Amendment C44: Statement addressing Clause 13.02 Bushfire for Dunolly area

January 2020



1. Summary

The purpose of amendment C31 is to update flood controls using information from the Dunolly Flood Management Plan (2014).

All amendments require an assessment against Planning Policy Framework for Bushfire Clause 13.02 to ensure an amendment does not result in increased bushfire risk.

Based on the below assessment, it is concluded that there is no unreasonable net increase in risk due to the removal of portions of the LSIO from land within the study boundary. The below information and case examples provide commentary on the various areas affected by the amendment.

2. The Study Area

The study area has been reviewed against the objective of the State Planning Policy for Bushfire Clause 13.02 using methods for a bushfire hazard landscape assessment set out in *Planning Permit Applications Bushfire Management Overlay Technical Guide* (DELWP, September 2017) ('the Guide'). The Guide identifies four landscape typologies to provide a framework for identifying landscape risk consistently across Victoria. Using this methodology, the aggregated flood study area would be categorised as Landscape Type 3, with higher risk areas on the perimeter of the township bordering the forest and lower risk areas with low-threat vegetation buffers near Burnt Creek and central Dunolly. Figure 1 in Appendix 1 shows the entire study area with reference to the Bushfire Management Overlay and shows the location and type of vegetation within the landscape through aerial photography.

Landscape Type 3 exhibits the following characteristics:

- The type and extent of vegetation located more than 150 metres from the site may result in neighbourhood-scale destruction.
- Bushfire can approach Dunolly from all directions as the township is surrounded by significant forested areas in all directions (which are also subject to the Bushfire Management Overlay).
- The surrounding state forests are not managed in a minimum fuel condition and can therefore provide fuel to any bushfires that start in the area.
- Neighbourhood Safer Places are located in Carisbrook, Maryborough and Talbot, however access to these locations is uncertain and depends on where the bushfire starts and how quickly it spreads.

The landscape of the study area consists of a defined valley and floodplain of the Burnt Creek corridor which is a tributary of the Loddon River. Dunolly and its surrounds is generally devoid of any steeply elevated land. There is approximately 30 metres of fall from the northwestern (upstream) boundary of the study area to southeastern (downstream) boundary along a roughly 12km reach of Burnt Creek.

There are several areas where the existing or proposed flood overlays intersect with denser vegetation in the northwestern, northeastern and southeastern reaches of the study area, however these areas are largely undeveloped. The Dunolly township is located directly to the west of one such area that is in the Bushfire Management Overlay. Other vegetation in the study area comprises only riparian vegetation along Burnt Creek. All other land within the study area is open paddocks.

More specifically, the study area can be characterized as having 10 different property types which are categorised and discussed in the next section. Example maps are shown in the figures in Appendix 2. The planning scheme requirements for a dwelling have been used for the purposes of assessing the net change in risk from bushfire. It can be seen in Figure 1 that the amendments to the LSIO are generally marginal increases or decreases in the overall extent. 62 out of 322* properties are proposed to have

the overlay removed entirely, with the remainder of properties having the overlay boundary amended within their property boundary.

*Note: For the purposes of this bushfire assessment, only properties with existing LSIO have been assessed. There are additional properties affected by the amendment (e.g. had no existing LSIO, will now have LSIO applied) and any amount of properties referred to in this assessment should not be taken to be the total number of properties affected by the amendment.

3. Specific Property Types

Council has reviewed property characteristics in relation to bushfire in detail via a property-by-property assessment conducted using GIS. It was deemed too exhaustive to document each of the 322 properties within the study area in this report* and so examples have been provided below that exhibit the characteristics of each property type instead. The area for assessment can be characterized as having 10 different property types outlined below.

Example maps are shown where necessary in the figures in Appendix 2. The planning scheme requirements for a dwelling have been used for the purposes of assessing the net change in risk from bushfire (excluding properties subject to a commercial zone – these are addressed specifically where necessary). Properties have been assessed as opposed to individual parcels to ensure the full potential for development of land in single ownership has been assessed.

*Note: All accompanying GIS information for each of the 322 properties for this assessment can be made available upon request.

Category 1 – Properties subject to existing LSIO and LSIO is to be removed entirely

Category 1 properties are affected by the existing Land Subject to Inundation Overlay (LSIO) and are proposed to have the LSIO removed entirely as the flood study shows no portion of the property to be affected by the 1% Annual Exceedance Probability (AEP) flood extent.

There are sixty-two (62) properties included in this category that can be sub-categorised as follows:

Sub-category 1.1 – Properties have an existing dwelling and additional development is unlikely.

There are **forty (40) properties** in this sub-category. Two examples are described below and exhibit typical characteristics for properties in category 1.1:

1	30 Tweeddale Street,	See Figure A. Property is approximately 9,900m ² and developed with a
	Dunolly	dwelling and outbuildings. Any second dwelling on the lot or subdivision
		would require a permit.
2	36 Tweeddale Street,	See Figure B. Property is approximately 1,200m ² and developed with a
	Dunolly	dwelling and outbuildings. Any second dwelling on the lot or subdivision
		would require a permit.

Sub-category 1.2 – Property is vacant but has room outside existing overlay to accommodate a dwelling as of right.

There are **five (5) properties** in this sub-category. One example is described below and exhibits typical characteristics for properties in category 1.2:

3	20 McKinnon Road,	See Figure C. Property is approximately 5,200m ² . Significant land exists
	Dunolly	outside the existing LSIO where a dwelling could be constructed without
		the need for a planning permit (under the LSIO, other triggers may
		apply).

Sub-category 1.3 – Property is a commercial property and already developed.

There are zero (0) properties in this sub-category.

