



GOLDEN PLAINS SHIRE

DRAFT TEESDALE STRUCTURE PLAN

2019

BACKGROUND & ISSUES REPORT

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1

INTRODUCTION

1.1. Introduction & Purpose

The Teesdale Structure Plan will help to guide the future growth and development of Teesdale.

The plan will consider how to best manage the growth of Teesdale whilst continuing to make the town a great place to live.

The purpose of the Teesdale Structure Plan background report (this report) is to ensure that the Teesdale Structure Plan is well informed, and stimulate discussion during community consultation that will occur before the Structure Plan is prepared.

The Teesdale Structure Plan will:

- Identify whether Teesdale requires additional land to support future residential or commercial development, and if so to identify the appropriate planning controls to support growth.
- Identify whether the existing planning controls in Teesdale are appropriate and to identify relevant changes if necessary.
- Take into account the objectives, principles and requirements of the Golden Plains Planning Scheme, the key influences affecting Teesdale and the communities vision for the town.
- Identify opportunities to improve the town not considered in existing Council Strategies, with regard to community and development infrastructure, open space and other matters with a relationship to land use planning.

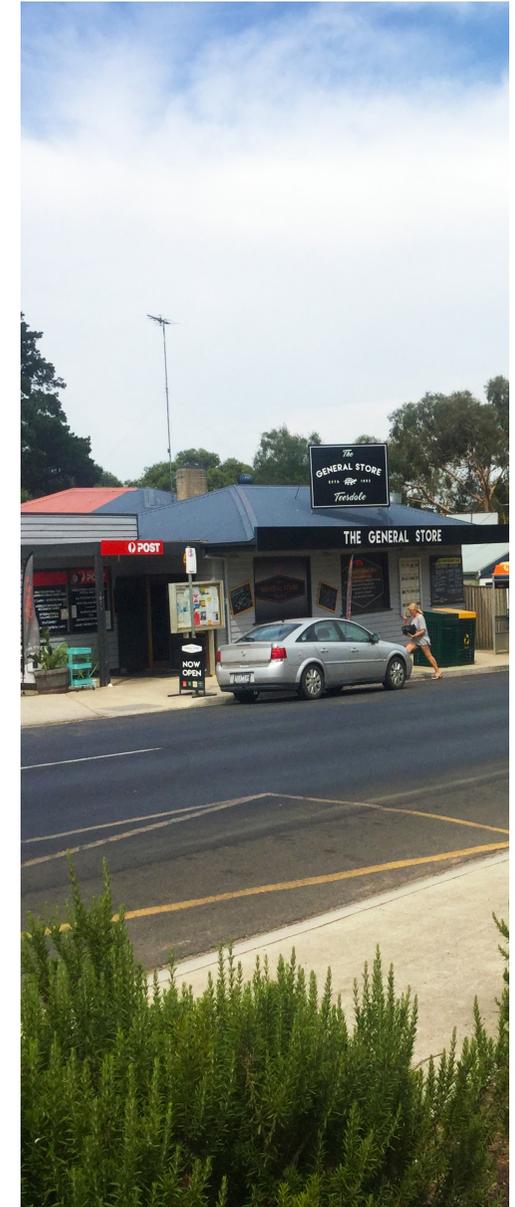
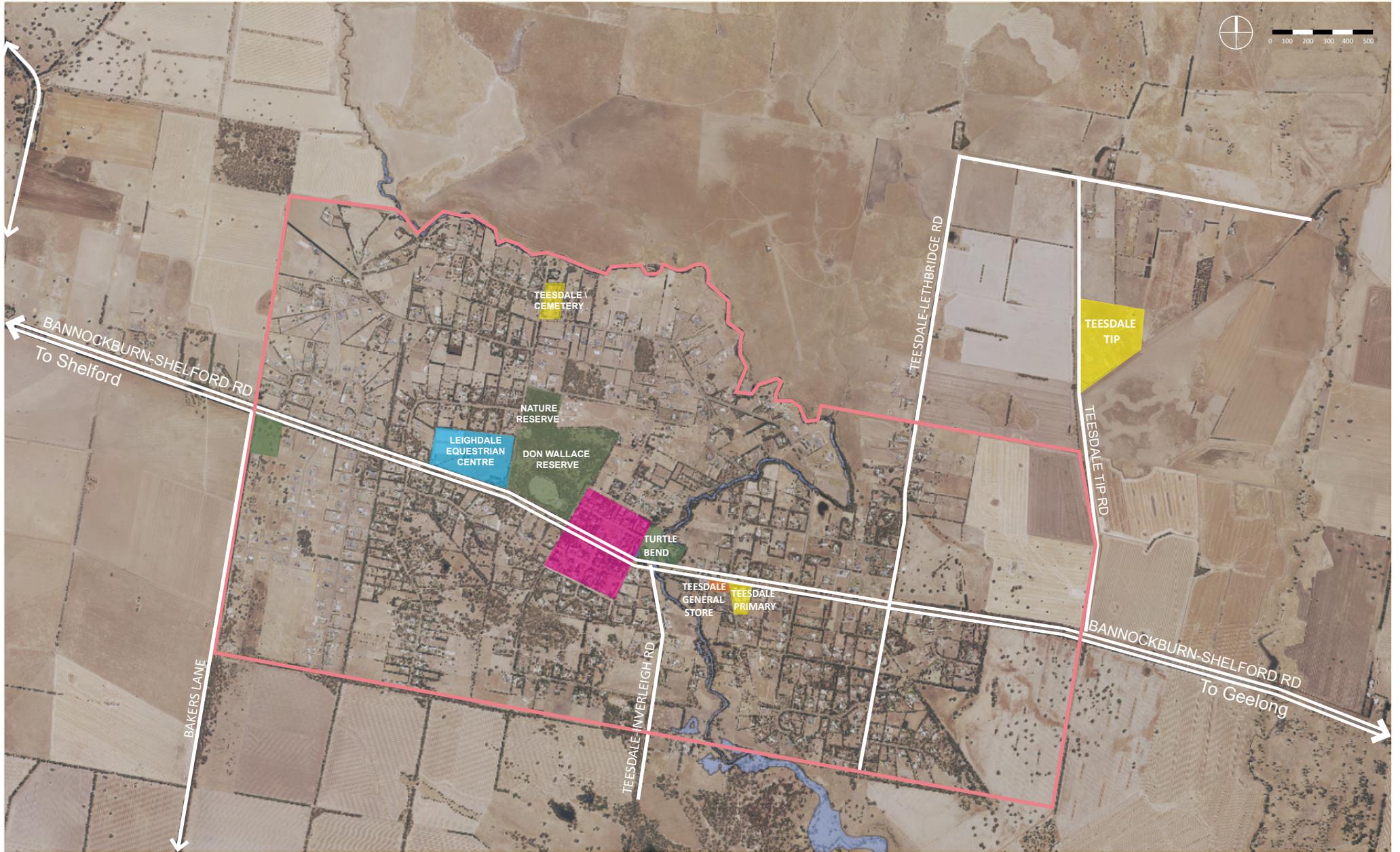


Figure 1 Teesdale Main Street



TEESDALE CONTEXT



Figure 2 Teesdale Context

2

NATURAL ENVIRONMENT

2.1 Bushfire

The Teesdale Sheoak Nature Conservation Reserve and the Don Wallace Reserve (contiguous) within the town are the areas with the highest fuel load. This is predominantly where the Bushfire Management Overlay (BMO) applies in addition to land in the north west corner. Typically the BMO applies to the areas at the greatest level of bushfire risk, though it does not capture all levels of risk.

Many private properties have a significant number of trees, as backyards in the town are typically large. There is also a significant number of treed areas along Native Hut Creek. A Department of Environment Land Water and Planning (DELWP) managed site known as “Chinaman’s Lagoon” on the southern side of township is also densely treed.

Teesdale generally borders farmland. Grassfire remains a risk from farming areas on the edge of the town, however grassfire would not likely result in the same level of damage as a bushfire from areas of dense trees/shrubs.

In terms of the wider area, approximately 1.6km to the south of town is the Inverleigh Flora and Fauna Conservation Reserve, which is a large



Figure 3 Teesdale, 1956

area of dense trees and shrubs. Within approximately 5km of the eastern edge of town is the Bannockburn Recreation and Flora and Fauna Reserves.

In 1969 there was a bushfire that reached into the north of Teesdale and Bannockburn, however there is limited known information about its impact on Teesdale. Stage 2 of the Golden Plains Heritage Study records that “A 1969 fire destroyed its hall” (in relation to Teesdale).

Historic aerial photography from a Department of Lands Survey in 1956 indicates that fuel loads close to Teesdale were not likely to be substantially different compared with today, however fuel loads within the town are far greater today. The population at that time was a fraction of today and there is now far more vegetation in backyards, along Native Hut creek and in what is now the Don Wallace Reserve.

Whilst the fuel loads from trees and shrubs inside or within the vicinity of the town are significant, they are by no means unusual for regional Victoria. Along with the vast majority of regional Victoria, Teesdale is classified as a designated “Bushfire Prone Area”. Development in a designated Bushfire Prone Area must comply with construction standards under AS3959 Construction of Buildings in Bushfire Prone Areas.

2.2 Rivers and Waterways

The main waterway that runs through Teesdale is the Native Hut Creek. A number of smaller waterways run through the town and across property boundaries.

Some of the land in the vicinity of native hut creek is flood prone as recognised in current Land Subject to Inundation Overlay and Floodway Overlay mapping.

The Corangamite Catchment Management Authority (CCMA) have indicated that the current flood mapping for Native Hut Creek is out of date. A study on the flood susceptibility of the Native Hut Creek has been developed and the CCMA are currently organising a peer review. Upon finalisation, a Planning Scheme Amendment is likely to be required to implement the new mapping.

