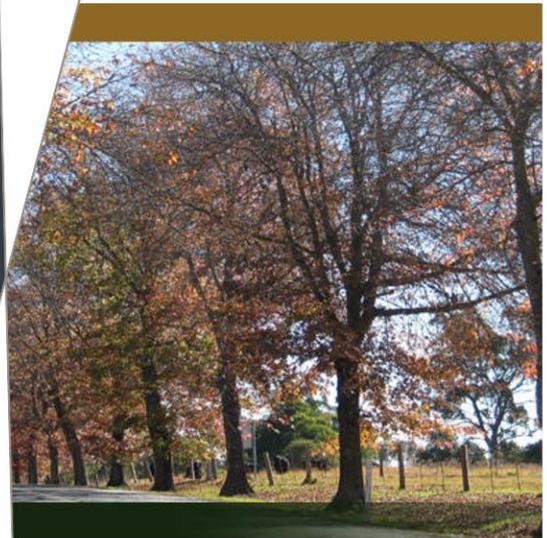


Development Servicing Plan – Water Supply

DSP Review Project

360791



Prepared for
Tenterfield Shire Council

14 July 2020



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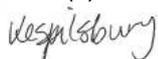
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Summary

This Development Servicing Plan (DSP) covers water supply developer charges in regard to the Tenterfield, Urbenville and Jennings development areas serviced by Tenterfield Shire Council.

This DSP document has been prepared in accordance with the 2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater issued by the Minister for Lands and Water, pursuant to Section 306 (3) of the *Water Management Act, 2000*.

The area covered by each DSP, and the existing and proposed works serving the area are shown on the document in Section 12.

The timing and expenditures for works serving the area covered by each DSP are shown in Section 4.

Levels of service to be provided in each DSP area are summarised in Section 5.

The water supply developer charges for the areas covered by this DSP document have been determined as follows:

Table 1-1 Proposed Developer Charges

| Service | DSP Name | Developer Charge (\$ per ET) |
|--------------|---|------------------------------|
| Water Supply | DSP Area A <ul style="list-style-type: none"> ▪ Tenterfield ▪ Urbenville | \$10,746 |
| | DSP Area B <ul style="list-style-type: none"> ▪ Jennings | \$4,108 |

Developer charges relating to this DSP document will be reviewed after a period of 4 to 8 years.

In the period between any review, developer charges will be adjusted annually on the basis of the movements in the CPI for Sydney, excluding the impact of GST.

The developer shall be responsible for the full cost of the design and construction of water supply and sewerage reticulation works within subdivisions section.

Background information containing all the critical data including calculation models behind each DSP is available on request (e.g. on USB).

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1 Introduction

Section 64 of the *Local Government Act, 1993* enables a local government council to levy developer charges for water supply, sewerage and stormwater. This derives from a cross-reference in that Act to Section 306 of the *Water Management Act, 2000*.

A Development Servicing Plan (DSP) details the water supply, sewerage and/or stormwater developer charges to be levied on development areas utilising a water utility's water supply, sewerage and/or stormwater infrastructure.

This DSP document covers water supply developer charges in regard to the Tenterfield, Urbenville and Jennings development areas served by Tenterfield Shire Council (TSC).

This DSP document has been prepared in accordance with the 2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater issued by the Minister of Lands and Water, pursuant to Section 306 (3) of the *Water Management Act, 2000*.

This DSP document supersedes any other requirements related to water supply developer charges for the areas covered by this DSP. This DSP takes precedence over any of TSC's code or policies where there are any inconsistencies relating to water supply developer charges.

2 Administration

2.1 DSP Name and Area Covered

The service area boundaries within this DSP are defined by the extent of the water supply systems within the LGA. These boundaries capture the existing and future developments served by the TSC. Table 2-1 outlines the service areas.

Table 2-1 DSP name and area covered

| DSP Name | Area Covered |
|-------------|---|
| Tenterfield | The area covered by this DSP is shown on Plan 360791-002-GS-002-ZoningPlan_Tenterfield. The DSP area is defined as the area served by the Tenterfield water supply system. |
| Urbenville | The area covered by this DSP is shown on Plan 360791-002-GS-004-ZoningPlan_Urbenville. The DSP area is defined as the area served by the Urbenville water supply system. |
| Jennings | The area covered by this DSP is shown on Plan 360791-002-GS-003-ZoningPlan_Jennings. The DSP area boundary is defined as the area served by the Southern Downs Regional water supply system within Tenterfield Shire Council area. |

2.2 Payment of Developer Charges

Developer charges will be determined and levied in accordance with the provisions of this DSP document at the time of considering an application for a compliance certificate under Section 305 of the *Water Management Act 2000* or a construction certificate under Section 109 of the *Environmental Planning and Assessment Act 1979* or at the time of issuing a notice or other form of written advice, e.g. under the *SEPP (Exempt and Complying Development Codes) 2008*. The time limit for payment of developer charges will be included in the notice of determination or will be advised to the developer by a separate notice. The amount of any developer charges not paid within the specified time limit will lapse. Any subsequent determination of developer charges will be made in accordance with TSC's then current DSP.

2.3 Dispute Resolution

Disputes will be resolved in accordance with Section 2.9 of the Guidelines. TSC is not a member of the Electricity and Water Ombudsman (EWON).

3 Demographic and land use planning information

3.1 Growth Projections

Growth projections for Tenterfield Local Government Area (LGA) population are show in Table 3-1. These projections are from 2019 to 2049, which is TSC’s current planning horizon.

The population and number of Equivalent Tenements (ETs) in January 1996 (ie.1995/96) are also indicated.

ET calculations are included in Section 7.3 of this DSP document.

Given the low population growth rate and its volatility to even small changes in new developments, an alternate reference was considered for the growth rate to be used for ETs. Analysing the number of connected properties within the LGA to the water supply systems, yields a more consistent growth rate of 0.68% and provides a more reliable basis for forecasting the ETs and performing the required calculations for the developer charges. This is shown in Table 3-2.

Table 3-1 Projected population growth

| Year | Population | Population Growth Rate (% p.a.) | Adopted ET Growth Rate (%pa) based on the connect properties |
|---------|------------|---------------------------------|--|
| 1995/96 | 6,195 | | |
| 2018/19 | 7,210 | 0.28% | 0.68% |
| 2019/20 | 7,230 | 0.28% | 0.68% |
| 2020/21 | 7,250 | 0.28% | 0.68% |
| 2021/22 | 7,250 | 0.00% | 0.68% |
| 2022/23 | 7,250 | 0.00% | 0.68% |
| 2023/24 | 7,250 | 0.00% | 0.68% |
| 2024/25 | 7,250 | 0.00% | 0.68% |
| 2025/26 | 7,250 | 0.00% | 0.68% |
| 2026/27 | 7,250 | 0.00% | 0.68% |
| 2027/28 | 7,250 | 0.00% | 0.68% |
| 2028/29 | 7,250 | 0.00% | 0.68% |
| 2029/30 | 7,250 | 0.00% | 0.68% |
| 2030/31 | 7,250 | 0.00% | 0.68% |
| 2031/32 | 7,230 | -0.28% | 0.68% |
| 2032/33 | 7,210 | -0.28% | 0.68% |
| 2033/34 | 7,190 | -0.28% | 0.68% |
| 2034/35 | 7,170 | -0.28% | 0.68% |
| 2035/36 | 7,150 | -0.28% | 0.68% |
| 2036/37 | 7,150 | 0.00% | 0.68% |
| 2037/38 | 7,150 | 0.00% | 0.68% |
| 2038/39 | 7,150 | 0.00% | 0.68% |
| 2039/40 | 7,150 | 0.00% | 0.68% |
| 2040/41 | 7,150 | 0.00% | 0.68% |
| 2041/42 | 7,150 | 0.00% | 0.68% |
| 2042/43 | 7,150 | 0.00% | 0.68% |
| 2043/44 | 7,150 | 0.00% | 0.68% |

| Year | Population | Population Growth Rate (% p.a.) | Adopted ET Growth Rate (%pa) based on the connect properties |
|---------|------------|---------------------------------|--|
| 2044/45 | 7,150 | 0.00% | 0.68% |
| 2045/46 | 7,150 | 0.00% | 0.68% |
| 2046/47 | 7,150 | 0.00% | 0.68% |
| 2047/48 | 7,150 | 0.00% | 0.68% |
| 2048/49 | 7,150 | 0.00% | 0.68% |

Table 3-2 Connected Properties for water supply

| Year | LGA | Tenterfield | Urbenville | Jennings |
|---------------------|-------|-------------|------------|----------|
| 2008 | 2,033 | 1,800 | 150 | 83 |
| 2009 | 2,044 | 1,815 | 145 | 84 |
| 2010 | 2,074 | 1,840 | 148 | 86 |
| 2011 | 2,072 | 1,840 | 148 | 84 |
| 2012 | 2,096 | 1,860 | 152 | 84 |
| 2019 | 2,184 | 1,916 | 165 | 103 |
| Average growth rate | | 0.68% | | |

Growth projections for the number of Equivalent Tenements (ETs) for water supply are shown in Table 3-3. The ET in January 1996 is also indicated. ET calculations are included in Section 7.3 of the DSP document.

Table 3-3 Projected demand growth for ETs

| Service Area | ETs 1996 | Current ETs 2019 | Projected ETs 2049 | Total New ETs | Proportion of Growth |
|--------------|----------|------------------|--------------------|---------------|----------------------|
| Jennings | 85 | 100 | 122 | 22 | 4.19% |
| Tenterfield | 1,807 | 2,112 | 2,584 | 472 | 88.55% |
| Urbenville | 148 | 173 | 212 | 39 | 7.26% |
| Total | 2,041 | 2,385 | 2,918 | 533 | 100% |

3.2 Land Use Information

This DSP document should be read in conjunction with Tenterfield Local Environmental Plan (LEP) 2013 which sets the framework for planning and development and applies land zonings across the LGA. These zonings specify the land uses permitted in each of the zones and provide development standards that may apply to specific developments. Tenterfield currently does not have any specific strategies in place to guide future residential and commercial development across the LGA. Low population growth has resulted in most developments being in-fill development within Tenterfield itself or small subdivisions on the edge of established towns and villages.

