



BACKGROUND REPORT

CHRISTMAS HILLS LAND USE STUDY AUGUST 2017

PREPARED FOR MELBOURNE WATER

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Acknowledgements and Recognition

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OVERVIEW OF THE PROJECT

1.1 THE PROJECT

Melbourne Water is a government owned statutory authority that supplies drinking and recycled water and manages Melbourne's water supply catchments, sewage treatment and rivers, creeks and major drainage systems.

In the 1970s, Melbourne Water purchased a large area of land in Christmas Hills, Kangaroo Ground, Smiths Gully and Panton Hill for the purpose of a water storage facility (Watsons Creek Reservoir). At the same time, other private and public adjacent land within the area was also reserved for the future use of the Reservoir through the application of a Public Acquisition Overlay (PAO).

In 1982, plans to construct the water storage facility were abandoned and a smaller water storage reservoir in Christmas Hills north of Sugarloaf Reservoir was adopted. In 2015 plans to construct the smaller water storage reservoir were also abandoned. Consequently the land reserved for the Watsons Creek Reservoir was considered surplus. Some of this surplus land has been progressively sold.

Today, Melbourne Water still owns 1006 hectares of land acquired for the Watsons Creek Reservoir and a further 313 hectares of privately owned land are affected by the PAO for the Reservoir.

The land reserved for the Watsons Creek Reservoir is now deemed surplus and Melbourne Water has engaged Spiire to deliver a comprehensive land use strategy (the Strategy) for the Christmas Hills precinct. The Strategy will take a comprehensive look at the area and address the following:

- Identify areas which require protection due to aspects of existing and important remnant bushland and landscape values.
- ► Respond to any other areas of consideration including bushfire risk, cultural heritage, service availability, land contamination and landscape character.
- Lot layouts to respond to existing and future land uses, the landscape, environmental values, site servicing and access.
- Ensure that the land disposal will not unreasonably remove options for future community facility locations.
- Provide an opportunity for future residents to inhabit a diverse and unique area of Victoria.

The land use study will deliver the following outcomes for Melbourne Water:

- Identify areas of opportunity and constraint when considering the future development of the Study Area.
- Create a Master Plan to guide subdivision and development in the Study Area.
- Provide the strategic justification for undertaking a Planning Scheme Amendment comprising:
 - Removal of the Public Acquisition Overlay currently existing on both public and private land for the purpose of the Watsons Creek Reservoir.
 - Transfer of approximately 280 hectares of land to the Crown for the WKNCR (rezone the land to facilitate the transfer).
 - Rezone land currently within the Public Use Zone to a more appropriate zone.



- Rezone other land in line with community aspirations and the Master Plan.
- Changes to policy in the Nillumbik Planning Scheme to facilitate the Master Plan outcomes.

The Project is to maximise the value to the community whilst ensuring the long term planning for the site satisfies community aspirations and the commercial and liveability objectives of Melbourne Water.

Of the 1006 hectares still owned by Melbourne Water, approximately 280 hectares of that land has been identified for retention as conservation land and negotiations are progressing to transfer the land to be included in the Warrandyte Kinglake Nature Conservation Reserve (WKNCR).

1.2 PURPOSE OF THIS REPORT

This Background Report (the Report) provides an analysis of the Christmas Hills Study Area and develops an initial grounding from which to deliver a comprehensive land use strategy.

The Report has been developed by undertaking the following tasks:

- ▶ Review of background documents provided by Melbourne Water in relation to the reservoir, its disposal and the development of surplus land.
- Review of the planning context for the area.
- Discussions with Melbourne Water and Nillumbik Shire Council.
- Discussions with relevant servicing authorities.
- Detailed site visit.
- Technical investigations:
 - Heritage
 - Landscape analysis
 - Servicing
 - Bushfire
 - Land contamination
 - Ecology
- Preparation of summary report including collation on key principles for the Project going forward.

This report includes summaries of the technical assessment findings. The individual technical assessment reports are included as attachments.

The next steps in this Project include: constraints analysis and options development; community and stakeholder consultation; preparation of a Master Plan; and a Planning Scheme Amendment to implement the proposed changes.



PROJECT HISTORY

2.1 WATSONS CREEK RESERVOIR

In 1968, Watsons Creek Reservoir was proposed as a water storage reservoir for Melbourne's Water Supply following a Parliamentary Public Works Committee Report titled *The Melbourne Metropolitan Water Supply Inquiry* (the Inquiry Report). The Inquiry Report provided recommendations which included the construction of a number of dams and reservoirs to assist in securing water supply for greater Melbourne following a significant drought in Eastern Australia (1967). Specifically, the Inquiry Report formulated the Lower Yarra Water Supply Scheme which comprised plans for dams on Sugarloaf Creek, the Yarra River and Watsons Creek in Christmas Hills. Construction would include developing the Sugarloaf Reservoir, Winneke Treatment Plant and Yering Gorge Pumping Station. The Watsons Creek Reservoir (the Reservoir) was to be filled via a tunnel connected to Sugarloaf Reservoir and the two storages would operate as one¹.

Plans for the dam on the Yarra River were abandoned after consideration of the impacts identified in the Yarra Brae-Sugarloaf Environmental Study in 1974.

The land required for the Watsons Creek Reservoir, which was to comprise some 350GL was purchased by the then Metropolitan Melbourne Board of Works (MMBW) in the 1970s. Following the purchase of land, a water supply strategy developed by the MMBW in the late 1970s determined that there was insufficient water available from the Yarra River to fill both Sugarloaf and Watsons Creek Reservoir. This saw the capacity of the proposed Watsons Creek Reservoir reduced significantly to around 100GL. Construction of the Sugarloaf Reservoir was completed in 1980 and it has a total capacity of 96GL.

In 1982, some of the land reserved for the Watsons Creek Reservoir was deemed as surplus and subsequently the surplus land was progressively sold. Between 1998 and 2005, 355 hectares of land reserved for the Watsons Creek Reservoir was sold. Melbourne Water developed a Local Structure Plan in 2001 which included a study of a further 276 hectares of rural land resulting in the restructuring of titles which were then sold. Furthermore, some 700 hectares of land reserved for the Reservoir were transferred to the Crown for the Warrandyte Kinglake Nature Conservation Reserve (WKNCR) in Kinglake National Park.

In 2012 Melbourne Water undertook a comprehensive review of potential augmentations of Melbourne's water supply system which included consideration of the need for the Watsons Creek Reservoir. The review took into account financial, environmental, social, technical and climatic considerations and determined that a Watsons Creek Reservoir would:

- ► Cost between \$720 million and \$1.2 billion to build (2011/2012 dollars).
- Only provide a relatively small and highly uncertain volume of water (3GL to 21GL per year). Note: By way of comparison Sugarloaf Reservoir on average produces 100GL per year.
- Be strongly influenced by climate change and climate variability.
- Be limited by the Yarra Basin diversion limit specified in Melbourne Water's Yarra River Bulk Entitlement.
- Take more than 11 years to plan, construct, commission and fill.

BACKGROUND REPORT CHRISTMAS HILLS LAND USE STUDY

https://www.parliament.vic.gov.au/images/stories/committees/enrc/future_water_supply/Submissions 57 110/084 Attachment3.pdf



- Require relocation of Eltham Yarra Glen Road, the Christmas Hills Primary School, homes and other community assets.
- Impact on endangered species protected by Commonwealth and State legislation.
- Disrupt the important wildlife corridor between the Yarra River and Kinglake National Park.

As a result, it was determined that the Watsons Creek Reservoir was no longer a preferred long term option. The recommendation was agreed by State Government and the water retailers. The recommendation resulted in the land's classification as surplus and has led to this Project.

2.2 LAND SALES IN WATSONS CREEK

Melbourne Water has previously sold land formerly reserved for the Watsons Creek Reservoir. The Christmas Hills Local Structure Plan (LSP) was prepared in 2001 to guide the sale and development of 276 hectares of surplus rural land. This land was in excess of the 300m setback distance from the proposed Watsons Creek Reservoir generally required to maintain and protect water quality.

The LSP proposed restructuring the 44 titles to ensure each lot was larger than four (4) hectares. Indicative house sites were identified for all titles based on an assessment of the site's topography, vegetation, access, features and available services. Environmental conservation requirements were at the forefront of planning the LSP with bushland areas protected from further development and the requirement for the use of private waste water treatment plants on each lot. A legal agreement was applied to all the titles prior to sale to encourage conservation, the appropriate siting of development of dwellings and to restrict certain land uses and domestic animals.

Nillumbik Council has however commented that some of these small titles have proven difficult to develop in today's planning and building regulation context. A discussion of recent case law for development in this area is provided in Section 5.3.2 of this report.

2.3 PROJECT COMMENCEMENT

In line with the State Government's program of selling surplus Government land, this Project will provide Melbourne Water with a Land Use Strategy to guide the subdivision, development and rezoning of the remaining Watsons Creek Reservoir land. The Land Use Strategy relates to an area of 1550 hectares of land held both publicly and privately.



2.3.1 GUIDING PRINCIPLES - SUSTAINABILITY

Melbourne Water's vision relates to enhancing life and liveability, making sustainability a core value for this Project. Through consideration of future development opportunities within the Study Area, Melbourne Water has a prime opportunity to demonstrate key strategic objectives into its future planning and development to create a show case outcome that considers their corporate strategic objective in the following context:

- ▶ Healthy people facilitating wellbeing of future residents promoting interactions with the natural environment through built form as well as considering community ownership and accessibility to adjoining biodiversity areas.
- ▶ Healthy places ensuring future places create a community which considers future climatic conditions and the protection of human life from the threat of bushfire, providing an appealing alternative housing option/development outcome for Melbourne's growing population.
- ► Healthy environment considering sustainable housing outcomes that implement integrated water management outcomes to protect downstream waterways, provide sustainable water supplies whilst integrating with the surrounding biodiversity values of the area.

A showcase outcome that provides for future generations at Christmas Hills will exemplify Melbourne Water's commitment to a liveable Melbourne.





3. STUDY AREA

The Study Area is located approximately 35 kilometres north-east of Melbourne's CBD in the Shire of Nillumbik. It is located within the Nillumbik Green Wedge and is outside of Melbourne's metropolitan area and urban growth boundary.

The Study Area is located in an area generally known as Christmas Hills which abuts the northern slopes of the Yarra River between the townships of Kangaroo Flat and Yarra Glen. Christmas Hills is located either side of the Eltham-Yarra Glen Road. Christmas Hills has a population of approximately 344 people (2011 Census). Other localities in the Study Area are Watsons Creek and Smiths Gully.

Christmas Hills comprises clusters of homes and community facilities as opposed to a distinct township area. The surrounding area retains a mosaic of farmland and bushland, as a result of a century of farming activity.

In addition to the features of the Study Area, which are described below, Christmas Hills comprises: the Sugarloaf Reservoir and recreation reserve and part of the Warrandyte Kinglake Nature Conservation Reserve (including the One Hill Reserve).

A context plan is provided at Figure 1 Surrounding Context Plan.

Detail on the history of Christmas Hills and the Study Area is provided in the Technical Assessment – Heritage. This includes information in terms of both pre and post contact periods. A detailed summary is provided in Section 6.1 of this report.

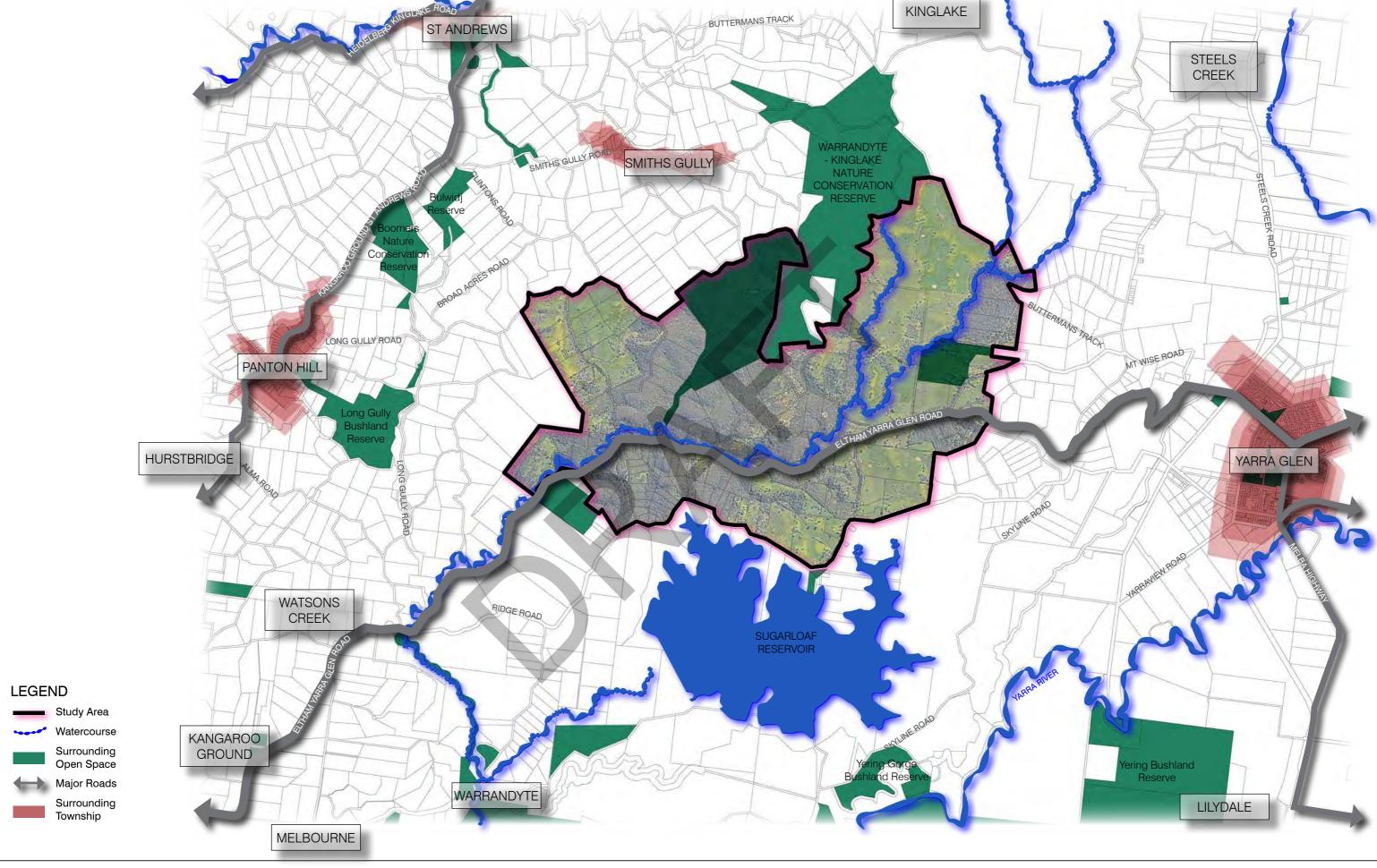




Figure 1 - Surrounding Context



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3.1 STUDY AREA

The Study Area for this Project has been determined by Melbourne Water and is either public land owned or private and public land previously reserved (utilising a Public Acquisition Overlay) for the purposes of the Watsons Creek Reservoir. The Study Area comprises approximately 1550 hectares of land and is loosely bound by Buttermans Track to the north, Dean Road to the east, Ridge Road to the south and Clintons Road to the west.

The Study Area is represented on the Study Area Plan at Figure 2 Study Area Plan.

The Study Area is bisected by the Eltham – Yarra Glen Road which is a two lane arterial road managed by VicRoads which runs from east to west. Watsons Creek and its tributaries also bisect the Study Area from the north east to the south west.

Both heavily forested areas and cleared land feature in the Study Area. Forested areas dominate the centre of the Study Area with more cleared land to the east and the north west.

3.1.1 TOPOGRAPHY

The Study Area is characterised by low foothills with an undulating topography varying between 100 and 372 metres AHD. It is dominated by undulating strike ridges incised by dendritic streams including Watsons Creek.

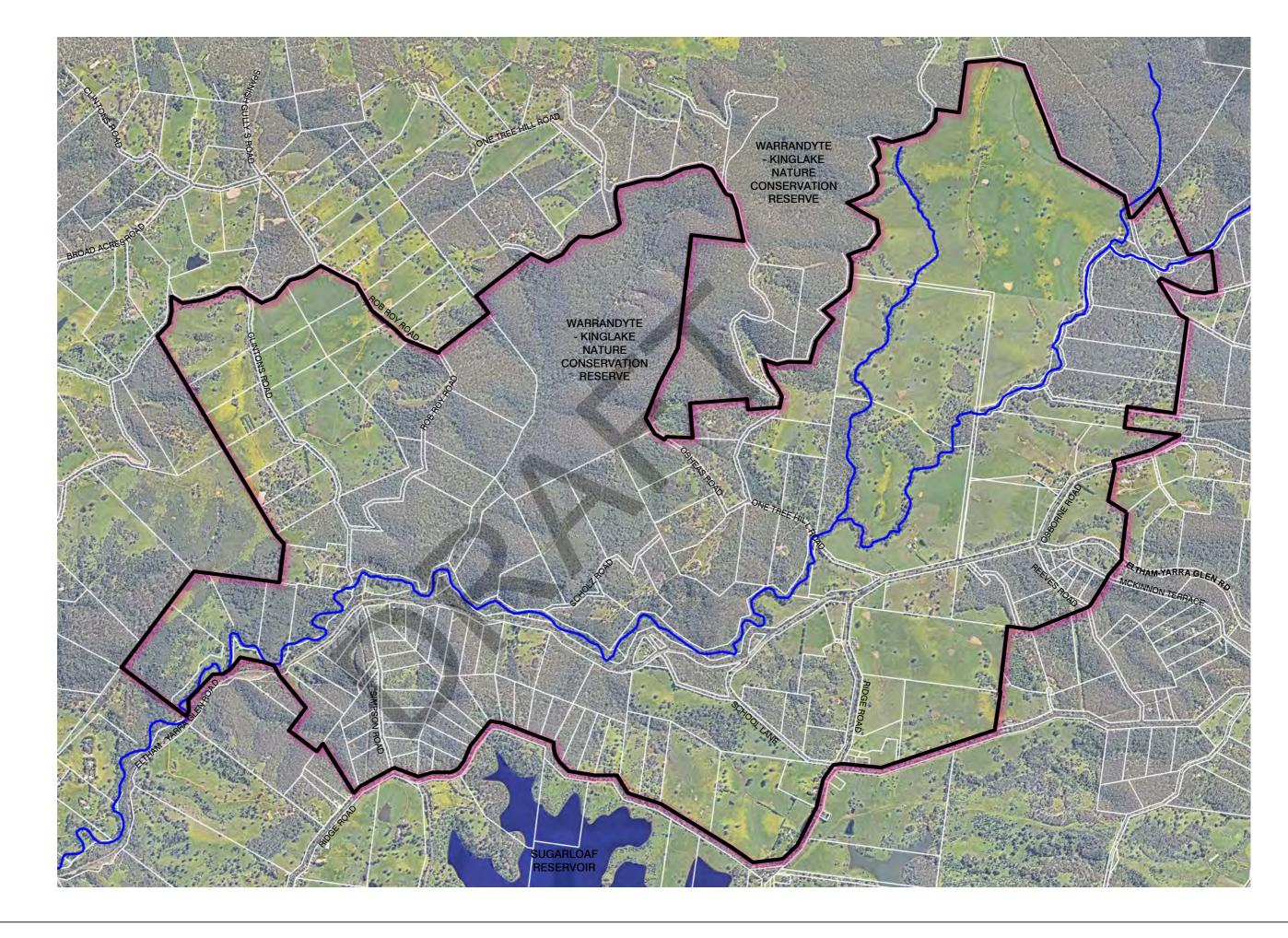
One Tree Hill in the north west of the Study Area rises to 372 metres above sea level.

3.1.2 ACCESS

Eltham-Yarra Glen Road is the key access spine for the Study Area with secondary roads and tracks providing access into most land parcels. Access features include:

- ▶ Ridge Road generally forms the southern boundary of the Study Area and divides it from the area surrounding the Sugarloaf Reservoir to the south.
- Clintons Road in the north west provides access into a predominantly cleared area.
- One Tree Hill Road and Scholz Road provide access into the centre of the Study Area to the north of Watsons Creek
- Osborne Road runs north from Eltham-Yarra Glen Road to loosely from the eastern boundary of the Study Area along with Buttermans Track.
- Simpson Road in the south west of the Study Area is an anomaly as the gazetted road location and the physical road location are different. Melbourne Water are seeking to rectify this issue.
- Four titles in the south west corner are currently inaccessible due to their location north of Watsons Creek and Eltham-Yarra Glen Road.
- Informal trails and tracks are also used for walking, cycling, horse riding and motor cycling.

Key access features are identified on the Study Area Plan at Figure 2 Study Area Plan.

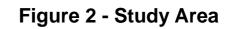


LEGEND
Study Area
Watercourse



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3.1.3 WATERWAYS

Watsons Creek is the main natural waterway in the Study Area and flows from the north east to the south west before linking with the Yarra River. The creek originates in the forested Kinglake National Park to the north east and passes through cleared and vegetated land at Christmas Hills and Kangaroo Ground.

Watsons Creek itself has excellent channel form, good streamside vegetation and its headwater reaches have been defined as ecologically healthy. Tributaries of Watsons Creek include Long Gully, Five Mile, Dean, Happy Valley, Stephensons and Sugarloaf Creeks. Tributaries are mostly ephemeral (temporary water flows following heavy rain). Watsons Creek is one of three major creeks that run through the Nillumbik Green Wedge.

Watsons Creek is predominantly owned by the Crown and on separate titles with limited access for recreation purposes. Some areas of the Crown title for Watsons Creek are narrow and inaccessible. Where Watsons Creek traverses through Wanneroo Farm and the privately owned land south of Wanneroo Farm, it is not within a separate title.

Melbourne Water are the designated waterway managers for Watsons Creek and for the area within 20m from the top of the creek bank.