Sub-category 1.4 – Property has the potential for a new dwelling.

There are **thirteen (13) properties** in this sub-category. Two examples are described below and exhibit typical characteristics for properties in category 1.4:

4	213 Broadway,	See Figure D. Property is approximately 480m ² and is in the General
	Dunolly	Residential Zone. This property would be categorized as Landscape Type
		One as set out in Planning Permit Applications Bushfire Management
		Overlay Technical Guide (DELWP, September 2017) and would be
		classified as an area surrounded by low-threat vegetation. Therefore, it
		is considered that the removal of the LSIO from this property is not
		likely to unreasonably increase bushfire risk. 11 other properties in
		category 1.4 exhibit similar characteristics.
5	176 Stuart Mill Road,	See Figure E. Property is approximately 8.0ha and is in the Farming
	Dunolly	Zone. The Central Goldfields Planning Scheme requires a permit for the
		construction of a dwelling in the Farming Zone on a lot of less than
		40ha. Therefore, it is considered that the removal of the LSIO from the
		property is not likely to increase bushfire risk as other permit triggers
		exist for development.

Sub-category 1.5 – Property is in a non-residential zone (i.e. industrial zone).

There are **four (4) properties** in this sub-category. One example is described below and exhibits typical characteristics for properties in category 1.5:

6	60 Thompson Street, Dunolly	See Figure F. Property is approximately 2.7ha and currently vacant. It is in the Industrial 1 Zone and further development that does not require a permit may be enabled by the removal of the LSIO. This property would be categorized as Landscape Type One as set out in <i>Planning</i>
		Permit Applications Bushfire Management Overlay Technical Guide (DELWP, September 2017) and would be classified as an area surrounded by low-threat vegetation. Therefore, it is considered that the removal of the LSIO from this property is not likely to increase bushfire risk. There are 3 other properties exhibiting the same characteristics and are located in the immediate vicinity of this land.

Category 2 - Properties where the area affected by the LSIO is being reduced.

Category 2 properties are affected by the existing Land Subject to Inundation Overlay (LSIO) and are proposed to have the LSIO reduced to reflect the up to date 1% AEP flood extent as determined by the flood study.

There are **seventy-four (74) properties** included in this category that can be sub-categorised as follows:

Sub-category 2.1 – Properties already developed with a dwelling and additional development is unlikely.

There are **thirty-one (31) properties** in this sub-category. One example is described below and exhibits typical characteristics for properties in category 2.1:

7	133 Separation Road,	See Figure G. Property is approximately 1.8ha and developed with a
	Dunolly	dwelling and outbuilding. Additional development or subdivision is
		likely to require a permit.

Sub-category 2.2 – Properties with existing development or with room to develop outside the existing LSIO.

There are **nine (9) properties** in this sub-category. One example of such a property is shown below. As can be seen in Figure H, significant land exists outside the existing LSIO where a dwelling could be constructed without the need for a planning permit (under the LSIO, other triggers may apply). The remaining eight properties exhibit similar characteristics or have substantially more land outside the existing LSIO for new development.

8	287 Dunolly-Moliagul	See Figure H. Property is approximately 2.4ha. Significant land exists
	Road, Dunolly	outside of the existing LSIO.

Sub-category 2.3 – Properties where the LSIO is proposed to be reduced and there is potential for a new dwelling.

There are **thirty-four (34) properties** in this sub-category. Seven properties which exhibit characteristics typical of sub-category 2.3 are described below and are representative of the remaining 27 properties.

9	47 Rheola Road, Dunolly	See Figure I. Property is approximately 43.5ha and comprises many smaller parcels. It is mostly within the Farming Zone; however a southwestern section lies within the Rural Living Zone. The Central Goldfields Planning Scheme requires a permit for the construction of a dwelling in the Farming Zone on a lot of less than 40 hectares. There are also substantial areas outside the existing LSIO or BMO where a new dwelling could be sited and avoid those permit triggers. Therefore, it is considered that the removal of the LSIO from the eastern portion of this lot is not likely to increase bushfire risk as other permit triggers exist for development.
10	17 Raglan Street, Dunolly	See Figure J. Property is approximately 3.2ha and is in the Low Density Residential Zone. There are 2 other similar properties. All 3 properties have existing dwellings and would require a permit for any additional dwellings.
11	218 Broadway, Dunolly	See Figure K. Property is approximately 8,400m² and is in the General Residential Zone. The proposed LSIO is will be reduced, enabling new development to occur. This lot would be characterized as Landscape Type One as set out in <i>Planning Permit Applications Bushfire Management Overlay Technical Guide</i> (DELWP, September 2017) and would be classified as an area surrounded by low-threat vegetation. Therefore, it is considered that the removal of the LSIO from a portion of this lot is not likely to unreasonably increase bushfire risk.

