

CURETON AVENUE PRECINCT

INVESTIGATION AREA REPORT

Prepared by **Hansen Partnership**

APRIL 2024

BACKGROUND & CONTEXT

An area of land fronting Cureton Avenue was identified as part of the *Mildura Housing and Settlement Strategy* (MHSS) as an area which required further investigation before its potential to accommodate additional growth or development could be ascertained. The MHSS was completed and adopted by Council in 2013/14 as 'Investigation Area 7'. This designation was subsequently translated into the Mildura Planning Scheme.

The scope of work for the *Mildura East Growth Area Framework Plan* project was expanded to include conducting relevant investigations and providing a clear recommendation as to the future development potential of the land in question.



Figure 1: Extract from MHSS showing 'Investigation Area 7'

Content within MHSS identified in relation to "Land to the east adjacent to the marina (currently Urban Flood Zone)" that:

> *Recent modelling by the MCMA (*) has indicated this land is still subject to significant potential for overland flow events and as such, a rezoning of this land is not supported at this point in time. The implications of the relationship between this land and the marina are not fully understood, particularly given some landfill which has occurred in the area. However, the land is in a strategic location given its relationship to the marina and proximity to the Mildura's CBD. As such, it is considered some further investigation is appropriate to be undertaken for land within this area to determine both the impacts of any additional cut and fill on flooding in the area and the relationship to the marina site, but also the most appropriate response to Mildura's urban form. It is noted that any resolution to allow urban development in this area may require a change to the identified Urban Growth Boundary. (Page 18)*

(*) Note that this statement is correct at the time of publishing of the MHSS. It does not reflect current circumstances.

The rationale for requiring further investigations has been that the strategic location of the land and its proximity to the CBD would make it suitable for more intensive development. However, this should only be the case where hazards, existing or future, do not affect the land.

The study area for these investigations was refined as part of this project to include all private properties within the area. These are shown in Figure 2.



Figure 2: Properties subject to this report'

In terms of the current conditions of the lots in question, the following is noted:

- Lots in the Investigation Area are quite large - generally falling into the 4000-10000sqm or 10000sqm plus categories.
- Key uses include the Brickworks (which extends across a large area, only part of which is included in this study) and existing residential uses. Given the current zoning of the land (the Urban Floodway Zone, discussed further on the following pages) many of these generally are relying on 'existing use' rights.
- No significant infrastructure is located in the area, but it close to services and facilities given its location on the periphery of Mildura's urban area.
- Etiwanda wetlands adjoins the area to the south-east. These wetlands are anticipated to expand over time and are one of the key 'end point' for one of Mildura's stormwater management system.
- Drainage upgrades have been proposed along Cureton Avenue, but it is unknown if these have been completed.
- The area is low-lying compared to adjoining land, reflective of its location on the floodplain of the Murray River.
- Some 'depleted' EVCs (Lingum Swampy Woodland) are present and the area has high biodiversity values as a result of proximity to the River - which is why an Environmental Significance Overlay has been applied (see following page for discussion).

POLICY CONTEXT

The policy context for the area is multi-layered across the State and local policy framework, with specific strategic directions that relate to future growth outcomes.

Settlement

'Settlement' sets out policy which guides and manages growth, and development, is contained in 'Settlement'. Clause 11.02-1S seeks to ensure that there is sufficient land to meet current and future needs, including to provide residential supply.

Clause 02.03-1 identifies the Main Urban Area of Mildura as the key settlement area for the municipality, and plans for its continued growth and development. The investigation area is included on the Mildura Main Urban Area Framework Plan at Clause 11.01-1L-09 to 'investigate development relationship to floodplain'.

Environmental and landscape values

The protection and management of the Murray River is contained within both State Planning Policy Framework, along with locally embedded objectives and strategies in Mildura's Municipal Planning Strategy as part of 'Environmental and landscape values' (Clause 12.03-1L and Clause 02.03-3). The Murray River is recognised for its significance as a environmental, economic and social asset, underpinning the vitality of the region.

This policy also notes that extensive development along the river has brought with it a series of problems, including increased salinity and nutrient levels; reduced water availability downstream; outbreaks of blue green algae; pollution of the river' changes to flood regimes' the threat of floodwaters overtopping levees; and the loss of habitats, and flora and fauna species.