In addition a tributary that crosses Jolly’s road and leads into native hut creek has

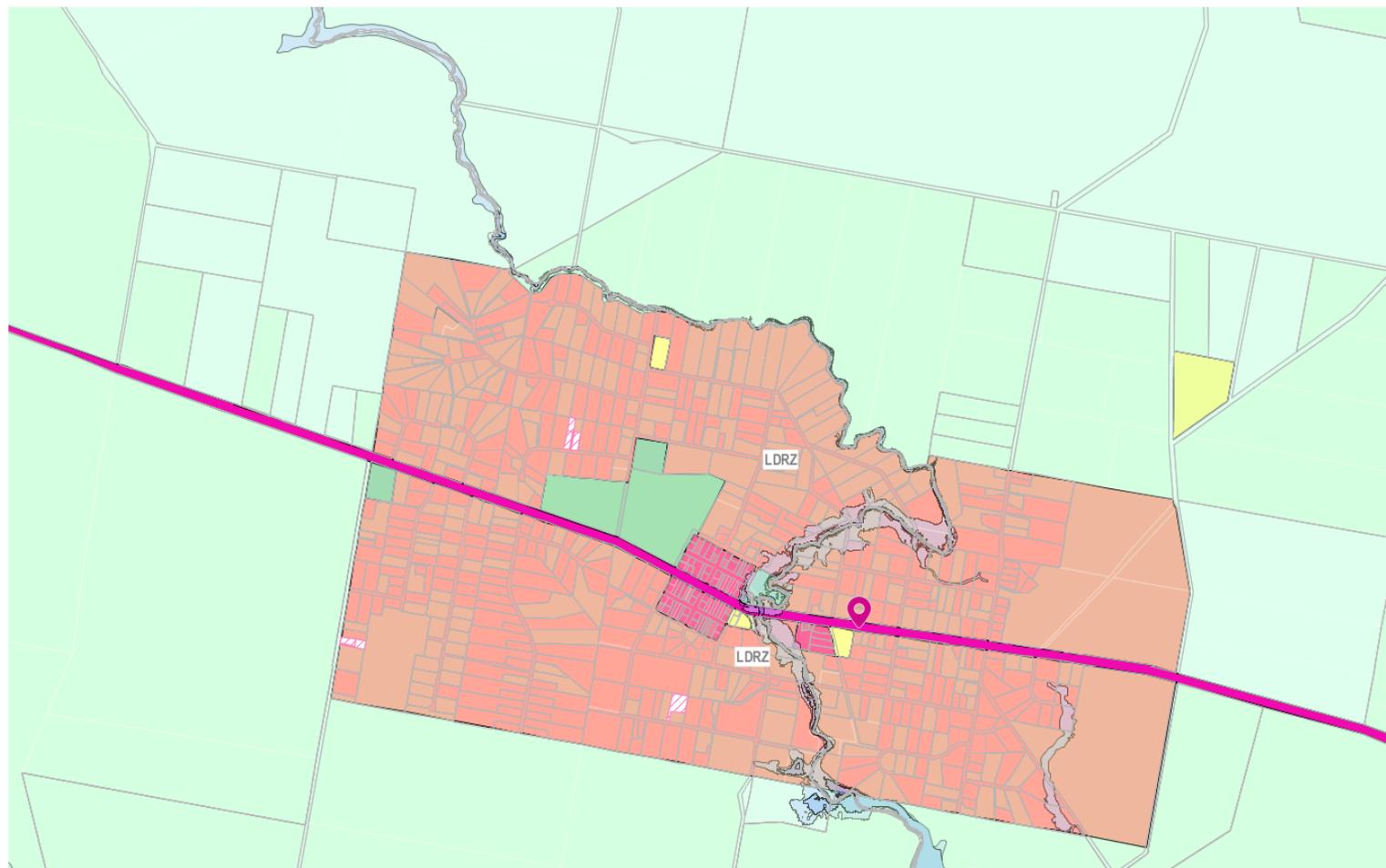


Figure 4 Teesdale with 1m contours

not been flood mapped but is understood to warrant consideration for possible flood impacts.

2.3 Topography

The majority of Teesdale is quite flat however there are significant undulating areas that run through the centre of the town in a north-south direction, including along native hut creek.

Teesdale with 1 metre contour (height) lines is depicted in figure 4 above.

2.4 Agricultural Land Qualities

Teesdale is mostly surrounded by agricultural land. The State Government is undertaking a project to identify, recognise and protect agricultural land within 100km of the Melbourne CBD, an area that includes Teesdale.

An area to the south east of Teesdale has been recognised as strategic agricultural land in the first iteration of the mapping – however the mapping has not been finalised. The State Government has indicated that in future strategic agricultural land will be protected.

2.5 Flora and Fauna

A majority of the vegetation in Teesdale is classified as Plains Grassy Woodland, with large pockets of Plains Grassland and Grassy Woodland.

Figure 2 shows ecological vegetation classes in Teesdale.

Notably 90 indigenous flora species have been identified in Teesdale.

A number of endangered fauna species have been identified within Teesdale and vicinity including Golden Sun Moth, Sulphur-crested Cockatoo and spotted March Frog.

2.6 Street Trees

The main road that runs through the middle of Teesdale, also known as “Bannockburn-Shelford road”, contains sporadic native and exotic trees and patches of trees, but do not follow a consistent theme.

Residential streets also tend to contain sporadic native trees and patches of trees, dense in places and sparse in others.

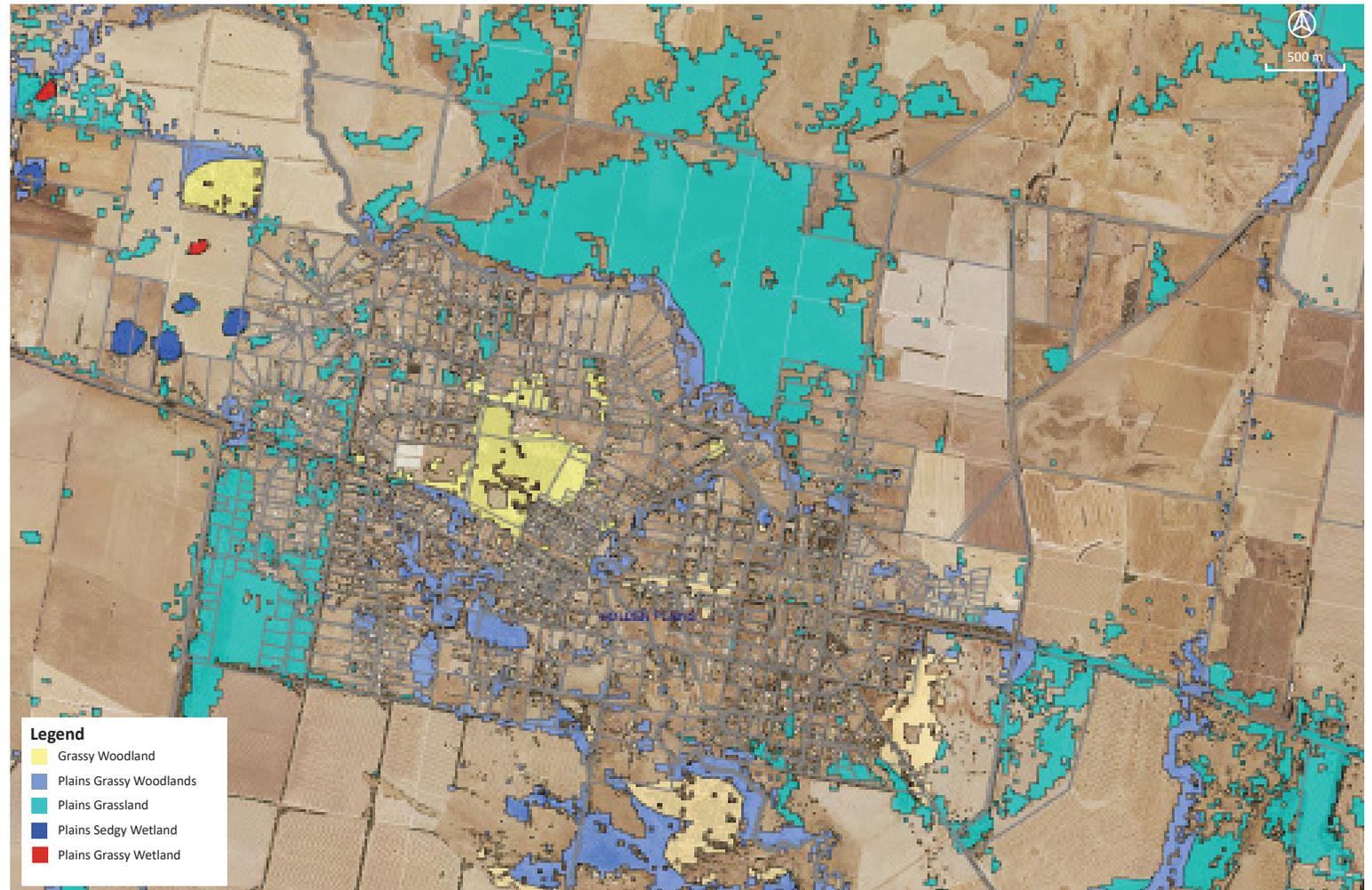


Figure 5 Teesdale EVC

TEESDALE ECOLOGICAL VEGETATION CLASSES



3

URBAN ENVIRONMENT

3.1 Entrances to the Town

The entrance to Teesdale along Bannockburn-Shelford Road from Bannockburn contains large amounts of native vegetation on arrival, including in private properties on the southern side. There is a 150m stretch of gravel on the northern side of the road upon approach just before Teesdale-Lethbridge road, which is of unknown purpose/history. There are gravel mounds in this area. There is no entrance feature or sign. It becomes more evident that one is entering a town at the intersection of Bannockburn-Shelford road and Mercer St, where there is a bus stop and it is possible to see a number dwellings.

The entrance to Teesdale from Shelford includes wide road reserves with fairly dense vegetation in parts. There is minimal evidence of entering a town.

3.2 Street Lighting

Currently there is no street lighting in the older parts of Teesdale, including along the main road. In newer low density developments street lighting is generally required at key intersections, where there are sharp bends in roads and at the end of court bowls.

3.3 Crossings

There are no zebra crossings in Teesdale, however there is a crossing area on the main road in front of the primary school.

Buffers

This section reviews land uses and natural features in and around Teesdale with possible buffer implications if land was ever developed in the vicinity of these uses.

Former Landfill

Teesdale contains a former landfill within the identified “Low Density Environmental Living” area, identified for potential growth in the 1997 structure plan.

The default EPA buffer requirement for a closed landfill is for a 500 metre buffer to the landfill cells (if known) or otherwise to the site boundary.

EPA guidelines provide the potential for reduced buffers subject to environmental audits.

Native Hut Creek

Subdivision in the vicinity of a waterway generally requires a buffer of 10-50

metres. The buffer distance will vary depending on the circumstances. The Corangamite Catchment Management Authority is the key advice giver that assists Council with determining the appropriate buffer distance.

Poultry Farms

There are poultry farms north of Teesdale. Clause 53.09 (Poultry Farm) of the Golden Plains Planning Scheme indicates that farms with over 1000 chickens require a distance of at least 400 metres to land in a residential zone, while smaller farms require at least a 200 metre distance.

Sand Quarry

There is a small sand quarry operating on rural land approximately 1.6km south east of the south eastern edge of the town. A specific buffer distance for this type of facility is not explicit in the planning scheme, nonetheless it would be a relevant consideration.

Composting Facility

A planning application for a composting facility at 607 Bannockburn-Shelford Road, Bannockburn has been submitted to Council but had not been approved as of 18/07/2019. The land is approximately 2.1km east of the eastern edge of Teesdale. The buffer for this type of facility is variable, depending on the details of the facility.

3.5 Sewer

Teesdale is not sewered and the provision of reticulated sewerage is not in the Barwon Water five year plan. There are currently no known plans to sewer the town. Nonetheless due to the size and growth of the town, as well as its proximity to sewer infrastructure in Bannockburn, the extension of sewer to Teesdale would not be unprecedented. There are examples of smaller towns that have been sewered in recent times such as Gordon and Smythesdale, albeit by a different water authority. Water authorities typically require strong community support before considering a town for the provision of reticulated sewer.