12	C7	Con Figure 1. Desperator is appropriately 5. Ohe and in the Fermine 7 and 7.
12	67	See Figure L. Property is approximately 5.0ha and is in the Farming Zone. The
	Thompson	Central Goldfields Planning Scheme requires a permit for the construction of a
	Street,	dwelling in the Farming Zone on a lot of less than 40 hectares. Therefore, it is
	Dunolly	considered that the removal of the LSIO from the eastern portion of this lot is not
		likely to increase bushfire risk as other permit triggers exist for development.
13	32	See Figure M. Property is approximately 7,700m ² and is in the Rural Living Zone.
	Separation	The Central Goldfields Planning Scheme requires a permit for the construction of a
	Road,	dwelling in the Rural Living Zone on a lot of less than 2ha. Therefore, it is
	Dunolly	considered that the reduction of the LSIO on the property is not likely to increase
	,	bushfire risk as other permit triggers exist for development.
14	161	See Figure N. Property is approximately 63.1ha and comprises many smaller
	Separation	parcels split between the Farming Zone and the Rural Living Zone. The eastern
	Road,	parcels in the Rural Living Zone have a reducing LSIO which could enable further
	Dunolly	development. These lots would be classified as Landscape Type One as set out in
	,	Planning Permit Applications Bushfire Management Overlay Technical Guide
		(DELWP, September 2017) and would be classified as an area surrounded by low-
		threat vegetation. The Farming Zone lots are all smaller than the 40ha minimum
		for a dwelling as of right and would required consolidation (via a permit) to enable
		a future dwelling. Therefore, it is considered that the removal of the LSIO from a
		portion of this lot is not likely to unnecessarily increase bushfire risk.
15	31	See Figure O. Property is approximately 7.7ha and comprises many smaller parcels
	McKinnon	split between the Low Density Residential Zone and the Rural Living Zone. All lots
	Road,	within the Rural Living Zone are less than 2ha and the construction of a dwelling
	Dunolly	would require a permit. Therefore, the reduction of the LSIO on these lots is not
	Dunony	likely to increase bushfire risk as other permit triggers exist for development.
		The eastern parcels in the Low Density Residential Zone have a reducing LSIO
		which could enable further development. This lot would be classified as Landscape
		Type One as set out in <i>Planning Permit Applications Bushfire Management Overlay</i>
		Technical Guide (DELWP, September 2017) and would be classified as an area
		surrounded by low-threat vegetation. Therefore, it is considered that the removal
		of the LSIO from a portion of this lot is not likely to unreasonably increase bushfire
		risk.

Category 3 – Properties where the area affected by the LSIO is being increased.

Category 3 properties are affected by the existing Land Subject to Inundation Overlay (LSIO) and are proposed to have the LSIO increased to reflect the up to date 1% AEP flood extent as determined by the flood study.

There are **zero (0) properties** included in this category and therefore no maps have been included for this category.

Category 4 – Properties where there is minimal (or no) change in risk caused by the amendment.

Category 4 properties are those affected by the existing Land Subject to Inundation Overlay (LSIO) and are proposed to remain in the LSIO or where the changes to the boundary of the LSIO will not result in a material increase in bushfire risk. These properties include land covered by the existing Bushfire Management Overlay as well as Crown Land and public land and therefore where no increase in the risk of new dwellings is expected due to the removal of the LSIO.

An example of one of these properties is at 219 Dunolly-Moliagul Road, Dunolly, and is shown in Figure P. Figure P shows the marginal changes to the LSIO boundary and is typical of the properties in Category 4

There are **185 properties** included in this category.

4. Conclusions

In Section 2 above, the aggregated flood study area was categorised as Landscape Type 3 in accordance with the guidance provided in *Planning Permit Applications Bushfire Management Overlay Technical Guide* (DELWP, September 2017), with higher risk areas on the perimeter of the township bordering the forest and lower risk areas with low-threat vegetation buffers near Burnt Creek and central Dunolly.

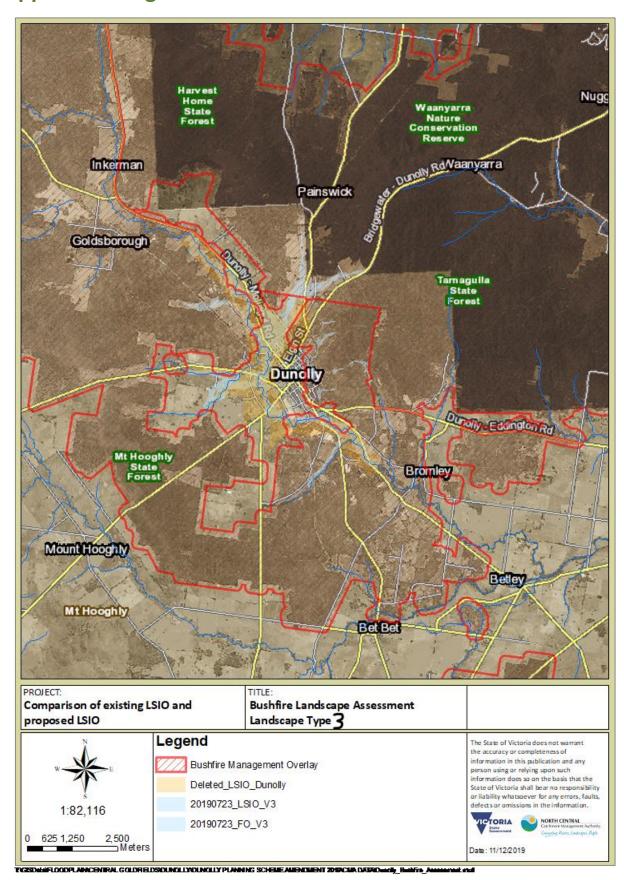
The assessment in Section 3 above provided a more detailed look at property characteristics via a property-by-property assessment conducted using GIS. It was deemed too exhaustive to document each of the 322 properties within the study area and so examples were provided that exhibited the characteristics of each property type instead.

Whilst the broad categorisation of the study area as a Landscape Type 3 suggests a higher risk area requiring careful consideration of the removal of permit triggers for a dwelling, the property-by-property assessment shows that there are no examples of unreasonable net increase in bushfire risk due to the removal of the LSIO. Although a property-by-property assessment has confirmed this, it can be broadly attributed to the following circumstances:

- a) The BMO has being previously applied to the area, indicating an assessment of bushfire risk has occurred locally and that the highest risk areas have been defined and had the BMO applied.
- b) Many of the changes to the LSIO will occur on land also affected by the BMO, meaning that whilst one permit trigger has been removed the primary overlay for the consideration of fire risk will still apply and trigger the need for permits for new dwellings (or at least the adherence to prescribed conditions).
- c) Changes to the LSIO that will occur outside of the BMO largely occur on land within areas of low-threat vegetation and therefore increased bushfire risk is low or negligible (and also presumably why the BMO hasn't been applied to such land).