Environmental risks and amenity

Both State and local policy seek to avoid developing land that is identified as potentially flood affected given the associated risks and impacts, contained in policy related to 'Environmental risks and amenity'.

Clause 13.03-1S (Floodplain management) is a State-wide policy which aims to protect or minimise the future impacts to human life, properties and infrastructure. In doing so, there is also a need to avoid intensifying existing flood impacts through inappropriately located uses and development. Clause 02.03-3 (Environmental risks and amenity) expressly discourages further development, particularly residential development, within areas on the floodplain, and includes a key direction to restrict further development on land liable to flooding.

Natural resource management

'Natural resource management' sets out future direction in consideration of environmental quality, and the sustainable management of agricultural and rural land. The protection and sustainable use of agricultural land is contained in Clause 14.01-1S and Clause 14.01-1L-01, with strategies to support horticulture and protect farmland by limiting growth in rural areas. With this, policy discourages housing in locations where amenity may be negatively impacted by farming and related activities, or where the location of housing may inhibit rural activities.

Clause 14.01-1L-03 applies to land in the Farming Zone (FZ) in the Mildura Older Irrigation Area ('MOIA') which applies to a small sliver of the area. It requires development to be consistent with the *Mildura Older Irrigation Area Incorporated Document* (October, 2023). Protection of the MOIA is also set out in local policy at Clause 02.03-4. Clause 14.01-1L-04 applies to land in the FZ in the Mildura East Growth Area. It similarly discourages uses that would compromise horticultural uses and uses that would affect ongoing agricultural activity.

Policy related to catchment planning, management and water quality seeks to preserve floodplains as natural systems, protect watery quality and to minimise development impacts to the ongoing protection and enhancement of these systems (Clause 14.02-1S and Clause 14.02-2S).

Built environment and heritage

Noting the area's proximity to the Mildura Brickworks (HO29), relevant direction to conserve and enhance heritage places is contained in 'Built environment and heritage'. The overarching intention of Clause 15.03-1S and Clause 15.03-2S is to continue the heritage significance of places through ongoing protection and conservation. Locally focused heritage policy is set out in Clause 15.03-1L which seeks to ensure an appropriate response to the significance of the place where the Heritage Overlay applies. Clause 02.03-5 notes that the growth of new residential areas contributes to defining local character, while needing to ensure history and cultural heritage is protected.

Housing

'Housing' includes Clause 16.01-1L-01 (Housing supply in Mildura) which encourages growth in the Mildura CBD, riverfront and Mildura Marina, along with the potential for growth on the periphery of the Main Urban Area which includes Mildura, as set out in Clause 16.01-3L-01. Local strategic directions for housing in Clause 02.03-6 seek to meet anticipate housing needs into the future.

Economic development

'Economic development' local policy at Clause 02.03-7 identifies that the key economic drivers of the municipality include horticultural and agricultural production, tourism, government services, and retail and commercial activities. State wide policy seeks to support the growth and diversification of rural economies (Clause 17.01-1S).

Noting that the investigation area abuts industrially zoned land, Clause 17.03-1S identifies the need to protect industrial land for a variety of activities with varying land size and buffer requirements.

Infrastructure

'Infrastructure' policy specifies that the staging and location of urban land release should be coordinated with Council's infrastructure program and recognises the need to protect the intergrity and functioning of rural and horticultural activity across State and local frameworks (Clause 19.03-2S, Clause 19.03-2L and Clause 02.03-9).

ZONES

Urban Floodway Zone (UFZ)

The Urban Floodway Zone (UFZ) applies to the majority of the land within the investigation area. It identifies waterways, major floodpaths, drainage depressions and high hazard areas within urban areas which have the greatest risk and frequency of being affected by flooding. Most urban land uses are prohibited in the UFZ.

Farming Zone (FZ)

The Farming Zone (FZ) applies to a small sliver of land fronting Cureton Avenue East, to the east of Etiwanda Avenue. In all cases the FZ does not match existing title boundaries. The local schedule applies a 100ha minimum subdivision and dwelling area (unless within a gazetted irrigation district or a water use license for horticulture has been issued). All FZ land is affected by either FO or LSIO.