If reticulated sewer was provided to Teesdale it would likely affect urban development opportunities and potentially town character. Lot sizes of 4000 square metres + would no longer be necessary for domestic waste water management reasons. The vast majority of Teesdale is situated within the Low Density Residential Zone, which has a

4000 square metre minimum lot size for unsewered properties and 2000 square metres for sewerred properties.

The installation of reticulated sewer is costly. In the case of the Smythesdale sewer scheme, land owners faced a cost in the vicinity of \$3000 - \$6000 per property in addition to the cost of decommissioning existing septic system. There is an ongoing charge for sewer, currently \$141.33 per quarter.

Update following consultation

Following community consultation activities in which 76% of survey respondents opposed reticulated sewer (representing approximately one quarter of Teesdale households) it became clear that community sentiment was not in favour of sewer. As Barwon Water will not consider sewer unless a strong majority expresses a preference for it (and before any other considerations, such as financial viability) reticulated sewer remains unlikely over the horizon of the Teesdale Structure Plan.

3.6 Housing

Housing Stock in Teesdale generally consists of large single storey dwellings surrounded by significant amounts of native vegetation. Although dwelling ages vary substantially, it is notable that around half of dwellings were built from the year 2000 onwards. Many properties have sheds that are larger in nature, reflecting the extremely low density nature of Teesdale. Out of a selection of

80 sheds within the Teesdale township, the average size of outbuildings was 136.03m², which is larger than the maximum outbuilding size not requiring a permit (120m²) in the provisions of the Low Density Residential Zone (Clause 32.03).



4

EXISTING STRATEGIES

4.1 Existing Strategies

1997 Teesdale Structure Plan

The 1997 Teesdale Structure Plan outlines the role of Teesdale as “a residential community with associated commercial and community services, with a limited servicing role for the surrounding rural area.”

The Structure Plan (Figure 6) outlines Teesdale as an area which is landscape dominated, with a limited range of facilities and a quiet rural retreat atmosphere.

The original structure plan outlines 3 stages of development.

1. Infill rural residential
2. Limited expansion east of Mercer Street
3. East of Bell, Miller and Kings Court

The Low Density Environmental Zone

Opportunity for small quantities of tourist accommodation and facilities and productive use of many of the large lots for small scale agriculture has also been outlined as potential factors for encouragement.

Domestic Wastewater Management Plan

The DWMP July 2015 was developed to provide an understanding of the best approach to manage effluent disposal throughout Golden Plains.

The DWMP recommends a minimum lot size of 4,000sqm for subdivision where lots are unsewered. This is to allow for safe effluent disposal.

No	Action	Est. cost	Priority
1	Advocate for the provision of a pedestrian crossing on the Shelford Bannockburn Road at the preschool near Panticks Rd.	500	1
2	Regularly mow the path beside Native Hut Creek from Turtle Bend Reserve along Panticks Road	-	1
3	Provide a foot/bicycle crossing at the north end of Sutherland St connecting the existing path in Sutherland St to the proposed mown trail in Panticks Rd.	10000	Ongoing
4	Give consideration to developing a trail between Bannockburn and Teesdale.	450000	6
5	Give consideration to developing a trail connecting Teesdale town centre to the Inverleigh Flora and Fauna Reserve.	125000	6
6	Give consideration to developing a path linking Turtle Bend Park to the hall and on to Chinaman's Lagoon	30500	6
7	Give consideration to developing a trail along Lethbridge Rd from Main Rd to Russell St.	15500	6

Figure 6 Paths and Trails Strategy 2013-2017

Golden Plains Paths and Trails Strategy (2013 – 2017)

The Paths and Trails Strategy provides a number of future actions for Teesdale as summarised above.

- Significant improvements to Don Wallace Recreation Reserve, including an upgrade to the surface of the playing field and car park upgrade.

Golden Plains Shire Recreation Strategy Plan (2015 – 2019)

This plan identified a number of aspirational improvements to Council owned land, including:

- Significant improvements to Turtle Bend Reserve (underway).

- Sealing the driveway of the Teesdale mechanics institute and making improvements to the Teesdale Hall and Equestrian Centre.
- A shared path to Bannockburn and a trail to the Inverleigh Flora and Fauna Reserve.

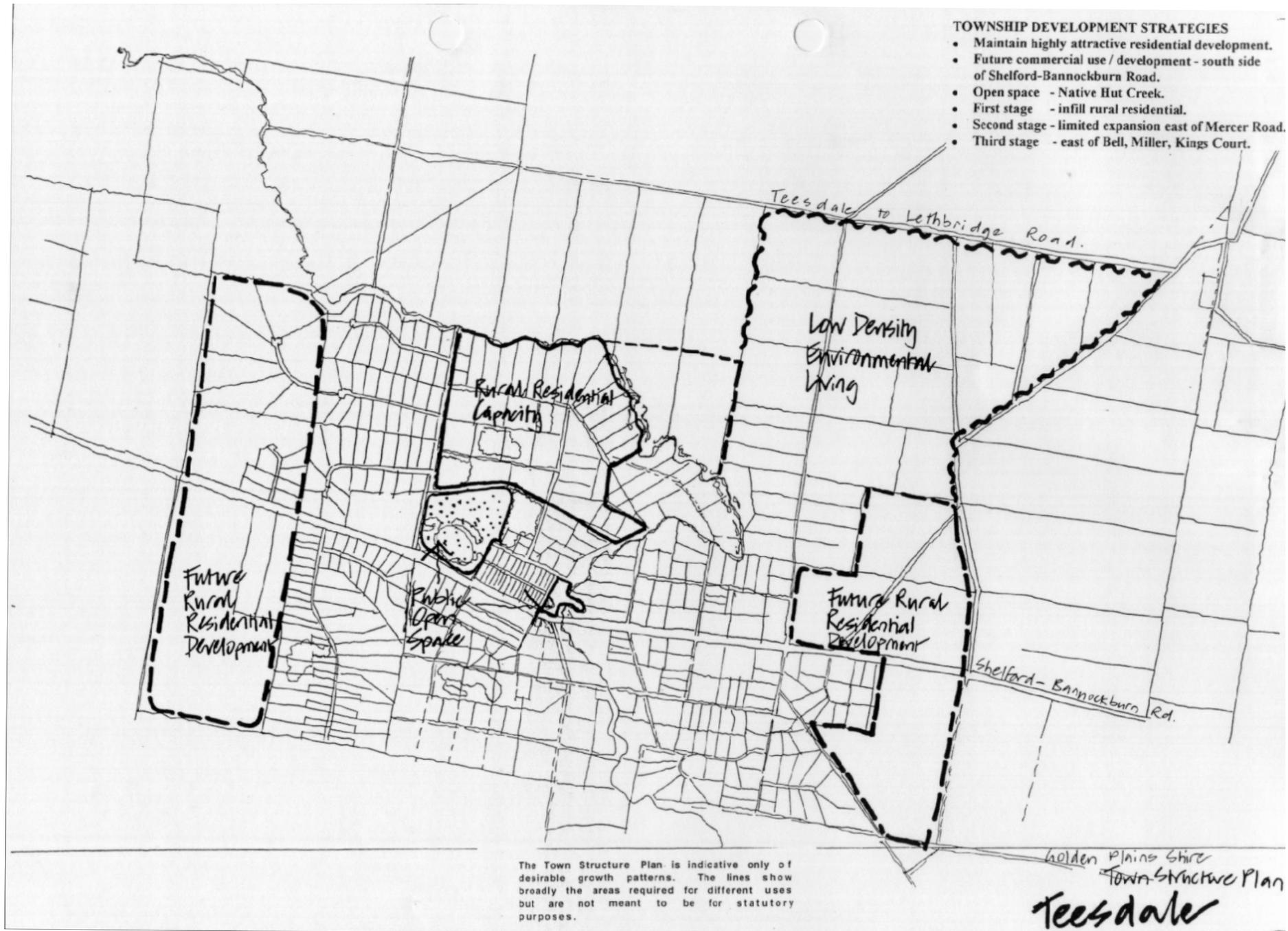


Figure 6 Teesdale Structure Plan 1997

Teesdale Community Plan (2016-2019)

This is a plan prepared by members of the community of Teesdale, known as “community coordinators”. The Plan identifies a number of key local projects and aspirations regarding community infrastructure, traffic safety, events and activities.

Key projects/aspirations listed include:

- Development of a multipurpose track between Teesdale and Bannockburn.
- Development of a pedestrian crossing between the car park and the shop.
- Sealing of the hall car park and CFA entry.
- Establishment of a half size basketball court at turtle bend park.
- An earlier version of the plan from 2014 also included a large number of potential improvements to the town that differ slightly from the most recent plan, for instance promoting the need for a crossing opposite the kindergarten and the possibility of traffic calming measures in the town centre. Survey responses in the 2014 version express many additional aspirations, for instance for more shops/services, for a barter board, a Men’s Shed and opposing the installation of street lighting.