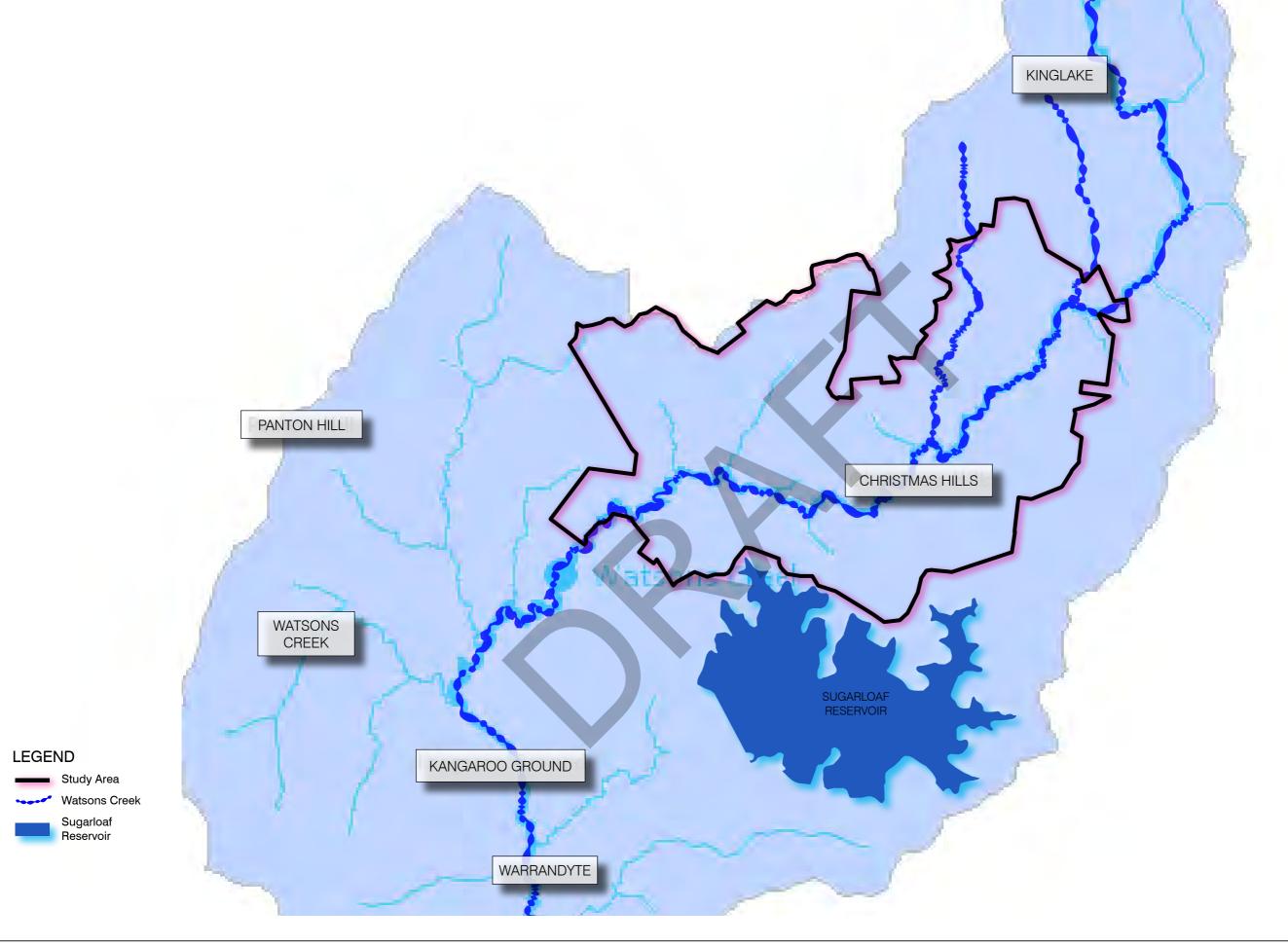
The Study Area is part of the Watsons Creek catchment which also includes Sugarloaf Reservoir, which is shown in Figure 3 Watsons Creek Catchment.

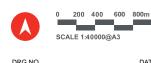
3.1.4 DEVELOPMENT

Development which has been limited throughout the Study Area has generally been in the form of dwellings and agricultural structures. These are dispersed in both the vegetated and cleared pastoral areas.

Some commercial and community facilities have been constructed within the Study Area over the last 160 years. Those features still present include: the Rob Roy Hill Climb track; Christmas Hills Primary School; former Post Office building; WWI memorial; Christmas Hills Hall and tennis courts; CFA station; Pony Land riding centre; and fire fighting tanks. Many of these features are concentrated along Eltham-Yarra Glen Road around Ridge Road.

Development has been limited by the designation of the Study Area for a future reservoir since the 1960s, as such much of the built form are pre-mid twentieth century.











3.1.5 WARRANDYTE - KINGLAKE NATURE CONSERVATION RESERVE

The Warrandyte – Kinglake Nature Conservation Reserve (WKNCR) is a large nature reserve partly located in the Study Area. The WKNCR provides a biodiversity link and native forest corridor for fauna, between the Yarra River at the northern tip of Warrandyte State Park and the southern section of Kinglake National Park, part of the Kinglake Plateau. The WKNCR currently comprises 660 hectares and is listed in the *Crown Land (Reserves) Act 1978 (Fifth Schedule)*. The section of the WKNCR currently within the Study Area is located to the north east of Rob Roy Road and incorporates the One Tree Reserve.

The WKNCR was first identified as a possible conservation link in 1976 by the former Land Conservation Council (LCC) and in 1994 surplus land owned or vested in Melbourne Water was recommended for inclusion as parks and reserves to be managed as a Nature Conservation Reserve.

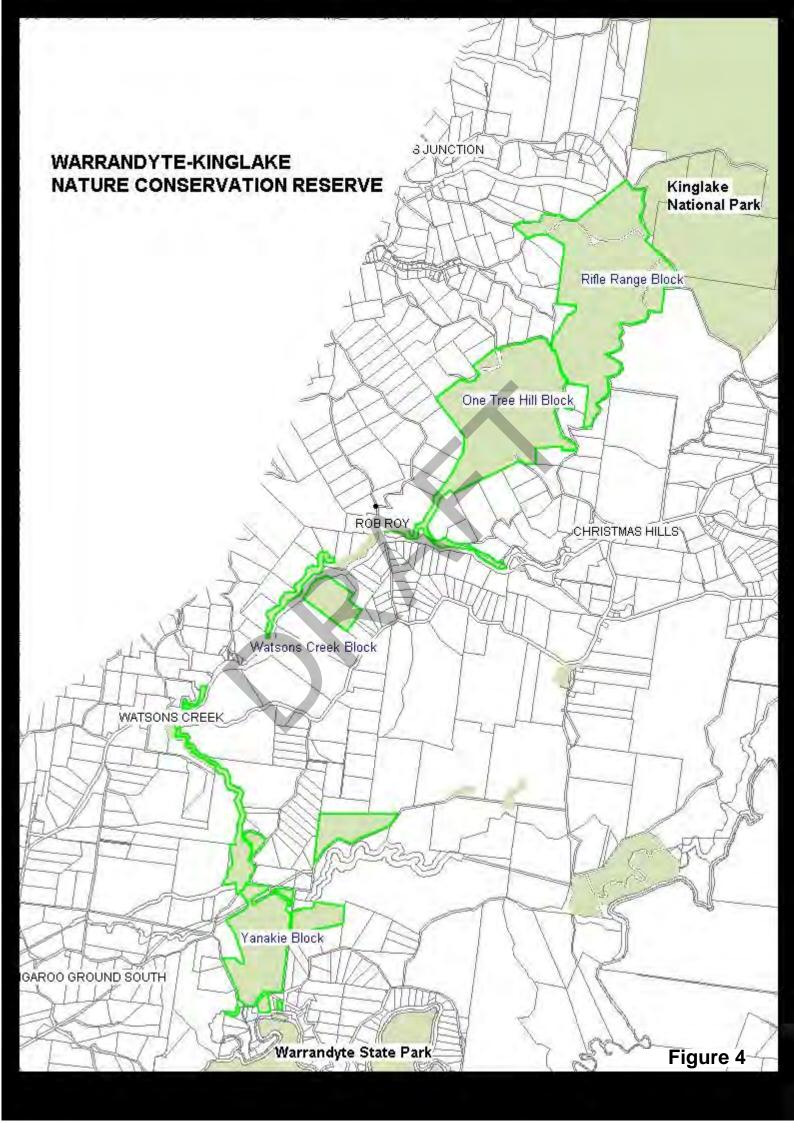
In December 2005 the land for the WKNCR was legislated as a Nature Conservation Reserve (Schedule 5, Part 1 – Division 10 of the *Crown Land (Reserves) Act* 1978) of 660 hectares to be permanently reserves for public purposes and be managed by Parks Victoria for nature conservation purposes. It includes existing Crown Land such as the One Tree Hill and Rifle Range Nature Conservation Reserves.

Melbourne Water has progressively transferred land reserved for the Watsons Creek Reservoir to the Crown (which has formed part of the WKNCR) in order to help preserve and enhance the conservation link in Christmas Hills. This Project proposes to transfer a further 280 hectares of land reserved for the Watsons Creek Reservoir to the Crown to be joined to the existing WKNCR. This land is located in the centre of the Study Area to the north and south of Watsons Creek and is indicated in Figure 4 Warrandyte Kinglake Nature Conservation Reserve.

3.1.6 EASEMENTS

A High Pressure Gas Pipeline easement runs in a north-south direction along the eastern boundary of the Study Area. This 27m wide easements contains the Pakenham to Wollert Pipeline which is a 750mm diameter gas transmission pipeline. Given this is a transmission asset, the pipeline does not directly service residential titles.

In accordance with the *Pipelines Act 2005* and *Australian Standard 2885* land use changes within the pipeline's 700m measurement length must be considered with respect to whether it will increase the risk of people in proximity of the pipeline asset. The measurement length is defined by the 4.7kw/m2 contour in the event of a full bore pipeline rupture.





3.1.7 LAND OWNERSHIP AND SIZE

The Study Area compromises approximately 150 land titles. Whilst the majority of the titles and the total land area are in the ownership of Melbourne Water or the Crown, there are a number of titles in private ownership. These private titles are currently wholly or partially subject to a Public Acquisition Overlay (PAO) for the Watsons Creek Reservoir.

Some of the Melbourne Water titles are under either tenancies (residential and commercial leases) or grazing licences.

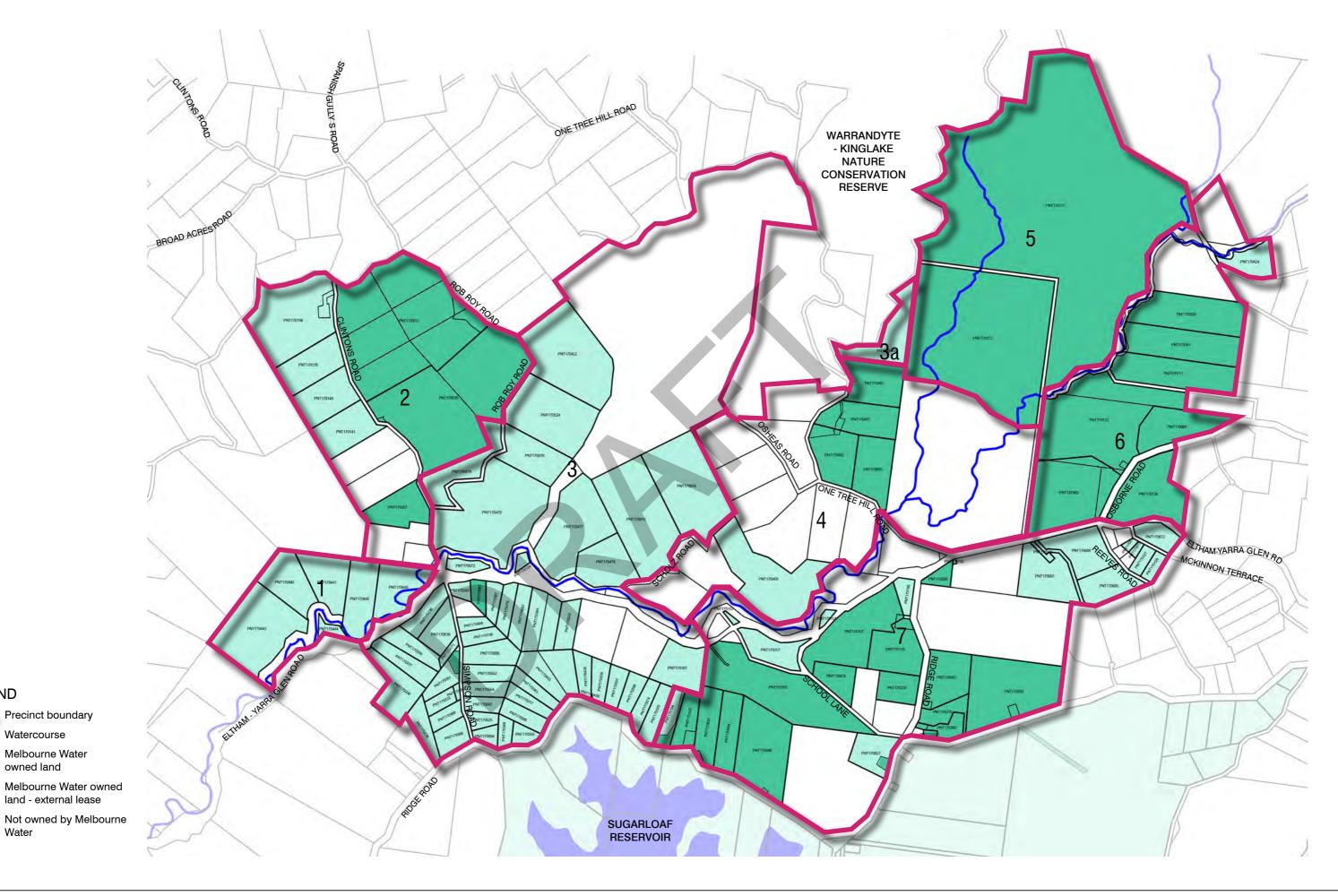
A breakdown of ownership in the Study Area is displayed in Table 1 below and in Figure 5 Melbourne Water Owned & Leased Land. We note that some of the titles comprise multiple parcels including Crown Allotments.

Table 1: Land titles in the Study Area

Ownership Category	Titles
Melbourne Water Owned	113
Melbourne Water Owned titles excluding land to be transferred to the Crown for the WKNCR	60
Melbourne Water Owned titles under lease and grazing licences	24
Private Property	32
Crown Land	2 (Titles already within the WKNCR) *This excludes Watsons Creek titles

Title size in the Study Area varies significantly in reflection of its past settlement and land use history. The breakdown of Melbourne Water owned land title size, excluding land to be transferred for the WKNCR, indicates a third of the titles (35%) are less than 5 hectares in area. These small titles are generally located to the south of Eltham-Yarra Glen Road. Only four titles owned by Melbourne Water are currently in excess of 40 hectares in size, the minimum subdivision size in the existing Rural Conservation Zone – Schedule 4 which applies in parts of the Study Area.

The breakdown of title size is shown in Figure 6 Melbourne Water Land – Title sizes.





DRG NO. UD ID 01

Watercourse

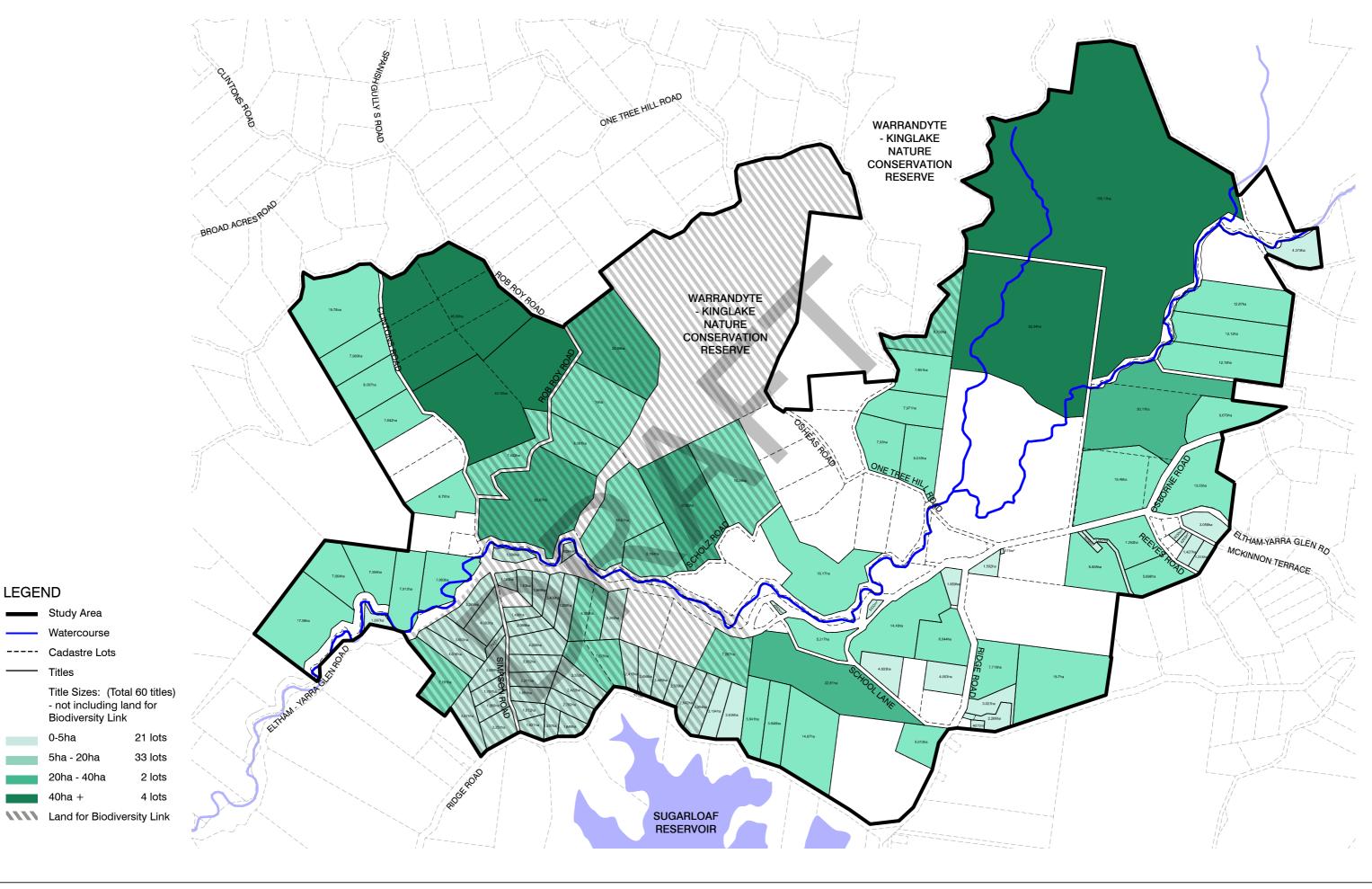
owned land

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3.2 PRECINCTS

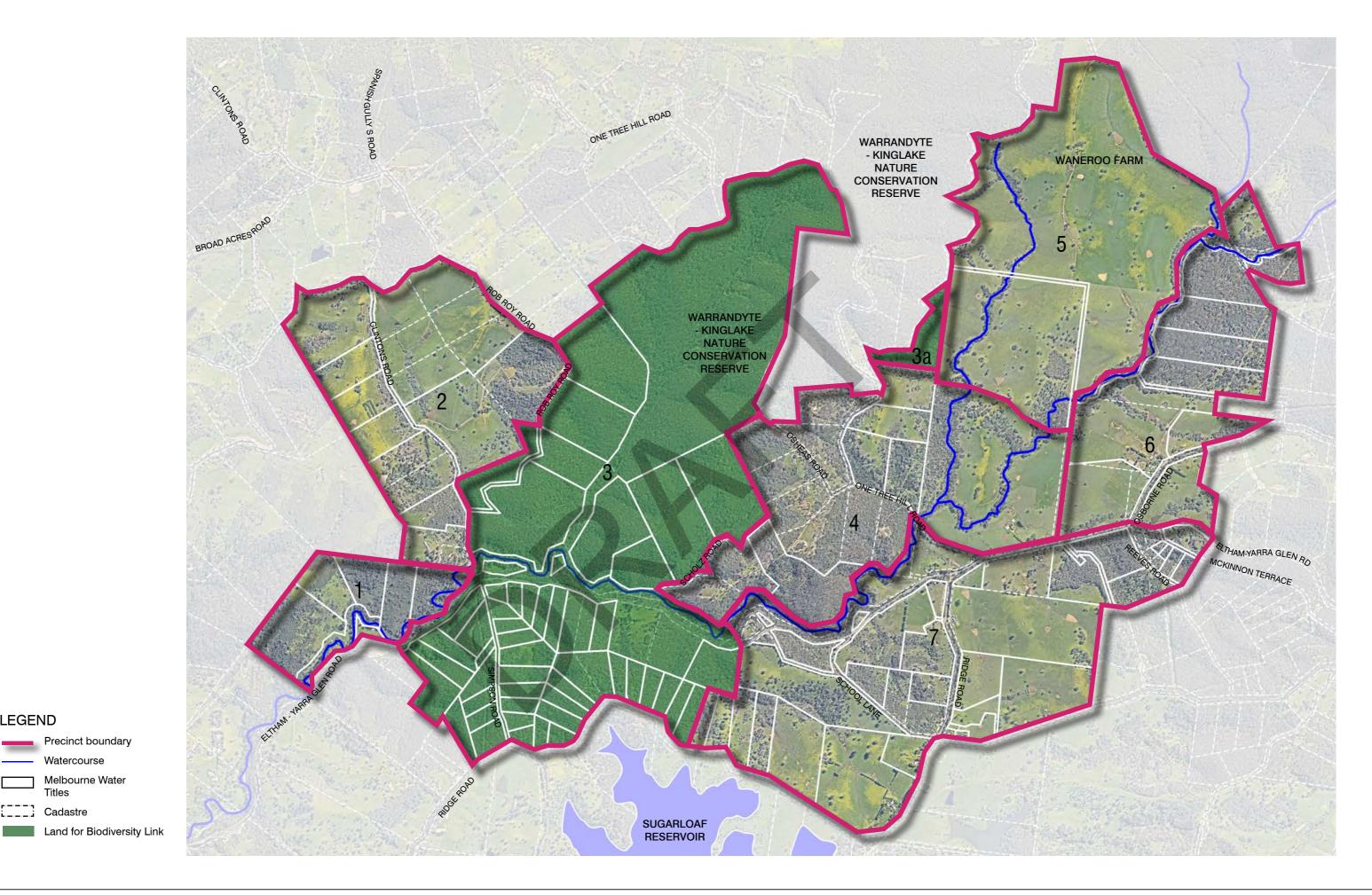
For the purposes of this Project, in order to better understand and analyse the overall Study Area, which at 1550 hectares is quite large, the land was divided into Precincts. The land grouped within these Precincts includes land that is not owned by Melbourne Water to provide a holistic understanding of the Study Area.