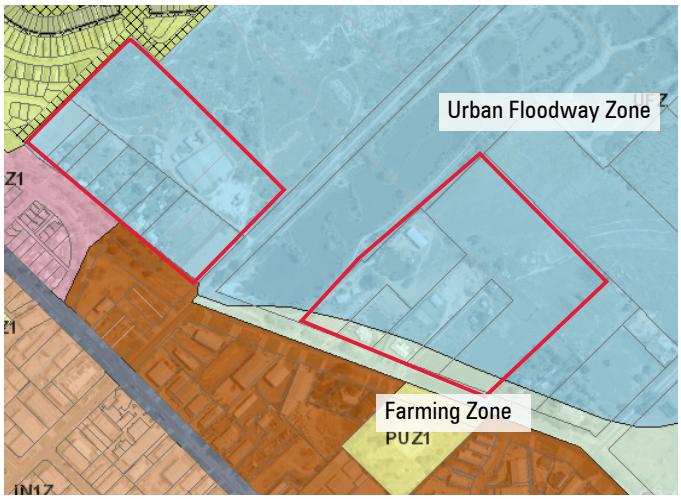


Figure 3: Zoning of study area

OVERLAYS

Environmental Significance Overlay, Schedule 1 (ESO1) 'Murray River Corridor'

The ESO1 applies to the whole of the investigation area. The environmental objective to be achieved is:

> *'To protect the environs of the Murray River for its biodiversity, nature conservation, flooding, economic development, cultural values, recreation and tourism importance.'*

Floodway Overlay (FO) - part

A sliver of the land, fronting Cureton Avenue East, to the east of Etiwanda Avenue, is subject to the FO. The FO identifies waterways, major floodpaths, drainage depressions and high hazard areas which have the greater risk and frequency of being affected by flooding. The local schedule does not contain any local content.

Heritage Overlay (HO)

The investigation covers part of the former Mildura Brickworks (HO29).

Aboriginal Cultural Heritage Sensitivity

A small section of the far northern corner of the area (abutting the adjacent Marina complex) is part of an area of Aboriginal Cultural Heritage Sensitivity.

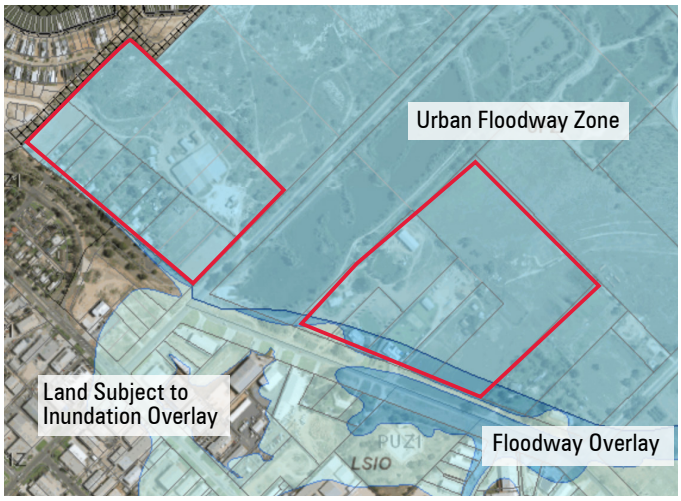


Figure 4: Flood Overlays and Urban Floodway Zone

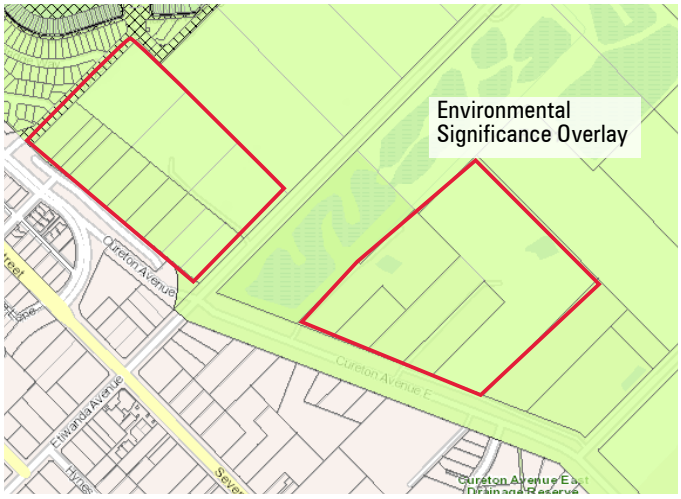


Figure 5: Environmental Significance Overlay

ISSUES & DISCUSSION

State and local policy outlined in the previous section of this report strongly discourages urban development in areas subject to flooding, which overlays and zoning discussed prior indicate this land is.