G21 Regional Growth Plan

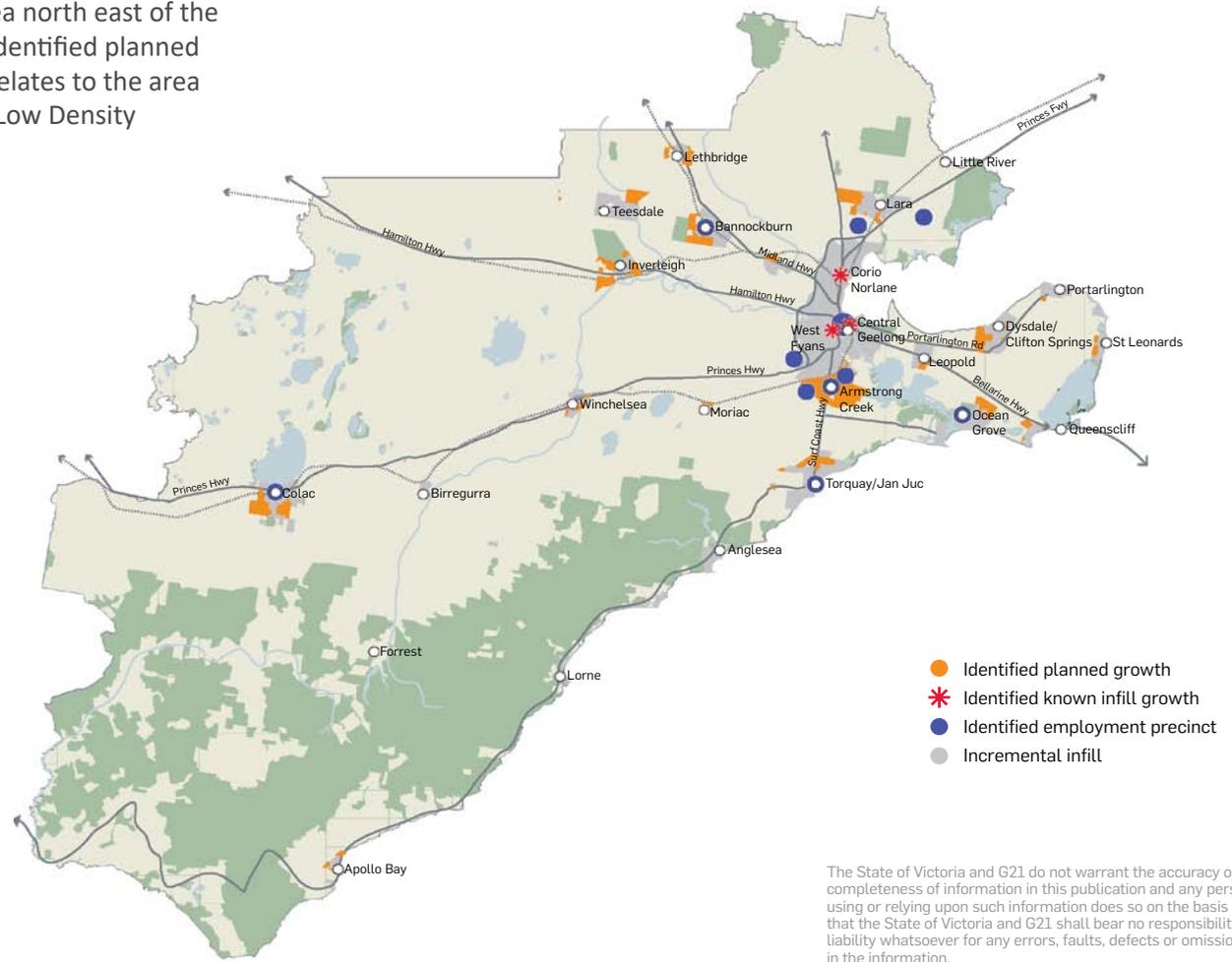
The G21 Regional Growth Plan seeks to

guide the growth of the Greater Geelong region (including Teesdale) through to the year 2050. It is a plan seeking to facilitate an eventual population of 500,000 people in the region.

Page 25 of the plan shows the locations for identified planned growth within the G21 region. The existing area of Teesdale is depicted as supporting incremental infill. There is an area north east of the town depicted as “Identified planned growth”, which correlates to the area currently shown as Low Density

Environmental Living in the Teesdale Structure Plan, as shown in Clause 21.08-14 of the Golden Plains Planning Scheme.

The G21 plan notes that towns such as Teesdale provide low density residential lifestyle options.



The State of Victoria and G21 do 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 and G21 shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

Figure 7 G21 Identified growth areas

5

PLANNING SCHEME ANALYSIS

5.1 Planning Scheme Analysis

The vast majority of Teesdale is situated within the Low Density Residential Zone (LDRZ). Under this zone all lots are required to be at least 4000 square metres in area, the minimum requirement under the zone in unsewered areas. This requirement is consistent with Council's minimum lot size requirements under the Domestic Wastewater Management Plan (DWMP).

Central Teesdale is situated within the Township Zone (TZ), a flexible zone that allows for a combination of residential and commercial uses and does not have a minimum lot size. Nonetheless land in this zone is still subject to the 4000 square metre minimum lot size requirement of the DWMP.

Reserves and public parks are situated in the Public Parks and Recreation Zone (PPRZ).

The zoning of Teesdale is shown at figure 8.

Zones Analysis:

- Within the Low Density Residential Zone lots tend to be large to very large in size, with some being over 5 hectares. In terms of the

planning controls applicable, there is a notable level of potential for infill subdivision in the Low Density Residential Zone where the minimum lot size is 4000sqm.

- If all infill subdivision in the Low Density Residential Zone was realised it would potentially result in changes that may not be appreciated by all residents, for instance more battle axe subdivisions.

- Properties in the central area of the town are located within the Township Zone and tend to be smaller, generally around 2000 to 4000 square metres in size.
- Although the Township Zone promotes both commercial and residential uses, it is recognised that residential is most common. A potential consequence being that aspiring businesses are more likely

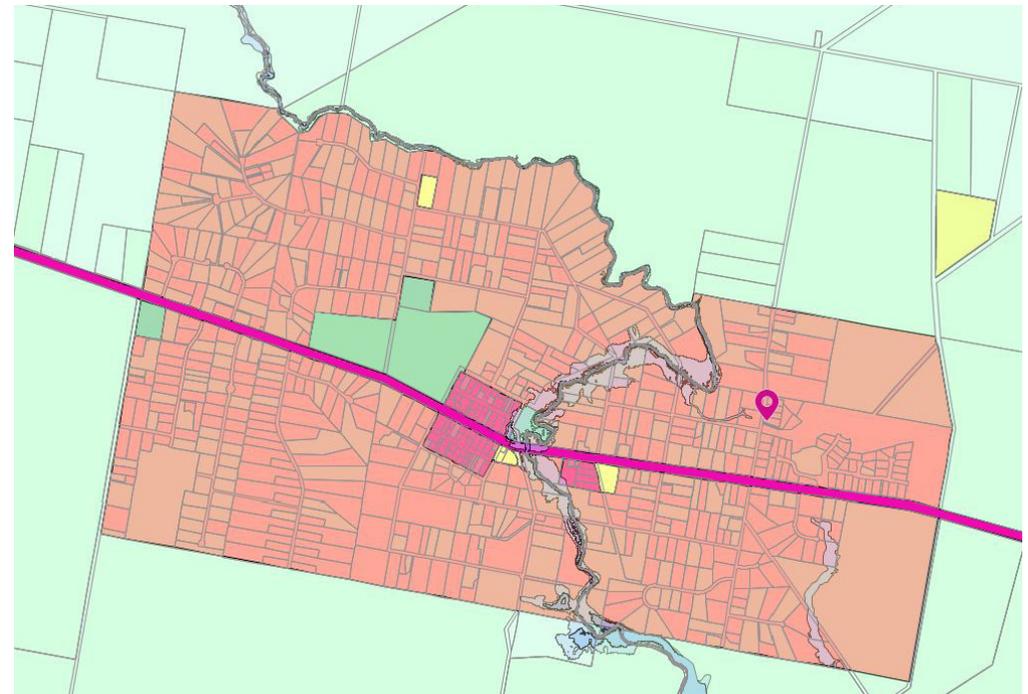


Figure 8 Teesdale Zones

to face objections on an amenity basis when/if they lodge a planning permit application, depending on the nature of the business.

- The size of the Township Zoned area exceeds Teesdale’s potential commercial requirements, however little of the land is being used for commercial purposes.

5.2 Overlays

Design and Development Overlay Schedule 5 (DDO5)

This Overlay which is titled “Low Density Residential Zone Setbacks” applies to the LDRZ areas of Teesdale. This Overlay seeks to ensure that buildings are setback appropriately from boundaries, roads and dwellings not in the same ownership.

Land Subject to Inundation Overlay (LSIO) and Floodway Overlay (FO)

These Overlays apply in the vicinity of the creek that runs through Teesdale known as Native Hut Creek. They generally seek to ensure that development considers flood management issues prior to any development beginning.

Environmental Significance Overlay Schedule 2 (ESO2)

This Overlay applies in the vicinity of Native Hut Creek. It generally seeks to ensure that the quality and quantity of stormwater flowing into the creek will not have significant environmental consequences.

Bushfire Management Overlay (BMO)

The BMO applies to and in the vicinity of the Don Wallace Reserve and Teesdale Sheoak Nature Conservation Reserve. It also applies to a heavily vegetated patch north west of the existing township.

The area surrounding Teesdale is mostly used for farming and is largely clear of vegetation.

Heritage Overlay

The Heritage Overlay applies to a limited number of significant sites in Teesdale (refer to Section 3.12 – Heritage).

Development Plan Overlay Schedule 2 (DPO2)

The DPO2 applies to two areas along the eastern edge of the town and to an area along the south western edge. Two of these areas are partially developed and one is undeveloped.

The DPO2 sets the requirements for future growth areas in Teesdale and requires a masterplan to be created for a wider development area. This ensures consideration for a number of specific matters at a holistic level. These matters include staging, roads, drainage, landscaping and linkages to nearby areas.

Salinity Management Overlay (SMO)

The SMO applies to a small area of land near the southern border of the town. It also applies sporadically to patches of land south of the existing

area of Teesdale. The SMO seeks to ensure that development is responsive to the limitations of building on salinity affected land.

5.3 Local & State Policy

Clause 21.08 Local Areas – Small Towns

The 1997 Teesdale Structure Plan is shown at Clause 21.08-14 of the Golden Plains Planning Scheme.

Notably the areas recognised as “Future Rural Residential Development” have been partially developed and have been zoned to support development. The area shown as “Low Density Environmental Living” has not been developed, is in use for farming (primarily) and is still zoned as the Farming Zone. This is an older structure plan and the closest modern translation to “Low Density Environmental Living” may be the Low Density Residential Zone.

Low Density Residential Subdivision Policy

This policy is based on the concept that there are varying soil qualities in Golden Plains and the particular soil capacity of different areas will sometimes mean that lot sizes need to be larger than

the 0.4 hectare minimum subdivision size described in the Golden Plains Low Density Residential Subdivision Policy.

5.4 State

Clause 11.01-1R Settlement – Geelong

This Clause carries over key direction from the G21 regional growth plan. The map within the Clause recognises the “Environmental Living” area from the 1997 Teesdale Structure Plan as a “Planned growth area”. This map designates the settlement boundary for Teesdale to be the existing built up area + the “Planned growth area”.

Clause 13.02 Bushfire

This Clause gives recognition to the protection of human life as the highest priority over all other policy considerations. It requires a number of specific matters be taken into account when planning for new areas, in particular to ensure that any location selected represents a low risk from bushfire.

6

SUPPLY & DEMAND

6.1 Demand

Between the 2011 to 2016 census Teesdale grew from 1479 to 1664 residents. This represents average annual population growth of 37 people or 2.5%. The average Teesdale household contains 2.9 residents. This means that in 2018 there would have been demand for approximately 13 dwellings (37 new residents/average household size = 12.7). If the 2.5% growth rate continues then over time the number of dwellings needed in a year will gradually increase.

6.2 Supply

Teesdale currently contains some capacity for future residential growth within the Development Plan Overlay Schedule 2 (DPO2) affected areas on the eastern and western edges of the town. These areas are already zoned for residential purposes and in some locations construction is underway. These areas are depicted in Figure 9.

Supply – Undeveloped Areas Already Residentially Zoned

It is estimated that the supply of undeveloped land within the DPO2 areas is equal to approximately 158 hectares, this includes some land that may have been subdivided but not yet developed

for dwellings. This would provide for 237 future lots (approximately) based on an assumption that 60% of the vacant land could be developed for residential lots (accounting for roads, open space and drainage infrastructure for example) and that the lots would be 4000 square metres in size.