On 1 March 2018, the NSW Government updated the Environmental Planning and Assessment Act 1979 with a number of changes required to be implemented at various stages over the next few years. This included the requirement for Council's to prepare a Local Strategic Planning Statement (LSPS) set out the 20-year vision for land-use in the local area, the special character and values that are to be preserved and how change will be managed into the future. This would, in turn, inform the future Local Housing Strategy and any LEP amendments that may be required to implement the outcomes of the LSPS. The requirement to deliver the LSPS and associated LEP Review is late 2019.

4 Water Supply Infrastructure

The existing and proposed water supply headworks serving the areas covered by this DSP are shown on plans in Section 12.

The existing and proposed water supply distribution works serving the areas covered by this DSP document are shown on Plans in Section 12.

4.1 Existing Capital Costs

The estimated MEERA capital cost of water supply capital works servicing the areas covered by this DSP document are shown in Section 14. Note that only those assets built in the last 30 years are included.

4.2 Future Capital Works Program

The timing and expenditure for water supply capital works (including backlog works) serving the area covered by this DSP document are shown in Section 15.

4.3 Reticulation Works

The developer shall be responsible for the full cost of the design and construction of water supply reticulation works within subdivisions.

5 Levels of Service

System design and operation are based on providing the following levels of service (LOS). Typical levels of service are outlined below.

Further information on levels of service is available from:

- > Tenterfield Shire Council's Strategic Business Plan for Water Supply and Sewerage Services, December 2015, (available at www.tenterfield.nsw.gov.au).
- > NSW Water and Sewerage Strategic Business Planning Guidelines, NSW Office of Water, July 2011, (available at www.water.nsw.gov.au).

5.1 Water Supply

The LOS that apply to TSC's water supply system are the targets that TSC aims to meet. These targets are not intended as a formal customer contract. The key LOS provided in Tenterfield Shire Council's Strategic Business Plan for Water Supply and Sewerage Services 2015 are found in Table 5-1.

Table 5-1 Water Supply Levels of Service

| Description | Units | Target Level of Service |
|--|------------------------------|--|
| Availability of Supply | - | All residential and non-residential properties within the defined service area. |
| Peak Day Demand | L/dwelling/day | 2,000 |
| Average Annual Demand | kL/dwelling/year | 190 |
| Fire Fighting | L/s | Water will be available from the fire hydrants for firefighting at minimum flow rates determined by guidelines for specific types of development as set out in Local Government Regulations and the conditions established by the NSW Fire Brigade |
| Pressure (when conveying maximum instantaneous demand (6l/min)): | | |
| Minimum pressure | Metres head | 12 except for existing high level zones at all times |
| Maximum static pressure | Metres head | 90 |
| Potable Water Quality | Compliance with ADWG 2011 | |
| Consumption Restrictions in Drought | | |
| Maximum frequency of restrictions | Number of times per 10 years | 5 |
| Maximum duration of restrictions | Months/10 year period | 10 |
| Ability to supply demand through the worst drought on record | % of water demand | 90(i.e. a 10% reduction in consumption). |
| Interruptions to Supply (per year per supply) | | |
| Planned (95% of time) | | |
| Notice given to domestic customers (between 9am and 4pm) | Days | 2 weeks |
| Notice given to industrial and commercial customers (times to be negotiated) | Days | 2 weeks |
| Unplanned | | |
| Maximum duration | Hours | <<4 hrs |
| Maximum interruptions to supply | Per 1,000 properties p.a. | 40 |

| Description | Units | Target Level of Service |
|--|----------------------|---|
| Main breaks | Per 100 km main p.a. | 25 |
| Service Provided | | |
| Time to provide an individual, residential connection to water supply in services area | Working days | 5 |
| Response Time (time to have staff onsite or to investigate a problem or answer an enquiry) | | |
| <i>Priority 1: A complete failure to maintain continuity of supply to large number of customers or critical user at critical time</i> | | |
| Possible Issues: Broken water main, broken service, jammed hydrant, no water, dirty water, leak creating a major issue. Typical Effects: Personal injury or risk to public health, loss of supply, major property damage, failure to maintain quality or quantity of service, large volume of water wasted, significant unplanned depletion of service reservoir, major environmental impact. | | <i>Repairs to commence:</i> Within 0.5 hour (during work hours) Within 1 hours (after work hours) |
| <i>Priority 2: Known fault, non-urgent</i> | | |
| Possible Issues: Service disconnection, faulty hydrant/valve, missing hydrant. Typical Effects: Need for preventative maintenance, minor customer impact. | | Programmed Maintenance |

6 Design Parameters

6.1 Water Supply

Investigation and design of water supply system components is based on the Water Supply Investigation Manual (1986).

The following technical reports relate to the system components in this DSP document:

- > Council Standards for Engineering Works Policy
- > Council Standards for Engineering Works Preface and Supplementary Notes
- > TSC has published a range of asset management documentation that covers the water system and contains the management strategy for the water network. The documents include:
 - > Water Supply Asset Management Plan, 2018 (available at www.tenterfield.nsw.gov.au)
 - > Asset Management Strategy 2017 – 2027, 2017
 - > Tenterfield Shire Council's Strategic Business Plan for Water Supply and Sewerage Services, December 2015, (available at www.tenterfield.nsw.gov.au).

7 Developer Charges Calculation – Water Supply

All new properties and properties with change in use which are subject to payment of water supply charges are liable for payment of developer charges. An ET is the basic unit to determine the loading that the development will place on the water supply system. One ET represents the equivalent loading for a single, detached residential dwelling. TSC uses the NSW Water Directorate’s Guidelines for Determining Water ET Figures.

Credit for existing use is applied in the calculation of the ET loadings, as the developer charges are levied for additional ET loading only. For example, the first lot in residential subdivisions is exempt from developer charges where the lot is already connected to the water supply system. Properties not already rated for water supply do not receive the one lot credit.

7.1 Summary

The developer charges for the area covered by this DSP document are as follows:

Table 7-1 Summary of proposed water supply developer charges

| DSP Area | Capital Charge (\$ per ET) | Reduction Amount (\$ per ET) | Calculated Maximum Developer Charge (\$ per ET) | Adopted Developer Charge (\$ per ET) |
|---------------|----------------------------|------------------------------|---|--------------------------------------|
| DSP Area A | | | | |
| ▪ Tenterfield | \$7,920 | -\$2,826 | \$10,746 | \$10,746 |
| ▪ Urbenville | | | | |
| DSP Area B | | | | |
| ▪ Jennings | \$1,282 | -\$2,826 | \$4,108 | \$4,108 |

These amounts have been calculated on the basis of the information shown in Sections 7.2 to 7.7.

7.2 Service Areas

The water supply service areas and the basis of determining the service areas are as follows:

Table 7-2 Water supply service areas

| Name of service area | Basis of determining the service area |
|----------------------|--|
| Jennings | Area serviced by a separate water supply distribution system |
| Tenterfield | Area serviced by a separate water supply distribution system |
| Urbenville | Area serviced by a separate water supply distribution system |

7.3 Equivalent Tenements (ETs)

As indicated in Section 5.1, one of the key levels of service (LOS) for Council’s water supply is “the average residential water to be supplied for a detached residential dwelling (1 ET) per tenement”, which is 190 kL/annum. Council’s 2015 strategic business plan (available at www.tenterfield.nsw.gov.au) includes this LOS and was derived after careful consideration of the average residential water supplied per connected property over the last 10 years. Current billing and usage information show the average annual residential water volume supplied for a single detached residential dwelling as 159.8 kL. This number 159.8 kL has been adopted and represents 1 ET.

For each service area, the number of ETs to be served has been determined as the estimated annual water to be supplied to the service area divided by the volume for 1 ET.

ET projections for each service area are shown in Table 7-3. The ETs in January 1996 are also indicated.

Table 7-3 ET projections for water supply

| Year | Number of ETs | | | Total ETs |
|-----------|---------------|------------|----------|-----------|
| | Tenterfield | Urbenville | Jennings | |
| 1995/96 | 1,807 | 148 | 85 | 2,041 |
| 2018/2019 | 2,112 | 173 | 100 | 2,385 |
| 2019/20 | 2,126 | 174 | 101 | 2,401 |
| 2020/21 | 2,141 | 175 | 101 | 2,417 |
| 2021/22 | 2,155 | 177 | 102 | 2,434 |
| 2022/23 | 2,170 | 178 | 103 | 2,450 |
| 2023/24 | 2,184 | 179 | 103 | 2,467 |
| 2024/25 | 2,199 | 180 | 104 | 2,483 |
| 2025/26 | 2,214 | 181 | 105 | 2,500 |
| 2026/27 | 2,229 | 183 | 105 | 2,517 |
| 2027/28 | 2,244 | 184 | 106 | 2,534 |
| 2028/29 | 2,259 | 185 | 107 | 2,551 |
| 2029/30 | 2,274 | 186 | 108 | 2,568 |
| 2030/31 | 2,290 | 188 | 108 | 2,585 |
| 2031/32 | 2,305 | 189 | 109 | 2,603 |
| 2032/33 | 2,321 | 190 | 110 | 2,621 |
| 2033/34 | 2,336 | 192 | 110 | 2,638 |
| 2034/35 | 2,352 | 193 | 111 | 2,656 |
| 2035/36 | 2,368 | 194 | 112 | 2,674 |
| 2036/37 | 2,384 | 195 | 113 | 2,692 |
| 2037/38 | 2,400 | 197 | 113 | 2,710 |
| 2038/39 | 2,416 | 198 | 114 | 2,728 |
| 2039/40 | 2,433 | 199 | 115 | 2,747 |
| 2040/41 | 2,449 | 201 | 116 | 2,765 |
| 2041/42 | 2,465 | 202 | 117 | 2,784 |
| 2042/43 | 2,482 | 203 | 117 | 2,803 |
| 2043/44 | 2,499 | 205 | 118 | 2,822 |
| 2044/45 | 2,516 | 206 | 119 | 2,841 |
| 2045/46 | 2,533 | 208 | 120 | 2,860 |
| 2046/47 | 2,550 | 209 | 121 | 2,879 |
| 2047/48 | 2,567 | 210 | 121 | 2,899 |
| 2048/49 | 2,584 | 212 | 122 | 2,918 |

ET calculation details for each service area are shown in Section 13.