The Precincts were determined using a number of principles applied in order of priority:

- 1. Study Area boundary set by Melbourne Water reflecting the proposed Watsons Creek Reservoir extent and existing planning controls (Public Acquisition Overlay and Public Use Zone 1).
- 2. All precinct boundaries and extents are determined by the existing cadastre and drawn to lot boundaries and road extents.
- 3. Land that has been nominated for the biodiversity conservation link is grouped in the same Precinct.
- ► The land proposed to be transferred to the Crown for the WKNCR is located within the Precincts 3 and 3a, with the exception of some identified biodiversity conservation land within Precinct 1 which will need to be extracted from the existing land titles and transferred to the Crown.
- 4. Location of land to the north and south of the main access road, Eltham-Yarra Glen Road.
- 5. Council Heritage Overlay affected properties were grouped together where possible as a reflection of existing community infrastructure locations.
- 6. Surrounding Road Access:
 - a. Access from the eastern Study Area boundary roads which are outside of the Study Area (Osborne Road, Dean Road and Buttermans Track).
 - b. Access from secondary roads to the north of Eltham-Yarra Glen Road (One Tree Hill Road and Scholz Road).
 - c. Land without direct road access has been grouped together.
- 7. Land that currently makes up the extent of the existing Wanneroo Farm property.
- 8. Land ownership patterns where possible land owned by Melbourne Water is grouped together where possible.

Through the application of these principles the Study Area can be broken down into seven (7) separate precincts as shown in Figure 7 Precinct Plan.

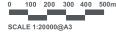
The precincts are described below. Title counts excluded land within the Watsons Creek title.





LEGEND

DRG NO. UD ID 01 DATE **25/05/2017**



Watercourse

Titles Cadastre





3.2.1 PRECINCT 1

Precinct 1 is located in the far western corner of the Study Area to the north of Eltham-Yarra Glen Road and comprises six (6) Melbourne Water owned titles.

Table 2: Precinct 1 Summary

Precinct 1	Key Features
Melbourne Water owned Titles	6
Private Titles	-
Heritage Features	HO200

Key features of Precinct 1 are:

- ▶ Watsons Creek is contained within Crown Allotment 54A, Parish of Queenstown. This land, known as 945 Eltham-Yarra Glen Road is included within the Heritage Overlay HO200 Hill, later Birch farm complex and is currently owned by the Crown. The title includes a small Miner's Cottage and is managed by Parks Victoria.
- One small title is located on the southern side of Watsons Creek. This title is proposed to be transferred to the Crown as part of the WKNCR.
- ▶ Two titles straddle Watsons Creek and are accessible from Eltham-Yarra Glen Road.
- The southern sections of the eastern titles are proposed to be excised and transferred to the Crown as part of the expansion of the WKNCR, this will prevent access to the remaining part of one of these titles.
- ► Three titles are currently not accessible as they are to the north of Watsons Creek. Melbourne Water and Parks Victoria, acting as the Crown, are negotiating the transfer of land to allow the construction of a bridge for access to these three titles and to the remaining part of the title transferred to the Crown.

3.2.2 PRECINCT 2

Precinct 2 is located in the north-west section of the Study Area, north of Eltham – Yarra Glen Road. It is accessed from Clintons Road and is to the immediate west of the existing and future WKNCR.

Table 3: Precinct 2 Summary

Precinct 2	Key Features
Melbourne Water owned Titles	7
Private Titles	4
Heritage Features	HO183

Key features of Precinct 2 include:

- ► Eleven titles comprising seven (7) Melbourne Water owned titles and four (4) privately owned titles. Melbourne Water currently lease all owned properties.
- The MG Car Club lease land on the west of Clintons Road and operate the Rob Roy Hill Climb. This land is partly protected (land at 375 and 385 Clintons Road, Smiths Gully) by



a Heritage Overlay, HO183 – *Clintons' Pleasure Grounds, later Rob Roy Hill Climb*. The Rob Roy Hill Climb originated in 1935 when the then Light Car Club of Australia established a hill climb circuit at the Clinton's Pleasure Grounds.

- Much of the land is cleared with more extensive vegetation present on the southern titles including around the Rob Roy Hill Climb.
- The two titles to the east of Clintons Road comprise multiple Crown Allotments.

3.2.3 PRECINCT 3 AND 3A

Precinct 3 is the largest precinct in the Study Area covering land both north and south of Eltham – Yarra Glen Road purely for the purpose of the proposed Warrandyte-Kinglake Nature Conservation Reserve (WKNCR), excluding three private properties. The Precinct is generally bound by Rob Roy Road to the west, Scholz Road to the south east and the existing WKNCR to the north.

Precinct 3A is also proposed to be transferred to form part of the WKNCR.

Table 4: Precinct 3 and 3A Summary

Precinct 3 and 3A	Key Features
Melbourne Water owned titles	53
Private titles	3
Heritage Features	H7922-0226: One Tree Hill Quartz Workings (Victorian Heritage Inventory)

Key features of Precinct 3 include:

- Dense forest vegetation which provides a nature corridor for fauna between the Yarra River valley and the Kinglake Plateau.
- 58 titles including:
 - 53 Melbourne Water owned titles, including two (2) leased titles which are developed with dwellings (to be demolished). These publicly owned titles will be transferred to the Crown for the extension of the WKNCR.
 - Two (2) titles, including the One Tree Hill Reserve, already owned by the Crown and part of the WKNCR. These two titles are affected by a Public Acquisition Overlay for the Watsons Creek Reservoir.
 - Three (3) private properties, each developed with a dwelling, and located to the south of Eltham-Yarra Glen Road. These properties will be surrounded by the WKNCR following transfer of surrounding land.
- A Victorian Heritage Inventory site is located within the existing part of the WKNCR (H7922-0226: One Tree Hill Quartz Workings).
- One lot in the south west of the Precinct is used as a native vegetation offset site.

Precinct 3A:

- ▶ The property fronts Roberts Road is irregular in shape and densely covered in vegetation.
- The land is publicly owned and is proposed to be transferred to the Crown for the extension of the WKNCR.



3.2.4 PRECINCT 4

Precinct 4 is located on the northern side of Eltham – Yarra Glen Road and comprises 16 land parcels.

Table 5: Precinct 4 Summary

Precinct 4	Key Features
Melbourne Water owned titles	5
Private titles	11
Heritage Features	-

Key features of Precinct 4 include:

- The majority of the titles in this Precinct are privately owned with Melbourne Water only owning five parcels. Most of the private titles are developed with dwellings.
- Access is provided via One Tree Hill Road, Scholz Road and O'Sheas Road.
- Land to the west of One Tree Hill Road is heavily vegetated. Land to the east of One Tree Hill Road is relatively cleared.
- Watsons Creek traverses from the north east across the Precinct. Watsons Creek is within surrounding titles through Precinct 4 rather than on its own Crown Allotment.

3.2.5 PRECINCT 5

Precinct 5 is located in the far northern section of the Study Area on the north side of Eltham – Yarra Glen Road.

Table 6: Precinct 5 Summary

Precinct 5	Key Features
Melbourne Water owned titles	1 (2 crown allotments)
Private titles	-
Heritage Features	-

Key features of Precinct 5 include:

- One (1) large title comprising two crown allotments owned by Melbourne Water which currently is utilised with a grazing lease. The title is leased for the purpose of Wanneroo Farm and comprises 230 hectares of land.
- Wanneroo Farm is generally cleared of vegetation.
- Watsons Creek runs along the eastern boundary of Wanneroo Farm and Five Mile Creek traverses north-south through the centre of the site. Through Wanneroo Farm, Watsons Creek does not have a separate Crown Allotment.
- A government road is located between the two (2) Crown Allotments (titles) which make up Wanneroo Farm.



3.2.6 PRECINCT 6

Precinct 6 is located in the north-east section of the Study Area on the north side of Eltham – Yarra Glen Road.

Table 7: Precinct 6 Summary

Precinct 6	Key Features
Melbourne Water owned titles	8
Private titles	2
Heritage Features	-

Key features of Precinct 6 include:

- ▶ 11 properties including 8 titles owned by Melbourne Water (6 leased) and 2 private titles.
- ▶ The Study Area boundary forms the eastern edge of the Precinct.
- Osborne Road provides access to titles in the Precinct from Eltham-Yarra Glen Road.
- ▶ Steep changes in topography, particularly along Dean Road.
- ▶ The northern section of the Precinct is heavily vegetated.
- Ponyland Equestrian Centre leases land in the Precinct.
- ▶ The northern most parcel of land in the Precinct, to the north of Watsons Creek, is part of a larger title (795 Buttermans Track, Christmas Hills) which is not included in the Study Area. This particular parcel (part of a title) is included in the Study Area as it is affected by the PAO.

3.2.7 PRECINCT 7

Precinct 7 is located in the south-east corner of the Study Area and is generally on the south side of Eltham – Yarra Glen Road with the exception of a small area of land between the north side of the road and the alignment of Watsons Creek.

Table 8: Precinct 7 Summary

Precinct 7	Key Features
Melbourne Water owned titles	32
Private titles	12
Heritage Features	HO53; HO159; HO177; HO201; HO243

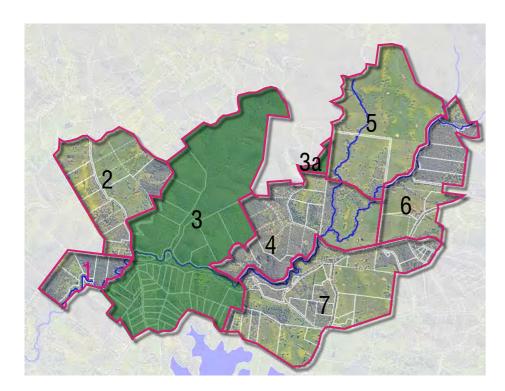
- Most of the titles in Precinct 7 are owned by Melbourne Water. Approximately 12 titles are privately owned.
- Community infrastructure is located within the Precinct including a hall and tennis courts (Ridge Road), the Christmas Hills Primary School (Eltham – Yarra Glen Road) and the Christmas Hills CFA station (intersection of Muir Road and Ridge Road). The CFA Station, hall and Primary School are all located on land not owned by Melbourne Water.
- Precinct includes a number of sites protected by a Heritage Overlay:
 - HO53 Christmas Hills Primary School.



- HO201 Lee House and Gossip Tree (Red Box tree).
- HO177 Dwelling at 1524 Eltham Yarra Glen Road.
- HO243 Christmas Hills Mechanics Institute (Harold Muir Hall).
- HO159 Bunya Bunyas (2) and Monterey Cypress (trees)
- ► The Precinct comprises predominantly cleared land interspersed with areas of dense bushland. Bushland is present in the north east around Reeves Road and McKinnon Terrace as well as centrally to the west of Ridge Road.
- ▶ An easement and high pressure gas pipeline run through the far east of the Precinct.
- ► The Christmas Hills Mechanics Institute Hall is located on a small title on Ridge Road. This title is owned by a Committee of Management who also manage the Hall. The tennis courts adjoining the hall however are on part of a separate Melbourne Water owned title.

Individual Precinct Plans are included at Figure 8 Precinct 1 to Figure 14 Precinct 7.





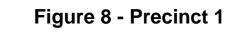




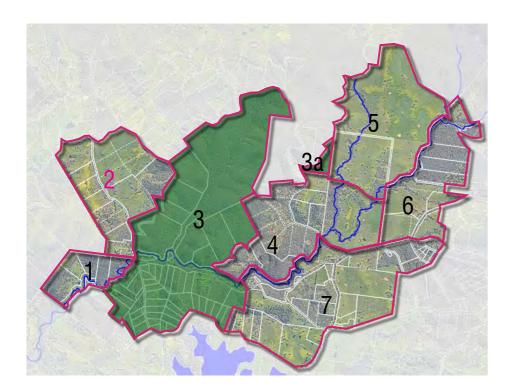


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Precinct boundary

Watercourse

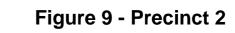
Melbourne Water Titles

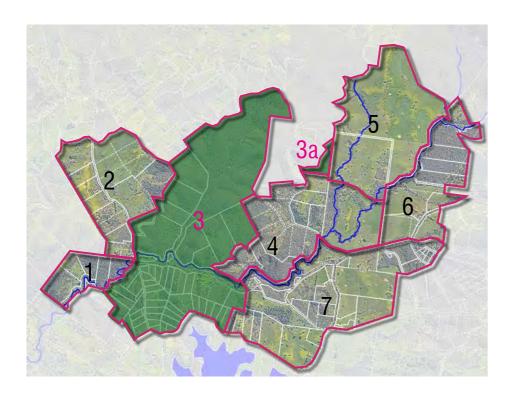
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Melbourne Water Owned Land

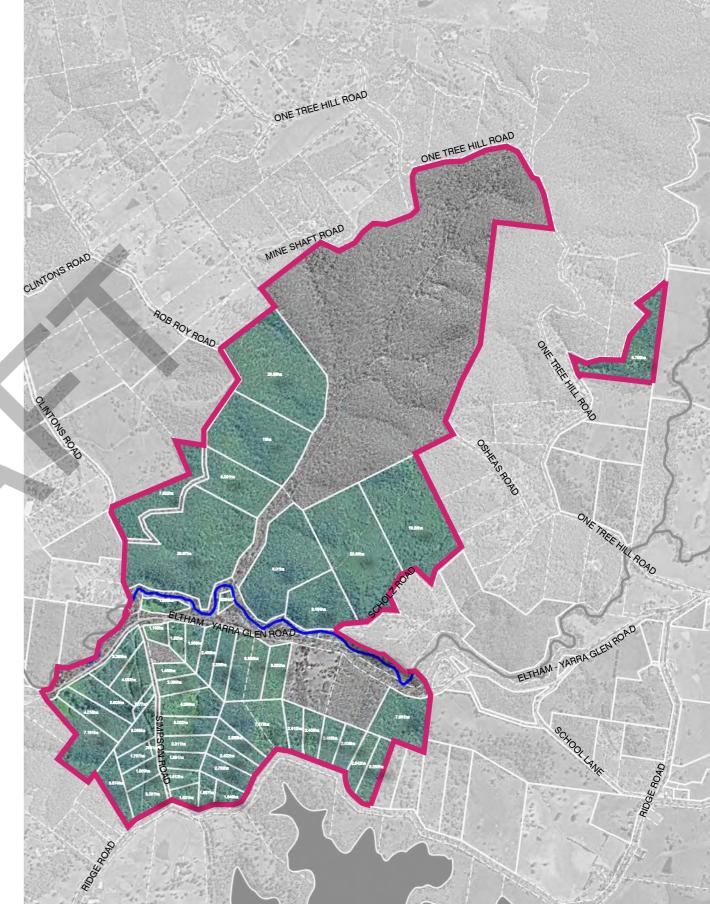














Precinct boundary

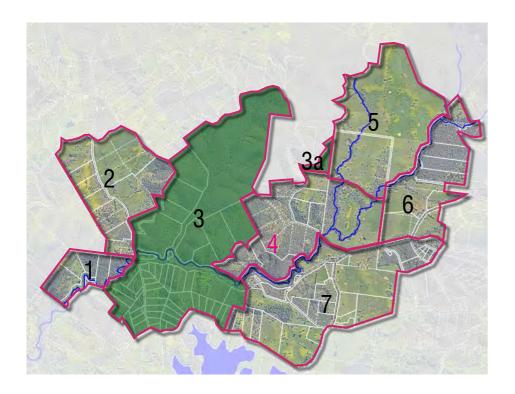
Watercourse

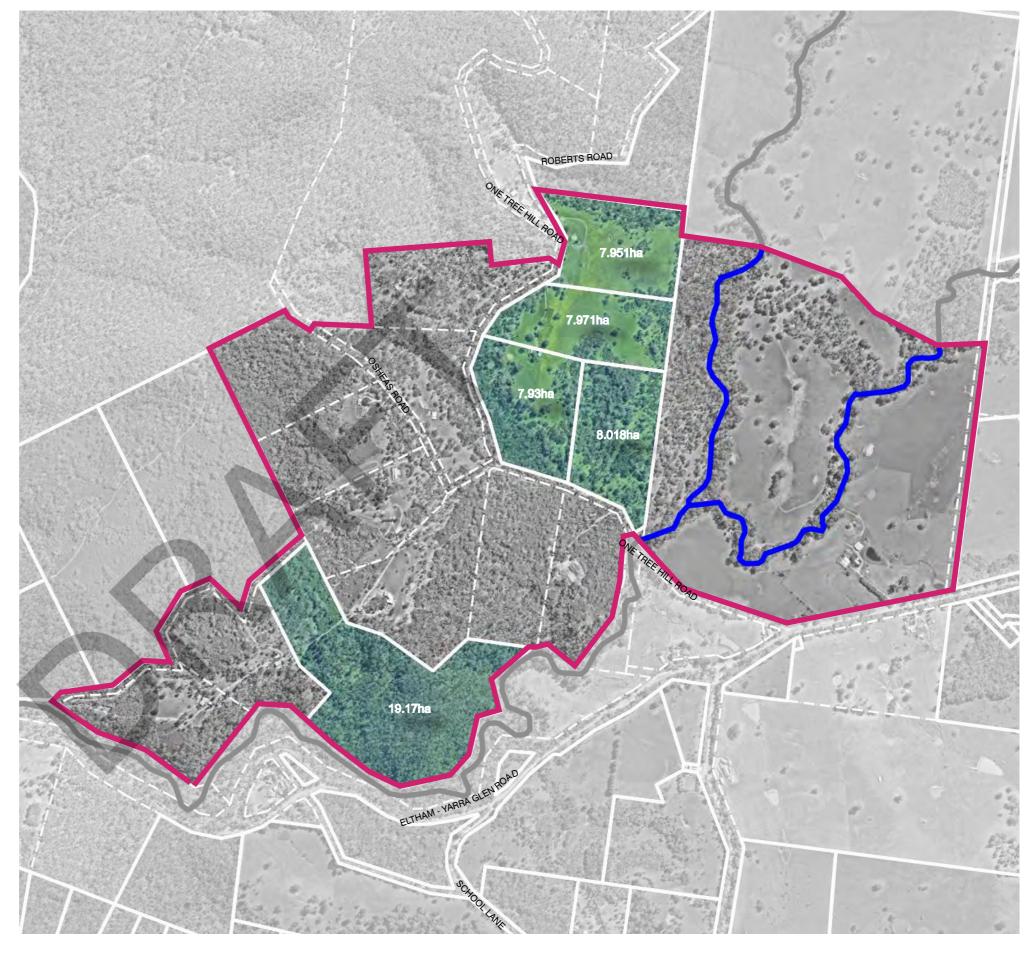
Melbourne Water Titles

Cadastre

Melbourne Water Owned







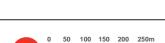


Precinct boundary
Watercourse

Melbourne Water Titles

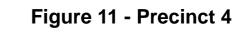
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Melbourne Water Owned

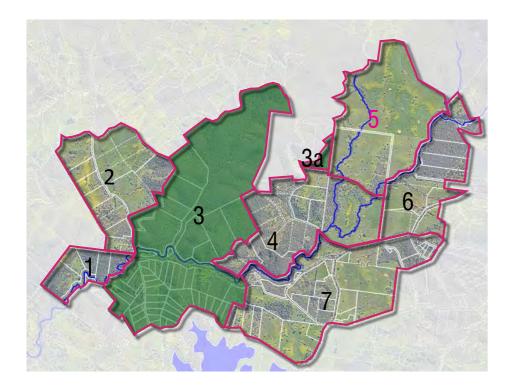


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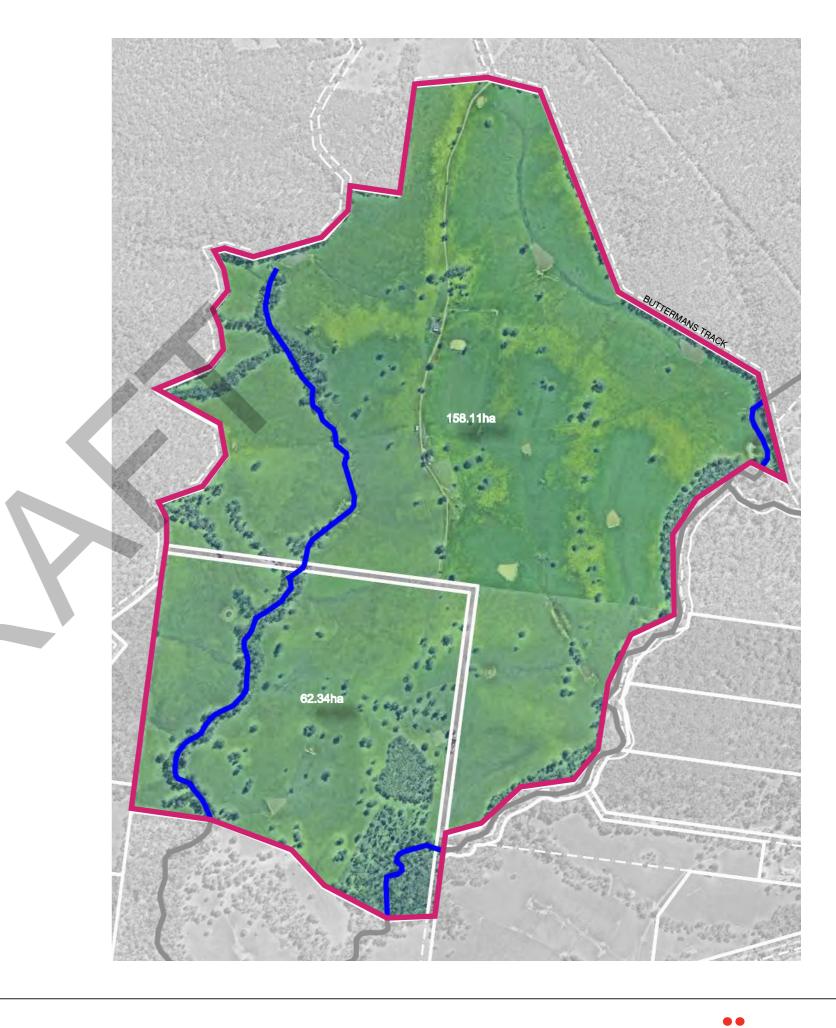
Precinct boundary

Watercourse

Melbourne Water
Titles

Cadastre

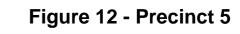
Melbourne Water Owned Land

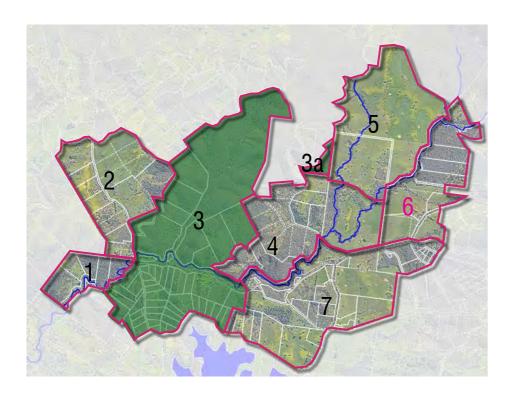














Precinct boundary

Melbourne Water Titles

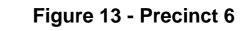
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Melbourne Water Owned