The number of potential lots is calculated as 158 (hectares) divided by 0.4 (size of lots in hectares) X 0.6 (assuming 60% of land is developable for lots) = 237 lots

Based on a supply calculation of 237 potential additional lots in these areas, Teesdale would have sufficient land supply to accommodate 687 additional residents (calculated as 237 lots X 2.9 people per household). This would allow the current estimated population of 1791 to grow to around 2478, providing just over 13 years of growth at the current annualised growth rate of 2.5%.

This calculation is based on 1791 (estimated population in 2019) X 1.025 (annual rate of growth) ^ 13 (years) = 2468 (residents).

Supply – Infill Potential

The physical potential for infill subdivision has been analysed and from this it has been identified that up to 822 additional lots could be yielded, if all existing residential allotments were resubdivided to the maximum extent possible. This is based on a high level (approximate) analysis taking into account known obvious physical constraints and the 4000 square minimum lot size of the Zone. There are potentially other constraints not known to the authors. Furthermore the intentions of land owners will vary, with some unlikely to consider subdivision. Therefore the maximum potential supply from infill subdivision is likely to be significantly more than what would actually be provided into the future.

Based on a supply calculation of 822 potential additional lots, Teesdale would have sufficient infill capacity to accommodate 2383 additional residents from infill alone (calculated as 822 lots X 2.9 people per household) enough for a more than a doubling of the population. As the land is owned by residents not developers it is not known how many

residents aspire to subdivide, thus the number of years of development potential from infill has not been provided.

Supply – Potential Growth Area (not currently residentially zoned)

The existing 1997 Teesdale Structure Plan includes a Farming Zoned area listed as “Low Density Environmental Living” deemed to be a future growth area. The same area is shown as a future growth area of Teesdale in the G21 regional growth plan. The area is depicted in the 1997 Teesdale Structure Plan below.

A supply calculation is made for this area based on the hypothetical scenario that the land was rezoned to the Low Density Residential Zone. This is hypothetical and does not reflect Council’s current work program.

The total land area (excluding a former landfill and 500 metre buffer around it) is approximately 200 hectares. Based on an assumption that 60% of the land could be developed for lots and that the lots would be 4000sqm in size, the potential yield is 300 lots. This is calculated as 200 (hectares) divided by 0.4 (size of lots in hectares) X 0.6 (assuming 60% of land is developable for dwellings) = 300 lots.

Based on a supply calculation of 300 potential new lots, Teesdale would have the capacity to accommodate 870

potential new residents (at 2.9 people per household) if all of the future growth area land was rezoned for residential purposes then subdivided (at the minimum size allowed by the zone). This is based on 300 (potential lots) X 2.9 (people per household) = 870. Adding together undeveloped areas already zoned + the potential growth area (not currently residentially zoned).

The 300 lots from the potential growth area + the 237 lots from the undeveloped areas already zoned are equal to 537 lots. Multiplying 537 lots by the average number of people per household (2.9) is equal to 1557 (potential additional residents). Meaning that these areas together would allow the town to grow to around 3348. This is just over 25 years of land supply at a 2.5% growth rate. This calculation is based on 1791 (estimated population in 2019) X 1.025 (annual rate of growth) ^ 25 (years) = 3320 (residents).

Other matters to consider

Teesdale forms part of an area that is integrated with the economy of the Geelong region. If other areas around Geelong become more or less restrictive in terms of the supply of additional Low Density residential opportunities, this is likely to have an impact on the

population growth rate of Teesdale. Theoretical lot yields stated in this report are estimates only and may differ in reality due to constraints or other reasons not known at the time of preparing this report.

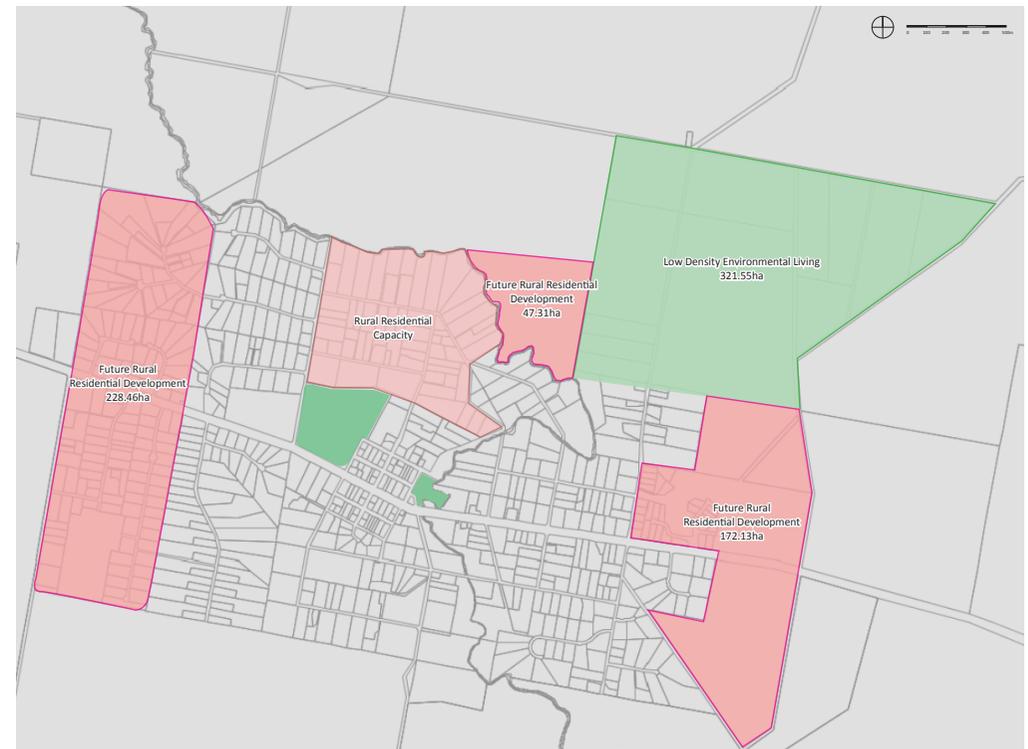


Figure 9 Identified growth areas from Teesdale Structure Plan 1997

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Theoretical lot yields stated in this report are estimates only and may differ in reality due to constraints or other reasons not known at the time of preparing this report.

Update: Recent Demand Figures and Finalisation of the Teesdale Structure Plan

During consultation for the background report it was brought to Council’s attention that the last two years of data from Barwon Water indicates that the growth rate of Teesdale has increased significantly compared to the census data utilised (2011 to 2016). The number of new water supply connections within Teesdale indicates that the growth rate of the town has been increasing by more than 2.5% per annum. In fact, over the past two years there has been 45 water supply connections on average (a pre-requisite for a dwelling) suggesting an average growth rate in that time of around 7.25% and considerably more in the latest year of data (2018-2019).

Recent figures may or may not be reflective of a fundamental shift in long term demand, as they only represent two years of data. As Teesdale has a small population size, it is susceptible to more variation in population growth than larger areas.

2016-17		2017-18		2018-19	
Greenfield	Infill	Greenfield	Infill	Greenfield	Infill
0	13	12	17	39	22

It is also worth appreciating that there has been negligible land supply available in Inverleigh (either infill or Greenfield) over the past three years. As Inverleigh is nearby and has a similar style of low density housing to Teesdale this may have funnelled demand towards Teesdale. As additional supply comes online in Inverleigh following the approval of the Berthon Park subdivision in 2020 (providing 110 lots), and the approval of Amendment C87 (which will provide the potential for more supply) it may split the demand for lower density allotments between the two towns.

Given the recent uptick in town growth in Teesdale as well as factors that may affect future growth, there is considerable uncertainty around the long term level of demand in Teesdale.

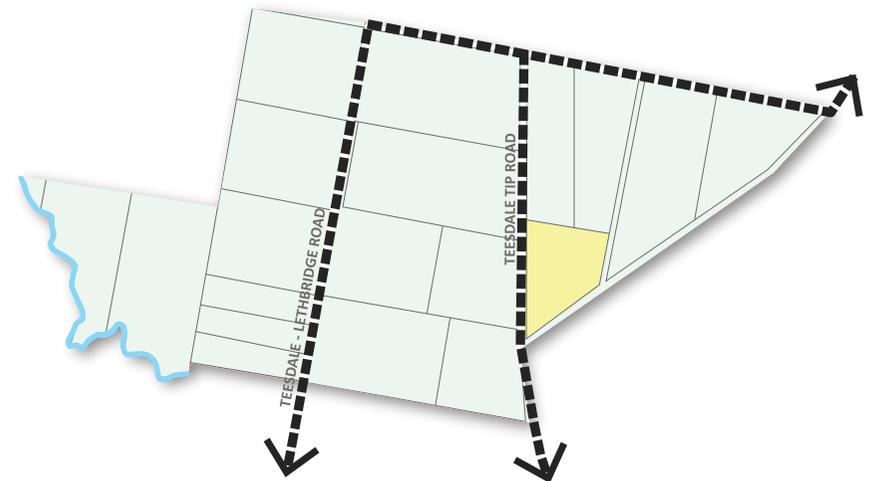
Nonetheless this section provides a supply-demand analysis based on both the 2.5% growth rate that applied during 2011 to 2016 (as indicated through the census) and the accelerated growth rate of 7.25% per annum (which matches the past two years based on Barwon Water connections), as well as identifying

supply from the North West Growth area identified in the Structure Plan.

This final growth investigation area selected for the structure plan is shown below and comprises approximately 360 hectares in area. If an area with a radius of 500 metres around the former Teesdale Landfill is excluded then the area it is approximately 250 hectares. The area excluded from the assessment

may/may not be developable depending on further assessments. It is fairly likely that some of it will be developable so removing this area from the calculation is considered conservative.

Assuming that 60% of the area is developable for lots, the yield from 250 hectares would be approximately 375 lots. This is calculated as 250 (hectares) divided by 0.4 (size of lots in hectares) X 0.6 (assuming that 60% of land is developable for dwellings).



In addition (as calculated prior to this update) it has already been assessed previously that there are approximately 237 lots able to be developed in areas already zoned for residential purposes, providing a total yield of approximately 612 lots.

612 lots equates to 1,775 people (at the rate of 2.9 people per household which applies in Teesdale as per census data).

How long will the growth areas last at a rate of 2.5% growth? (2011 to 2016 census)

Multiplying 617 lots by the average number of people per household in Teesdale (2.9) is equal to around 1789 (potential additional residents). Meaning that the growth areas could allow the town to grow to 3,580 people, enough for 28 years of growth.

This is calculated as:

1791 (estimated population in 2019)
X 1.025 (annual rate of growth) ^ 28
(years) = 3,575 (population in 28 years).
*

How long will the growth areas last at a rate of 7.25% of growth? (Barwon Water data for last 2 years)

At a 7.25% rate of growth, the growth areas would only last for approximately 10 years.