7.4 Capital Charge

The capital charge for each service area covered by this DSP document has been calculated using NPV spreadsheet method.

Under the NPV spreadsheet method, the capital cost of relevant assets and projected ETs served in a service area are entered into a spreadsheet. These capital costs are only for the share of the asset capacity used in the service area. The PV of capital cost and the PV of the new ETs are calculated, and the capital charge per ET is the PV of the capital cost divided by the PC of the ETs.

Calculations details for PV of ETs and PV of capital costs for each service area are shown in Section 16.

The summary of the capital charge calculations is shown in Table 7-4.

Table 7-4 Summary of capital charges

| Service Area | PV of New ETs for pre-1996 assets @3% | PV of New ETs for post-1996 assets @5% | PV of capital cost for pre-1996 assets @3% | PV of capital cost for post-1996 assets @5% | Capital charge for pre-1996 assets | Capital charge for post-1996 assets | Capital charge per ET (\$) |
|--------------|---------------------------------------|--|--|---|------------------------------------|-------------------------------------|----------------------------|
| Tenterfield | 370 | 253 | \$0 | \$1,958,435 | \$0 | \$7,732 | \$7,732 |
| Urbenville | 30 | 21 | \$0 | \$213,172 | \$0 | \$10,228 | \$10,228 |
| Jennings | 18 | 12 | \$0 | \$15,890 | \$0 | \$1,282 | \$1,282 |

7.5 DSP Area

Table 7-5 shows agglomeration of service areas into DSP areas of within 30% of highest capital charge.

Table 7-5 Agglomeration of service areas

| Service Area | Capital Charge (2018/19 \$ per ET) | Percentage of Highest Capital Charge DSP Area A | Percentage of Highest Capital Charge DSP Area B |
|--------------|------------------------------------|---|---|
| Urbenville | \$10,208 | 100% | |
| Tenterfield | \$7,732 | 76% | |
| Jennings | \$1,282 | 13% | 100% |

Weighted average capital charge for each DSP area is calculated by weighting by the PV of new ETs in each service area. The calculation is shown in Table 7-6.

Table 7-6 Weighted average capital charge

| DSP Area | Service Area | Capital charge for each service area | New ETs in service area | PV of new ETs in service area | % of PV of new ETs in DSP area | Weighted component of the capital charge for each DSP area (\$ per ET) | Weighted capital charge for each DSP area (\$ per ET) |
|------------|--------------|--------------------------------------|-------------------------|-------------------------------|--------------------------------|--|---|
| DSP Area A | Tenterfield | \$10,228 | 39 | 20 | 8% | \$774 | \$7,920 |
| | Urbenville | \$7,732 | 472 | 250 | 92% | \$7,147 | |
| DSP Area B | Jennings | \$1,282 | 22 | 12 | 100% | \$1,282 | \$1,282 |

The utility-wide weighted average capital charge is \$7,638.

7.6 Reduction Amount

Council has adopted the NPV of Annual Bills method to calculate the Reduction Amount. This method involves the difference between the revenue for annual bills, and annual OMA cost, projected for new development over the next 30 years. This is divided by the PV of the new ETs over 30 years to give the reduction amount.

The reduction amounts have been calculated as follows:

- > Income from annual bills at the commencement of the DSP = \$ 929.80 per ET
- > OMA cost at the commencement of the DSP = \$1,170.23 per ET
- > Net income = Annual bill – OMA cost (as above) = -\$240.43 per ET

Based on the calculations shown in Table 7-7, the resulting reduction amount is -\$2,826 per ET.

Table 7-7 Calculation of the reduction amount

| Year | Total ETs | New ETs | NPV of new ETs | Cumulative new ETs | Net income from new ETs (\$) | NPV of net income from new ETs | Reduction amount (\$ per ET) |
|---------|-----------|---------|----------------|--------------------|------------------------------|--------------------------------|------------------------------|
| 2018/19 | 2,385 | | 267 | | | -\$753,780 | -\$2,826 |
| 2019/20 | 2,401 | 16 | | 16 | -\$3,847 | | |
| 2020/21 | 2,417 | 16 | | 32 | -\$7,694 | | |
| 2021/22 | 2,434 | 17 | | 49 | -\$11,781 | | |
| 2022/23 | 2,450 | 16 | | 65 | -\$15,628 | | |
| 2023/24 | 2,467 | 17 | | 82 | -\$19,715 | | |
| 2024/25 | 2,483 | 16 | | 98 | -\$23,562 | | |
| 2025/26 | 2,500 | 17 | | 115 | -\$27,650 | | |
| 2026/27 | 2,517 | 17 | | 132 | -\$31,737 | | |
| 2027/28 | 2,534 | 17 | | 149 | -\$35,824 | | |
| 2028/29 | 2,551 | 17 | | 166 | -\$39,912 | | |
| 2029/30 | 2,568 | 17 | | 183 | -\$43,999 | | |
| 2030/31 | 2,585 | 17 | | 200 | -\$48,086 | | |
| 2031/32 | 2,603 | 18 | | 218 | -\$52,414 | | |
| 2032/33 | 2,621 | 18 | | 236 | -\$56,742 | | |
| 2033/34 | 2,638 | 17 | | 253 | -\$60,829 | | |
| 2034/35 | 2,656 | 18 | | 271 | -\$65,157 | | |
| 2035/36 | 2,674 | 18 | | 289 | -\$69,485 | | |
| 2036/37 | 2,692 | 18 | | 307 | -\$73,812 | | |
| 2037/38 | 2,710 | 18 | | 325 | -\$78,140 | | |
| 2038/39 | 2,728 | 18 | | 343 | -\$82,468 | | |
| 2039/40 | 2,747 | 19 | | 362 | -\$87,036 | | |
| 2040/41 | 2,765 | 18 | | 380 | -\$91,364 | | |
| 2041/42 | 2,784 | 19 | | 399 | -\$95,932 | | |
| 2042/43 | 2,803 | 19 | | 418 | -\$100,500 | | |
| 2043/44 | 2,822 | 19 | | 437 | -\$105,068 | | |
| 2044/45 | 2,841 | 19 | | 456 | -\$109,637 | | |
| 2045/46 | 2,860 | 19 | | 475 | -\$114,205 | | |
| 2046/47 | 2,879 | 19 | | 494 | -\$118,773 | | |

| Year | Total ETs | New ETs | NPV of new ETs | Cumulative new ETs | Net income from new ETs (\$) | NPV of net income from new ETs | Reduction amount (\$ per ET) |
|---------|-----------|---------|----------------|--------------------|------------------------------|--------------------------------|------------------------------|
| 2047/48 | 2,899 | 20 | | 514 | -\$123,582 | | |
| 2048/49 | 2,918 | 19 | | 533 | -\$128,150 | | |

Calculation details for the reduction amount are shown in Section 17.

7.7 Cross-Subsidy

The cross-subsidy is the difference (%) between the annual bill with the calculated maximum developer charge and the increase in the annual bill with a proposed lower developer charge.

LWUs may elect to cap the developer charges for small villages in order to maintain affordability and to avoid 'stranded' assets in such villages.

LWUs may also cap other developer charges to maintain affordability, subject to adopting a commercial developer charge which recovers a significant proportion of the capital cost of the infrastructure.

The cross-subsidy, resulting from capping of developer charges must be disclosed in the DSP, the utility's Annual Report, annual Operational Plan and in communication materials for consultation with stakeholders as noted above.

Two options were developed and examined as follows.

- > Option 1 – No cross-subsidy – Calculated maximum developer charge adopted
- > Option 2 – Adopted cross-subsidy of 20%

A summary of the options for developer charges and cross-subsidy is shown in Table 7-8.

Table 7-8 Developer charges options – weighted average subsidy

| Option 1 - No Cross Subsidy | | | | | | | |
|-----------------------------|--------------|-----------------------------|------------|-----------|--------------------|-----------------------------------|--|
| DSP Area | Service Area | Calculated Developer Charge | PV New ETs | Weighting | Weighted component | Weighted average developer charge | Weighted average cross-subsidy to developer charge |
| DSP Area A | Tenterfield | \$10,746 | 250 | 89% | \$9,511 | \$10,464 | \$0 |
| | Urbenville | | 20 | 7% | \$778 | | |
| DSP Area B | Jennings | \$4,108 | 12 | 4% | \$175 | | |

| OPTION 2 - 20% DISCOUNT | | | | | | | |
|-------------------------|--------------|-----------------------------|------------|-----------|--------------------|-----------------------------------|--|
| DSP Area | Service Area | Calculated Developer Charge | PV New ETs | Weighting | Weighted component | Weighted average developer charge | Weighted average cross-subsidy to developer charge |
| DSP Area A | Tenterfield | \$9,162 | 250 | 89% | \$8,109 | \$8,936 | \$1,528 |
| | Urbenville | | 20 | 7% | \$664 | | |
| DSP Area B | Jennings | \$3,851 | 12 | 4% | \$164 | | |

The impact of cross-subsidies on the annual water supply/ sewerage bill for each option is shown in Table 7-9 below.

Table 7-9 Impact of cross-subsidies on annual bill

| Option | Required annual water supply bill per ET (\$) | Resulting increase in annual water supply/ sewerage bill (%) |
|---------------------------------|---|--|
| 1 – No Cross-subsidy | \$930 | Nil |
| 2 – Adopted Cross-subsidy (20%) | \$940 | 1.10% |

Council has elected to not apply a cross-subsidy to the calculated developer charges for water services. This results in no increase to the current annual water supply bill due to developer charges.

Calculation details for the reduction amount are shown in Section 18.

8 Reviewing / Updating of Calculated Developer Charges

Developer charges will be adjusted on the 1st July each year on the basis of movements in the CPI for Sydney, in the preceding 12 months to December, excluding the impact of GST.

Developer charges will be reviewed by Council after a period of 4 to 8 years.

9 Background Information

Background information containing all the critical data including calculation models behind each DSP is available from TSC on request. The contact details are below:

Tenterfield Shire Council
Ph: (02) 6736 6000

The background document lists and references all the other studies that have been used as a source, including TSC's Strategic Business Plan, Financial Plan and the latest TBL Performance Report.