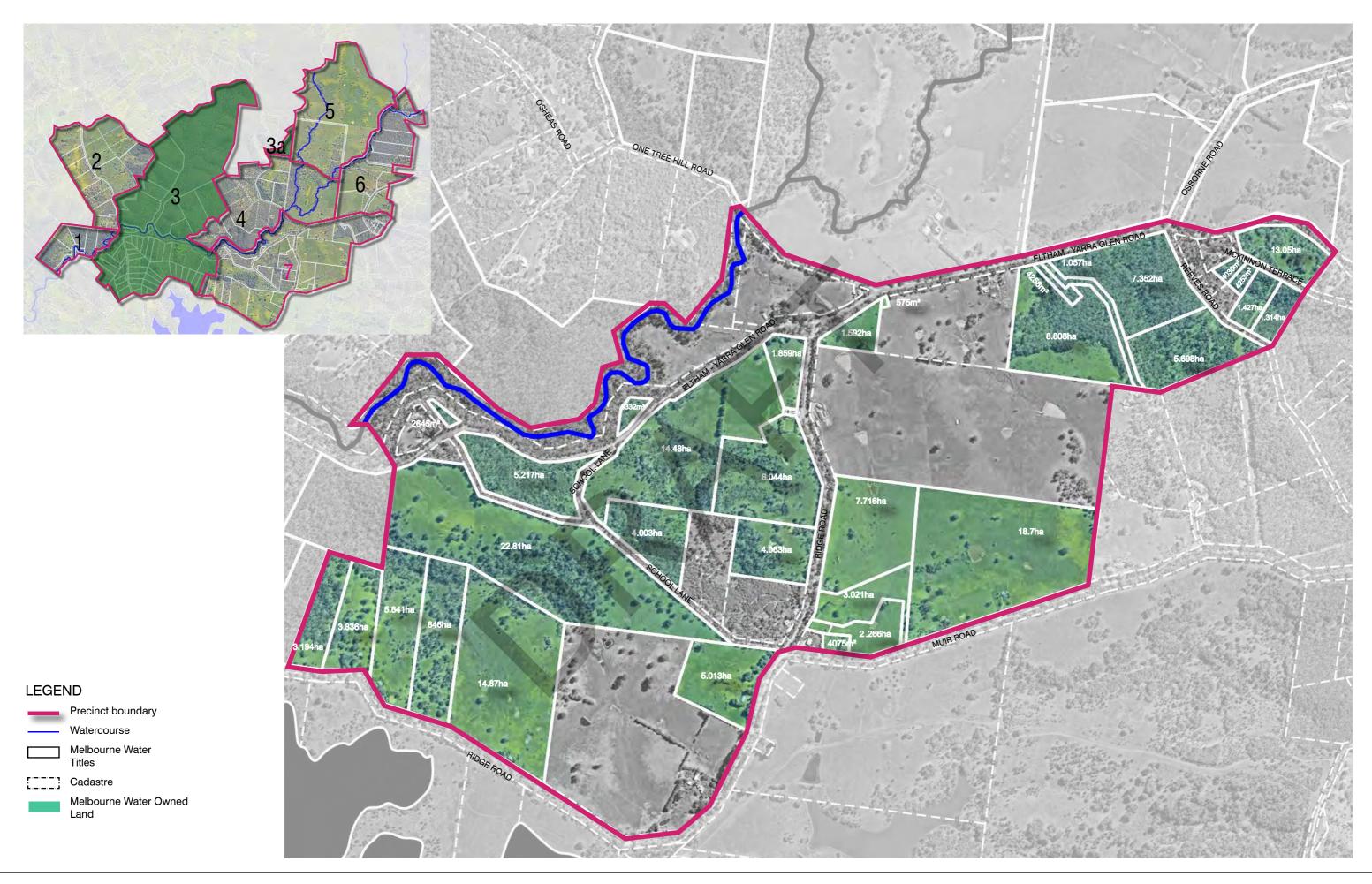




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4. Planning CONTROLS

This section of the report undertakes a review of the town planning considerations relevant to the Study Area.

4.1 COMMONWEALTH AND STATE LEGISLATION

A number of Commonwealth and State Acts are of relevance to the Project. These are summarised in the Table below.

Table 9: Legislation impacting the Project

Act	What it does	Implication for Study Area
Commonwealth		
Environment Protection and Biodiversity Conservation Act 1999	Reflates to matters of national environmental significance including listed threatened species and ecological communities.	Referral of matters that may affect national environmental significance values. Intervention by the Commonwealth to protect a species or community of national significance. Targeted surveys may be required to confirm if EPBC Act listed species are impacted. Refer to Section 0 Ecology.
Victorian		
Flora and Fauna Guarantee Act 1988	Conserves threatened species (Victoria's native plants and animals) and communities and manages threatening processes. Places a duty on public authorities to have regard to the objectives of the Act in their operations.	A permit is required to remove protected flora from public land. Actions on public land should align with the management regime for listed fauna species. Refer to Section 0 Ecology.
Heritage Act 1995	Protects Victoria's cultural heritage. Lists places on the Victorian Heritage Register.	Requires approval to impact State significant heritage places. No requirement for rezoning of land.
Aboriginal Heritage Act 2006	Protects areas of Aboriginal Cultural Heritage. Defines high impact activities and identifies places of cultural heritage significance.	Requires a Cultural Heritage Management Plan (CHMP) to be prepared for high impact activities in cultural heritage significance areas. No requirement for rezoning of land.



Act	What it does	Implication for Study Area
Environmental Effects Act 1978	Requires consideration of the environmental impacts or effects of a development proposal (public works).	Requires an Environmental Effects Statement (EES) to be prepared for significant development. No requirement for rezoning of land.
Environmental Protection Act 1970	Requires protection of the environment from development impacts. Sets out State Environment Protection Policy.	Requires Works Approvals, Permits and Licenses for activities which may pollute or damage the environment. No requirement for rezoning of land.
Planning and Environment Act 1987	Requires consideration of the Nillumbik Planning Scheme. Designates the Nillumbik Green Wedge.	Planning Scheme Amendment to rezone the land and remove the PAO. Detailed in Section 4.2.

4.2 PLANNING AND ENVIRONMENT ACT 1987

The requirements of the *Planning and Environment Act 1987* (the Act) should be considered with regards to the implications for rezoning, subdivision, land use and development within the Study Area. The Act requires consideration of the Nillumbik Planning Scheme.

The Act identifies the Study Area is within the Nillumbik Green Wedge by virtue of its location in a metropolitan fringe planning scheme (Nillumbik Planning Scheme) and outside of the urban growth boundary.

Section 46AF of the Act states that where an amendment to a metropolitan fringe planning scheme has the effect of altering or removing any controls over the subdivision of any green wedge land to allow the land to be subdivided into more lots or into smaller lots than allowed for in the planning scheme will require ratification by Parliament.

4.2.1 PLAN MELBOURNE

Plan Melbourne provides discussion and direction on green wedge areas, which includes the Nillumbik Green Wedge where the Study Area is located. Green wedge areas were first set aside in the 1970s to conserve rural activities and significant natural features and resources between the growth areas of metropolitan Melbourne as they spread out along major road and rail links. Green wedges and peri-urban areas provide opportunities for the community to connect with nature, improving health outcomes, as well as maintaining the ecosystem services that underpin Victoria's prosperity (Plan Melbourne 2017, p.79). The Nillumbik Green Wedge fulfils that role.

Direction 4.5 of Plan Melbourne, the State's Metropolitan Strategy, is *Plan for Melbourne's green wedges and peri-urban areas*. Planning for Melbourne's green wedges is required to, among other things:

- Protect biodiversity assets, including national and state parks, Ramsar wetlands and coastal areas.
- Support existing and potential agribusiness activities, forestry, food production and tourism.



- Protect major state infrastructure and resource assets, including water supply dams and water catchments and waste management and recycling facilities.
- Provide a recreational resource, which contributes to public health outcomes for all Victorians.

Plan Melbourne notes that these valued features, assets and industries should be prioritised before other land uses.

In relation to future growth in the green wedges Plan Melbourne requires growth to be managed to protect productive land, strategic economic resources, heritage and biodiversity assets, while accommodating additional housing and employment in established towns that have the capacity for growth. Planning for green wedges areas should:

- ▶ Define and protect areas that are strategically important to the metropolitan area and the State, for the environment, biodiversity, landscape, open space, water, agriculture, energy, recreation, tourism, environment, cultural heritage, infrastructure, extractive and other natural resources.
- Protect and manage the value of green wedges consistent with green wedge management plans.
- Avoid development in locations where there is risk to life, property, the natural environment and infrastructure from natural hazards such as bushfire and flooding.
- Accommodate additional housing and employment in established towns that have the capacity for growth.
- Provide for non-urban breaks between urban areas.

The Nillumbik Green Wedge is shown in Figure 15 Green Wedge Plan.



Nillumbik Green Wedge OEden Park Locality **O**Humevale Nillumbik OKinglake Central Green Wedge See Whittlesea **OWhittlesea** GW map Green Wedge area OKinglake East Urban growth area **O**Kinglake Local government area OEagle Nest OStrathewen Woodstock Public land Lakes and reservoirs OYan Yean River/Creeks Nillumbik Green Wedge Active railway line and passenger station OArthurs Creek See Yarra Valley and Yarra O Mittons Bridge and Dandehong GW map Freeway **O**Wollert **O**Mernda OSteels Creek Highway Bridge Inn Rd Doreen ONutfield Dixons Creek OKnobs Junction Arterial road OSmiths Gully OCottles Bridge **O**Yarrambat OHurstbridge Panton Hill Epping OSouth Morang Christmas Hills arrawarra Swattle Glen **O**Lalor **O**Watsons Creek OMill Park Diamond Creek OPretty Hill Metropolitan Ring Rd OSt Helen Kangaroo Ground Melbourne O OWatsonia North OEltham North OBend of Islands Greensborough **O**Watsonia Research OKingsbury **O**Eitham Coldstream West Yallambie Montmorency North Warrandyte OLower Plenty **O**Viewbank ORosanna ORosanna East OWonga Park Figure 15 @ The State of Victoria, Department of Transport, Planning and Local Infrastructure, 2013. The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information



4.2.2 NILLUMBIK GREEN WEDGE MANAGEMENT PLAN

The Nillumbik Green Wedge Management Plan (Nillumbik GWMP) provides a long term vision for the Nillumbik Green Wedge which guides decision making in the region in line with the requirements for planning in Plan Melbourne. The Nillumbik GWMP is referenced in the Nillumbik Planning Scheme and notes the Nillumbik Green Wedge is distinguished from others by the quality of its environment and natural bushland and that it is these environmental qualities and the diverse townships that create a sense of place and continue to draw people to settle in the Municipality. The Rural Conservation Zone is noted as the predominant zone in the Nillumbik Green Wedge.

The Guiding Principles of the Nillumbik GWMP include: Collaboration; Sustainability; Leadership; Connectedness; Conserve and enhance; Embrace Change; Social equity; Celebrate local identity; Precautionary Principle; Appreciation and enjoyment.

There are also seven broad aims which build on the Guiding Principles. These are:

- ► Conserve and enhance the natural values, landscapes and cultural heritage of the Nillumbik Green Wedge.
- Increase local and wider community understanding and enjoyment of the special nature of the Nillumbik Green Wedge.
- Maintain strong, connected and diverse communities.
- Achieve a diverse economic base in the Nillumbik Green Wedge that helps local communities to thrive but does not impact negatively on natural and cultural values or on the valued character of towns, settlements and landscapes.
- Minimise bushfire risk to human life.
- Involve communities and other stakeholders in delivering the GWMP.
- Deliver the GWMP and future actions in keeping with the guiding principles.

A range of objectives and strategies are provided to manage land use and development in the Nillumbik Green Wedge.

The current Council Plan includes an action to review the GWMP.

4.3 NILLUMBIK PLANNING SCHEME

The Study Area is within the municipality of Nillumbik and as such the Nillumbik Planning Scheme (the Scheme) applies. Key aspects of the Scheme that are relevant to this Project are detailed below.

4.4 STATE PLANNING POLICY

In determining how land should be used and developed, Council must have regard to the State Planning Policy Framework (SPPF). The SPPF contains specific policies in relation to urban development, rural development, the environment, heritage and built form, housing, transport, infrastructure and economic development to ensure the orderly and consistent planning of Victoria. The following State Planning Policy is relevant to the Study Area:

- Clause 11.01-1 (Settlement networks)
- ► Clause 11.05-2 (Distinctive areas of state significance)
- Clause 11.06-4 (Place and Identity)
- Clause 11.06-6 (Sustainability and Resilience)
- Clause 11.06-7 (Green Wedges)



- Clause 12.01-1 (Protection of biodiversity)
- Clause 12.04-1 (Environmentally Sensitive Areas)
- Clause 12.04-2 (Landscapes)
- Clause 13.05 (Bushfire)
- Clause 14 (Agriculture)
- Clause 14.02 (Water)
- Clause 15 (Built Environment)
- Clause 16.02-1 (Rural residential development)

A summary of this policy content is included as an attachment.

The implications of this policy content for the Project and Study Area are:

- The Christmas Hills region's unique character (this is undefined in the Scheme) is a valued attribute and its protection is sought.
- Green wedges are to be protected from inappropriate development whilst supporting development which provides for environmental, economic and social benefits. New residential development is to be consolidated where services are available and green wedge values can be protected.
- Victoria's biodiversity is to be protected by minimising significant impacts from land use and development, particularly around conservation reserves. Planning is to assist in reestablishing links between isolated habitat remnants.
- Landscapes and significant open spaces that contribute to character, identity and sustainable environments are to be protected and improved.
- Community resilience to bushfire is to be strengthened by prioritising the protection of human life and ensuring the risk to existing residents, property and infrastructure will not be increased by land use and development. Bushfire protection is to be managed within property boundaries.
- Productive farmland of strategic significance is to be protected by discouraging the development of small isolated lots in the rural zones with single dwellings. Rather, existing small lots are encouraged to be consolidated. Rural residential development is not to encroach on high quality productive agricultural land or impact on waterways or other natural resources.
- Water quality is to be protected.
- Heritage is to be considered, protected and conserved.
- Rural residential development is only to be zoned where it is located close to existing towns and can be supplied with services and road access.

4.5 LOCAL PLANNING POLICY FRAMEWORK (LPPF)

The Local Planning Policy Framework within the Nillumbik Planning Scheme provides guidance for land use and development at a more localised level and includes policy for and commentary on coastal areas, including Christmas Hills. The following Local Planning Policy is relevant to the Study Area:

- Clause 21.04 (Vision Strategic Framework)
- Clause 22.04 (Siting and Design Policy for Buildings and Works in Non-Urban Areas)
- Clause 22.05 (Aboriginal Cultural Heritage Policy)



Clause 22.13 (Wildfire Management Policy)

A summary of this policy content is included as an attachment.

The implications of this policy content for the Project and Study Area are:

- Land use is to be guided by elements including: the designation of the Study Area for "conservation farming" coupled with a focus on nature and landscape conservation.
- A network of strategic habitat links are supported and indigenous vegetation is to be protected and enhanced.
- Fragmentation of land in rural areas is to be limited and consolidation and retention of large lots encouraged for the purpose of preserving conservation values or agricultural potential is encouraged where appropriate.
- ► The rural landscape character is to be protected and enhanced by conserving bushland and avoiding buildings on ridge lines and hilltops.
- In rural areas dwellings are to be sited to minimise landscape and habitat impacts, avoid erosion and minimise fire risk.

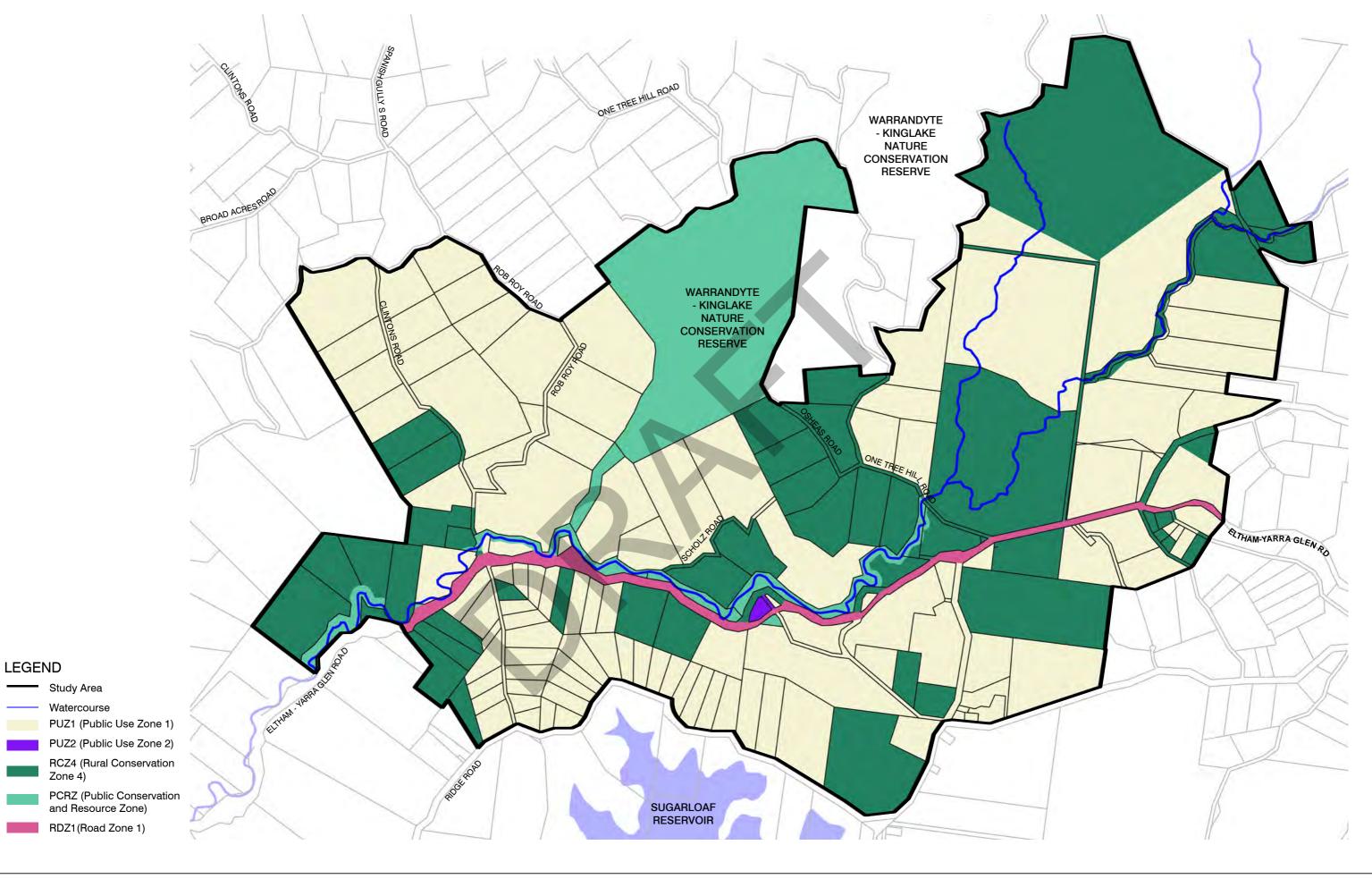
4.6 ZONES

The Study Area is located within a number of zones as shown in

. The following zones are located within the Study Area:

- ► Clause 35.06 Rural Conservation Zone Schedule 4 (RCZ4)
- ► Clause 36.01 Public Use Zone Schedule 1: Service and Utility (PUZ1)
- ► Clause 36.01 Public Use Zone Schedule 2: Education (PUZ2)
- ► Clause 36.03 Public Conservation and Resource Zone (PCRZ)
- Clause 36.04 Road Zone Category 1 (RDZ1)

Details of the zones are provided in Figure 16 Planning Zones.





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4.6.1 RURAL CONSERVATION ZONE - SCHEDULE 4 (RCZ4)

The purpose of Clause 35.06 Rural Conservation Zone (RCZ) is:

- To protect and enhance the natural environment and natural processes for their historic, archaeological and scientific interest, landscape, faunal habitat and cultural values.
- ► To encourage development and use of land which is consistent with sustainable land management and land capability practices, and which takes into account the conservation values and environmental sensitivity of the locality.
- ► To provide for agricultural use consistent with the conservation of environmental and landscape values of the area.

Schedule 4 to the Rural Conservation Zone applies within the Study Area. The conservation values of the RCZ4 are to conserve and permanently maintain the existing rural character by encouraging protection of the environmental and landscape values of the major environmental assets such as the Plenty Gorge, Kinglake National Park and the Yarra River.

The RCZ4 makes up a large proportion of the Study Area and mandates a minimum subdivision area of 40 hectares.

The use of land in the RCZ4 for dwellings is subject to planning permission and must meet the following requirements:

- Access to the dwelling must be provided via an all-weather road with dimensions adequate to accommodate emergency vehicles.
- ► The dwelling must be connected to a reticulated sewerage system or if not available, the waste water must be treated and retained on-site in accordance with the State Environment Protection Policy (Waters of Victoria) under the Environment Protection Act 1970.
- The dwelling must be connected to a reticulated potable water supply or have an alternative potable water supply with adequate storage for domestic use as well as for fire fighting purposes.
- The dwelling must be connected to a reticulated electricity supply or have an alternative energy source.

4.6.2 PUBLIC USE ZONE SCHEDULE 1 AND 2 (PUZ1 & PUZ2)

The purpose of Clause 36.01 Public Use Zone (PUZ) is:

- ▶ To recognise public land use for public utility and community services and facilities.
- To provide for associated uses that are consistent with the intent of the public land reservation or purpose.

PUZ1 (Service and Utility) dominates the Study Area and consists of land reserved for the future construction of the Watsons Creek Reservoir and thus owned by Melbourne Water.

PUZ2 (Education) applies to land at 1409 Eltham – Yarra Glen Road and consists of a small parcel of land reserved for education purposes and used for the Christmas Hills Primary School.

A permit is required to subdivide land. The Project seeks to remove this zone from land in the Study Area in preparation for sale.

4.6.3 PUBLIC CONSERVATION AND RESOURCE ZONE (PCRZ)

The purpose of Clause 36.03 Public Conservation and Resource Zone (PCRZ) is:



- ► To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values.
- ► To provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes.

The PCRZ is located in the northern section of the Study Area for the purpose of the Warrandyte-Kinglake Nature Conservation Reserve. The PCRZ also covers a small portion of Watsons Creek.