This is calculated as:

1791 (estimated population in 1791)
X 1.0725 (annual rate of growth) ^ 10
(years) = 3,606 (population in 10 years).
*

*Note: The above calculations do not account for infill subdivision, even though infill will accommodate some demand (and probably a significant amount of it). Because infill subdivision will accommodate some demand the growth areas will in reality fill up more slowly. The amount of infill that will be supplied is unpredictable and so has been excluded from the calculation.

TEESDALE LDRZ - INFILL POTENTIAL (MAXIMUM YIELD SCENARIO)

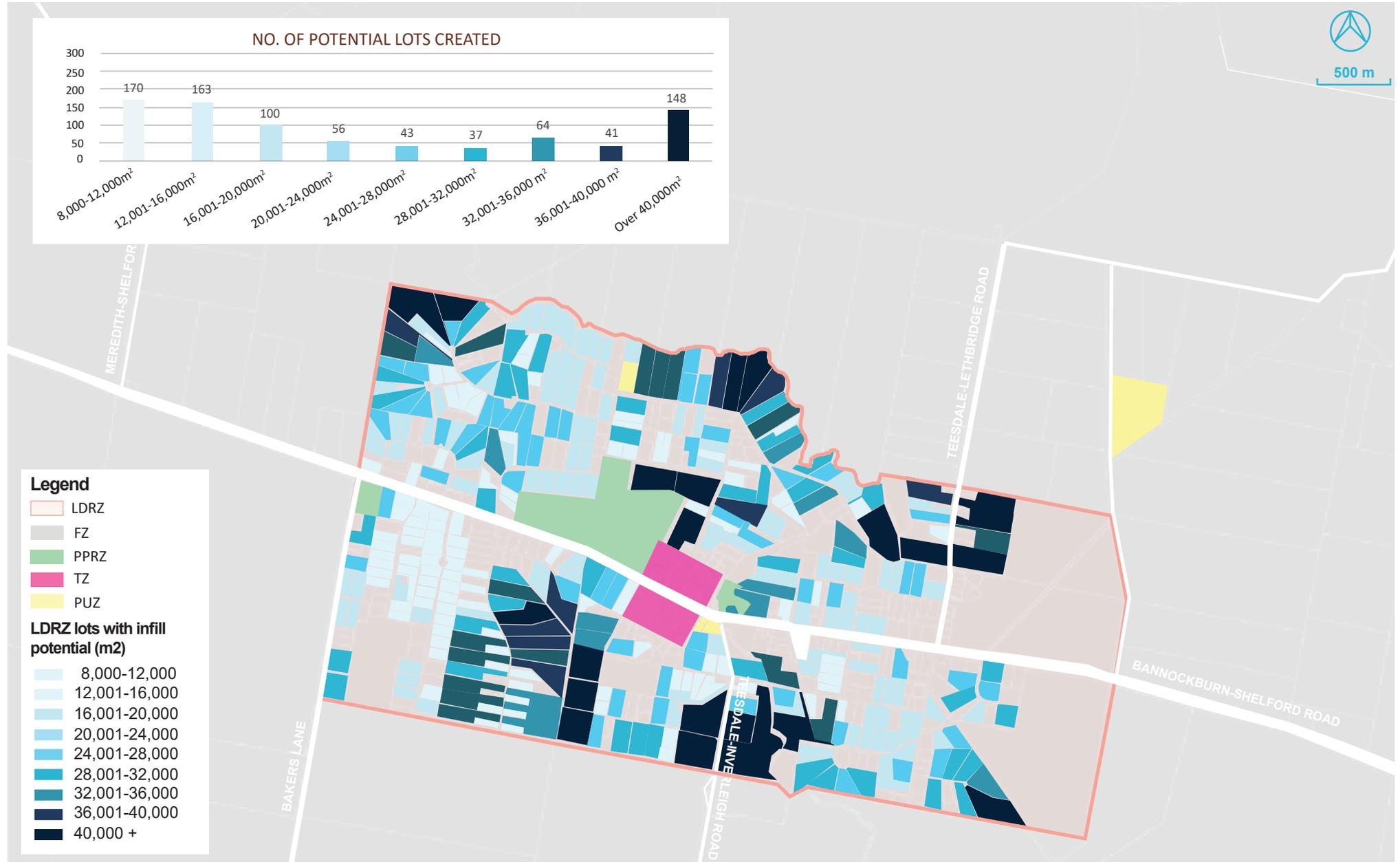


Figure 10 Infill potential in Teesdale

TEESDALE - NEW DWELLINGS CONSTRUCTED 2014-2018

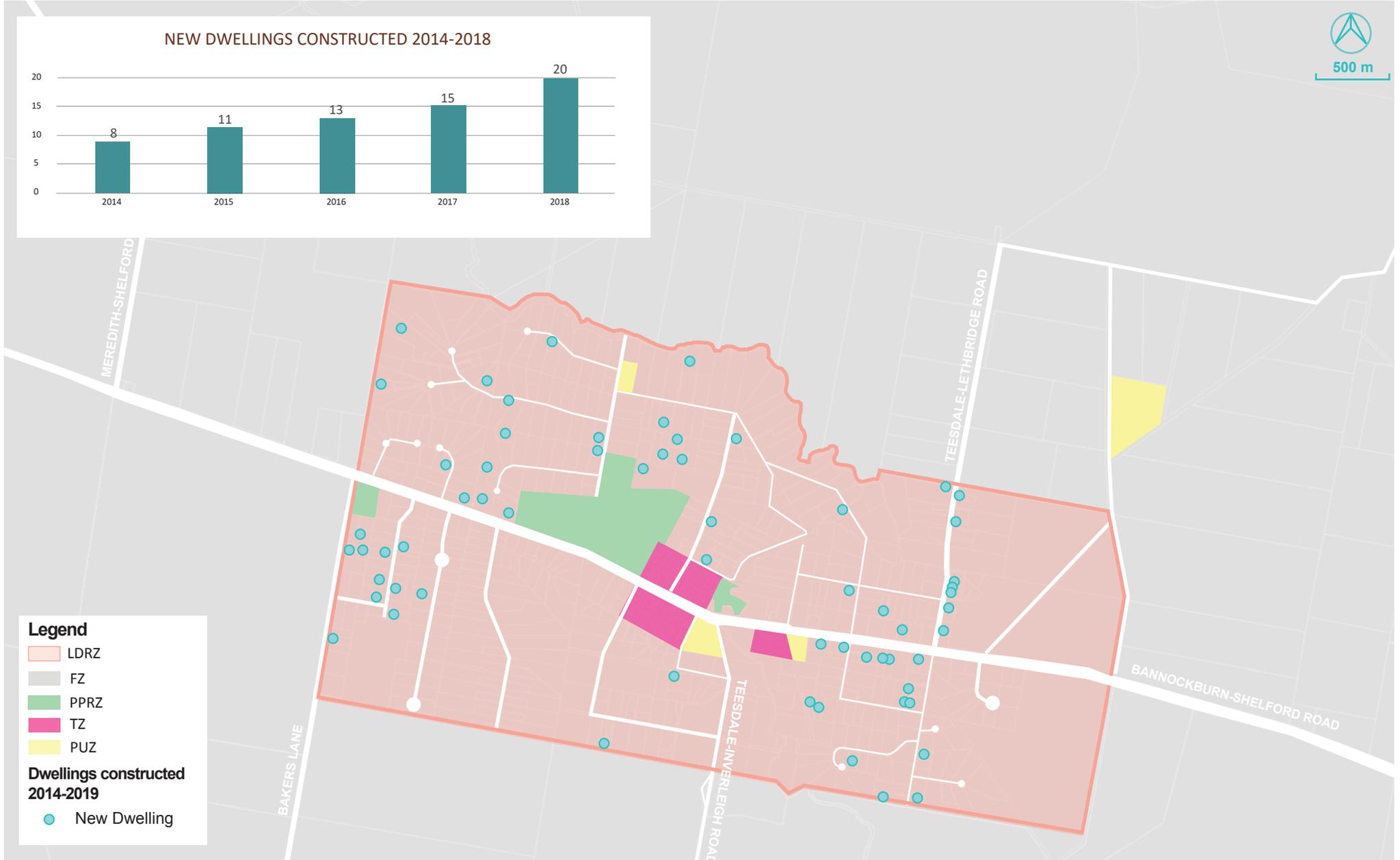


Figure 11 new dwellings constructed 2014-2018

7

DEMOGRAPHICS & HOUSING

7.1 Demographics & Housing

Teesdale is primarily a young family town and contains 494 families. 22.5% of residents are aged 14 or under, compared with 18.3% in Victoria.

According to ID profile, Teesdale & district have a SEIFA disadvantage index of 1,059, compared to 1,010 for all of Victoria, meaning that on average

Teesdale is somewhat less disadvantaged than the State average. The SEIFA index is comprised of factors such as incomes and employment.



AVERAGE HOUSEHOLD SIZE

2.9



MEDIAN AGE

39



% OF TEESDALE <14

22.5%



% TEESDALE >65

11.4%



MEDIAN WEEKLY HOUSEHOLD INCOME

\$1,621



MODES OF TRANSPORT

79.7% travel to work by car as a driver or passenger



FAMILY COMPOSITION

51.6% of families are a couple with children



OCCUPATIONS

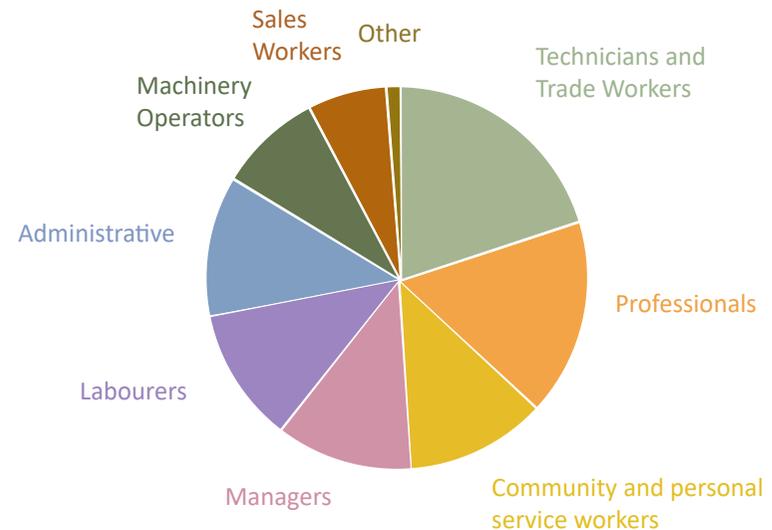


Figure 13 Most common occupations in Teesdale, ABS 2016

7.2 Method of Travel to Work

According to Profile I.D, Teesdale has an above-average dependency on commuting to work by car, when compared with the Victorian average.