10 Other DSPs and Related Contribution Plans

This DSP document supersedes any other requirements related to water supply developer charges for the Tenterfield area covered by this DSP.

The related Section 64 Development Servicing Plan is:

- > *Tenterfield Shire Council Development Contributions Plan – Sewerage Services (Cardno, 2020)*

The related Section 7.11 and Section 7.11 Development Contributions Plans are:

- > *Tenterfield Shire Council Section 7.11 Development Contributions Plan (Subdivisions) (Cardno, 2020)*
- > *Tenterfield Shire Council Section 7.12 Development Contributions Plan 2019 (General Development) (Cardno, 2020)*

11 Glossary

| | |
|------------------------|---|
| Annual Bill | LWU's annual water supply or sewage bill for an annual demand of 1 ET. |
| Asset | An asset (or part of an asset) including land and headworks assets that directly provides, or will provide, the developer services to development within the DSP area for which the Developer Charge is payable. |
| ADWF | Average dry weather flow. One of the design parameters for flow in sewers. |
| Annual Demand | The total water demand over a year. Used to size headworks components |
| Background Information | Contains all the critical data behind each DSP. This information should be made available electronically to developers on request, e.g. On a USB and should include the calculation models in Excel or similar electronic spreadsheet format, so that all components of the models can be investigated. |
| BOD | Biochemical oxygen demand. Used as a measure of the 'strength' of sewage. |
| Capital Cost | The Present Value (MEERA basis) of all expenditure on assets used to service the development. |
| Capital Charge | Capital cost of assets per ET adjusted for commercial return on investment (ROI) |
| CP | Section 94 Contributions Plan |
| CPI | Consumer price index. |
| DPI Water | A division of NSW Department of Primary Industries |
| Developer Charge (DC) | Charge levied on developers to recover part of the capital cost incurred in providing infrastructure to new development |
| Development Area | See DSP area |
| Discount Rate | The rate used to calculate the present value of money arising in the future. |
| DSP Document | Development Servicing Plan Document |
| DSP Area | That part of a water utility's area covered by a particular Development Servicing Plan. Also referred to as Development Area. |
| EP | Equivalent Persons (or equivalent population). Used as a design parameter for loadings of sewage treatment works. |
| ET | Equivalent tenement. The annual demand a detached residential dwelling will place on the infrastructure in terms of the water consumption or sewage discharge. |
| Government Subsidies | Government funds provided towards the capital cost of a project. |
| GST | Goods and services tax. |
| Headworks | Significant assets at the top end of the water systems or the bottom end of the |

wastewater and stormwater system. For example water headworks may comprise a system of storage reservoirs, water treatment works and major supply conduits.

| | |
|-----------------|---|
| IPART | The NSW Independent Pricing and Regulatory Tribunal. |
| KL | Kilolitre (1,000 litres). |
| LEP | Local Environmental Plan |
| LGNSW | Local Government and Shires Associations. |
| LSPS | Local Strategic Planning Statement |
| LWU | Local water utility (NSW). Excludes Sydney Water Corporation, Hunter Water Corporation, Gosford Council, Wyong Council, Essential Water and Fish River Water Supply. |
| MEERA | Modern Engineering Equivalent Replacement Asset. An asset value calculated on the basis that the asset is constructed at the time of valuation in accordance with modern engineering practice and the most economically viable technologies, which provides similar utility functions to the existing asset in service. |
| ML | Megalitre (1,000,000 litres, or 1,000 kilolitres). |
| Net Income | Annual bill minus OMA cost per ET. |
| NOW | NSW Office of Water, replaces by DPI Water since July 2015 |
| NPV | Net present value means the difference between the Present Value of a revenue stream and the Present Value of a cost stream. |
| OMA | Operation, maintenance and administration (cost). |
| Peak Day Demand | The maximum demand in any one day of the year. Used to size water treatments works, service reservoirs, trunk mains and pumping stations in the distribution system. |
| Operating Cost | In relation to a DSP is the operation, maintenance and administration cost (excluding depreciation and interest) of a LWU in providing Customer services to a DSP area. |
| Periodic bills | The periodic bills (generally quarterly) levied by a LWU in accordance with their annual operational plan. |
| Post 1996 Asset | An asset that was commissioned by a LWU on or after 1 January 1996 or that is yet to be commissioned. |
| Pre-1996 Asset | An asset that was commissioned by a LWU before 1 January 1996. |
| PV | Present value. The current value of future money or ETs. |
| PWWF | Peak wet weather flow. One of the design parameters of flow in sewers |
| Real Terms | The value of a variable adjusted for inflation by a CPI adjustment |

| | |
|------------------|--|
| Reduction Amount | The amount by which the capital charge is reduced to arrive at the developer charge. This amount reflects the capital contribution that will be paid by the occupier of a development as part of future annual bills. |
| ROI | Return on investment. Represents the income that is, or could be, generated by investing money. |
| Service Area | An area serviced by a separate water supply system, an area served by a separate STW, a separate small town or village, or a new development of over 500 ETs. |
| SS | Suspended solids, or the concentration of particles in sewage. Used as a measure of the 'strength' of sewage. |
| STW | Sewage treatment works |
| TRB | Typical residential bill, which is the principal indicator of the overall cost of a water supply or sewerage system and is the bill paid by a residential customer using the utility's average annual residential water supplied per connected property. |
| TSC | Tenterfield Shire Council |
| WICA | Water Industry Competition Act, 2006 |
| WICAA | Water Industry Competition Amendment (Review) Act, 2014 |
| WTW | Water treatment works. |

12 Plans

Plans of the DSP areas and existing assets are shown on the following pages

Figure 12-1 360791-002-GS-001-SitePlan

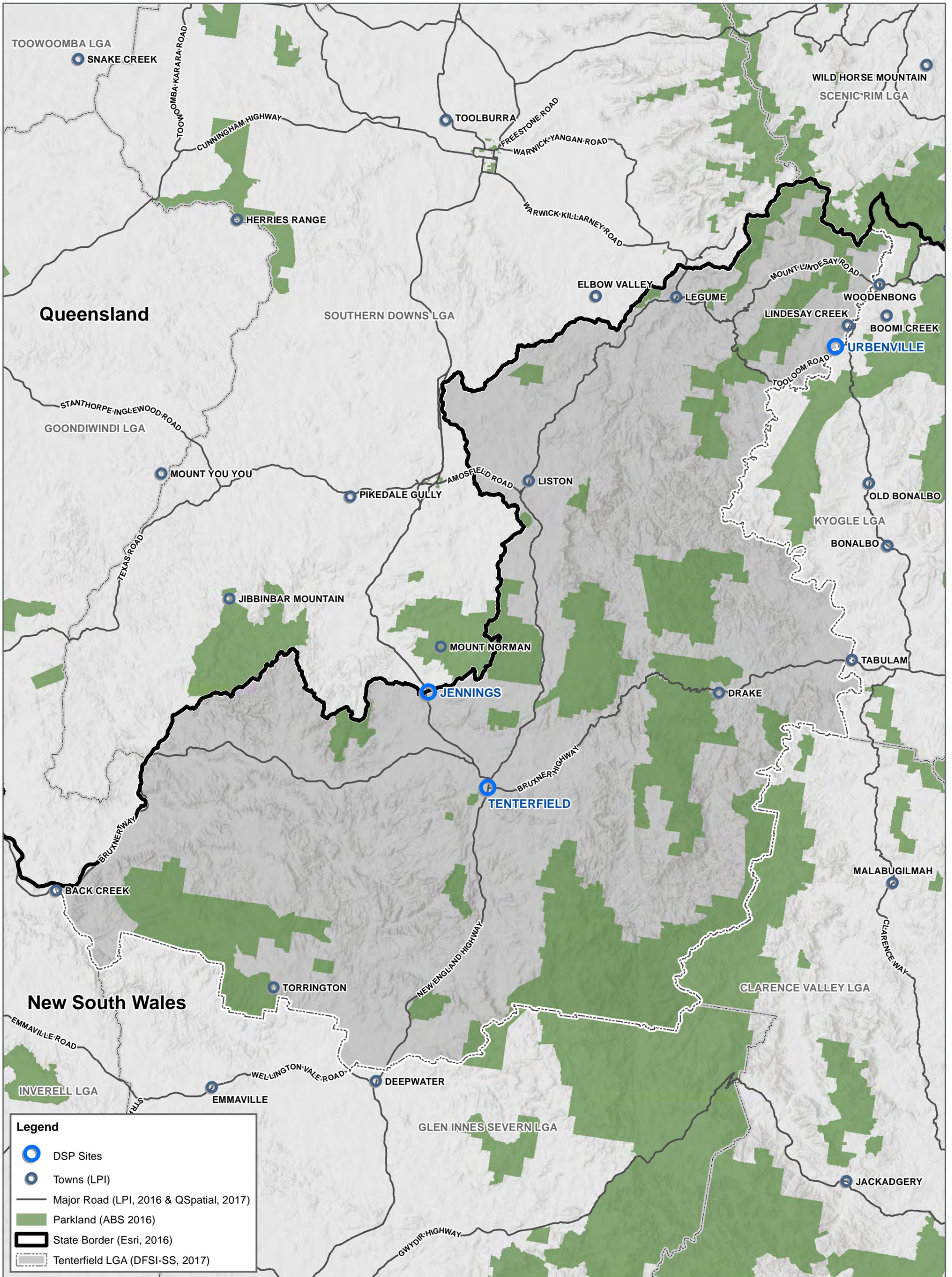
Figure 12-2 360791-002-GS-002-ZoningPlan_Tenterfield

Figure 12-3 360791-002-GS-003-ZoningPlan_Jennings

Figure 12-4 360791-002-GS-004-ZoningPlan_Urbenville

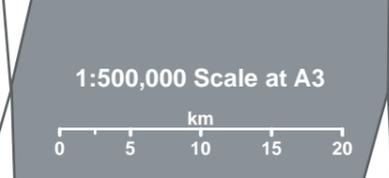
Figure 12-5 360791-002-GS-005-ExistingWater_Tenterfield