Based on this assessment, it is concluded that there is no unreasonable net increase in bushfire risk due to the removal of LSIO from land within the study boundary.

Appendix 1: Figure 1



Appendix 2: Figures A to PFigure A

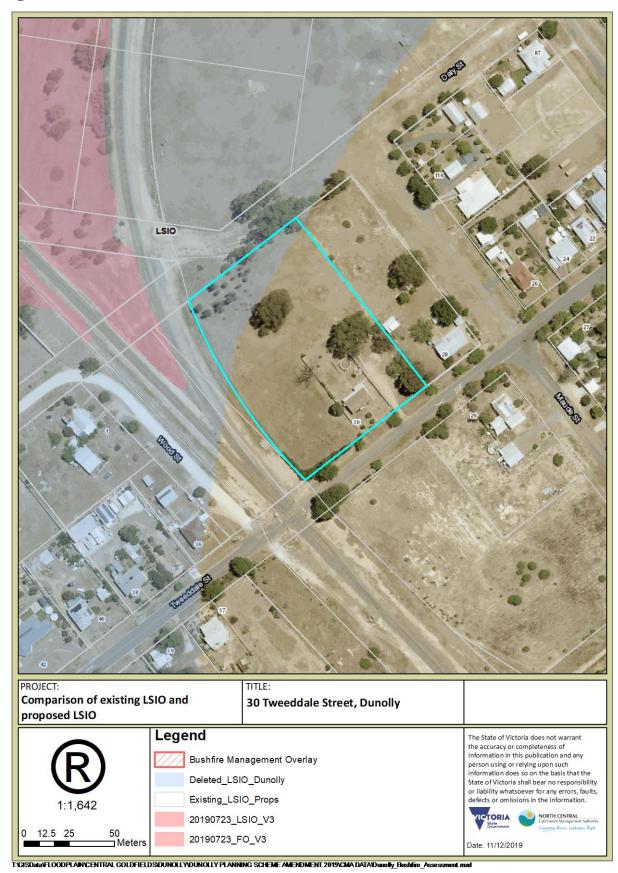


Figure B

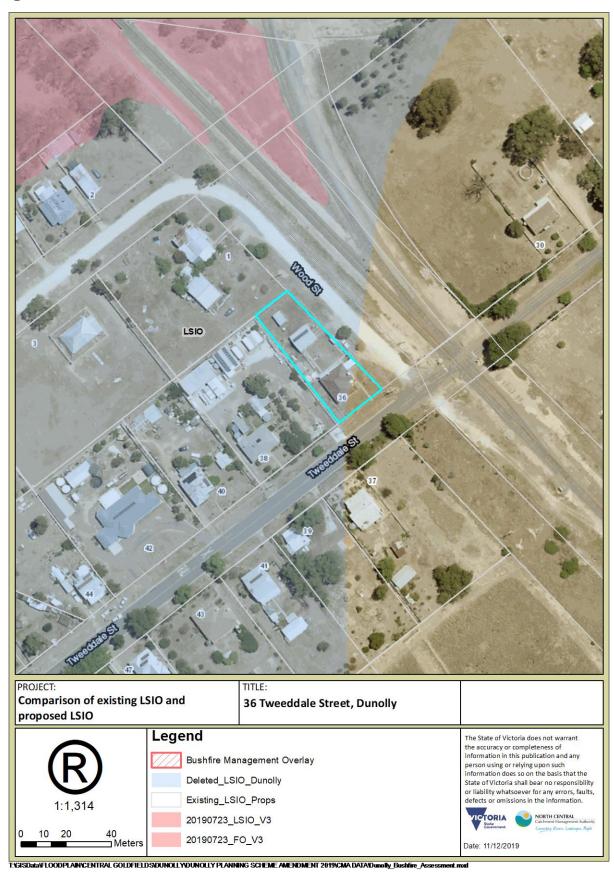




Figure C

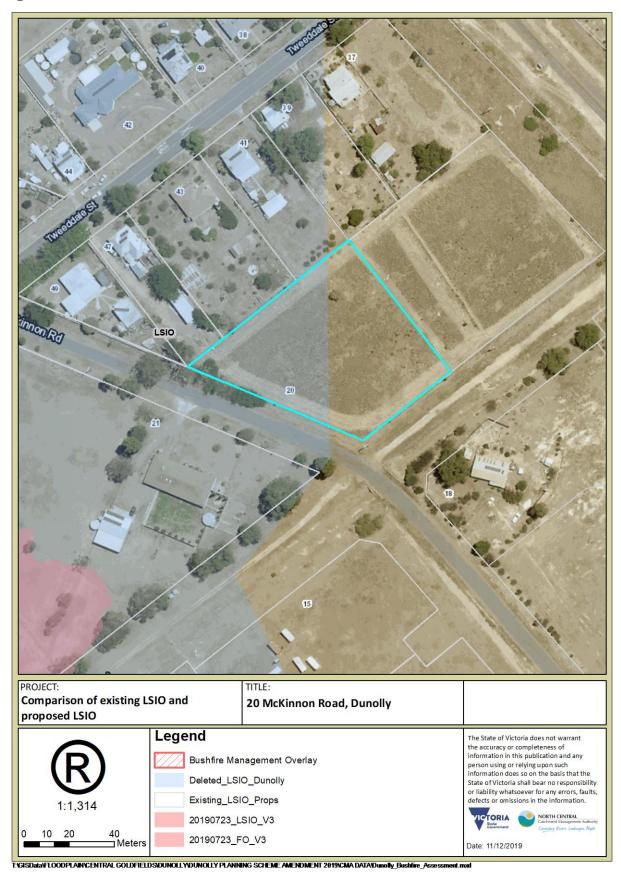




Figure D

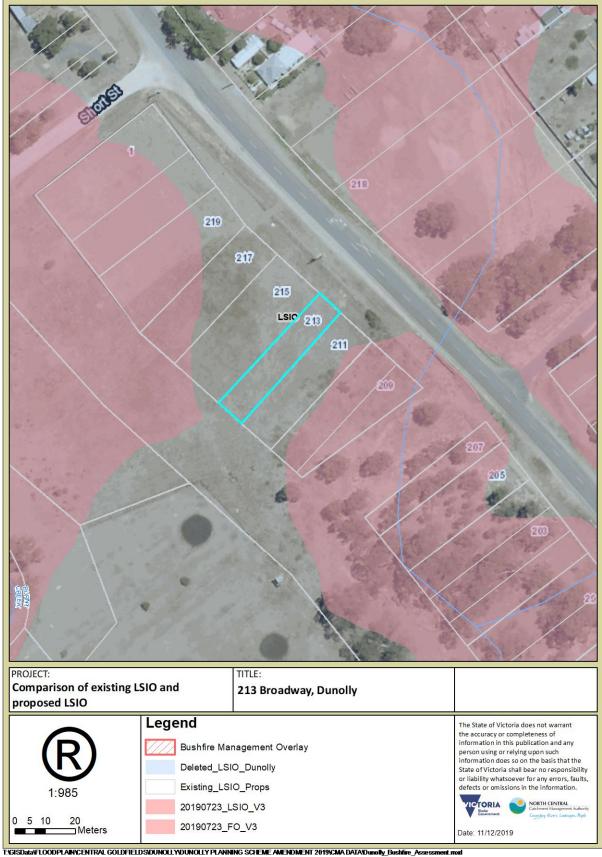




Figure E

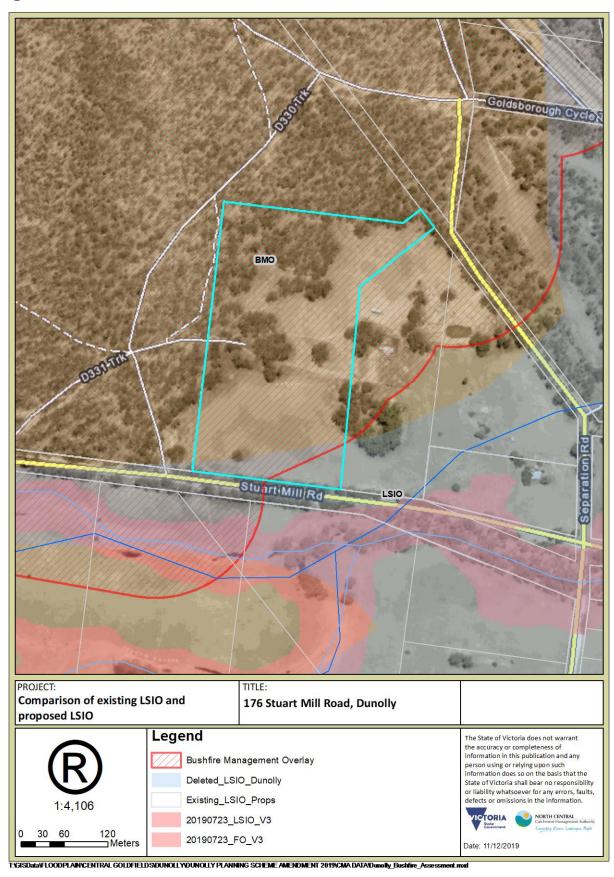




Figure F