A permit is required to construct a building or carry out works and to subdivide land. The use of land for a dwelling is subject to the condition that it is conducted by or on behalf of a public land manager.

4.6.4 ROAD ZONE CATEGORY 1 (RDZ1)

The purpose of Clause 36.04 Road Zone Category 1 (RDZ1) is:

- To identify significant existing roads.
- ► To identify land which has been acquired for a significant proposed road.

The RDZ1 runs along the length of the Eltham – Yarra Glen Road which bisects the Study Area in an east-west direction.

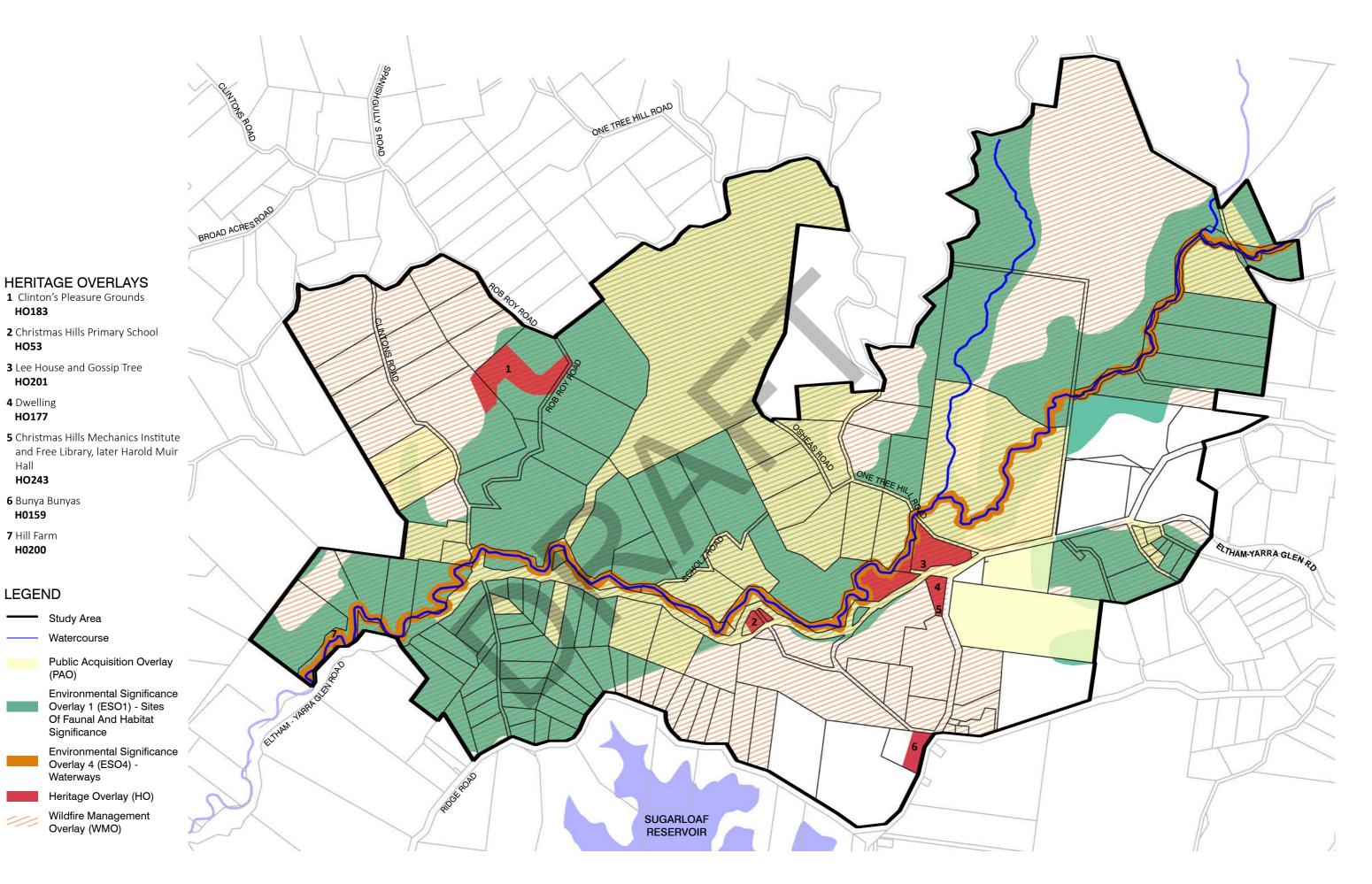
Subdivision and dwelling development on adjacent land to the RDZ1 will require consultation with VicRoads.

4.7 OVERLAYS

The Study Area is affected by a range of planning scheme overlays as shown in Figure 17. The following overlays affect the Study Area:

- ► Clause 42.01 Environmental Significance Overlay Schedule 1 (ESO1)
- Clause 42.01 Environmental Significance Overlay Schedule 4 (ESO4)
- Clause 43.01 Heritage Overlay (HO)
- Clause 45.01 Public Acquisition Overlay Schedule 2 (PAO2)
- Clause 44.06 Bushfire Management Overlay (BMO)

Details of the overlays are provided in Figure 17 Planning Overlays.





HO183

HO53

HO201 **4** Dwelling HO177

> Hall HO243

H0200

LEGEND

Study Area

(PAO)

Waterways

6 Bunya Bunyas H0159 **7** Hill Farm

DATE **24/04/2017**







4.7.1 ENVIRONMENTAL SIGNIFICANCE OVERLAY

Two schedules to Clause 42.01 Environmental Significance Overlay (ESO) apply within the Study Area, Schedule 1: Sites of Faunal and Habitat Significance and Schedule 4: Waterways.

The purpose of the ESO is:

- To identify areas where the development of land may be affected by environmental constraints.
- ▶ To ensure that development is compatible with identified environmental values.

Schedule 1 to the ESO (ESO1) specifically relates to Sites of Faunal and Habitat Significance, the Statement of Environmental Significant for the Schedule is as follows:

Much of the Shire is heavily vegetated and supports a diverse range of native fauna and flora. Some species are listed under the Flora and Fauna Guarantee Act. There are specific sites occurring on both private and public land that have been identified as being of particular importance within the Sites of Faunal and Habitat Significance in North East Melbourne (Beardsell 1997). Identification, protection and enhancement of the environmentally significant sites and strengthening of connecting habitat links will assist in the maintenance of biodiversity within the Shire and surrounding areas.

The environmental objectives of ESO1 are:

- To protect and enhance sites of faunal and habitat significance identified in (Beardsell 1997) Sites of Faunal and Habitat Significance in North East Melbourne.
- To protect and enhance regional and strategic habitat links identified in (Beardsell 1997) Sites of Faunal and Habitat Significance in North East Melbourne.

Schedule 1 to the ESO (ESO1) applies to much of the forested land within the Study Area.

The 1997 Sites of Faunal and Habitat Significance report includes the land at *Site 64:* Watsons Creek to Christmas Hills and notes that its natural heritage values are due to its landscape. It is listed as the most intact foothills streamway landscape in North East Melbourne and notes that its habitat connectivity role in the area is considerable.

Schedule 4 to the ESO (ESO4) relates to Waterways, the Statement of Environmental Significance for the Schedule is as follows:

The waterways within the Shire of Nillumbik are an integral element of the environmental systems that support biodiversity, and directly impact on freshwater environments. Waterways also often provide relatively undisturbed habitat corridors between larger areas of remnant vegetation. The many threatened flora and fauna species identified as existing in the Shire rely, to a great extent, on the catchment areas of watercourses in the Shire. These areas need to be protected from inappropriate development.

ESO4 includes the following environmental objectives:

- To maintain environmental flows and improve the quality of water within watercourses.
- ▶ To maintain the capacity of watercourses to carry natural flows.
- ► To prevent erosion of banks, stream beds and adjoining land and the siltation of watercourses, drains and other features.
- To protect and enhance the diversity, integrity and health of local flora and fauna habitats within and along watercourses.
- To ensure that development (including fill) does not occur on land liable to flooding.



- To ensure that subdivision and development is compatible with the environmental values of watercourses.
- To provide for the retention, restoration and revegetation of local native species.
- ► To protect natural landforms and geological features.
- ► To ensure that the scenic qualities and visual character of waterway corridors are not compromised by the inappropriate siting of buildings, the placement of fill or lack of screening vegetation.
- ► To restore those sections of waterway corridors which have been previously modified to create artificial beds, banks and landforms.

The ESO4 runs along the alignment of Watsons Creek through the Study Area.

Generally under an ESO a permit is required to: construct a building or construct or carry out works; subdivide; construct a fence; construction bicycle pathways and trails; and remove, destroy or lop vegetation. The individual schedules provide some exemptions to these permit requirements. The ESO controls indicate vegetation within the Study Area may be of environmental significance from a habitat perspective. Retention and enhancement of significant vegetation, particularly the Study Area's heavily forested areas may be necessary.

4.7.2 HERITAGE OVERLAY

Clause 43.01 Heritage Overlay applies to a number of sites within the Study Area. The purpose of the Heritage Overlay (HO) is:

- ▶ To conserve and enhance heritage places of natural or cultural significance.
- To conserve and enhance those elements which contribute to the significance of heritage places.

The Heritage Overlays applying in the Study Area are detailed in Table 10: Heritage.

Table 10: Heritage Overlay Schedule Controls

Heritage Overlay	Heritage Site	Controls	Precinct
HO53	Christmas Hills Primary School 1362 & residence 1409 Eltham Yarra Glen Road, Christmas Hills	Tree controls apply – English Oak and Manna Gum. Prohibited uses may be permitted.	7
HO159	Bunya bunyas (2) & Monterey cypress 695-697 Ridge Road, Christmas Hills	Tree controls apply. Prohibited uses may be permitted.	7
HO177	Dwelling 1524 Eltham Yarra Glen Road, Christmas Hills	No schedule controls apply	7
HO183	Clinton's Pleasure Grounds, later Rob Roy Hill Climb	No schedule controls apply	2



Heritage Overlay	Heritage Site	Controls	Precinct
	375 and 385 Clintons Road, Smiths Gully		
HO200	Hill, later Birch farm complex 945 Eltham Yarra Glen Road, Watsons Creek	No schedule controls apply.	1
HO201	Lee house and Gossip Tree 1533 Eltham Yarra Glen Road, Christmas Hills	Tree controls apply	7
HO243	Christmas Hills Mechanics Institute and Free Library, later Harold Muir Hall 787 Ridge Road, Christmas Hills	No schedule controls apply	7

4.7.3 PUBLIC ACQUSITION OVERLAY - SCHEDULE 2

Clause 45.01 Public Acquisition Overlay – Schedule 2 (PAO2) was applied to both public and privately owned land within the Study Area to reserve the land for the future Watsons Creek Reservoir with the intent that the land would be acquired by Melbourne Water. The key purposes of a PAO include:

- ► To identify land which is proposed to be acquired by a Minister, public authority or municipal council.
- To reserve land for a public purpose and to ensure that changes to the use or development of the land do not prejudice the purpose for which the land is to be acquired.
- ► To designate a Minister, public authority or municipal council as an acquiring authority for land reserved for a public purpose.

The intention of this Project is to remove the PAO2 from the Study Area as the land is no longer required for the proposed Watsons Creek Reservoir.

4.7.4 BUSHFIRE MANAGEMENT OVERLAY (BMO)

Clause 44.06 A BMO affects the majority of the Study Area in recognition of its bushfire risk. The purpose of the BMO includes:

- ► To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire.
- ► To identify areas where the bushfire hazard warrants bushfire protection measures to be implemented.
- ► To ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level.

It is understood that the entire Study Area is proposed to be included in the BMO when new mapping is gazetted in 2017.



A permit is required for development and subdivision within the BMO. Consideration of bushfire risk is a key requirement in planning for bushfire.

4.8 PARTICULAR PROVISIONS

A number of particular provisions apply to future land use and development within the Study Area. These include the following which are detailed below:

- Clause 52.17 Native Vegetation
- Clause 52.29 Land adjacent to a Road Zone, Category 1 or Public Acquisition Overlay for a road
- Clause 52.47 Planning for bushfire
- Clause 52.48 Bushfire Protection
- Clause 57 Green Wedge Land

4.8.1 CLAUSE 52.17 NATIVE VEGEATION

Clause 52.17 relates to native vegetation, the purpose of the particular provision is:

- ► To ensure permitted clearing of native vegetation results in no net loss in the contribution made by native vegetation to Victoria's biodiversity. This is achieved through the following approach:
 - Avoid the removal of native vegetation that makes a significant contribution to Victoria's biodiversity.
 - Minimise impacts on Victoria's biodiversity from the removal of native vegetation.
 - Where native vegetation is permitted to be removed, ensure that an offset is
 provided in a manner that makes a contribution to Victoria's biodiversity that is
 equivalent to the contribution made by the native vegetation to be removed.
- ▶ To manage native vegetation to minimise land and water degradation.
- To manage native vegetation near buildings to reduce the threat to life and property from bushfire.

Permits are required for the removal of Native Vegetation, defined in the Nillumbik Planning Scheme (Clause 72) as plants that are indigenous to Victoria, including trees, shrubs, herbs, and grasses.

Applications are assessed under low, moderate or high assessment pathways depending on the location and extent of the vegetation. The three location risks, A, B and C, apply within various parts of the Study Area.

4.8.2 CLAUSE 52.29 LAND ADJACENT TO A ROAD ZONE

Eltham-Yarra Glen Road is an arterial road under the management of VicRoads and within the Road Zone Category 1. Any alterations to access from this road will require planning approval under Clause 52.29. The purpose of this Clause is:

- ▶ To ensure appropriate access to identified roads.
- ▶ To ensure appropriate subdivision of land adjacent to identified roads.

4.8.3 CLAUSE 52.47 PLANNING FOR BUSHFIRE

Clause 52.47 Planning for Bushfire seeks:



- ► To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire.
- ► To ensure that the location, design and construction of development appropriately responds to the bushfire hazard.
- To ensure development is only permitted where the risk to life, property and community infrastructure from bushfire can be reduced to an acceptable level.
- ► To specify location, design and construction measures for a single dwelling that reduces the bushfire risk to life and property to an acceptable level.

It outlines objectives, approved measures, alternative measures and decision guidelines used in planning for bushfire. Further details on how the Study Area is impacted by Clause 52.47 are provided in the Technical Assessment – Bushfire and summarised in Section 0.

4.8.4 CLAUSE 52.48 BUSHFIRE PROTECTION

Clause 52.48 Bushfire Protection: Exemptions identifies a number of exemptions to some requirements in the Nillumbik Planning Scheme with a view to enhance protection from bushfire. Further details on how the Study Area is impacted by Clause 52.48 are provided in the Technical Assessment – Bushfire and summarised in Section 0.

4.8.5 CLAUSE 57 GREEN WEDGE LAND

Clause 57 Metropolitan Green Wedge Land provides Core Planning Provisions (CPP) for land outside the urban growth boundary, including for land in the Rural Conservation Zone (RCZ). Its objectives include:

- To protect metropolitan green wedge land from uses and development that would diminish its agricultural, environmental, cultural heritage, conservation, landscape natural resource or recreation values.
- ▶ To protect productive agricultural land from incompatible uses and development.
- To ensure that the scale of use is compatible with the non-urban character of metropolitan green wedge land.
- ▶ To encourage the location of urban activities in urban areas.
- ▶ To provide deeming provisions for metropolitan green wedge land.

Of particular note, Clause 57 specifies conditions for land uses and prohibits the creation of a lot that is smaller than that specified as the minimum area for the zone.

4.9 PLANNING PRACTICE NOTES

The State Government prepares practice notes to guide the implementation and development of Planning Schemes. Of particular relevance to this Project are:

- Practice Note 37 Rural Residential Development.
- Practice Note 42 Applying the Rural Zones.
- Practice Note 62 Green Wedge Planning Provisions.
- ▶ Practice Note 64 Local Planning for Bushfire Protection.
- Practice Note 65 Bushfire Applications.

These are discussed below.



4.9.1 RURAL RESIDENTIAL DEVELOPMENT – PRACTICE NOTE 37

Practice Note 37 (PN 37) provides guidance for rural residential land use and development. The Practice Note defines "rural residential development" as:

...land in a rural setting, used and developed for dwellings that are not primarily associated with agriculture. Some agriculture may take place on the land however it will be ancillary to the use for a dwelling. It is likely to be carried on for 'lifestyle' reasons and is unlikely to provide a significant source of household income. Rural residential land is typically also used for non-agricultural home occupations or for large gardens. These lots are larger than typical residential lots, but are usually too small for agricultural use.

Due to its primarily residential function, the Practice Note recognises that rural residential development requires access to most of the normal services and infrastructure provided in urban settlements, and typically generates urban residential amenity expectations. This has implications for agricultural activities and for the provision of services and infrastructure.

PN 37 specifically refers to: the Low Density Residential Zone (LDRZ); the Rural Living Zone (RLZ); and the Green Wedge A Zone.

In this regard, the Practice Note requires any new rural living proposal to address the following key issues:

- Land use conflicts between agricultural activities and the amenity expectations of rural residential dwellers should be minimised.
- Significant impacts to primary production or to the environmental or cultural values of a rural area should be avoided.
- Finite and valuable natural resources present on the land should not be lost.
- ► The local environment and landscape should have the capacity to absorb more intensive use and development without significant or irreversible harm to its values or to the new use and development.
- Demand for costly or inefficient community services or infrastructure should not be generated.

These considerations give rise to the following broad questions which the Practice Note directs to be answered in sequence:

- Strategy: Does rural residential development align with the overall strategic planning of the municipality?
- Housing need: How much rural residential development is required to provide appropriate housing diversity and choice to meet housing needs?
- Location: Where should new rural residential development take place?

It is noted that the Practice Note does not refer to rural residential development in the Rural Conservation Zone (RCZ) which currently applies to land in the Study Area. The considerations however could be relevant to the rezoning of the surplus public land in the area.

4.9.2 APPLYING THE RURAL ZONES – PRACTICE NOTE 42

Planning Practice Note 42 (PN 42) recognises the role of, and need for, sound strategic planning in rural areas given the changing nature of farming, and growing number of people seeking a rural lifestyle.

PN 42 identifies that farming is becoming more diverse, industrialised, intensifying, aggregating and undergoing social change whilst similarly more people are seeking to live in



rural areas for a range of social, environmental and economic reasons. This is creating increased competition for land, renewed interest in part-time small-scale farming and lifestyle living. This changing rural landscape requires strategic thinking regarding farming areas and rural settlement patterns to promote sustainable farming and to avoid potential land use conflicts.

PN 42 outlines the six key rural zones as follows:

- ► Farming Zone a zone that is strongly focussed on protecting and promoting farming and agriculture.
- Rural Activity Zone a mixed use rural zone that caters for farming and other compatible land uses
- Rural Conservation Zone a conservation zone that caters for rural areas with special environmental characteristics.
- Green Wedge Zone a zone that provides for all agricultural uses and limits non-rural uses to those that either support agriculture or tourism, or that are essential for urban development but cannot locate in urban areas for amenity or other reasons.
- ► Green Wedge A Zone a zone that provides for all agricultural uses and limits non-rural uses to those that support agriculture, tourism, schools, major infrastructure and rural living.
- ▶ Rural Living Zone a zone that caters for residential use in a rural setting.

All of the rural zones provide for the use of land for agriculture; however while it is implicit in the purpose of the Farming Zone, Rural Activity Zone, Green Wedge Zone and Green Wedge A Zone that farming will be a primary land use activity, in the Rural Conservation Zone and Rural Living Zone, farming is subordinate to other land uses or the environmental values of the land. Choice of zone will be important in determining the future of the Study Area.

4.9.3 PRACTICE NOTE 62 - GREEN WEDGE PLANNING PROVISIONS

Practice Note 62 (PN62) outlines the planning provisions that apply to green wedge areas. This includes the Core Planning Provisions (the CPP), Clause 57, which set out prohibitions and restrictions on certain uses and subdivision of land in the green wedge. PN62 identifies that small lot subdivisions under the minimum subdivision size in the applicable zone are prohibited.

The CPP essentially apply an additional requirement affecting subdivision and how land may be used in the green wedge. PN62 notes that a Responsible Authority cannot issue a permit for a use or subdivision that is prohibited by the CPP, even though it may be allowed in the zone or an overlay. The zones which apply in Green Wedge areas are the Green Wedge Zone, Green Wedge A Zone and Rural Conservation Zone (RCZ).

PN62 also notes the following in relation to the RCZ:

The RCZ should be applied to conserve, maintain and enhance the environment. The zone recognises the opportunity for agricultural production while seeking to also protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values. The zone could also be applied to rural areas degraded by environmental factors such as salinity or erosion. Restrictions apply to development and the range of discretionary uses is limited to those that support farming, agriculture and tourism. A schedule to the zone requires specific environmental values of the land to be listed.

Consideration of the Study Area's location in the Green Wedge will limit the degree of land use change and development that can occur.



4.9.4 PRACTICE NOTE 64 - LOCAL PLANNING FOR BUSHFIRE PROTECTION

Practice Note 64 (PN64) provides guidance about local planning for bushfire protection to assist Councils in tailoring their Local Planning Policy Framework in response to bushfire matters.

PN64 confirms bushfire hazard is determined by vegetation, topography and weather. It requires the consideration of bushfire in strategic planning including planning scheme amendments.

The key strategy for enhancing resilience to bushfire is identified as directing development to the lowest risk locations and avoiding future development in extreme risk locations. In identifying the risks from bushfire PN64 directs consideration of bushfire behaviour, features of the location that affect the level of risk and risks arising from the proposal itself.

The bushfire risk in the Study Area is assessed in the Technical Assessment – Bushfire and outlined in Section 6.4.

4.9.5 PRACTICE NOTE 65 - BUSHFIRE APPLICATIONS

Practice Note 65 (PN65) provides advice on assessing applications under Clause 44.06 Bushfire Management Overlay. It outlines three application pathways relating to: single dwellings in existing settlements; all other buildings and works and subdivision and requires the assessment of the bushfire hazard and the identification of bushfire protection measures.

The requirements of PN65 have been considered in the Technical Assessment – Bushfire and possible responses outlined in Section 6.4.