Figure 12-6 360791-002-GS-007-ExistingWater_Urbenville



Legend

- DSP Sites
- Towns (LPI)
- Major Road (LPI, 2016 & QSpatial, 2017)
- Parkland (ABS 2016)
- State Border (Esri, 2016)
- Tenterfield LGA (DFSI-SS, 2017)



Study Area
TENTERFIELD LOCAL GOVERNMENT AREA

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2019-08-12 | Project: 3607-91
Coordinate System: GDA 1994 MGA Zone 56
Map: 360791-002-GS-001-SitePlan.mxd 02



Zoning Plan Tenterfield

TENTERFIELD LGA
DEVELOPMENT SERVICING PLAN

Legend

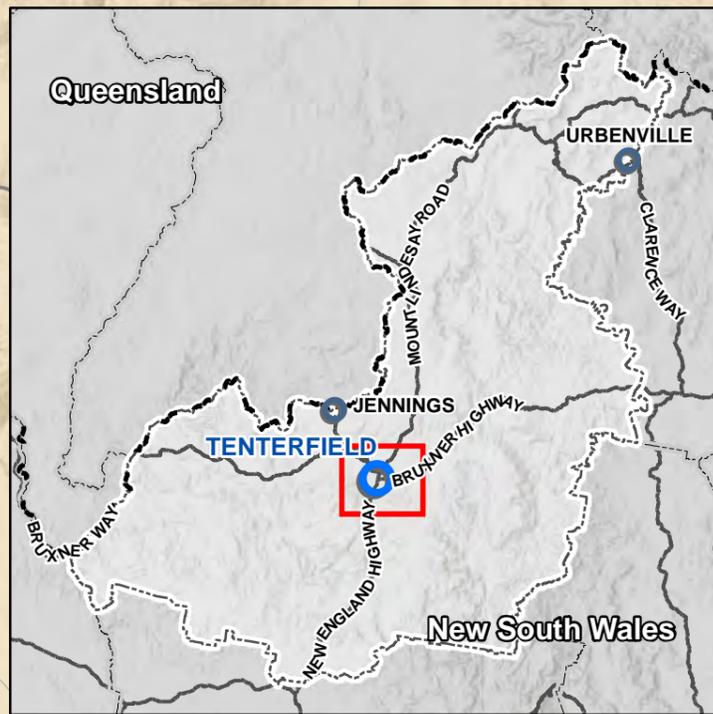
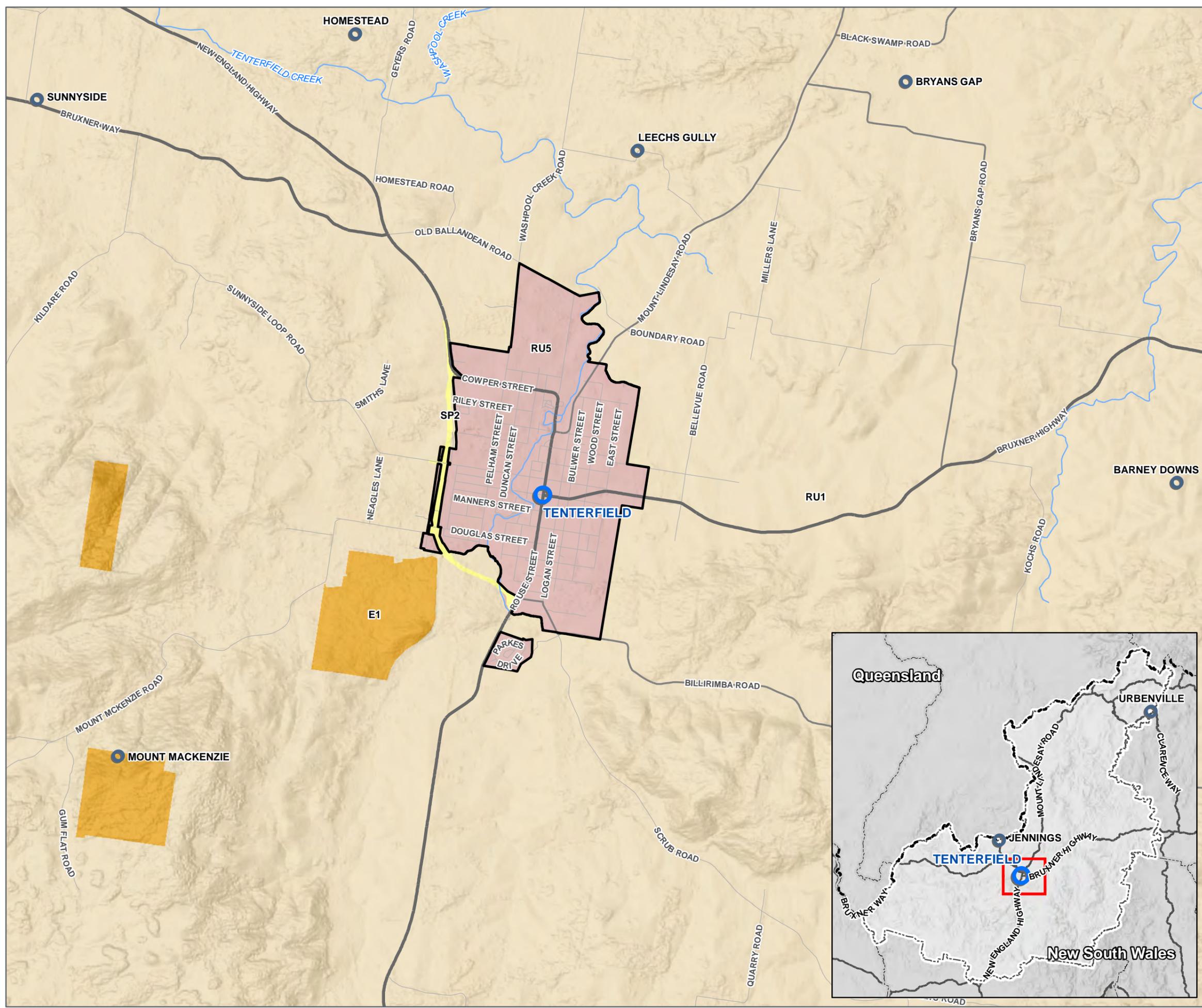
- DSP Sites
- Towns (LPI)
- Major Watercourses (LPI)
- Service Area
- State Border (Esri, 2016)
- Tenterfield LGA (DFSI-SS, 2017)
- Roads (NSW SS)**
 - Major Road
 - Arterial Road
 - Local Road
- Tenterfield LEP, 2013 (DPE, Feb 2019)**
 - E1 - National Parks and Nature Reserves
 - RU1 - Primary Production
 - RU5 - Village
 - SP2 - Infrastructure

NOTE: Service Area defined by the water and sewer supply systems

1:50,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2020-03-16 | Project: 3607-91
Coordinate System: GDA 1994 MGA Zone 56
Map: 360791-002-GS-002-ZoningPlan_Tenterfield.mxd 03





Zoning Plan Jennings

TENTERFIELD LGA
DEVELOPMENT SERVICING PLAN

- Legend**
- DSP Sites
 - Towns (LPI)
 - Major Watercourses (LPI)
 - Service Area
 - State Border (Esri, 2016)
 - Tenterfield LGA (DFSI-SS, 2017)
- Roads (NSW SS)**
- Major Road
 - Local Road
- Tenterfield LEP, 2013 (DPE, Feb 2019)**
- RU1 - Primary Production
 - RU5 - Village

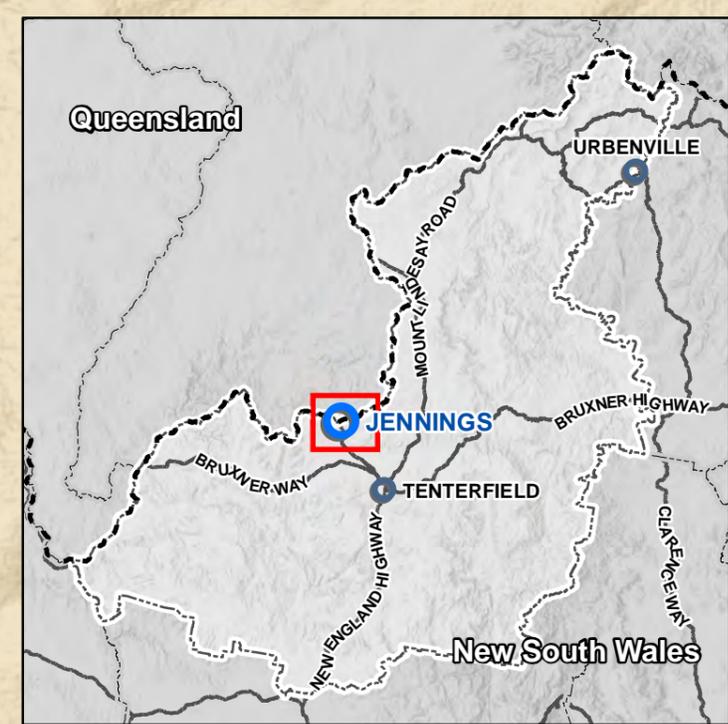
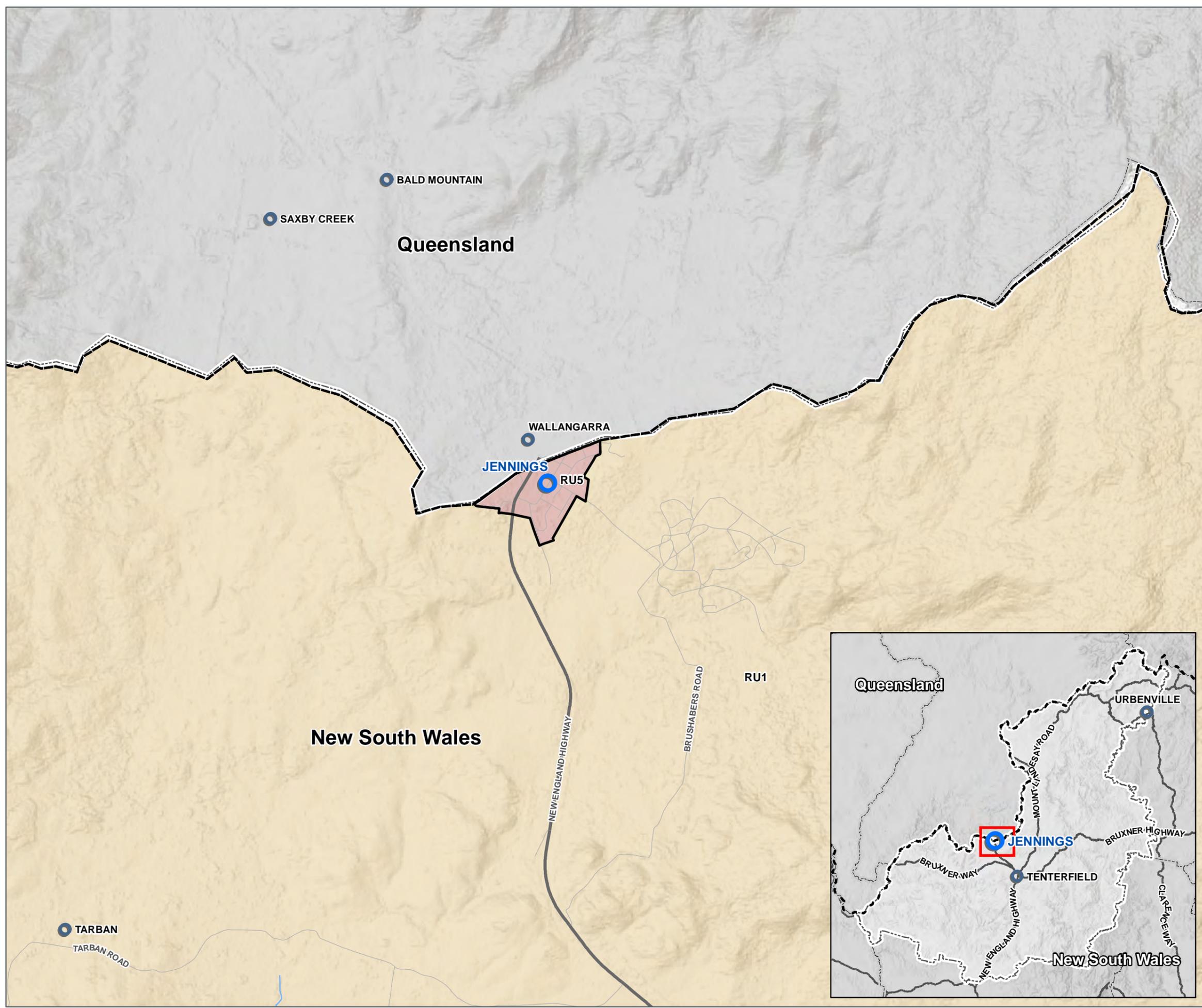
NOTE: Service Area defined by the water and sewer supply systems