The Mallee Catchment Management Authority is the Floodplain Management Authority for the area and has responsibility for ensuring flood intelligence mapping are appropriate and consistent with guidance provided at state level. Mildura Rural City Council has two key responsibilities. These are:

- Ensuring that the Mildura Planning Scheme and associated local policy responses accurately reflect areas of risk.
- Ensuring that policy responses and associated development approvals respond to this risk in a manner that is consistent with state policy.

Environmental Significance Overlay Schedule 1 suggests (but does not mandate) that developments that have no relationship with the Murray River should be located outside of the Murray River corridor entirely. This means that any development in this area should only be approved if it has a tangible link to the river corridor that mean the location of that use or development should be supported. This is of lesser relevance than issues related to flooding detailed above but nonetheless would require consideration should flooding not be an issue.

There is also a Heritage Overlay which affects part of the 'brickworks' site. There is some lack of clarity regarding the accuracy of the currently identified extent of the Overlay. However, issues of heritage significance would be a matter for consideration as part of any development approval process, but are of lesser relevance to the strategic direction being established by this report.

The Mallee Catchment Authority was consulted in the process of this project to ensure an accurate understanding of flood modelling given there can sometimes be a significant delay in the preparation of flood modelling and the integration of this into a planning. Recent modelling has been undertaken as part of the Mid-Murray flood study and is shown in Figure 6.

In addition to the flood modelling (Figure 6), there was a significant flood events in both 2011 and 2022 (Figures 7 and 8) which indicate that without the creation of earthen levees these areas would clearly be subject to inundation as modelled and shown in Figure 6. This modelling extends somewhat further than the controls currently included in the Mildura Planning Scheme - with the boundary of affected areas extending across Cureton Avenue in the properties on the southern side.

There have been some questions raised as to the development potential of the land given the presence of a n earthen levee which can been seen clearly in Figure 8.

The *Victorian Floodplain Management Strategy* includes discussion around the role of levees in flood protection and subsequent direction regarding the role of levees and their relationship to residual risk.

> *"There are many towns where existing flood mitigation infrastructure is unmanaged to the point where it could fail during a flood due to the lack of maintenance – despite the three tiers of government having invested, in good faith, in building the infrastructure in the first place.*
>
> *There are several reasons why this inconsistent approach cannot continue:*
>
> - *there is no certainty that unmanaged mitigation infrastructure would perform to its design standards in a flood (if indeed those standards are known)*
> - *the benefits of the mitigation works are not well understood and do not necessarily match expectations*
> - *emergency service agencies lack sufficient information to predict whether or not a levee is likely to fail*
> - *the downstream impacts are not understood and may be worse as a result of floodwaters being channelled by the levees*
> - *insurance premiums may be higher than they need to be because, in the absence of reliable information about the ownership and maintenance of flood*