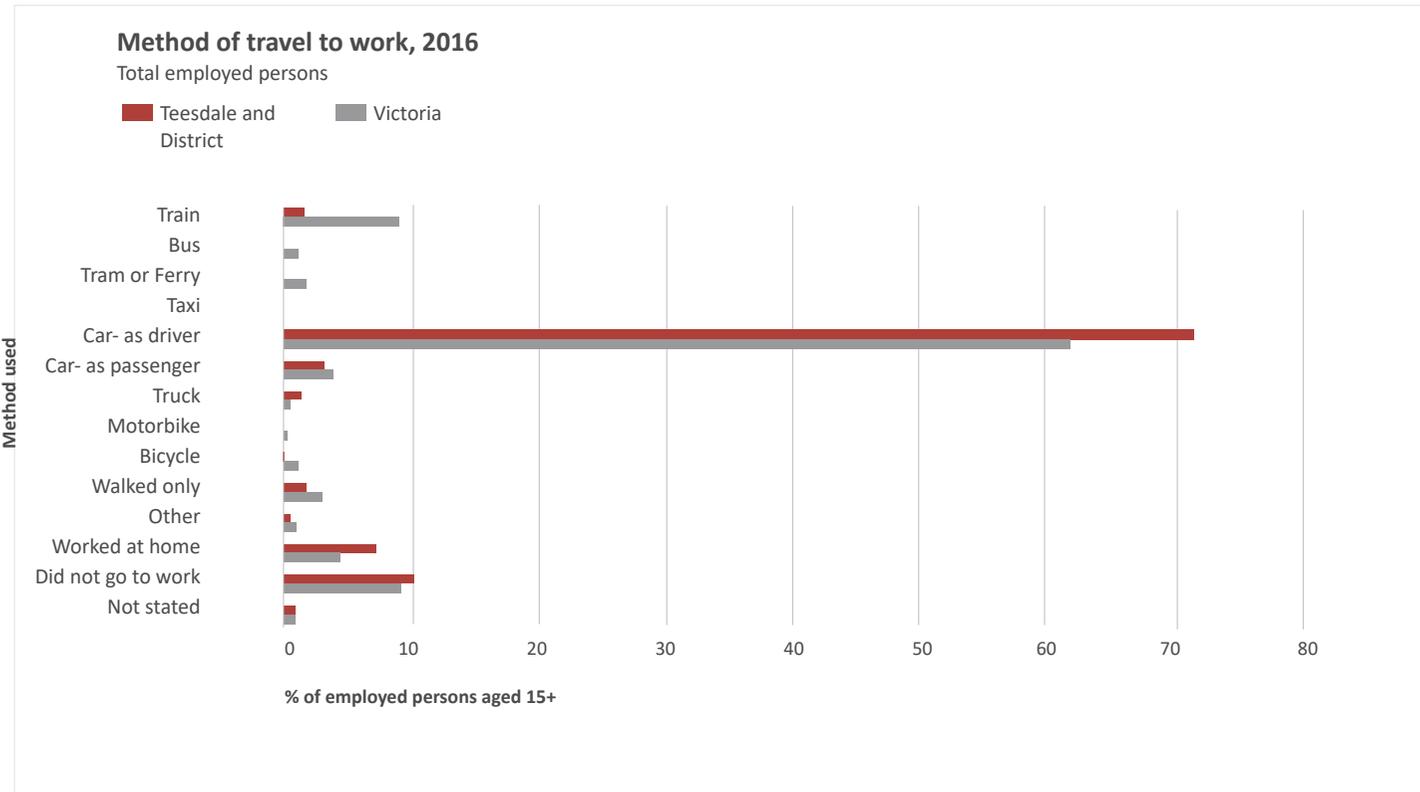


Figure 14 Method of travel to work 2016

8

COMMERCIAL LAND

8.1 Commercial Land

Teesdale currently contains a medical centre, a general store, pharmacy, plant nursery, equestrian centre, a café and other miscellaneous commercial operators.

There is a significant amount of existing Township Zoned land in Teesdale (4.077ha to the east, 23.03ha to the west) that is centrally located. Most of the smaller lots in the town reside within this Zone. This is a flexible zone that supports residential and commercial uses and is akin to a mixed use zone, however most commercial uses require a planning permit.

In theory the supply of potential commercial land exceeds the potential needs of the population. In reality Teesdale is notable for having relatively few commercial uses compared to other towns of this size. It does not have a pub, service station, small supermarket or restaurant. At the other end of the spectrum Corryong (population 1,348) in north eastern Victoria has three service stations, an IGA supermarket, a bakery, a bank and a number of cafes and restaurants. The key difference being that Corryong is not close to any major urban centre and is therefore relatively self-reliant economically.

The vast majority of employed Teesdale residents work elsewhere and students above primary school age need to study elsewhere (no secondary school). Those who go elsewhere for work or study can shop elsewhere with relative ease.

The small number of commercial uses in town may also be influenced by the low density nature of the town. In most small towns a high percentage of the population live within a walkable distance to the commercial centre. In Teesdale, the low density nature means that the town has a large physical footprint – walking distances can be

relatively high for a town with this level of the population.

A potential barrier to commercial development is the existing nature of land use in the Township Zone. The vast majority of lots are used for residential purposes. The only commercial operators appear to be a medical centre and a home based business dealing in fish food products. A commercial operator would need to firstly acquire land and then obtain planning permission in the context of a neighbourhood that is almost entirely residential.

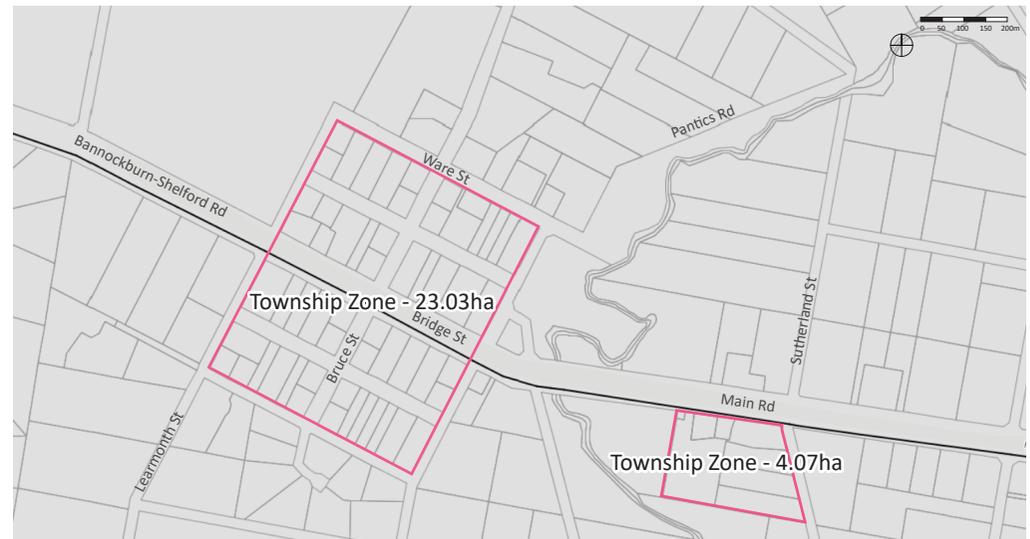


Figure 15 Township Zone areas in Teesdale

9

COMMUNITY INFRASTRUCTURE & OPEN SPACE

9.1 Community Infrastructure & Open Space

Teesdale currently contains:

- A primary school.
- A Pre-school.
- Community hall.
- Presbyterian Church.
- Public Park (Turtle Bend Park) including play equipment.
- A football oval with pavilion (at Don Wallace Reserve).
- Don Wallace Reserve and Sheoak Nature Conservation Reserve.
- Several tennis courts.
- Several walking tracks, including along the main street and along a part of Native Hut Creek close to the centre of town.
- A BMX track.
- Chinaman's Lagoon (a lagoon, walking area and bushland reserve).

Turtle Bend Park is currently planned for a substantial upgrade, following a successful \$222,000 Federal Government grant application.

The park already contains a toilet, BBQ, shelter and play equipment.

Teesdale is a short drive to Bannockburn which contains higher order community infrastructure such as a library.

Pedestrian and Cycle Network

Teesdale contains several walking tracks including along the entire main road and along a part of Native Hut Creek close to the centre of the town. There are additional walking opportunities at Don Wallace Reserve and around Chinaman's Lagoon.

Other than the main road, Teesdale does not contain footpaths in residential streets. However newer subdivision standards require a footpath along at least one side of every road, even in low density areas.

The Golden Plains Paths and Trails Strategy identifies a number of future actions for Teesdale related to tracks and trails, including a shared path to Bannockburn.



10

INTERACTIONS WITH OTHER TOWNS & CITIES

11. Connection to Other Towns & Cities

Teesdale itself provides little by way of local employment opportunities, though it is notable for having easy access to a number of significant regional economies providing good job opportunities for residents. The town is most integrated with Geelong, being a 34 minute drive to the Geelong CBD. It is a driveable distance to the Western suburbs of Melbourne being only 51 minutes to Werribee. It is 50 minutes to Ballarat and 52 minutes to Colac. The town also has a strong relationship with Bannockburn (11 minutes away) which provides limited local employment opportunities, the nearest major supermarket and key community infrastructure for the region such as the library and nearest secondary school. The high level of integration with larger urban areas is reflected in the high numbers of residents driving to work and the number of households with more than one car (as discussed under demographics).