1:40,000 Scale at A3



Cardno

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2020-03-16 | Project: 3607-91
Coordinate System: GDA 1994 MGA Zone 56
Map: 360791-002-GS-003-ZoningPlan_Jennings.mxd 03





Zoning Plan Urbenville

TENTERFIELD LGA
DEVELOPMENT SERVICING PLAN

Legend

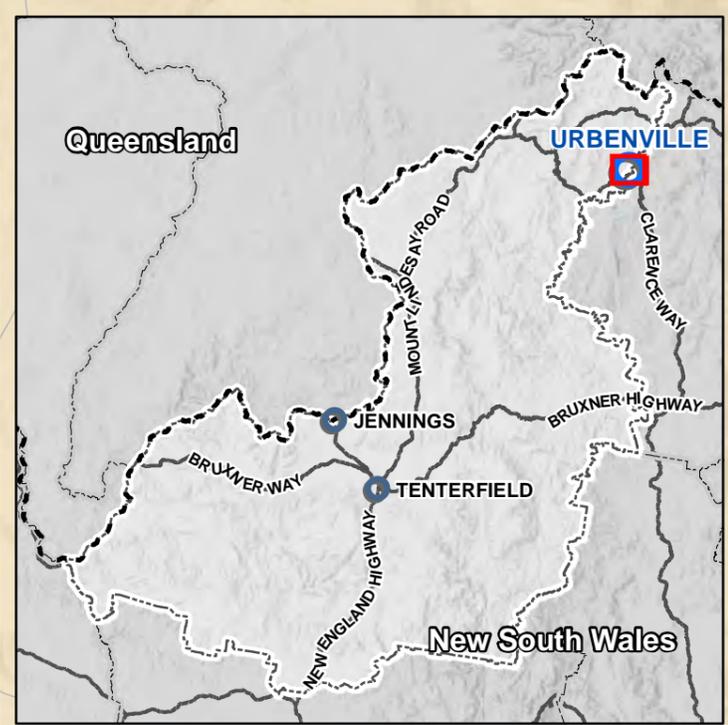
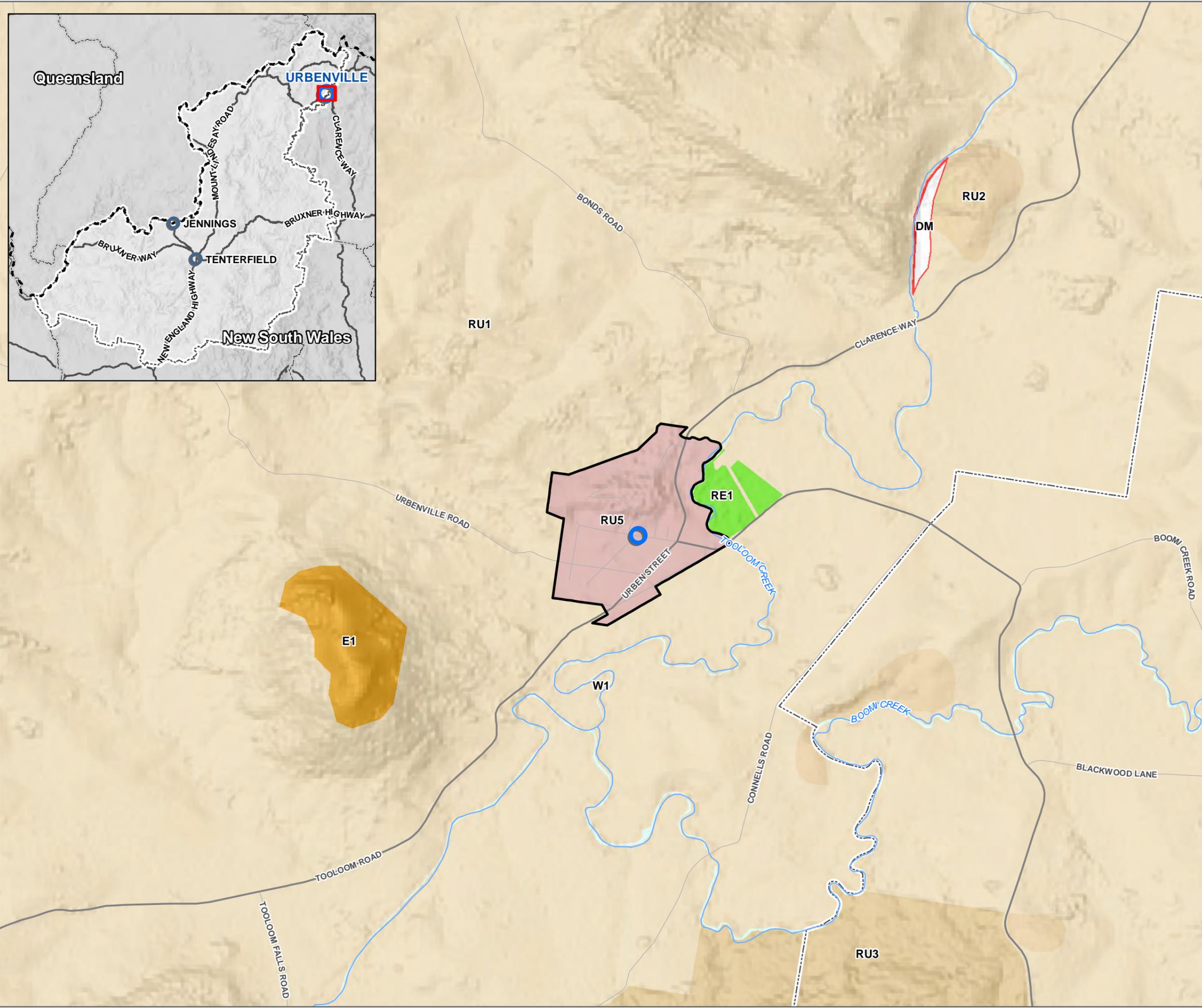
- DSP Sites
- Towns (LPI)
- Major Watercourses (LPI)
- Service Area
- State Border (Esri, 2016)
- Tenterfield LGA (DFSI-SS, 2017)
- Roads (NSW SS)**
 - Arterial Road
 - Local Road
- Tenterfield LEP, 2013 (DPE, Feb 2019)**
 - E1 - National Parks and Nature Reserves
 - RE1 - Public Recreation
 - RU1 - Primary Production
 - RU2 - Rural Landscape
 - RU3 - Forestry
 - RU5 - Village
 - W1 - Natural Waterways
 - DM - Deferred Matter