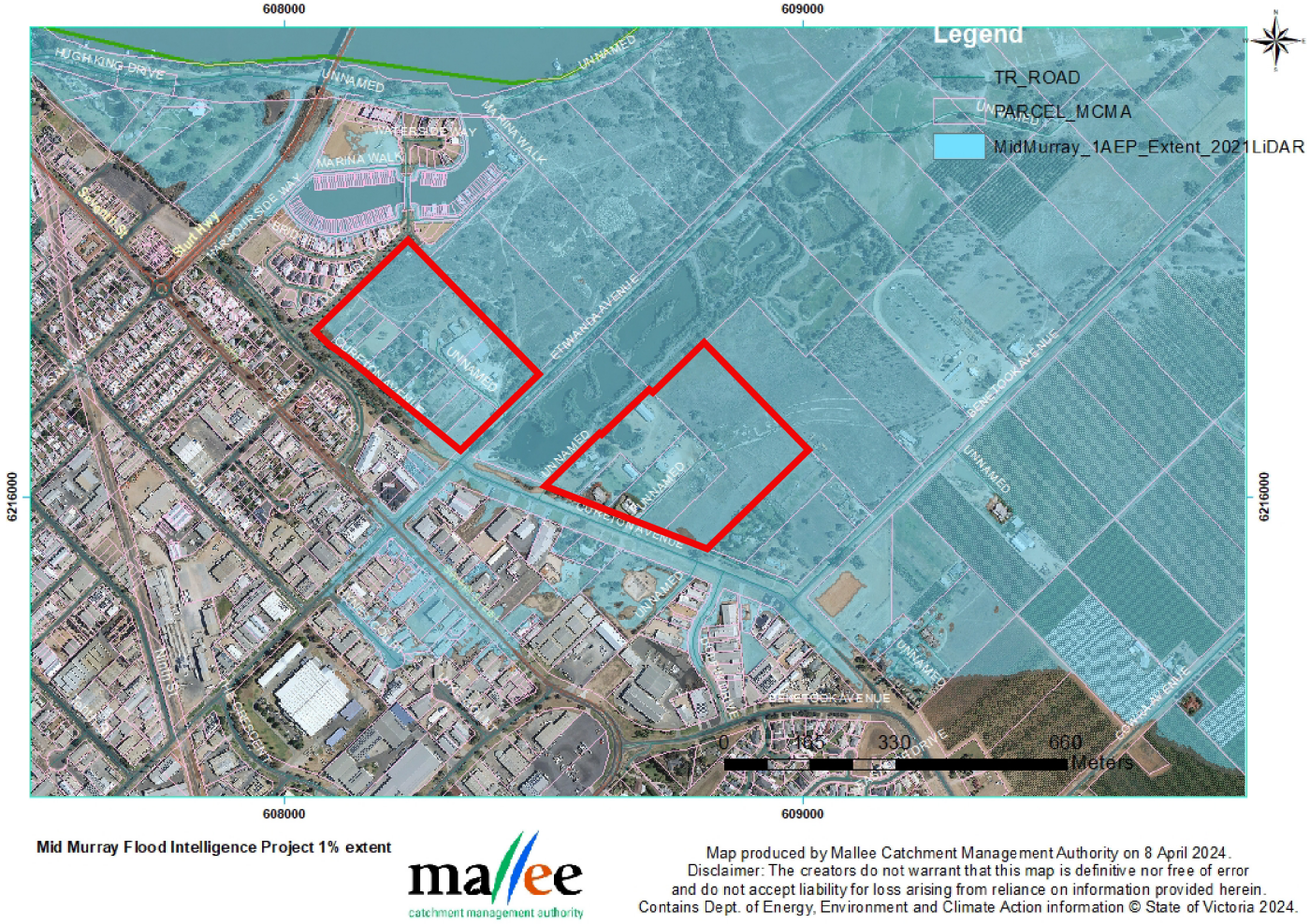


Figure 6: Catchment Management Authority flood modelling extent

> *mitigation infrastructure, insurers are assuming that it is not in place".* (page 66)

> *"An alternative way to reduce existing flood risks to private assets in rural areas is to allow landholders to build ring levees to protect individual buildings and curtilages (the enclosed area of land adjacent to a building or dwelling). These are often small enough not to have significant third party or environmental impacts.*
>
> *However, individual levee protection should not be a substitute for setting floor levels above the 1% AEP flood level for new dwellings. New levees on private land must comply with relevant planning approvals to enable third party impacts to be considered. The landholder will be responsible for construction and maintenance of these works."* (page 72)

The presence of the levee of the type present in the investigation area does not mitigate against the need for planning decisions to consider the land as it is remains flood affected.

On the basis of both the existing flood modelling, recent events and the need to consider strategically the likelihood if increased intensity rainfall events under climate change, it is considered that the land subject to this investigation are still subject to considerable flood risk.