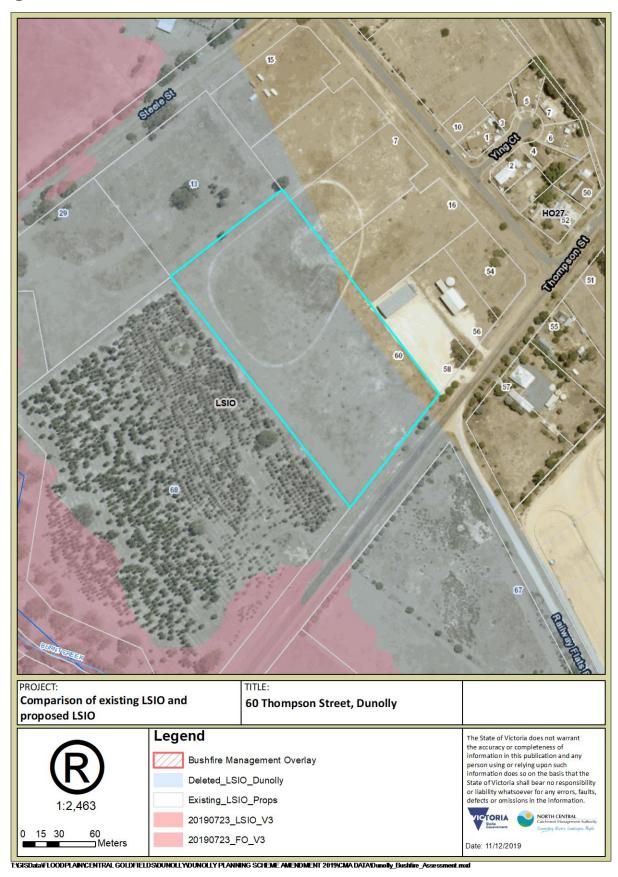




Figure G

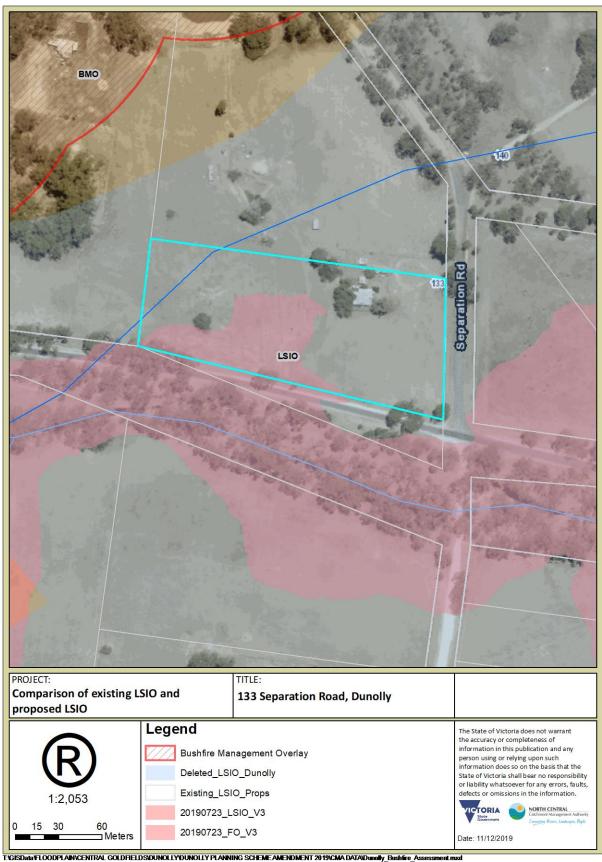




Figure H

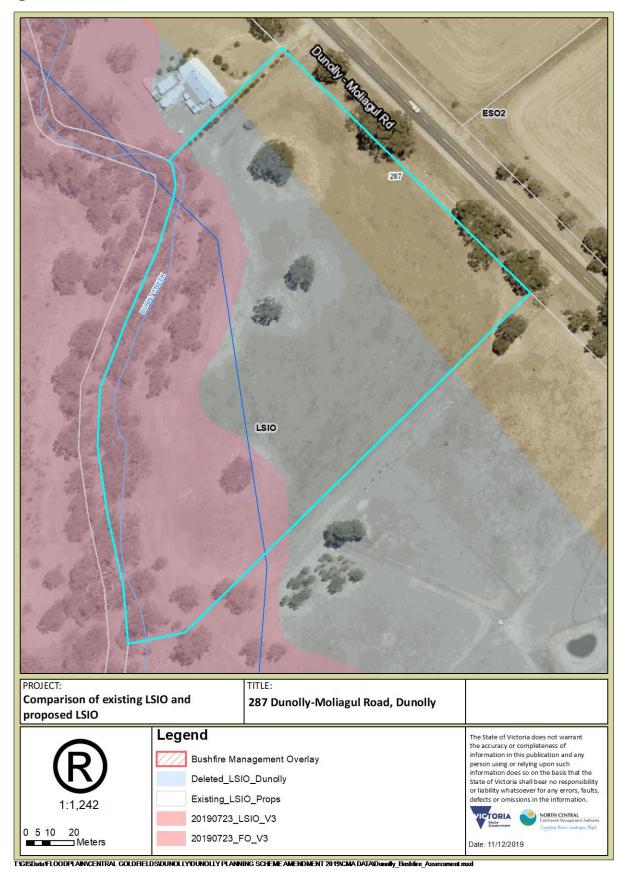




Figure I

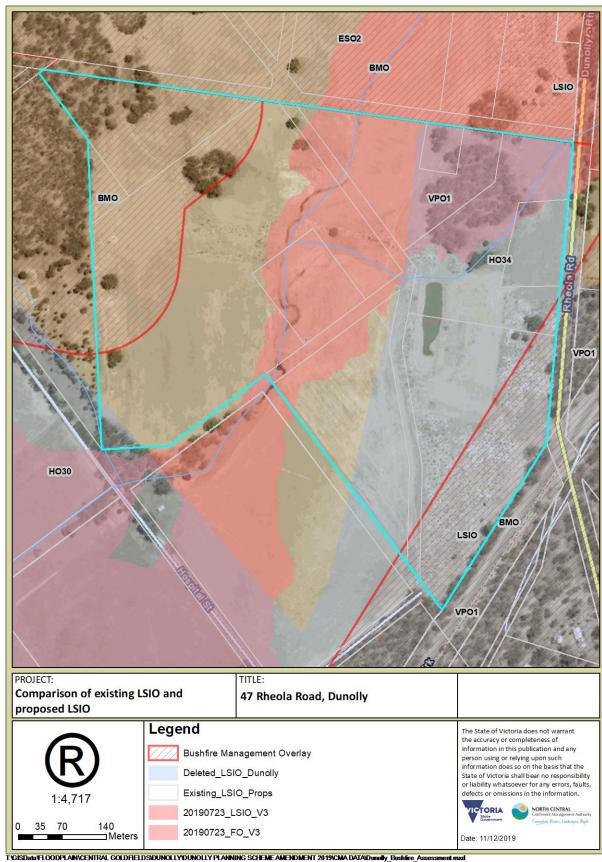




Figure J

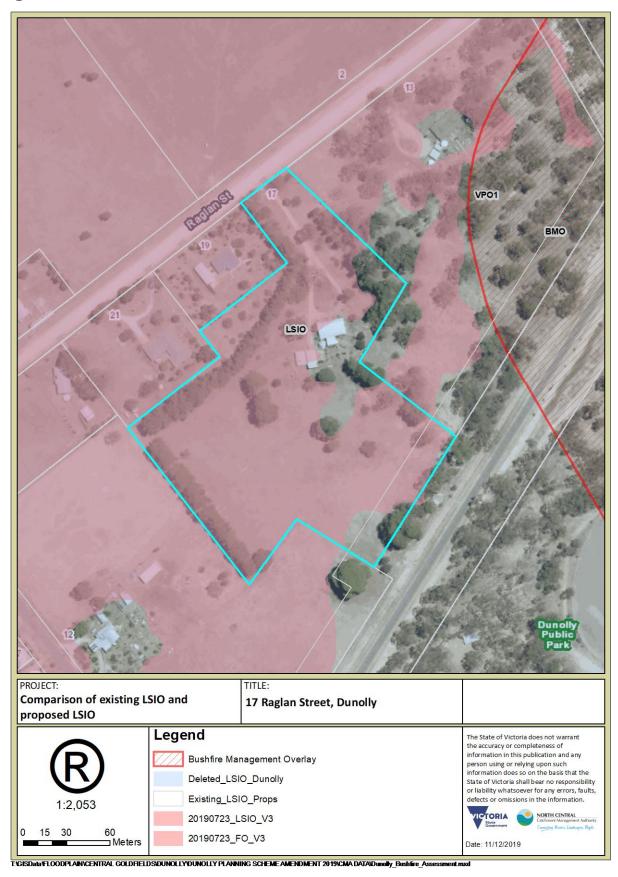