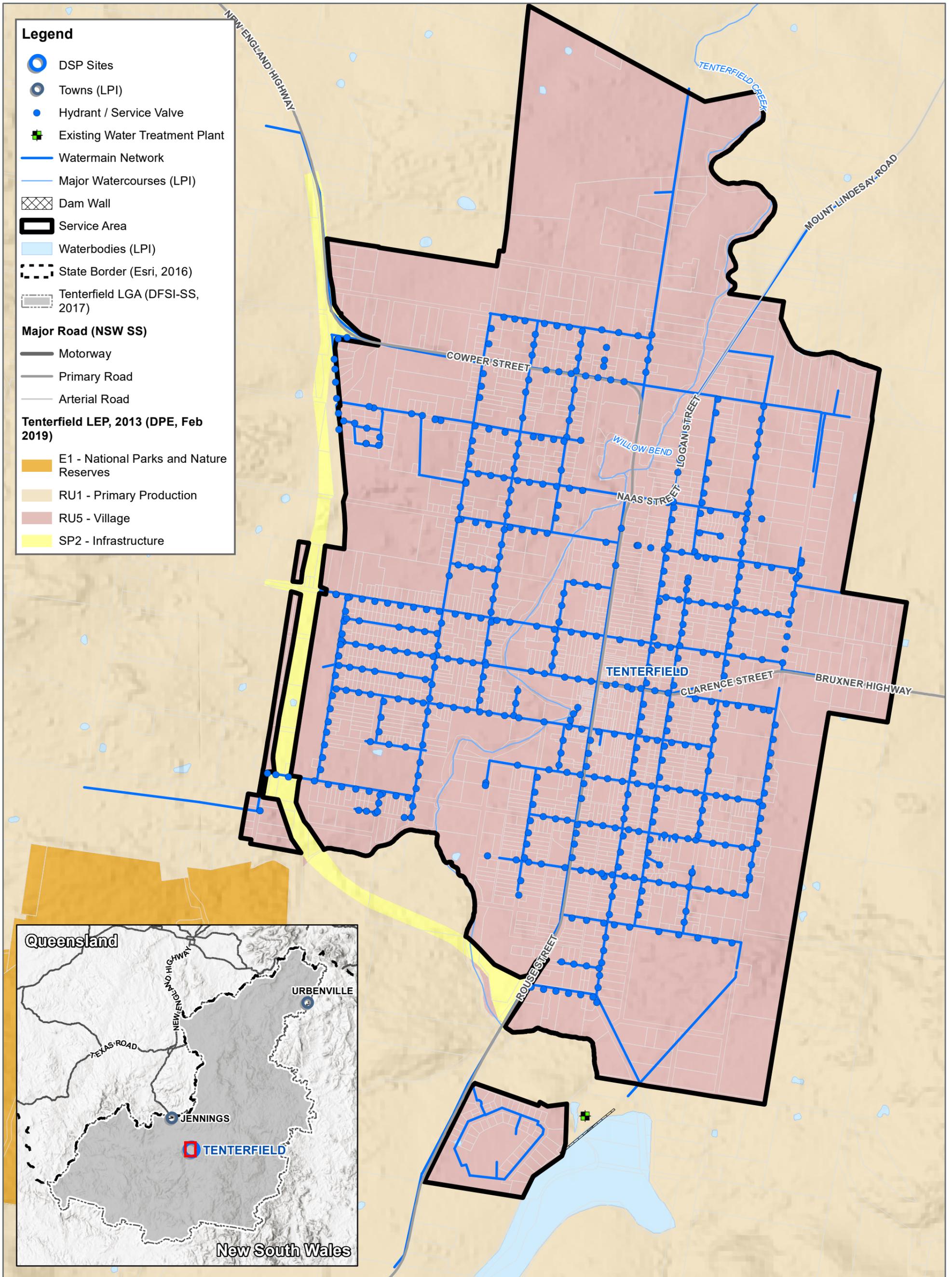
NOTE: Service Area defined by the water and sewer supply systems

1:20,000 Scale at A3



Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
Date: 2020-03-16 | Project: 3607-91
Coordinate System: GDA 1994 MGA Zone 56
Map: 360791-002-GS-004-ZoningPlan_Urbenville.mxd 03





Legend

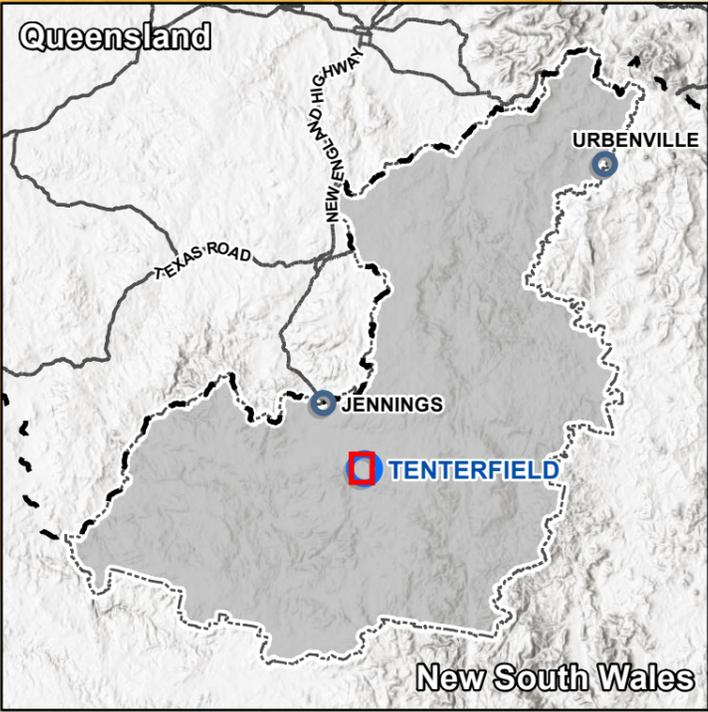
- DSP Sites
- Towns (LPI)
- Hydrant / Service Valve
- Existing Water Treatment Plant
- Watermain Network
- Major Watercourses (LPI)
- Dam Wall
- Service Area
- Waterbodies (LPI)
- State Border (Esri, 2016)
- Tenterfield LGA (DFSI-SS, 2017)

Major Road (NSW SS)

- Motorway
- Primary Road
- Arterial Road

Tenterfield LEP, 2013 (DPE, Feb 2019)

- E1 - National Parks and Nature Reserves
- RU1 - Primary Production
- RU5 - Village
- SP2 - Infrastructure



1:16,000 Scale at A3

0 150 300 450 600 m

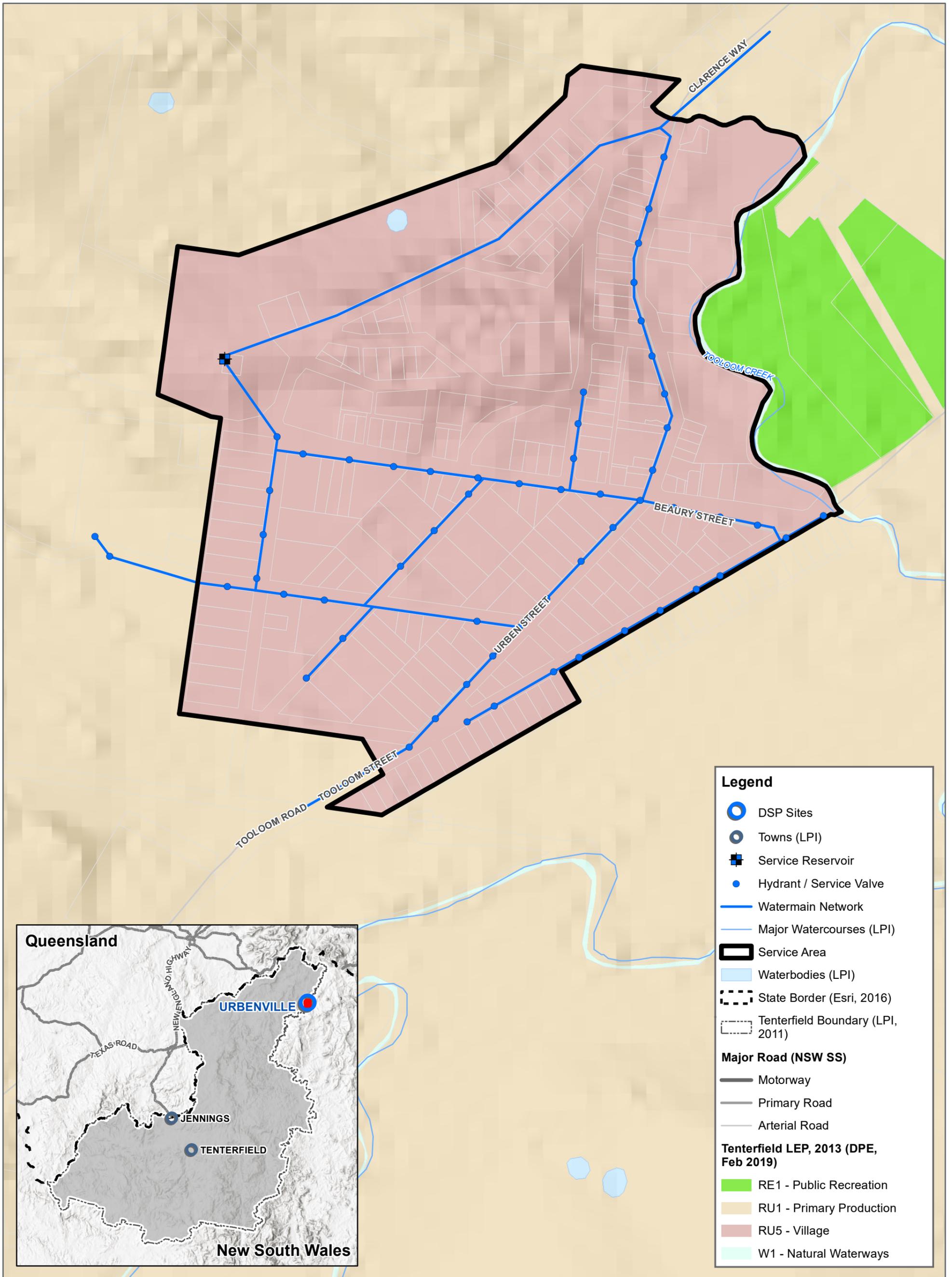
Existing Water Infrastructure Tenterfield

TENTERFIELD LGA - DEVELOPMENT SERVICING PLAN



Cardno

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
 Date: 2020-01-28 | Project: 3607-91
 Coordinate System: GDA 1994 MGA Zone 56
 Map: 360791-002-GS-005-ExistingWater_Tenterfield.mxd 02