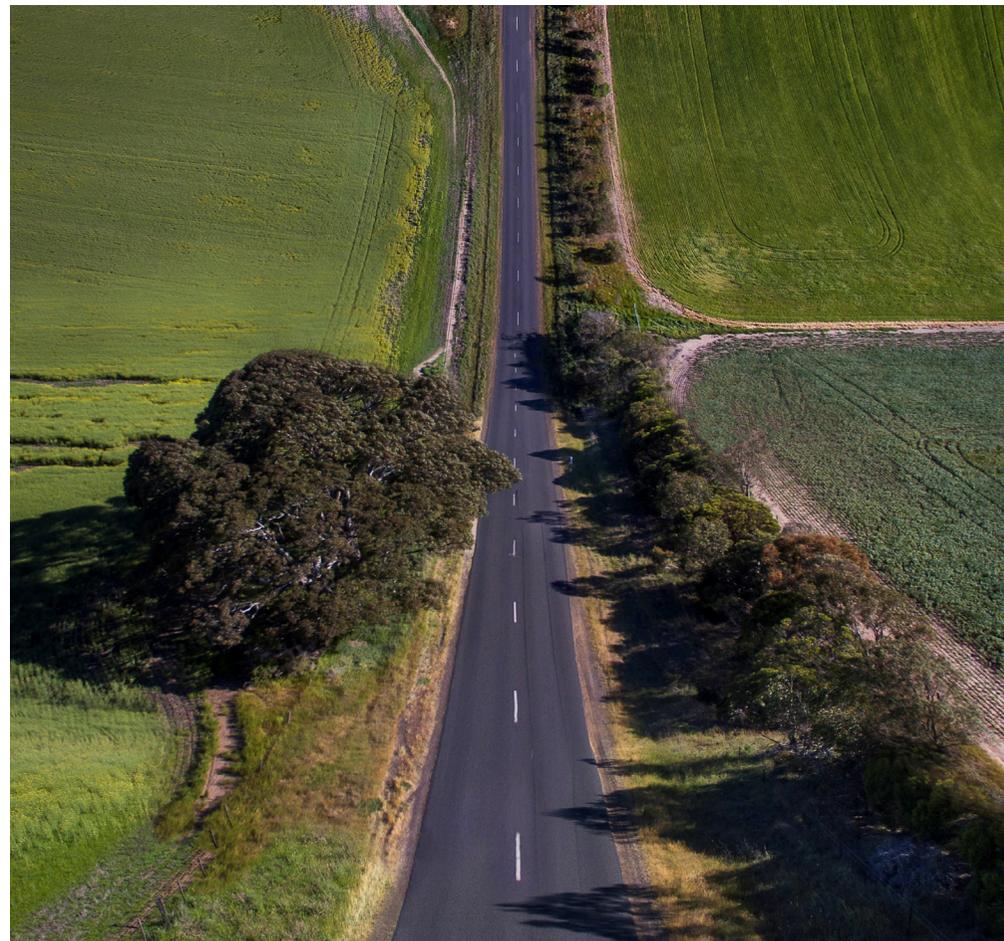
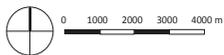
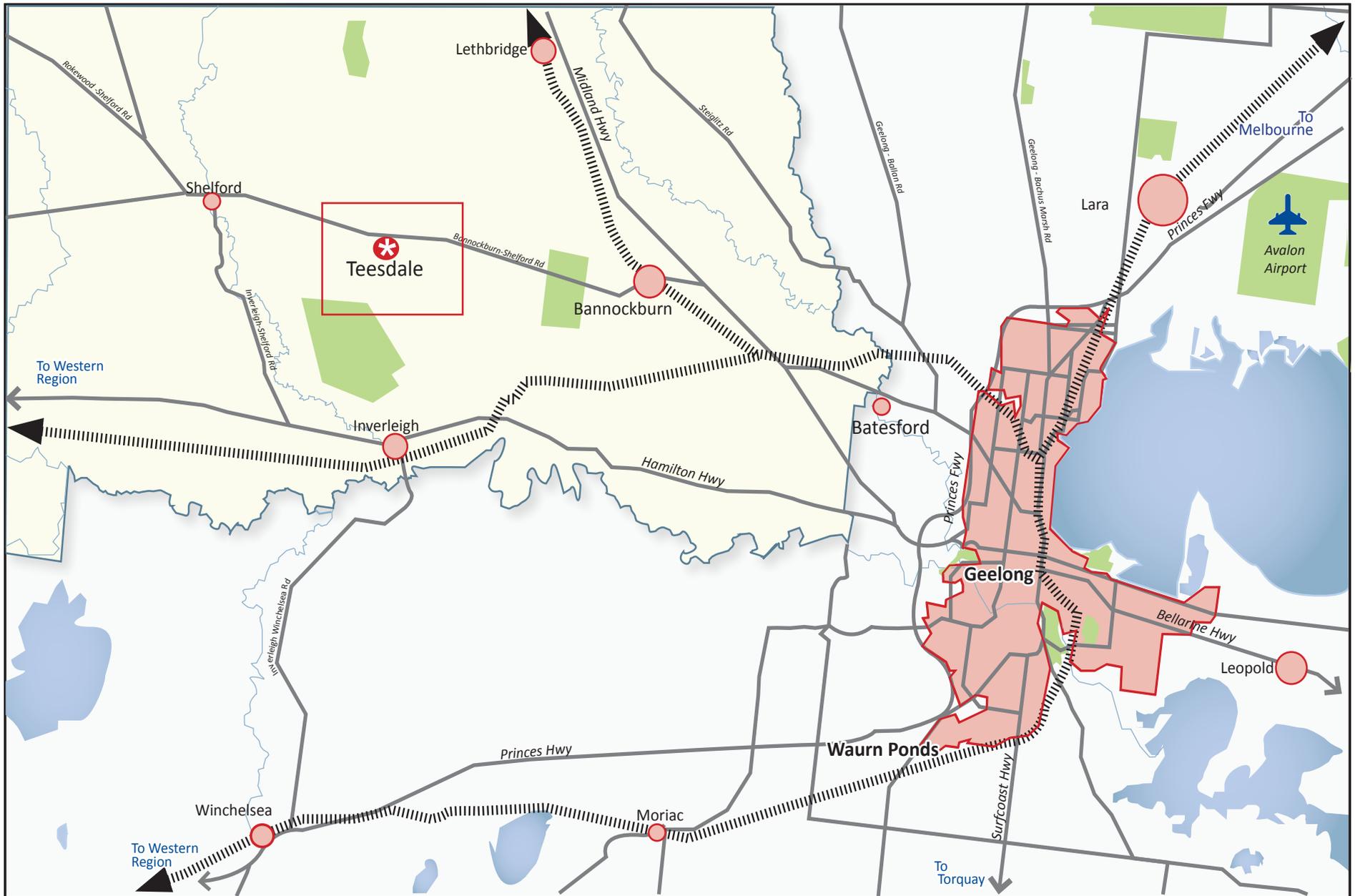


Figure 16 Teesdale Regional Context



TEESDALE REGIONAL CONTEXT



HERITAGE

10.1 Heritage

Teesdale was part of the parish of Carrah and Burtwarrah, the county of Grant and the Shire of Leigh. The township of Teesdale on Native Creek was proclaimed in 1852 on a major travelling route to Buninyong via Mount Mercer. Like that settlement Teesdale was also connected to the pastoral concerns.

Teesdale's first house in 1851 became the site of the post office. Aboriginal people used to camp in a paddock called Bullivant's. It's Farmer's Common proclaimed in 1861, with a Mechanics' Institute in 1874, which in 1888 became a free public library. A 1969 fire destroyed its hall, a new one built in 1973, at which time a water main was also constructed to connect the town to the Meredith basin. Teesdale was the site of the Leigh Community Centre in 1979.

There are six sites in Teesdale recognised and protected under the Heritage Overlay including the Presbyterian Church, the Teesdale primary school, a bluestone cottage "Gowan Brae", the War Memorial, the Woolbrook Homestead Complex and Chinaman's Lagoon.

A row of *Maclura pomifera* (Ossage Orange) and *Pinus pinea* (Stone Pine) on Bannockburn-Shelford Road, Teesdale are recognised by the Significant Landscape Overlay in the Golden Plains Planning Scheme. Both sets of trees date from the late 19th century, which is significantly longer than the typical life expectancy for these species.

Chinaman's Lagoon

Teesdale's original water supply was extracted from Native Hut Creek, but by the 1870s the water was considered too salty for human consumption and provisions were made to establish a permanent and more reliable water source for the emerging township. Earth works were undertaken to construct the reservoir at the site now known as "Chinaman's Lagoon" and by 1883 tenders were called for the fabrication and laying of pipes and the construction of a tunnel. The Lagoon was named after the Chinese contractor who undertook works associated with the reservoir. In 1973 the town was connected to reticulated water from a basin at Meredith.

The site comprises an earthen dam and aboveground infrastructure, dating from the period when the water catchment supplied the township, including a bluestone lined well approximately .75 metres in diameter and a basalt paved offlet. The site includes significant amounts of bushland and native vegetation.

Teesdale 40 years ago

Aerial photography from the Department of Crown Lands Survey in 1978, as shown below, depicts Teesdale as a lightly populated area. Since this time the number of residential allotments has significantly increased.



Figure 17 Teesdale 1978 vs Teesdale 2017

12

KEY FINDINGS

12.1 Key Findings

Commercial Land

- Teesdale lacks many business types generally found in towns of this size such as a service station, pub or restaurant.
- While the centre of the town is zoned as the Township Zone and can support both residential and commercial development (generally requiring a planning permit), the vast majority of this land is used for residential purposes at the current time.

Residential Land

- The supply of remaining greenfield land available is sufficient to cater to around 13 years of population growth at a current growth rate of 2.5% per annum.
- Teesdale contains extensive potential for infill subdivision.
- If no further greenfield subdividable land is recommended by this iteration of the Teesdale Structure Plan, infill subdivisions are likely to occur to a greater extent than otherwise might be experienced in order to cater to demand.

Street Lights

- Teesdale contains no street lights in the older parts of town, including along the entire main road.

Street Trees

Teesdale contains a mix of native and exotic street trees with no clear theme, however the street trees are generally aesthetically pleasing.

Crossings

- There is one crossing in the town on the main road in front of the school, suitable for crossing in School times with a supervisor. Teesdale does not have any other pedestrian crossings, including on the main road (a VicRoads road).
- There are no pedestrian refuge islands on the main road

Sewer

- Teesdale is unsewered.
- Teesdale is growing and is close to the reticulated sewer network in Bannockburn.
- There are no current plans to sewer Teesdale in Barwon Water's 5 year capital works program, however the circumstances of the town appear to warrant consideration for sewerage over the long term.

- Whilst Council is unable to provide sewer, a community preference for sewer is likely to be of potential interest to Barwon Water if it exists.
- If reticulated sewer was ever installed it would bring opportunities, but would also change the character of the town. Most notably the Low Density Residential Zone applicable to most of the town has a minimum subdivision size of 2000 square metres for sewer lots and 4000 square metres for unsewered lots.
- Reticulated sewer would be at a cost to individual land owners, for instance the Smythesdale sewer scheme involved a cost of around \$3000 - \$6000 per lot. Land owners were also responsible for organising the decommissioning of their existing septic system.

Entrances to town

- On approach from Bannockburn, Teesdale does not contain an entrance feature or sign and could possibly be enhanced by a more consistent vegetation theme.

- On approach from Bannockburn, just before Teesdale-Lethbridge road on the right hand side of the road reserve there is a 150m long gravel area of unknown origin with some mounds of gravel. This is out of keeping with other parts of the road reserve, which are generally vegetated.
- On approach from the west side there is little to identify that one has entered a town, other than glimpses of houses – generally behind trees.

Flood Mapping

- A flood mapping study is being finalised by the CCMA, which when completed will result in modifications to the flood levels and the extent of existing mapping in the vicinity of native hut creek. A planning scheme amendment will be required to implement the mapping.
- A tributary of Native Hut Creek which goes through Chinaman’s Lagoon and across Jolly’s road has not been flood mapped, but is understood to warrant consideration for future flood mapping.

Note: Existing Council Strategies include plans for the upgrades to the path network, as well as upgrades at the Don Wallace Recreation Reserve, Turtle Bend Park, improvements to the Teesdale Hall and an upgrade to the Leighdale Equestrian Centre. These have not been listed as key issues, as they will not be relevant to the Structure Plan – which will seek to avoid duplication with existing plans and strategies.