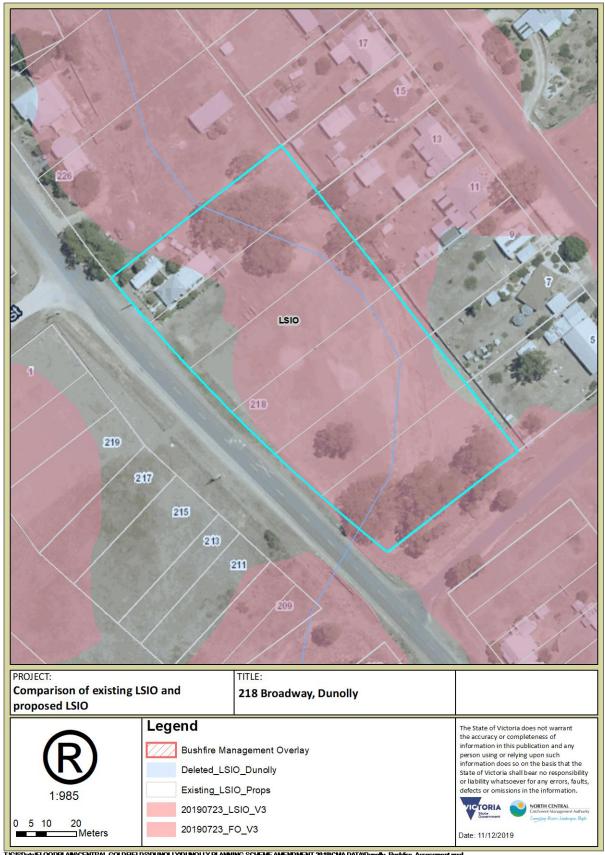




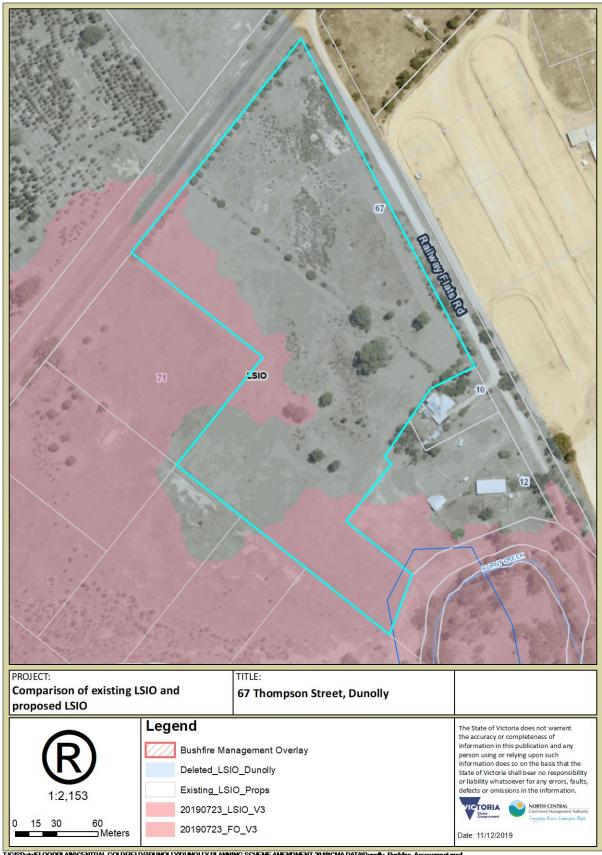
Figure K



FIGISData/FLOODPLAIN/CENTRAL GOLDFIELD/SIDUNOLLY/DUNOLLY PLANNING SCHEME AMENDMENT 2019/CMA DATA/Dunolly_Bushfire_Assessment.mxd



