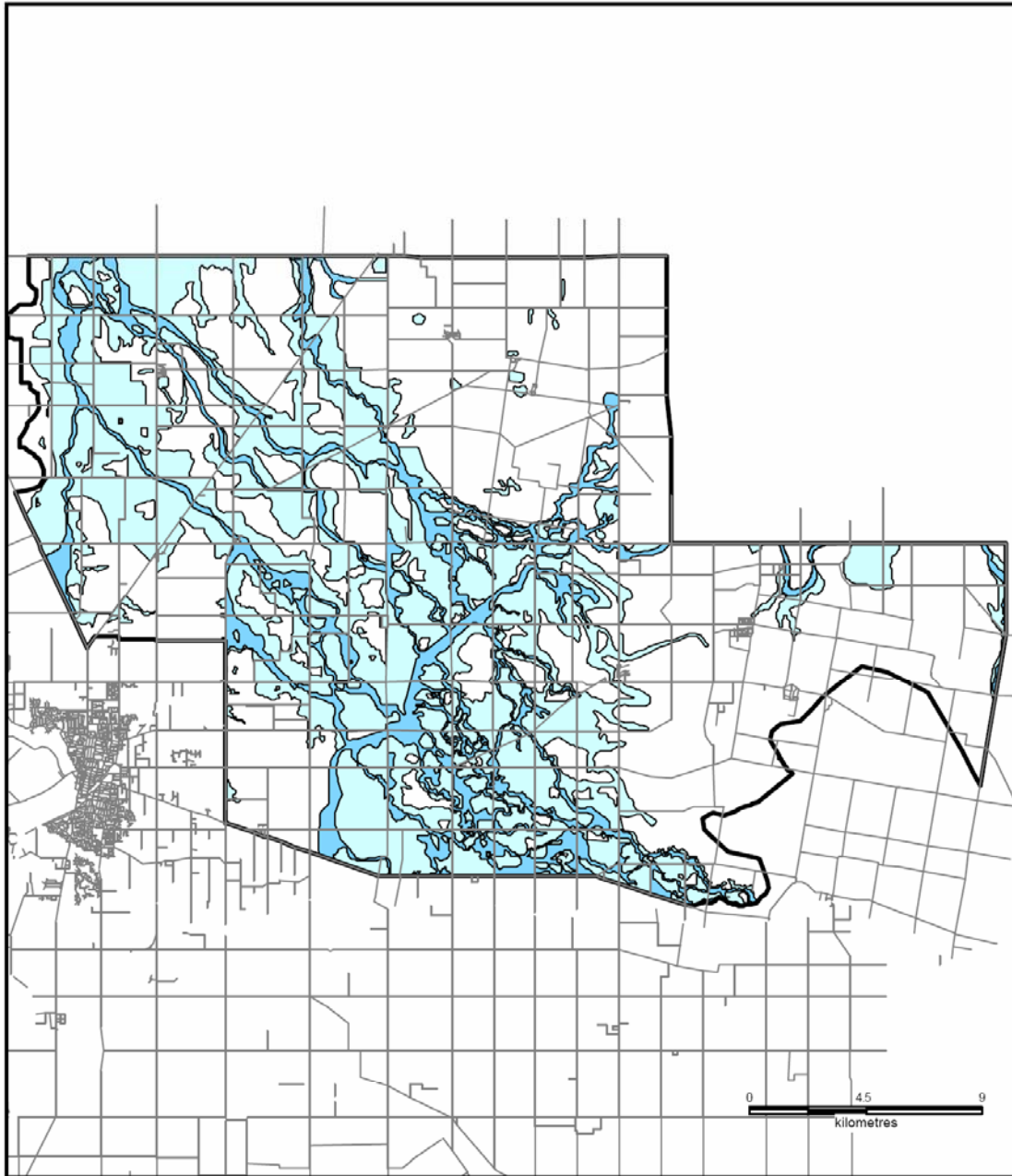
8.3 Works

- any earthworks do not obstruct natural flow paths or drainage lines on land located within the overlay.
- any earthen land fill at the site of a new building or a building extension should be no more than 2 metres from the building footprint.
- any works that are designed to protect the immediate surrounds of existing habitable dwellings, where the floor level is below the 100-year ARI flood level, and do not enclose an area of more than 1,000 m² including the footprint area of works.

8.4 Subdivision

- any subdivision does not increase the number of lots, except for the purposes of a lot excision agreed to by the responsible authority and the floodplain management authority, or any subdivision located partly within FO or LSIO is structured so that:
 - new lot boundaries (other than existing and/or realignment of lot boundaries) are sited on land where the 100-year ARI flood depths are less than 0.5 metres; and
 - each lot is accessible via a defined access route where the 100-year ARI flood depths are less than 0.8 metres.

Greater Shepparton Local Floodplain Development Plans Precinct of Broken Creek



LEGEND

-  Roads
-  Broken Creek Precinct
-  LSIO region
-  FO region

This map showing FO & LSIO areas are indicative only and not to be used as a substitute over the planning scheme maps.



PREPARED BY: PLANNING DATA AND MAPPING TEAM
DEPARTMENT OF SUSTAINABILITY AND ENVIRONMENT