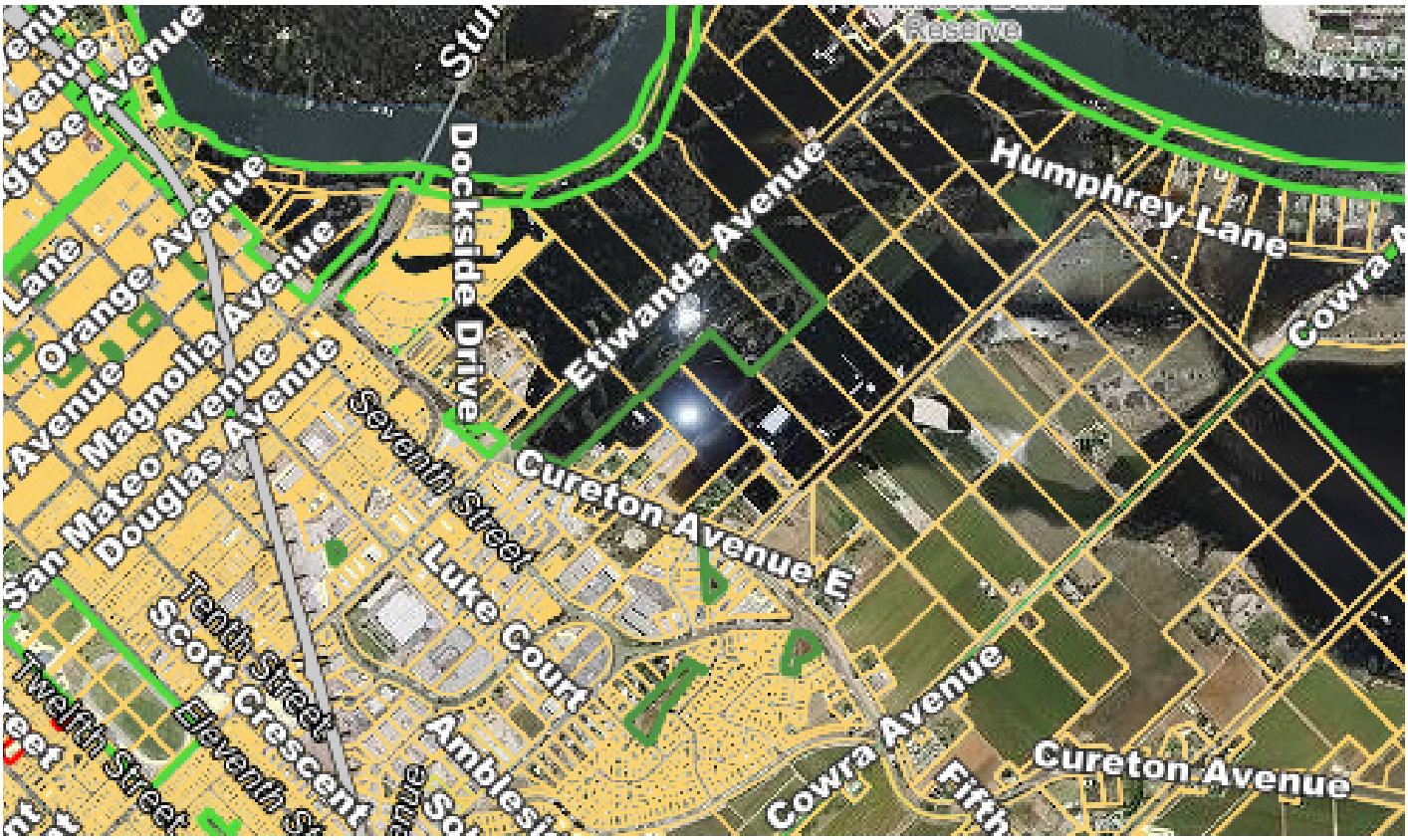


Figure 7: 2011 flood extent aerial photography



Figure 8: 2022 flood extent aerial photography (noting emergency levee construction)

RECOMMENDATIONS

Given the land within the Investigation Area remains subject to considerable flood risk, it is inconsistent with State policy to support any intensification of development on the subject land. Even where there are portions of lots which are not subject to potential flood risk, on the basis of the limited contribution the area would make to housing growth, and the increasing risk over time further intensification is not recommended.

Accordingly, as part of the implementation of the Mildura East Growth Area Framework Plan, that additional changes be made to relevant plans and policy within the Mildura Planning Scheme to remove references to this area as an 'investigation area' and to remove flood affected land from within the Urban Growth Boundary for the settlement. This could be undertaken as part of any Planning Scheme Amendment Council (or other relevant Planning Authority) undertakes to implement the recent flood study.

It is noted however, that residences within the investigation area would retain their existing use rights. Any application for alterations and additions, or the replacement of existing dwellings would be subject to requirement to bring the any existing dwellings up to relevant regulatory standards at the time of the application.

In addition, engagement with residents through this process identified two key priorities for local actions which should be noted for consideration in relevant council programs or projects. These are:

- Improvements to maintenance and upgrades to the Eitwanda Wetlands to reduce litter and improve access and amenity to the area for recreational purposes.
- To upgrade pedestrian pathways along the service road which provides access to the majority of properties in this precinct