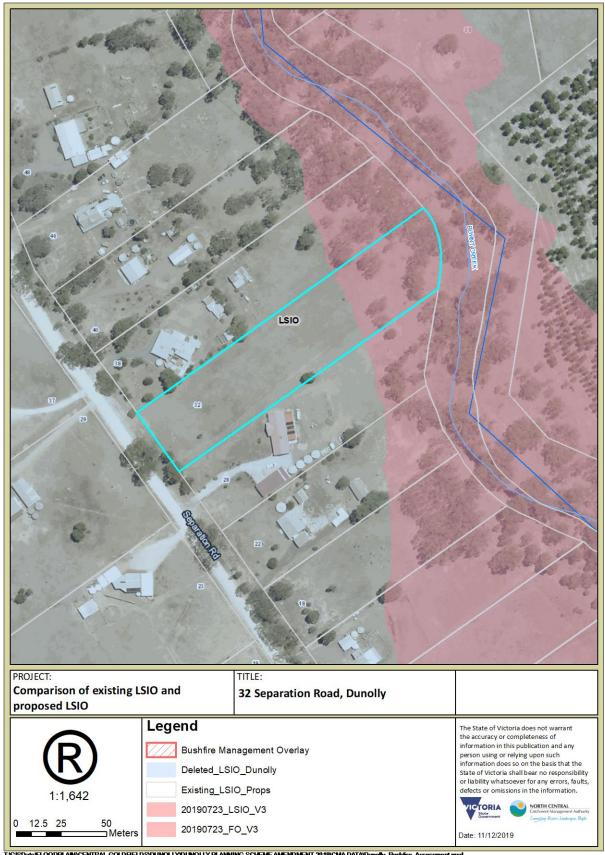
Figure L



T:GISData/FLOODPLAIN/CENTRAL GOLDFIELDSDUNOLLYDUNOLLY PLANNING SCHEME AMENDMENT 2019/CMA DATA/Dunolly_Bushfire_Assessment.mxd



Figure M



FIGISData/FLOODPLAIN/CENTRAL GOLDFIELD/SIDUNOLLY/DUNOLLY PLANNING SCHEME AMENDMENT 2019/CMA DATA/Dunolly_Bushfire_Assessment.mxd



Figure N

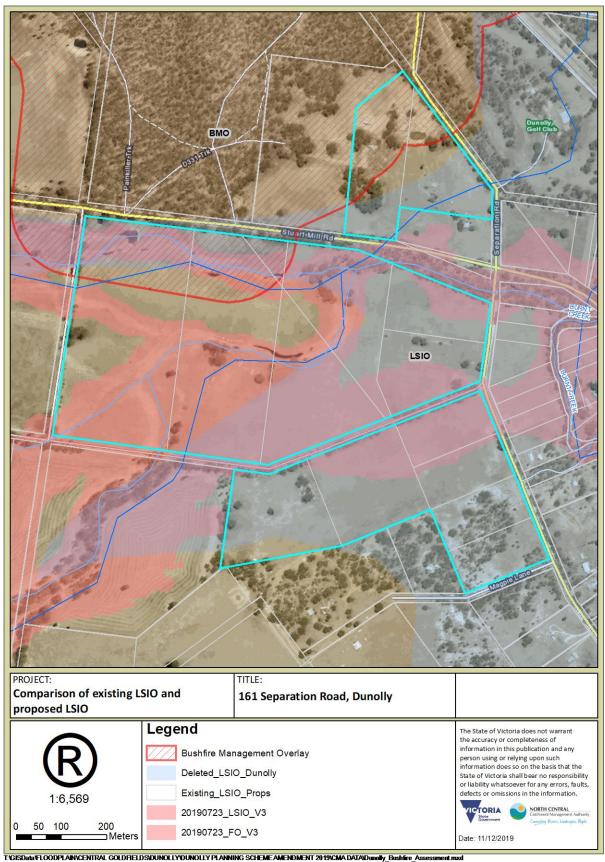
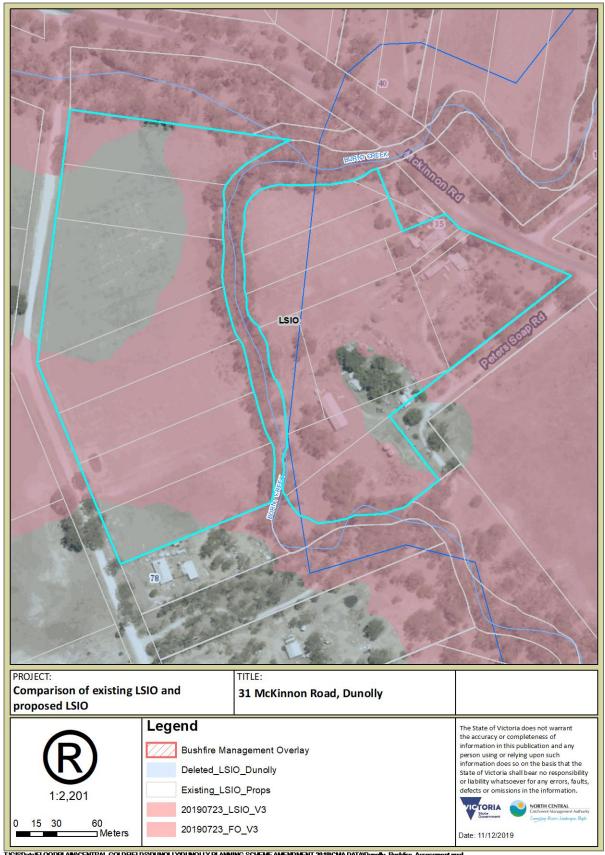




Figure O



FIGISData/FLOODPLAIN/CENTRAL GOLDFIELD/SIDUNOLLY/DUNOLLY PLANNING SCHEME AMENDMENT 2019/CMA DATA/Dunolly_Bushfire_Assessment.mxd



Figure P