OTHER CONSIDERATIONS

5.1 MELBOURNE WATER DOCUMENTS

Melbourne Water has provided a number of documents to Spiire as background information for the Project. The documents are:

- Information in relation to the transfer of land for the Warrandyte Kinglake Nature Conservation Reserve (WKNCR):
 - Land Conservation Council (LCC) Recommendation 1994.
 - VEAC Metropolitan Melbourne Investigation Final Report 2011 (Section 7.2.11).
- Documents in relation to the Local Structure Plan prepared for the sale of Melbourne Water land outside the 300m buffer required for the proposed reservoir in 2000.
 - Christmas Hills Local Structure Plan, Planned FX 2001.
 - Living in Christmas Hills Brochure.
- Documents in relation to vegetation management.
 - Christmas Hills Flora and Fauna Assessment and Land Management Recommendations, Australian Ecosystems 2012 (Flora and Fauna Assessment).
 - Offset Planting Christmas Hills
 - Winneke Offset Management Plan
 - Sugarloaf Bushfire Risk Management Plan

These documents provide background information which underpins the Project. Of particular relevance to this Project is the following:

- The LCC in 1994 recommended: if the Upper Watsons Creek reservoir does not proceed, or if Melbourne Water decides to dispose of its land holdings, the Melbourne Water land within the link be transferred to and managed by the Department of Conservation and Natural Resources on a basis to be agreed between the two authorities (Recommendation C48). This was based on an assessment that the Watsons Creek alignment is part of the most suitable site for the provision of a habitat link. The Plan accompanying Recommendation C48 is at Figure 18 Recommendation C48 Plan (LCC).
- The 2001 Christmas Hills Local Structure Plan (LSP) provided for the re-subdivision and sale of land not required for a buffer around the proposed Watsons Creek Reservoir. The LSP restructured the existing 44 titles into 38 titles which were designed to be utilised by a dwelling. Indicative house sites were provided based on topography and road access criteria.
- A 2011 VEAC Report on Metropolitan Melbourne include recommendations that Government allocate resources: a) to implement previously accepted LCC recommendations on Crown Land through appropriate reservation.
- An Offset Management Plan is currently in place for three parcels along Ridge Road which are to be secured to offset the unavoidable loss of native vegetation associated with the Winneke Treatment Plant upgrade works. This offset site is located on land designated for transfer to the Crown for the WKNCR.
- ► The Flora and Fauna Assessment identified six land management zones in the Study Area in 2012 as:
 - Management Zone 1: Tracts of relatively intact indigenous vegetation with high condition vegetation.



- Management Zone 2: Mosaic of fragmented medium-to high quality vegetation and comprising rare and threatened flora species.
- Management Zone 3: Moderate to large sized areas of substantially modified vegetation often comprising extensive weeds.
- Management Zone 4: Offset planting site of low conservation value.
- Management Zone 5: Cleared agricultural land with less than 25 precent indigenous vegetation cover and relatively low cover of High Threat weeds.
- Management Zone 6: Cleared agricultural land with a high cover of Moderately High to Very High threat weeds.

A copy of the Management Zones plan is provided at Figure 19 Flora and Fauna Management Zones (Figure 11, Australian Ecosystems).

The Project will implement the recommendations of the LCC as outlined above by proposing to transfer environmentally significant land to the Crown for inclusion in the Warrandyte-Kinglake Nature Conservation Reserve (WKNCR).



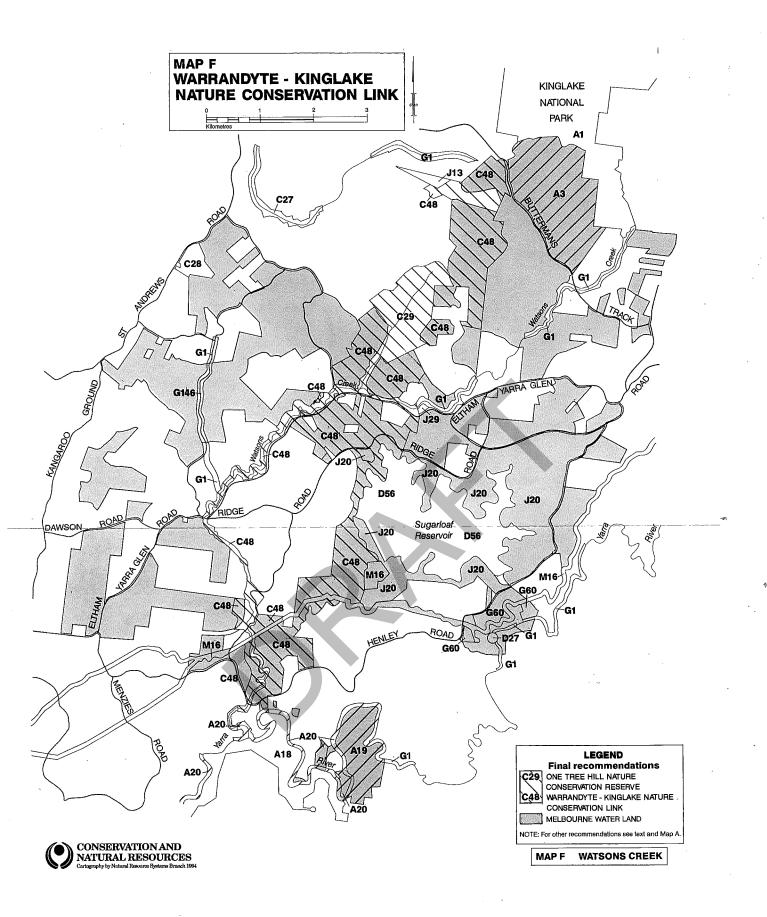






Figure 11 Distribution of Land Management Zones

Project: Christmas Hills Flora and Fauna A ssessment and Land Management Recommendations

Map prepared by Australian Ecosystems March 2012

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0.5 kilometres Projection: Universal Transverse Mercator Datum: Geocentric Datum of Australia Figure 19



5.2 STRATEGIC DOCUMENTS

Other strategic documents which provide an insight into the Study Area and future planning include:

- Christmas Hills Community Environmental Recovery Action Plan (CERAP) 2012, which notes the following:
 - Actions to care for and manage the environmental and agricultural values of Christmas Hills. It identifies land in three zones: conservation focus (Zone A), agriculture focus (Zone B) and restoration focus (Zone C).
 - The majority of the properties in the CERAP area (approximately 76%) are bush blocks covering 58% of the Christmas Hills catchment (properties in Zone A). Another 17% of the properties are in Zone B, covering 28% of the catchment. The remaining 7% of properties are in Zone C covering 14% of the catchment. Half of the lots in the CERAP area are less than 4 hectares in size.
 - The hilly landscape and soil type of the Christmas Hills catchment facilitates a significant erosion hazard.
 - High to moderate quality agricultural land is located centrally in the Study Area, to the south of Buttermans Track, typically consistent with cleared land locations.
- Nillumbik Council Plan 2017-2021, which includes the following goals:
 - Safe and healthy environments: healthy and safe communities enjoy living in our iconic environments.
 - A prosperous economy: a strong local economy that supports business growth, jobs and community wealth.

These strategic documents confirm parts of the Study Area are of value from a conservation perspective and other parts, predominantly cleared land, are of agricultural value.

5.3 CONSULTATION

5.3.1 COUNCIL OFFICER DISCUSSIONS

Spiire and Melbourne Water have held initial discussions with Nillumbik Council planning and environment officers regarding the Project and future planning for the Watsons Creek area. Council Officers have provided correspondence requesting further involvement in the Project and for a full due diligence investigation to be undertaken as a first phase. This Background Report complies with Council's requirement.

Council Officers indicated that they see the Project as an excellent opportunity to achieve high quality strategic outcomes based on a thorough analysis and constraints mapping. Council also noted a willingness to explore a collective and innovative approach to subdivision and rezoning. They also provided the following comments:

- Council see many benefits from changing the pattern of lots in the area, potentially consolidating lots in some areas and creating smaller lots along Eltham-Yarra Glen Road.
- While subject to a thorough site context analysis, potentially lower environmental values and bushfire risk around Eltham-Yarra Glen Road and Ridge Road, Christmas Hills could provide opportunity to effectively create a new township. This would necessitate rezoning the land to a more flexible zone than Rural Conservation Zone, Schedule 4 (RCZ4), which dictates a minimum 40 hectare lot size. The Rural Living Zone would be worth considering. It has a minimum subdivision size of 2ha (unless otherwise specified in the schedule) and allows land to be used for a dwelling as of right. Such a rezoning would require Ministerial approval and ratification by Parliament consistent with section 46AG of



the P&E Act. Employing a collective approach to landscape management across these new lots would also provide much needed certainty for Council and future lot owners. Bushfire and vegetation assessment at a local, multi-lot level can be detailed, accurate and therefore result in minimal risk to the public.

▶ To offset this significant change, larger properties with higher environmental values or considerable site constraints should be retained or consolidated and rezoned to the surrounding incumbent zone RCZ4. An integrated approach to organising these lots would go a long way to garner public and political support. Council is keen to avoid a situation where the finalised lots fail to provide certainty for owners and Council.

The Project will consider Council Officer's comments regarding the choice of zone for the Study Area as well as the need to balance landscape management with environmental features and bushfire risk.

5.3.2 CASE LAW

Council Officers have also indicated a number of surplus Watsons Creek Reservoir land parcels previously disposed of by Melbourne Water have still not realised development due to being undersized and subject to poor constraints planning prior to rezoning.

Council Officers indicated:

Applications on these sites have at times become complicated and very expensive for the applicants to obtain planning permits. As planning schemes are not static documents, changes in planning policy have raised the bar in terms of the necessary planning assessment. A rigorous assessment process at a macro-level should avoid these mistakes. Recent case law provides commentary around developing substandard sized rural lots for residential purposes. These decisions have resulted in VCAT refusal due to the zone objectives, as well as other competing policy. Many of these decisions also provide commentary around bushfire risk and vegetation impacts.

The recent decisions are:

- ► Theme Homes Pty Ltd v Nillumbik SC & Ors [2012] VCAT 1300 655 Cottlesbridge-Strathewen Road, Cottles Bridge
- Beaton v Nillumbik SC [2013] VCAT 2130 955 Buttermans Track, Christmas Hills
- ▶ Weingartner v Nillumbik SC [2016] VCAT 1359— 145 Overbank Road, Eltham
- Stickland v Nillumbik SC & Ors [2011] VCAT 1284 170-190 Watery Gully Road, Kangaroo Ground

The overall findings of these key decisions are:

- Dwellings are not generally encouraged in Rural Conservation Zone locations as they are considered to not be consistent with the policy framework.
- Development of dwellings on small lots is considered inappropriate and inconsistent with policy and zone controls as well as the location within the green wedge.
- ► The introduction of a dwelling into an area that will expose people to a high risk from bushfires and where that risk cannot be reduced to a satisfactory level is not supported.
- The associated loss of vegetation, with dwelling development, may significantly alter the landscape character of the area and is not supported.
- The tribunal has not been persuaded that there is a net community benefit in granting a permit for a dwelling on the land where it is under the minimum subdivision size.



To ensure the future development of lots can be supported, the Project will carry out a detailed assessment of environmental and infrastructure constraints to minimise the issues identified in the case law above.

5.3.3 FUTURE CONSULTATION

Spiire at this point has not undertaken any additional consultation than that outlined with Council, being a meeting and correspondence. Future stages of the Project propose extensive consultation with Departments (DELWP in particular), Council, agencies and authorities, land owners and tenants in the area as well as the wider community.





6. TECHNICAL ASSESSMENTS

To inform the Project, Spiire has engaged technical experts, internally and externally, to provide advice on the Study Area's features from a number of perspectives, including:

- Heritage, including Cultural Heritage; Archaeology at Tardis
- Landscape Values and Visual Amenity; Spiire Landscape Architects
- Servicing Infrastructure; Spiire Engineers
- Bushfire; Terramatrix
- Land Contamination; WSP
- Ecology; Ecology Australia

A summary of the findings of each Technical Assessment is provided in this Report. Each Technical Assessment is provided as an appendix.

6.1 HERITAGE

Archaeology at Tardis has undertaken a Cultural Heritage Desktop Assessment (Heritage Report) to outline the Aboriginal and historical heritage of the Study Area.

The Heritage Report includes a detailed history of the Study Area including its environmental, Aboriginal and historical background. This includes the following:

- Prior to European settlement the strategic economic value of the Study Area would have been moderate to high given the presence of five EVCs and three main waterways, therefore intensive resources utilisation would have occurred close to permanent water sources such as Watsons Creek. Thus, the flora and fauna in the Study Area would have been sufficient to support significant past Aboriginal community populations.
- The natural values of the Study Area including fauna, flora, topography and local stone sources would have attracted Aboriginal groups to utilise or stay. The highest strategic values are likely to be associated with the Watsons Creek.
- ▶ The Study Area is located within the Wurundjeri Willam clan.
- Exploration and settlement in the Christmas Hills region began in the 1830s as a means to find additional pastoral land.
- Squatters began to illegally occupy available grazing land and undertook improvements including the clearing of land and draining of swampier areas for improved pasture.
- Four pastoral runs covered parts of the Study Area between the 1840s and 1870s, the Allwood/Caledonia/Diamond Creek run; the Christmas Hills run (including home station with woolshed and homestead structures); an unnamed run; and the Glenard/Smith's run.
- Leased runs were surveyed and made available for sale in 1865. Land in the Parish of Sutton was mostly purchased by 1880 whilst land in the Parish of Queenstown were retained under Crown lease.
- Gold mining in the area meant of number of gold miners took up leases and land improvements were limited so they couldn't impede gold mining activity.
- Land use remained relatively unchanged in the nineteenth century with many of the farms focusing on combined grazing, dairying and cropping.
- A track was established in the 1850s through the area, along the current Ridge Road alignment, which led to the beginnings of the Christmas Hills township with the opening of an Hotel. The township continued to expand, however it was not officially gazetted. The school was constructed in 1880 and the Mechanics Institute in 1894.



- ► The region became a centre for gold mining in the second half of the nineteenth century, known as the Caledonia Goldfields. Alluvial mining along the creeks was followed by quartz reef mining in the surrounding hills which lasted till the early 1920s, including at Swedish Reef, located in the north of the Study Area.
- ▶ Given the proximity of Yarra Glen and Eltham, Christmas Hills' population remained low during the twentieth century and no defined centre existed. The 1930s saw the establishment of the Rob Roy Hill Climb.
- Sugarloaf water storage reservoir was created in the 1970s to the south of the Study Area.
- Much of the Study Area has changed little since aerial photography in 1958 with limited additional clearing identified.

From an Aboriginal heritage perspective the Study Area includes areas of cultural heritage sensitivity including: land within the 200 metres of named waterways (Watsons Creek, Happy Valley Creek and Five Mile Creek); registered cultural heritage places; and parks.

Eleven previously registered Aboriginal heritage places are located within the Study Area. These are predominantly artefact scatters with two places being scarred trees. All recorded sites date to the late Holocene period (the last 2000 years). The artefacts are predominantly flakes with some tools, cores, axes and grindstones. The location of the Aboriginal Heritage places indicates a moderate relationship between the places and proximity to waterways.

The Heritage Report provides a model for Aboriginal sites in the Study Area as follows:

- Low density surface and subsurface artefact scatters, and culturally scarred trees are the most likely site types for the activity area.
- ► The most likely location for Aboriginal cultural heritage is undisturbed land within 200m of Watsons Creek, Happy Valley Creek and Five Mile Creek, and along hills, ridgelines and spurs.
- ► The potential for Aboriginal cultural heritage to be present within the cultural sensitive areas is moderate. Whilst outside these areas, the potential for Aboriginal cultural heritage material is low.
- Aboriginal archaeological values can only be clearly defined by undertaking a targeted survey (standard assessment) and subsurface testing (complex assessment) of the Study Area due to the extremely low ground surface visibility.
- Although unlikely, the potential for Aboriginal burials to occur in sandy environments must be considered.
- Under the Aboriginal Heritage Act 2006, a mandatory Cultural Heritage Management Plan will not be required as part of the rezoning of land in the Study Area.

From an historical heritage perspective the Study Area was dominated by pastoral activities. The following information is provided:

- ► The Christmas Hills run home station was located within the eastern section of the Study Area on Watsons Creek. A moderate potential for remains of the Christmas Hills home station to be present along the eastern part of Watsons Creek.
- ▶ Gold mining occurred from the 1850s through to the middle of the 20th Century and included both alluvial gold mining along the main creeks and quartz mining in the north. There is a moderate potential for sites associated with the gold mining within the Study Area. This includes one previously registered historic site (Victorian Heritage Inventory H7922-0266) located at 290 One Tree Hill Road, Smiths Gully. The site is the former One Tree Hill Quartz Workings and is in land proposed for inclusion in the WKNCR (Precinct

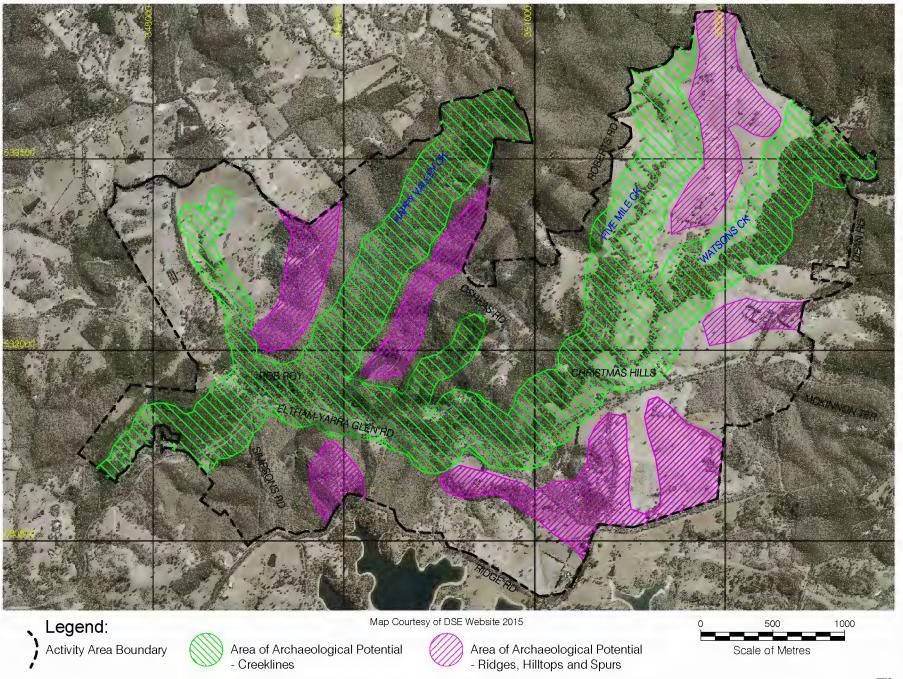


- 3). Any works which may impact the fabric of this historic site requires a Consent from Heritage Victoria.
- Nillumbik Planning Scheme Heritage Overlays apply to seven sites within the Study Area (refer to Section 4.7.2). A planning permit is required from Nillumbik Shire Council for any works which may impact the heritage significance of the site.
- ► There is low potential for additional sites containing portable artefacts across the entire Study Area.
- ▶ No areas of historic archaeological potential were located during site visits.
- Should any historic archaeological site in the Study Area be disturbed, an application to disturb such sites is required to Heritage Victoria.

Areas of Aboriginal Cultural Heritage Potential are shown in Figure 20 Aboriginal Cultural Heritage Potential (Map 8, Tardis).

Areas of Historical Archaeology Potential are shown in Figure 21 Historical Archaeology Potential (Map 9, Tardis).

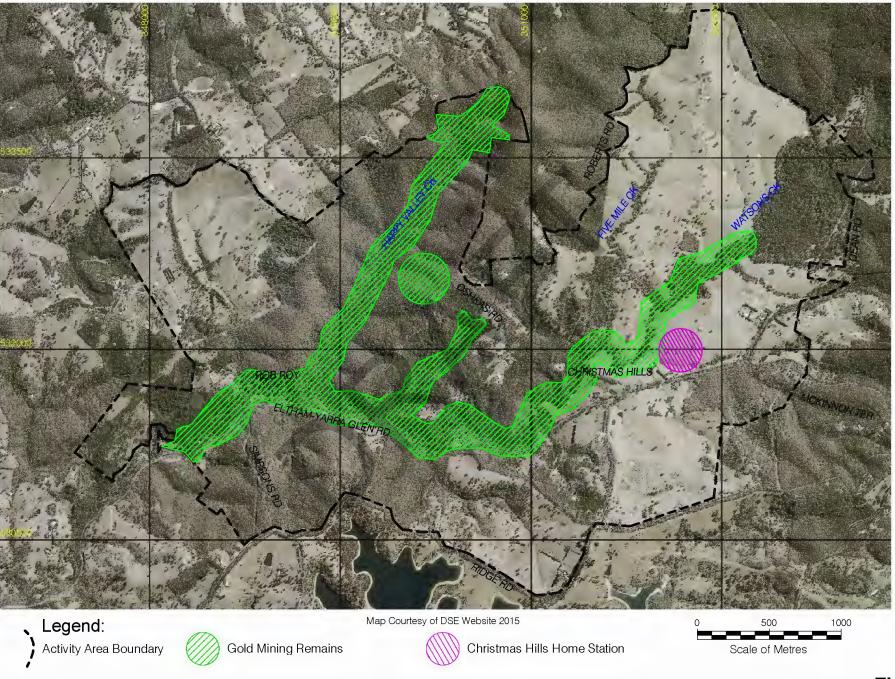




Map 8 Areas of Aboriginal Cultural Heritage Potential

Figure 20

GDA Zone 55



Map 9 Areas of Historical Archaeology Potential

Archaeology At Tardis heritage advisors

GDA

Zone 55



6.2 LANDSCAPE

Spiire has undertaken an assessment of the Study Area's visual amenity and landscape values in the context that these features can have the ability to positively influent the lifestyle and environment of existing and future residents. This baseline analysis of the Study Area's characteristics will assist in informing future options for subdivision and development.

The Landscape report identified landscape and visual features for each identified Precinct and provided considerations for future protection, development and enhancement of the landscape and visual resource. The landscape and visual features of particular note include:

Precinct 1:

- Landscape: Undulating to steep slopes that are partially vegetated with some areas open pasture land.
- Views: Nature views are unique to the local area within the vegetated slopes and riparian zones of Watsons Creek. Localised views are generally enclosed and filtered by the existing topography and vegetation.

Precinct 2:

- Landscape: Undulating to steep cleared agricultural grazing land, scattered trees, low scattered scrub and tussocks.
- Views: Characterised by, long open views over the undulating agricultural landscape north east and south west. Views are varied depending upon the topography, with distant topographical features forming a backdrop.

Precinct 3:

- Landscape: Natural to semi-natural landscape with distinctive landscape elements that contribute to high degrees of amenity and tranquillity.
- Views: Unique to the regional and local area and are characterised as enclosed, short views restricted by the undulating topography and vegetation cover. Long views may be afforded from topographical high points to the north-west from One Tree Hill.

Precinct 4:

- Landscape: Mix of semi-natural landscape. Steep to undulating topography to the
 west, becoming gentler in the east. Dense forest exists generally across the
 precinct, with the remaining cleared and or partially cleared landscape composed
 of agricultural small-holdings, 'bush blocks' patchwork with scattered residences
 associated outhouses, landscaping, and access routes. Cleared agricultural land,
 tree lined creek lines and residences and associated farming infrastructure
 dominates the east of the precinct.
- Views: Unique to the local area and are characterised by enclosed, short views restricted by the undulating topography and vegetation cover to the west. Longer views may be afforded where bush has been cleared for residential and agricultural land use to the east.

Precinct 5:

- Landscape: Undulating cleared agricultural grazing country with scattered trees and some small pockets of bushland. Excepting the south-east corner, Precinct 5 is surrounded by dense bushland.
- Views: Unique to the regional and local area and are characterised by expansive, open views across the landscape with distant, yet prominent, topographical features of the WKNCR and Kinglake National Park to the north west forming a backdrop. The weaving creek lines and gullies cutting through the



landscape also form part of this view. Long views may be afforded from topographical high points. Visually, the site is exposed being some of the only cleared agricultural land in the immediate local area, and as such, allows for a unique scenic and viewing experience.

Precinct 6:

- Landscape: Undulating cleared agricultural grazing country with vegetation along fence lines, local roadsides and gullies in the south. Dense native bushland occurs in the north.
- Views: The north of the site is comprised of enclosed, short views restricted by the undulating topography and vegetation cover. Open views may be afforded within cleared areas from topographical high points in the south of the precinct.

Precinct 7:

- Landscape: Undulating to gently undulating cleared agricultural grazing land, with pockets of native vegetation (central and eastern) and scattered trees (gullies, roadsides and fence lines), low scattered scrub and tussocks. Introduced plant species are also found scattered throughout. Due to clearing and agricultural pursuits, the landscape is in part degraded with less distinctive landscape elements in comparison to the rest of the Study Area.
- Views: The majority of the precinct is characterised by filtered to open views over an agricultural landscape. Enclosed, short views are available in vegetated, undulating areas. The condition of the landscape elements, in part, detract from the overall scenic amenity of this locale in comparison to other precincts within the Study Area.

The Study Area was found to have the potential to continue to significantly contribute to the landscape character and visual amenity and the uniqueness of Christmas Hills and its environs. The Landscape report noted the following future considerations to ensure this contribution:

- Consideration for environmental and landscape significance overlays.
- Interface between properties fronting onto conservation reserves and landscape features.
- Protection of key views and vistas.
- Provision of access (physical and visual) and linkages throughout the study area.
- Guidance for appropriate development and management that protects and reinforces the natural, rural and scenic amenity and landscape character values of the study area and environs.
- Regard to the role of vegetation in the landscape value and visual amenity of the study area.
- Interpretation of the landscape and visual context to assist in public education.
- Connection to community.
- Minimisation of vegetation removal.
- Minimise landscape and visual impacts to land subject to planning policy, inclusive of National Parks, State Parks and Forests, Nature Conservation Reserves and Recreational Reserves within the vicinity of the study area.
- ▶ Retain and protect the scenic landscapes, rural character, landscape character and special environmental features of the study area and environs.
- Conserve and enhance the cultural significance and character of open rural and scenic non-urban landscapes.

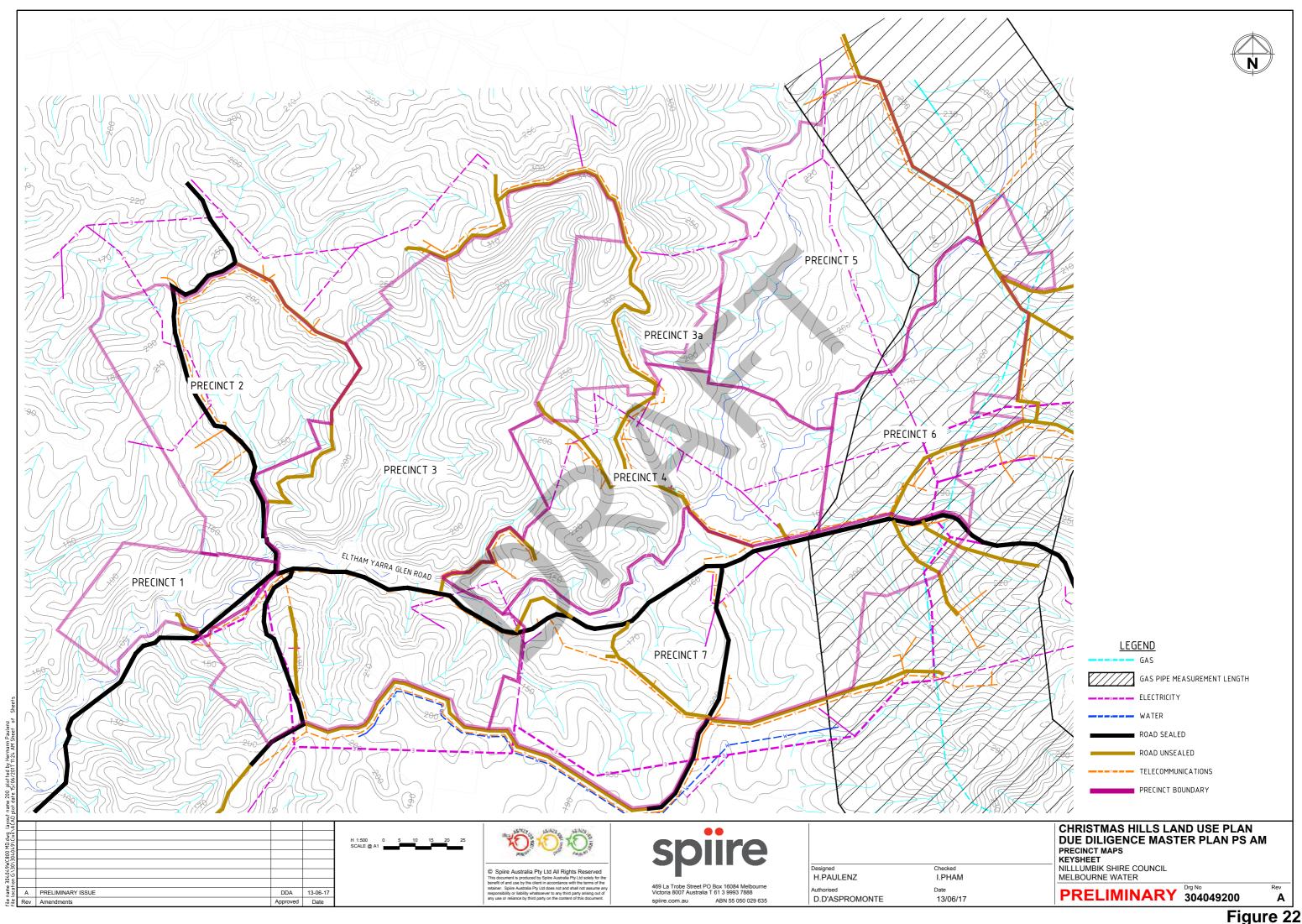


6.3 SERVICING INFRASTRUCTURE

Spiire has undertaken an assessment of services and infrastructure available in the Study Area based on asset information from utilities providers on a Precinct basis which confirmed service availability is limited. Key existing infrastructure in the Study Area is shown in Figure 22 Servicing Infrastructure (Spiire).

The assessment overall found:

- Reticulated drinking water, sewerage, drainage and gas are not available in most Precincts.
- Natural gas reticulation is not available in any Precinct. A high pressure gas pipeline is located in the east but cannot be used for gas reticulation (refer to Section 3.1.6). The pipeline may limit density and land use within 700m of its alignment.
- Electricity is available, however it is predominantly limited to single wire earth return (SWER) with very limited capacity. Electricity service is most readily available in Precinct 6 with a 22kv connection available. SWER is present in all other Precincts and connecting will need to be at the discretion of Ausnet services who are likely to encourage future underground servicing.
- ► Telecommunications are available in the vicinity of the Study Area and basic telecommunications access can be provided to the majority of titles.
- Access is provided via sealed and unsealed roads. Four titles within Precinct 1 are currently inaccessible.
- A 1350mm trunk water main is located to the south of Precinct 7 and potential could be used to supply water to the Precinct.
- ► Future infrastructure considerations for the Study Area include:
 - Provision of drainage, drinking water and sewerage infrastructure will be required in the Study Area or through on-site measures.
 - Water supply must currently come from local supply sources, rainwater or bores.
 - Wastewater disposal must currently be met by domestic mechanical or biological sewage treatment solutions.
 - Future drainage considerations must consider stormwater quality and volume impacts on the downstream waterway.
 - Electricity extension to currently un-serviced titles may be possible.
- Future development should consider an overarching sustainability assessment to define alternative approaches to servicing the Precinct focusing on energy and integrated water management options. This should look to align servicing outcomes with the recommendations from other assessments.





6.4 BUSHFIRE

The significant risk of and impact from bushfire in the Nillumbik Green Wedge has been shown in recent years including the Black Saturday Bushfires in 2009 with the Kilmore East fire reaching to the immediate north of Christmas Hills and into the Kinglake National Park. Given this significant bushfire history it is important the potential for bushfire in the Study Area is understood.

Terramatrix has prepared a Bushfire Development Report (BDR) on how land in the Study Area can respond to the planning and building controls for bushfire. The BDR identifies the measures required for future development in the Study Area to respond to bushfire controls in the Nillumbik Planning Scheme (the Scheme). It includes a bushfire hazard site assessment, a bushfire landscape assessment and a development response.

The BDR discusses the implications of the planning and building controls for bushfire on the Study Area. It notes the need to strengthen community resilience to bushfire by applying the overarching strategies of Clause 13.05 of the Scheme, protecting human life and applying the precautionary principle, and taking advantage of existing settlement patterns. Terramatrix reiterates that the CFA also provide principles to implement Clause 13.05 which include:

- Direct development to locations of lower bushfire risk.
- Carefully consider development in locations where there is significant bushfire risk that cannot be avoided.
- Avoid development in locations of extreme bushfire risk.
- Avoid development in areas where planned bushfire protection measures may be incompatible with other environmental objectives.

The BDR identifies that the Study Area is an area of "significant bushfire risk". The proposed changes in the Study Area will need to acceptably mitigate the bushfire risk and not increase the risk to existing residents and community infrastructure. Therefore it is suggested future development should avoid areas of environmental significance and be located away from all vegetation and sited in areas where vegetation can be managed to create and maintain defendable space. To further respond to planning policy on bushfire, development would only be able to proceed where adequate defendable space can be provided entirely within the boundaries of the subject property.

In assessing the Bushfire Hazard Landscape, Terramatrix concluded that the location of the Study Area includes significant risk from a bushfire perspective. The following factors have led to this risk:

- ► The relative remoteness of the area and its location surrounded by forest vegetation on rugged terrain.
- ► The reliance on one main road, Eltham-Yarra Glen Road, means access and egress options are poor.
- Long fire runs (more than 10km in length) through forest vegetation towards the Study Area are possible. These are particularly possible from the north-northwest and south west which are also the directions typically associated with severe and extreme fire behaviour.
- ► The steep and variable topography will exacerbate fire behaviour.
- ► The Study Area and wider surrounding landscape accords with Broader Landscape Type 4 an "extreme risk landscape" as per Planning Practice Note 65. This landscape risk is not uniform across the Study Area and elements of Broader Landscape Type 3 are present around less risky areas of pasture/grassland away from forest vegetation.



▶ The Regional Bushfire Planning Assessment for the Melbourne Metropolitan Area prepared by DPCD in 2012 identifies Watsons Creek as being in a "bushfire landscape of consideration" and the wider area as being hazardous due to the extent of remnant bushland vegetation (of high and very high conservation significance) and presence of developed bush blocks in proximity to the parkland. Skyline Road is noted as having limited access and egress.

The BDR also includes a Bushfire Hazard Site Assessment which provided the following conclusions:

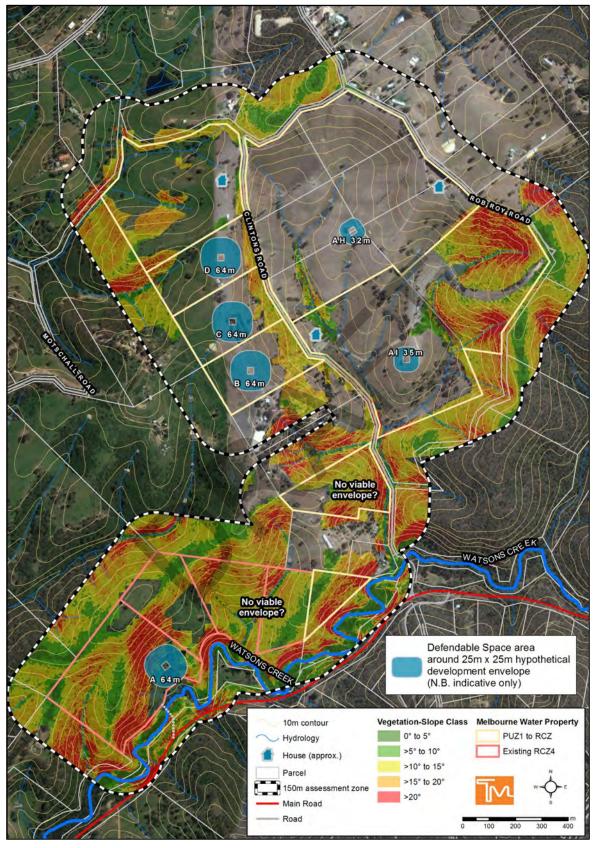
- Treed vegetation in the Study Area comprises Open Forest and Woodland. Forest has a higher surface fine fuel load than Woodland and significantly impacts defendable space requirements. Grassland is also present which can be hazardous at a height over 100mm.
- ► Topography creates an undulating to rugged landscape, especially to the north of the Study Area which will exacerbate bushfire attack.

Terramatrix in response to the assessment has identified measures required for future development in response to the bushfire risk. These measures include:

- Some properties may need additional bushfire protection measures above compliance with BMO Approved measures to justify their development and achieve acceptable safety. This includes:
 - Enhanced defendable space.
 - Applying the current defendable space but constructing dwellings to a higher BAL standard.
 - Increasing the resistance of buildings to strong severe bushfire winds.
 - Equipping buildings with systems for enhanced protection from embers.
 - Designing and providing a shelter-in-place location.
- Utilise an approach avoiding development altogether on higher risk sites in the Study Area and concentrating on lower risk properties.
- Development should avoid long driveways and design details should consider risk. Each lot would require a 10,000L capacity, non-combustible, above-ground tank.
- ▶ Defendable space envelopes would need to be fully considered in the context of environmental impacts.
- Many parcels within the Study Area could achieve a viable development envelope for a BAL-19 or BAL 12.5 dwelling and be provided with defendable space entirely within their property boundaries.

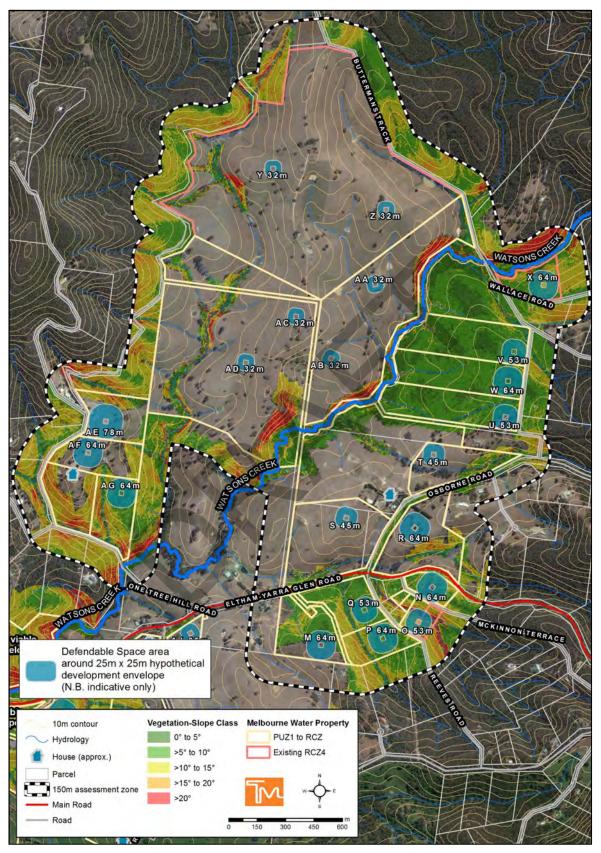
Hypothetical defendable space envelopes are shown in Figure 23 Western area bushfire risk (Map 7, Terramatrix), Figure 24 Eastern area bushfire risk (Map 8, Terramatrix) and Figure 25 Southern area bushfire risk (Map 9, Terramatrix) along with vegetation slope class and topographical information indicating high level bushfire risk.





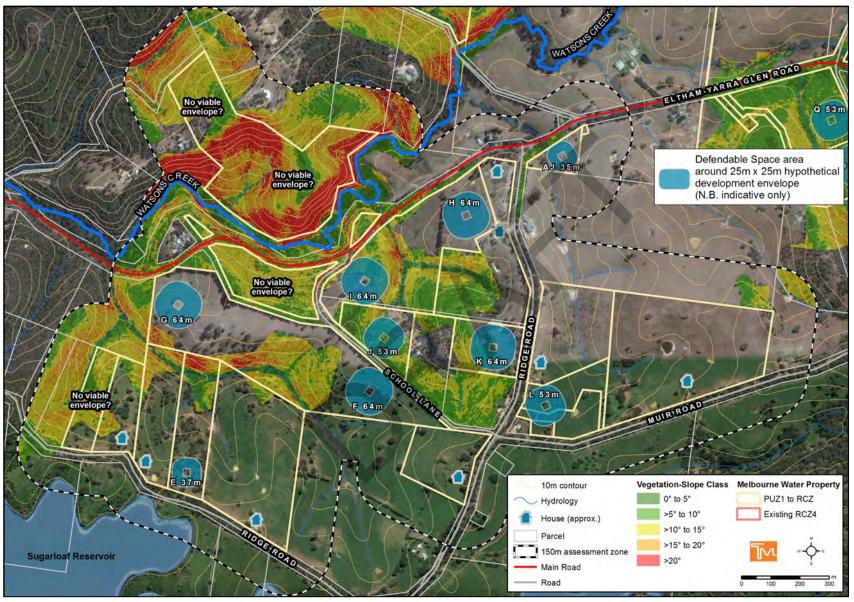
 ${\bf Map~7-Hypothetical~defendable~space~envelopes-Western~part~of~the~study~area.}$





Map 8 - Hypothetical defendable space envelopes - Eastern part of the study area.





Map 9 - Hypothetical defendable space envelopes - Southern part of the study area.



6.5 LAND CONTAMINATION

WSP has prepared a Preliminary Site Investigation (PSI) for the Study Area to determine whether there is any potential for contaminated land to be present. Essentially the assessment sought to determine if historical and current land use had the potential to cause contamination.

Topographical, geological, groundwater and drainage features of the Study Area were identified in the PSI to inform possible contamination extent. This analysis identified:

- Surface water drainage across the Study Area is likely to follow the topography towards naturally occurring surface water features.
- ▶ No known occurrence of Acid Sulphate Soil was located in the Study Area or surrounds.
- Groundwater flow direction is anticipated to be complex within the Study Area given the number of surface water features and potential discharge points as well as the undulating topography of the area.

The PSI confirmed previous land use in the Study Area included residential, gold mining, farming/grazing, and commercial land uses. Gold mining was historically present in areas proposed to be transferred for the Warrandyte Kinglake Nature Conservation Reserve (WKNCR), particularly near One Tree Hill Road in Precinct 3 of the Study Area.

Land Contamination investigations identified:

- No sites exist within the Study Area that are listed on the Environmental Protection Authority's Priority Sites Register. A property outside the Study Area at 165 Motschall Road, Panton Hills (to the immediate north west of Precinct 2) is listed due to the dumping of industrial waste.
- ► Gold mining in the Nillumbik area typically did not involve the treatment of the gold and therefore typical contamination from gold mining was unlikely.
- The presence of illegal dumps within the Study Area was considered to be likely given the relatively isolated nature of some parts of the Study Area.
- Aerial imagery indicates little to no change in land uses since the 1950s.
- Potential sources of contamination within the Study Area are likely to be localised in relation to:
 - Chemical, oil, fuel storage associated with farming sheds.
 - Potential septic sewerage systems.
 - Illegal disposal of wastes.
 - Asbestos containing building materials (particularly given the mid-century age of the buildings).
 - Underground storage tanks for fuel/heating oil at residential properties.
 - Surface soils in farming and grazing land has the potential for residual pesticide, herbicide or nutrients to be present.
- The Ponyland Equestrian Centre (Precinct 6) is a potential source of contamination on the inference that fuels, chemical sand or 'horse dips' could be historically or currently used. Further investigation of this property may be required.



6.6 ECOLOGY

Ecology Australia undertook an assessment of available ecological information in relation to the Study Area. Their Ecological Due Diligence Assessment found the Study Area was characterised by mostly low foothills with extensive areas of both remnant bushland and farmland with biodiversity levels driven by remnant patch size and connectivity. The Study Area has two prominent vegetation remnants:

- An intact remnant centred on the Happy Valley Creek catchment including the existing Warrandyte-Kinglake Nature Conservation Reserve (WKNCR).
- A fragmented remnant "corridor" running along the east of the Study Area, extending from Skyline Road to the Buttermans Track and connecting to WKNCR to the north.

The Study Area has been described with nine Ecological Vegetation Classes (EVCs), including five threatened (vulnerable or endangered), one depleted and three of least concern. Thirty per cent of the vegetated landscape in the Study Area contains EVCs which are threatened or near threatened (depleted). These threatened EVCs are located throughout the Study Area with almost 40% (80 hectares) located in areas proposed to be transferred for the conservation link.

The condition of native vegetation in the Study Area shows the larger and well-connected vegetation patches are generally of high or very high quality. This is shown in Figure 26 Modelled native vegetation condition (Ecology Australia), which shows modelled native vegetation condition in the Study Area.

Threatened flora investigations identified 60 Victorian rare of threatened flora specifies recorded within five kilometres of the Study Area, often within public land areas. These include four *EPBC Act* listed species which may possibly occur in the Study Area:

- Charming Spider-orchid
- Crimson Spider-orchid
- Little Pink Spider-orchid
- Round-leaf Pomaderris.

Other threatened flora considered likely to occur in the Study Area include:

- Arching Flax-lily
- Wine-lipped Spider-orchid
- Silurian Striped Greenhood.

The investigations also found 57 threatened fauna species within five kilometres of the Study Area comprising mammals, frogs, reptiles, fish, birds (36 species) and invertebrate. Several threatened fauna species are known or highly likely to occur in the Study Area including:

- Powerful Owl
- Brush-tailed Phascogale
- Common Dunnart
- Southern Toadlet.

The investigations also identified the Swift Parrot (Endangered) and the Grey Headed Flying Fox (Vulnerable), two *EPBC Act* listed fauna species have a reasonable chance of occurring in the Study Area. The habitat utilised by the Swift Parrot is primarily located in areas to be transferred for the WKNCR. The Grey Headed Flying Fox is likely to periodically forage in treed habitats in the Study Area.



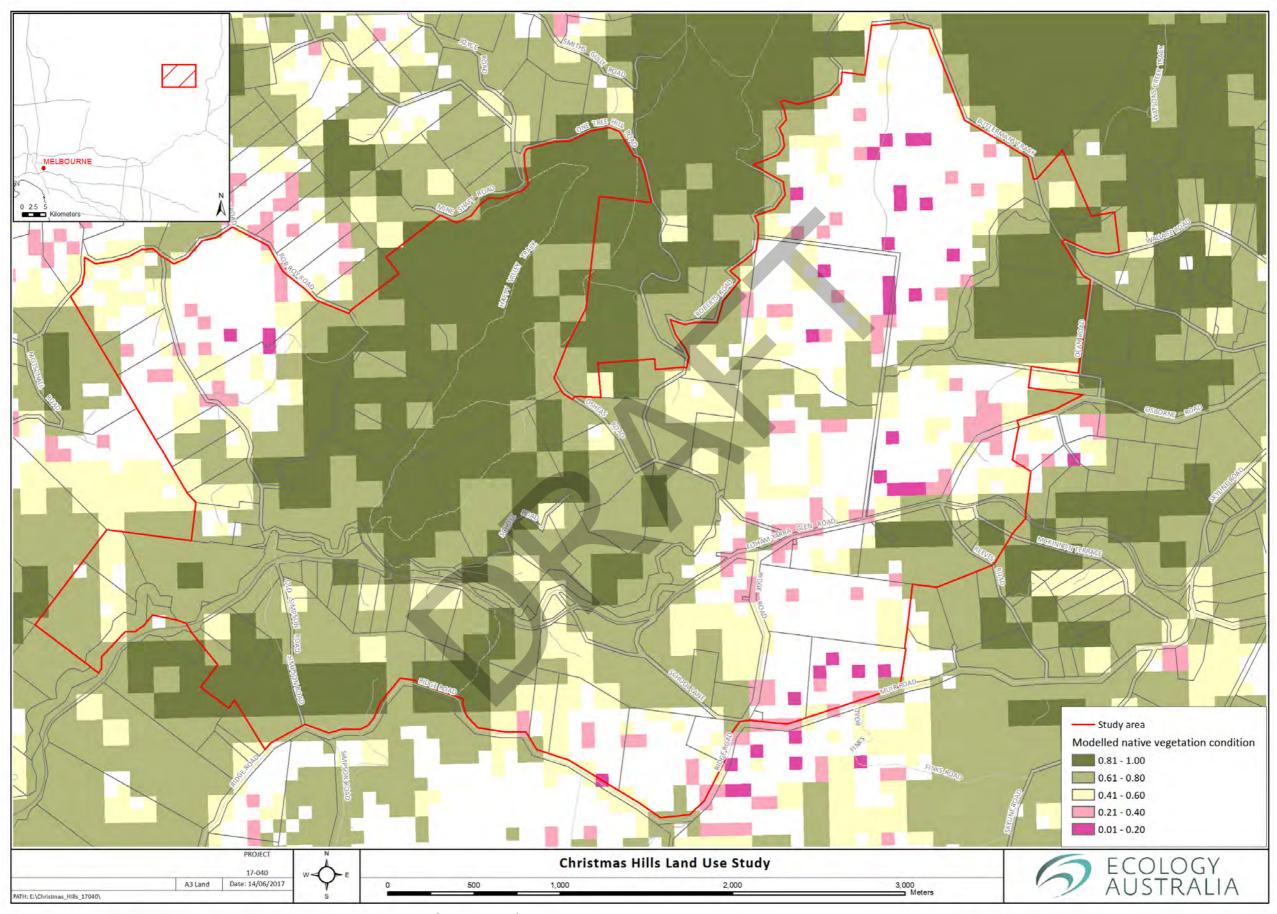


Figure 3 Modelled native vegetation condition throughout the study area (DELWP 2017).

Figure 26



Ecology Australia analysed the Strategic Biodiversity Score (SBS) attributed to the Study Area by the State Government. The SBS across the Study Area highlights the following:

- ► Relative high SBS (>0.61) can be attributed to reasonably fragmented sections of the landscape.
- Patchy remnants along water courses can score highly presumably on the basis of connectivity.
- The modelling has obvious vagaries showing low scores for the forested Happy Valley creek and the Deans Road forested patch.

Ecological based policy and legislation also impacts the future of the Study Area. This policy context includes the requirements of the Nillumbik Planning Scheme and the Permitted clearing of native vegetation regulations which require the removal of a 'patch' of native vegetation or a 'scattered tree' to be assessed under the Biodiversity Assessment Guidelines (DEPI 2013) and offsets may be required for the loss of vegetation.

Also of relevance is the State Government's plan *Protecting Victoria's Environment – Biodiversity 2037* which sets ambitions targets to arrest the decline in biodiversity. Melbourne Water's agreement to transfer 280 hectares of land to the Crown for the WKNCR will help implement these targets.

The Due Diligence report concludes the most impact to biodiversity from changes in the Study Area will be from the development of existing zoned land and land which will be removed from the Public Use Zone and made available for development. This can potentially be reduced by amalgamating small titles to retain high quality vegetation. Land at Reeves Road and McKinnon Terrace (Precinct 7) in particular could be consolidated. Any future development or subdivision would require assessment under Victoria's Native Vegetation Clearing Regulations.





7. BACKGROUND SUMMARY

The Planning Controls applying to the Study Area and the findings of the Technical Assessments provide the following conclusions which should guide option development and the future Master Plan for the Study Area:

7.1 OPPORTUNITIES

- ► The Study Area is within the Nillumbik Green Wedge and the values of the region's unique character should be protected.
- The mix of private and public land in the Study Area provides an opportunity for a range of outcomes including subdivision.
- Anomalies in land ownership and title location can be resolved through the master planning process, this includes the tennis courts adjoining the hall and Simpson Road.
- Opportunities exist to formalise the Christmas Hills township and to expand existing community facilities.
- Inclusion of land within the WKNCR recognises the habitat significance of parts of the Study Area and its location within the Nillumbik Green Wedge.
- Significant agricultural land should be retained and large lots are encouraged for retention.
- Existing title size is varied across the Study Area with most titles under 10 hectares.
- Topography and mix of bushland and cleared areas creates ample views which can be enhanced through subdivision and sensitive development.
- Many properties could achieve a viable development envelope for a dwelling and have defendable space within its boundaries. Properties may need additional bushfire measures to achieve support.
- Heritage places are present within the Study Area. The historically sensitive areas are focused on Watsons Creek and around existing community infrastructure in Precinct 7. Management of these sensitive areas can be enhanced through the master planning process.
- ▶ Retention of the Victorian Heritage Inventory site within the WKNCR will ensure its heritage fabric and significance is protected.
- Land contamination sources are likely to be localised.
- Wanneroo Farm is a large existing agricultural land holding which is unusual in the surrounding area.
- ► The Crown land area applying to Watsons Creek can be enhanced expanded to further protect the waterway and its values from inappropriate land use and development. Opportunities also exist to provide greater access for the community and to ensure its alignment through the Study Area is reflected on title.
- ▶ Development of a Master Plan will allow for land management preferences to be identified and implemented through the Nillumbik Planning Scheme.

7.2 CONSTRAINTS

► The existing zoning surrounding the Study Area including the limitations of the Rural Conservation on land uses. The suite of zones available is limited by Core Planning Provisions for Green Wedges (Clause 57) and the need for any potential designation to be ratified by Parliament.



- The buffer to the APA Gas Pipeline may impact land use and development density within 700 metres of its alignment.
- Services in the Study Area are limited and development will need to consider on site provision.
- Undulating topography with ridges and valleys will impact future subdivision and development potential as well as bushfire activity and risk.
- ▶ Access and egress is relatively limited with a reliance on Eltham Yarra Glen Road.
- ► The Study Area is an area of significant bushfire risk and parts of the landscape are extreme risk for bushfire. Subdivision and development should avoid the most high risk locations.
- Threatened flora and fauna is likely to be present in the Study Area based on the location and presence of Ecological Vegetation Classes.
- Habitat links in the Study Area are important to the State's biodiversity.
- The extensive removal of significant vegetation is to be avoided to maintain biodiversity. Development should be directed away from these areas.
- The balance between competing aspects of planning policy is required in the Study Area.

7.3 RECOMMENDED PLANNING CONTROLS

- ▶ Choice of zone controls for land to be sold in the Study Area include:
 - Rural Conservation Zone, various existing or new schedules with a specific minimum subdivision size and conservation objectives.
 - Other green wedge zones.
 - Rural Living Zone, subject to ratification by Parliament.
 - Township Zone, subject to ratification by Parliament.
 - Other rural zones, subject to ratification by Parliament.
- A study of appropriate and applicable zones will be undertaken in the next phase of the Project.
- Planning Overlays could be used to implement the findings and directions of the Master Plan.
- Specific planning policy changes could also be made within the Nillumbik Planning Scheme to assist in the future development of the Study Area in a manner which reflects its unique character and known values and constraints.

7.4 FURTHER WORK

- This Background Report will be used to provide a base from which consultation can be undertaken to confirm initial findings on the constraints and opportunities of the Study Area.
- The Project will undertake a constraints analysis of the information and findings outlined in the technical assessments. Options for rezoning and subdivision will then be determined prior to the creation of a Master Plan for the Study Area.
- Once finalised, the Master Plan and proposed planning controls will be implemented via a Planning Scheme Amendment to the Nillumbik Planning Scheme.

APPENDIX 1 PLANNING POLICY SUMMARY



1. NILLUMBIK PLANNING SCHEME - PLANNING POLICY CONTENT

1.1 State Planning Policy

In determining how land should be used and developed, Council must have regard to the State Planning Policy Framework (SPPF). The SPPF contains specific policies in relation to urban development, rural development, the environment, heritage and built form, housing, transport, infrastructure and economic development to ensure the orderly and consistent planning of Victoria. The following State Planning Policy is relevant to the Study Area:

- Clause 11.01-1 (Settlement networks)
- ► Clause 11.05-2 (Distinctive areas of state significance)
- Clause 11.06-4 (Place and Identity)
- ► Clause 11.06-6 (Sustainability and Resilience)
- Clause 11.06-7 (Green Wedges)
- Clause 12.01-1 (Protection of biodiversity)
- ► Clause 12.04-1 (Environmentally Sensitive Areas)
- Clause 12.04-2 (Landscapes)
- Clause 13.05 (Bushfire)
- Clause 14 (Agriculture)
- Clause 14.02 (Water)
- Clause 15 (Built Environment)
- Clause 16.02-1 (Rural residential development)

Specific content of relevance includes:

- Clause 11.01-1 (Settlement networks) seeks to promote the sustainable growth and development of Victoria and deliver choice and opportunity for all Victorians through a network of settlements.
- Clause 11.05-2 (Distinctive areas of state significance) seeks to protect and enhance the valued attributes of the distinctive areas of the Bellarine Peninsula, Macedon Ranges, Mornington Peninsula and the Yarra Valley and Dandenong Ranges.
 - The unique character of the Christmas Hills region is a valued attribute to the Yarra Valley.
- Clause 11.06-4 (Place and Identity) includes strategies to strengthen protection and management of green wedge land.
- ▶ Clause 11.06-6 (Sustainability and Resilience) seeks to create a more sustainable and resilient city that manages its land, biodiversity, water, energy and waste resources in a more integrated way by facilitating the uptake of renewable energy technologies including in green wedge areas.
- Clause 11.06-7 (Green Wedges) seeks to protect the green wedges of Metropolitan Melbourne from inappropriate development. Key strategies in support of this objective include:
 - Ensure strategic planning and land management of each green wedge area to promote and encourage its key features and related values.
 - Support development in the green wedge that provides for environmental, economic and social benefits.
 - Consolidate new residential development within existing settlements and in locations where planned services are available and green wedge area values can be protected.



- Plan and protect major state infrastructure and resource assets that serve the wider Victorian community, such as...water supply dams...
- Protecting important productive agricultural areas such as Werribee South, the Maribyrnong River flats, the Yarra Valley, Westernport and the Mornington Peninsula.
- Protect areas of environmental, landscape and scenic value such as biodiversity assets, national and state parks, Ramsar wetlands and coastal areas.
- Clause 12.01-1 (Protection of biodiversity) seeks to assist the protection and conservation of Victoria's biodiversity, including important habitat for Victoria's flora and fauna and other strategically valuable biodiversity sites. This is supported by strategies which ensure strategic planning:
 - Avoids and minimises significant impacts, including cumulative impacts, of land use and development on Victoria's biodiversity.
 - Considers impacts of any change in land-use or development that may affect the biodiversity value of adjoining national parks and conservation reserves...
 - Assists in the protection and management of sites containing high value biodiversity.
 - Assists in the re-establishment of links between isolated habitat remnants that contain high value biodiversity.
- Clause 12.04-1 (Environmentally Sensitive Areas) seeks to protect and conserve environmentally sensitive areas including the Upper Yarra Valley.
- ► Clause 12.04-2 (Landscapes) seeks to protect landscapes and significant open spaces that contribute to character, identity and sustainable environments by improving the landscape qualities, open space linkages and environmental performance in green wedges and conservation areas and non-urban areas.
- Clause 13.05 (Bushfire) provides a range of strategies to implement its objective of assisting to strengthen community resilience to bushfire. These strategies include:
 - Overarching strategies:
 - Prioritise the protection of human life over other policy considerations in planning and decision-making in areas at risk from bushfire.
 - Where appropriate, apply the precautionary principle to planning and decision-making when assessing the risk to life, property and community infrastructure from bushfire.
 - Ensure that planning to create or expand a settlement in an area at risk from bushfire:
 - o Addresses the risk at both the local and broader context.
 - Reduces the risk to future residents, property and community infrastructure from bushfire to an acceptable level.
 - Ensures any biodiversity and environmental objectives specified in the planning scheme are compatible with planned bushfire protection measures.
 - Ensures the risk to existing residents, property and community infrastructure from bushfire will not increase as a result of future land use and development.
 - Ensures future residents can readily implement and manage bushfire protection measures within their own properties.
 - Ensure that planning schemes, in particular the Municipal Strategic Statement, Local Planning Policies and zones applying to land, provide for use and development of land in a manner compatible with the risk from bushfire.
 - Only permit new development where:



- The risk to human life, property and community infrastructure from bushfire can be reduced to an acceptable level.
- Bushfire protection measures, including the siting, design and construction of buildings, vegetation management, water supply and access and egress can be readily implemented and managed within the property.
- The risk to existing residents, property and community infrastructure from bushfire is not increased.
- Clause 14 (Agriculture) seeks to protect productive farmland which is of strategic significance in the local or regional context. This is supported by strategies to:
 - Limit new housing development in rural areas, including:
 - Directing housing growth into existing settlements.
 - Discouraging development of isolated small lots in the rural zones from use for single dwellings, rural living or other incompatible uses.
 - Encouraging consolidation of existing isolated small lots in rural zones.
- ► Clause 14.02 (Water) includes the objective to assist the protection and, where possible, restoration of catchments, waterways, water bodies, groundwater, and the marine environment by among other things retaining natural drainage corridors with vegetated buffer zones at least 30m wide along each side of a waterway to maintain the natural drainage function, stream habitat and wildlife corridors and landscape values, to minimise erosion of stream banks and verges and to reduce polluted surface runoff from adjacent land uses. It also seeks to protect water quality including reservoirs and local storage facilities.
- Clause 15 (Built Environment) seeks:
 - To recognise and protect cultural identity, neighbourhood character and sense of place.
 - To ensure the conservation of places of heritage significance.
 - To ensure the protection and conservation of places of Aboriginal cultural heritage significance.
- Clause 16.02-1 (Rural residential development) provides guidance on rural residential development and includes a number of strategies to manage development in rural areas and to identify land suitable for rural living and rural residential development. These strategies include:
 - Demonstrating the need for rural residential development.
 - Ensuring planning for it avoids or significantly reduces adverse impacts.
 - Ensuring rural residential development does not encroach on high quality productive agricultural land or impact on waterways or other natural resources.
 - Is only zoned where it is located close to existing towns...and can be supplied with electricity and water and good quality road access.



1.2 Local Planning Policy Framework (LPPF)

The Local Planning Policy Framework within the Nillumbik Planning Scheme provides guidance for land use and development at a more localised level and includes policy for and commentary on coastal areas, including Christmas Hills. The following Local Planning Policy is relevant to the Study Area:

- Clause 21.04 (Vision Strategic Framework)
- Clause 22.04 (Siting and Design Policy for Buildings and Works in Non-Urban Areas)
- Clause 22.05 (Aboriginal Cultural Heritage Policy)
- Clause 22.13 (Wildfire Management Policy)

Specific content of relevance includes:

- Clause 21.04 (Vision Strategic Framework) identifies the Shire of Nillumbik's 2020 goals including the following:
 - Retain the semi-rural/township lifestyle.
 - Retain productive farmlands.
 - Encourage sustainable development.
 - Encourage the development of environmentally sensitive/appropriate buildings.
 - Retain natural and cultural heritage.
 - Nurture and support the development and practice of the arts.
 - Increase opportunities for employment within the Shire and encourage home-based employment.
- ► The Framework Plan in Clause 21.04 builds on the following elements of relevance to guide land use in Nillumbik:
 - Conservation farming (comprising a mix of bushland management and farming) and compatible rural activities on land along the Diamond Creek axis, extending north east to the Kinglake Ranges and south to Yarra River generally via Watsons Creek and in the Christmas Hills and Smiths Gully areas.
 - A nature and landscape conservation focus throughout the Shire, enhancing the natural features of the rivers and mountains.
 - A network of strategic habitat links north-south along the waterways (from Kinglake National Park to Yarra River) and east-west along roadsides and natural features.
 - Protection and enhancement of indigenous vegetation in urban and green wedge areas.
 - Bushland conservation through the Kinglake Ranges, Yarra Valley Parklands and Plenty Gorge Park, including substantial areas of public land, and environmental living areas at the Bend of Islands, Dunmoochin and along the Plenty Gorge fringe.
- Objectives and strategies for land use and development in Nillumbik include:
 - To limit the fragmentation of land in rural areas.
 - Ensure land use changes do not have an adverse impact on the landscape or strategic environmental values of the land.
 - Protect the productive potential of rural land by limiting small lot subdivision.
 - Encourage new rural residential development in areas zoned for that purpose at Yarrambat and Plenty and other appropriately zoned areas.



- With respect to subdivision, consider rural land consistent with the Framework Plan, as rural, conservation, environmental rural and conservation interface based on land capability, rural character, proximity to major environmental assets and potentially conflicting low-density residential areas, landscape features and strategic environmental values.
- Encourage retention of large lots in single ownership for the purposes of preserving conservation values or agricultural potential which may require a larger subdivision size.
- Encourage the consolidation of titles.
- To ensure that any new dwelling built in the non urban area does not adversely impact on the primary production activities carried out on the land or on the environmental values of the land.
 - Ensure that the development of any new dwelling outside of the Urban Growth Boundary does not adversely impact on the primary production activities carried out on the land or on neighbouring land.
 - Encourage sites to be used according to land capability, and be managed to avoid or minimise adverse impacts on the quality and quantity of natural resources, surrounding land and the catchment.
- To protect and enhance rural landscape character.
 - Conserve bushland and encourage revegetation.
 - Ensure uses, buildings and works in rural and low-density residential areas maintain or enhance the landscape character of the locality, including views to the site.
 - Restrict multiple buildings in rural and low-density residential areas, and support the consolidation of buildings (especially outbuildings).
 - Ensure that the siting and design of buildings and works in rural areas avoid ridgelines and hilltops wherever possible to ensure that they do not form a silhouette on the horizon.
- Apply the Rural Conservation Zone to non-urban land with environmental significance and landscape values.
- Use the schedule to the Rural Conservation and Green Wedge Zones to establish varying subdivision minimums based on land classified in the Framework Plan as Conservation, Conservation Farming, Rural Conservation and Conservation Interface. The schedule specifies the outcomes unique to each of the classifications.
- To protect and enhance sites of environmental significance.
 - Protect areas of environmental significance, by restricting land uses and development that may adversely impact on native flora and fauna.
 - Establish a shire wide network of strategic habitat links and retain high value conservation land in public ownership wherever possible.
 - Incorporate the retention and enhancement of strategic habitat links into subdivision plans and site management plans where appropriate.
 - Encourage the retention of vegetated areas of sufficient size that maintains the viability of faunal populations and vegetation communities and protects biodiversity and other significant environmental values.
- To protect places of natural and cultural heritage.
- To avoid and mitigate the limitations and threats posed by environmental hazards in land use and development.



- Clause 22.04 (Siting and Design Policy for Buildings and Works in Non-Urban Areas) identifies the following objectives for development in non-urban areas including:
 - To encourage the appropriate and respectful siting and design of dwellings and other buildings in rural areas to minimise landscape and habitat impacts, avoid erosion, areas liable to flooding and other off-site effects and best prepare for potential fire risk.
 - To encourage the appropriate and respectful siting and design of structures, such as signage and poles, in rural areas to minimise landscape and habitat impacts.
 - To encourage appropriate and respectful works in rural areas to minimise landscape and habitat impacts, avoid erosion and mitigate threats posed by flooding and other off-site impacts.
- Clause 22.05 (Aboriginal Cultural Heritage Policy) identifies that the Shire of Nillumbik falls wholly within land occupied by the Wurundjeri Willam Clan of the Woi Wurrung speaking people. Objectives to preserve the aboriginal heritage over the land include:
 - To provide for the identification of sites of Aboriginal cultural significance and the appropriate level of management in consultation with the local Aboriginal community.
 - To ensure new uses, developments and works do not impede on or detract from sites and features of Aboriginal cultural heritage and archaeological significance.
- Clause 22.13 (Wildfire Management Policy) emphasizes risk of bushfires in the Shire of Nillumbik and sets out the following objectives:
 - To guide discretionary decision-making about the use of land, the design of subdivisions, the siting and design of buildings and the management of land in bushfire prone areas.
 - To avoid intensifying local wildfire risk to people and property through inappropriately located, designed or managed uses or developments.



APPENDIX 2 TECHNICAL ASSESSMENTS