Legend

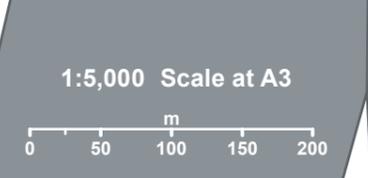
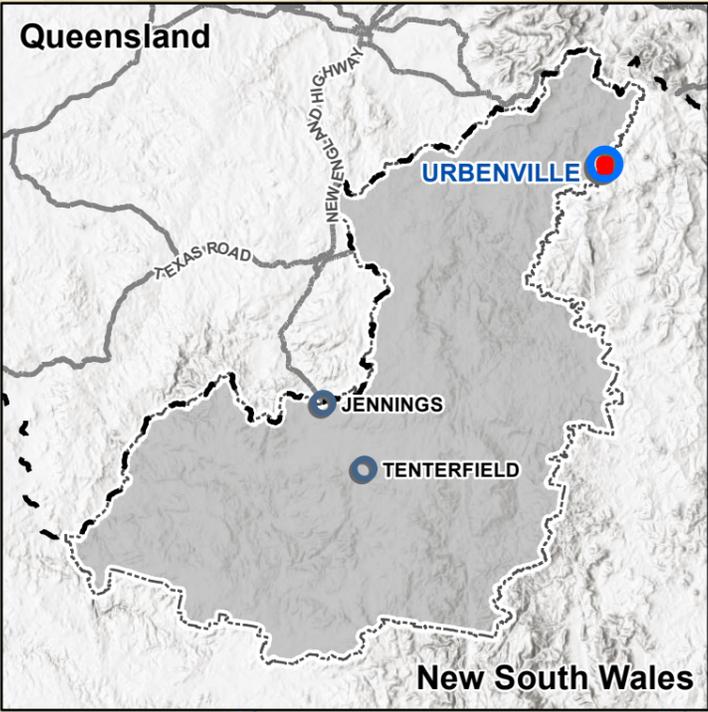
- DSP Sites
- Towns (LPI)
- Service Reservoir
- Hydrant / Service Valve
- Watermain Network
- Major Watercourses (LPI)
- Service Area
- Waterbodies (LPI)
- State Border (Esri, 2016)
- Tenterfield Boundary (LPI, 2011)

Major Road (NSW SS)

- Motorway
- Primary Road
- Arterial Road

Tenterfield LEP, 2013 (DPE, Feb 2019)

- RE1 - Public Recreation
- RU1 - Primary Production
- RU5 - Village
- W1 - Natural Waterways



**Existing Water & Sewer Mains
Urbenville**

TENTERFIELD LGA - DEVELOPMENT SERVICING PLAN

Map Produced by Cardno NSW/ACT Pty Ltd (WOL)
 Date: 2020-01-28 | Project: 3607-91
 Coordinate System: GDA 1994 MGA Zone 56
 Map: 360791-002-GS-007-ExistingWater_Urbenville.mxd 02

13 Calculation of ETs

| Water Supply Information | Value | Source |
|--|----------------|--|
| Tenterfield Dam, 1,393ML capacity, average demand 1.2ML/day | | TSC Drought Management Plan (pg5) |
| Water Supplied 2018-2019 (ML) - Tenterfield | 337.6 | Council |
| Average Annual Residential Water Supplied 2018-2019 (kL/connected property) | 159.8 | Council |
| Equivalent Tenements (ETs) for 2018-2019 - Tenterfield | 2,111.9 | = Total Water supplied / Average annual residential supplied |
| Urbenville water supply, 240ML capacity weir, average demand 0.7 ML/day, some water supplied to adjacent Shire | | TSC Drought Management Plan (pg6) |

| Connected Properties Water | | | | |
|---|-------|-------------|------------|----------|
| Year | LGA | Tenterfield | Urbenville | Jennings |
| 2008 | 2033 | 1800 | 150 | 83 |
| 2009 | 2044 | 1815 | 145 | 84 |
| 2010 | 2074 | 1840 | 148 | 86 |
| 2011 | 2072 | 1840 | 148 | 84 |
| 2012 | 2096 | 1860 | 152 | 84 |
| 2019 | 2,184 | 1916 | 165 | 103 |
| Source | | | | |
| TSC Water Supply and Sewerage Strategic Business Plan (pg. 34,35) - 2008-2012 | | | | |
| Council - Actual values for 2019 | | | | |
| TSC Drought Management Plan (pg8) - Urbenville system total connected properties 2019 | | | 359 | |

| Data for ET calculations | LGA | Tenterfield | Urbenville | Jennings |
|------------------------------------|--------|-------------|------------|----------|
| Proportion of connected properties | 100% | 88.55% | 7.26% | 4.19% |
| ETs (2019) | 2384.9 | 2111.9 | 173 | 100 |

| Year | LGA Population (Number) | | | Adopted ET growth rate | Equivalent Tenements (ETs) | | | | Annual ET Take-up (New ETs) | | | |
|---------|-------------------------|----------------------|------------|------------------------|----------------------------|-------------|------------|----------|-----------------------------|-------------|------------|----------|
| | Data points | Growth Rate (% p.a.) | Estimation | | LGA | Tenterfield | Urbenville | Jennings | LGA | Tenterfield | Urbenville | Jennings |
| 1995/96 | | 0.53% | 6,195 | 0.68% | 2,041 | 1,807 | 148 | 85 | | | | |
| 1996/97 | | 0.53% | 6,229 | 0.68% | 2,055 | 1,819 | 149 | 86 | 14 | 12 | 1 | 1 |
| 1997/98 | | 0.53% | 6,262 | 0.68% | 2,069 | 1,832 | 150 | 87 | 14 | 13 | 1 | 1 |
| 1998/99 | | 0.53% | 6,295 | 0.68% | 2,083 | 1,844 | 151 | 87 | 14 | 12 | 1 | 0 |
| 1999/00 | | 0.53% | 6,329 | 0.68% | 2,097 | 1,857 | 152 | 88 | 14 | 13 | 1 | 1 |
| 2000/01 | 6,363 | 0.53% | 6,363 | 0.68% | 2,111 | 1,869 | 153 | 88 | 14 | 12 | 1 | 0 |
| 2001/02 | | 0.53% | 6,397 | 0.68% | 2,125 | 1,882 | 154 | 89 | 14 | 13 | 1 | 1 |
| 2002/03 | | 0.53% | 6,431 | 0.68% | 2,140 | 1,895 | 155 | 90 | 15 | 13 | 1 | 1 |
| 2003/04 | | 0.53% | 6,465 | 0.68% | 2,154 | 1,908 | 156 | 90 | 14 | 13 | 1 | 0 |
| 2004/05 | | 0.53% | 6,499 | 0.68% | 2,169 | 1,921 | 157 | 91 | 15 | 13 | 1 | 1 |
| 2005/06 | 6,534 | 0.53% | 6,534 | 0.68% | 2,184 | 1,934 | 159 | 91 | 15 | 13 | 2 | 0 |
| 2006/07 | | 1.39% | 6,625 | 0.68% | 2,199 | 1,947 | 160 | 92 | 15 | 13 | 1 | 1 |
| 2007/08 | | 1.39% | 6,717 | 0.68% | 2,214 | 1,960 | 161 | 93 | 15 | 13 | 1 | 1 |
| 2008/09 | | 1.39% | 6,810 | 0.68% | 2,229 | 1,974 | 162 | 93 | 15 | 14 | 1 | 0 |
| 2009/10 | | 1.39% | 6,904 | 0.68% | 2,244 | 1,987 | 163 | 94 | 15 | 13 | 1 | 1 |
| 2010/11 | 7,000 | 1.39% | 7,000 | 0.68% | 2,259 | 2,001 | 164 | 95 | 15 | 14 | 1 | 1 |
| 2011/12 | | 0.42% | 7,030 | 0.68% | 2,274 | 2,014 | 165 | 95 | 15 | 13 | 1 | 0 |
| 2012/13 | | 0.42% | 7,060 | 0.68% | 2,290 | 2,028 | 166 | 96 | 16 | 14 | 1 | 1 |
| 2013/14 | | 0.42% | 7,090 | 0.68% | 2,305 | 2,042 | 167 | 97 | 15 | 14 | 1 | 1 |
| 2014/15 | | 0.42% | 7,120 | 0.68% | 2,321 | 2,055 | 169 | 97 | 16 | 13 | 2 | 0 |

| Year | LGA Population (Number) | | | Adopted ET growth rate | Equivalent Tenements (ETs) | | | | Annual ET Take-up (New ETs) | | | |
|---------|-------------------------|----------------------|------------|------------------------|----------------------------|-------------|------------|----------|-----------------------------|-------------|------------|----------|
| | Data points | Growth Rate (% p.a.) | Estimation | | LGA | Tenterfield | Urbenville | Jennings | LGA | Tenterfield | Urbenville | Jennings |
| 2015/16 | 7,150 | 0.42% | 7,150 | 0.68% | 2,337 | 2,069 | 170 | 98 | 16 | 14 | 1 | 1 |
| 2016/17 | | 0.28% | 7,170 | 0.68% | 2,353 | 2,084 | 171 | 98 | 16 | 15 | 1 | 0 |
| 2017/18 | | 0.28% | 7,190 | 0.68% | 2,369 | 2,098 | 172 | 99 | 16 | 14 | 1 | 1 |
| 2018/19 | | 0.28% | 7,210 | 0.68% | 2,385 | 2,112 | 173 | 100 | 16 | 14 | 1 | 1 |
| 2019/20 | | 0.28% | 7,230 | 0.68% | 2,401 | 2,126 | 174 | 101 | 16 | 14 | 1 | 1 |
| 2020/21 | 7,250 | 0.28% | 7,250 | 0.68% | 2,417 | 2,141 | 175 | 101 | 16 | 15 | 1 | 0 |
| 2021/22 | | 0.00% | 7,250 | 0.68% | 2,434 | 2,155 | 177 | 102 | 17 | 14 | 2 | 1 |
| 2022/23 | | 0.00% | 7,250 | 0.68% | 2,450 | 2,170 | 178 | 103 | 16 | 15 | 1 | 1 |
| 2023/24 | | 0.00% | 7,250 | 0.68% | 2,467 | 2,184 | 179 | 103 | 17 | 14 | 1 | 0 |
| 2024/25 | | 0.00% | 7,250 | 0.68% | 2,483 | 2,199 | 180 | 104 | 16 | 15 | 1 | 1 |
| 2025/26 | 7,250 | 0.00% | 7,250 | 0.68% | 2,500 | 2,214 | 181 | 105 | 17 | 15 | 1 | 1 |
| 2026/27 | | 0.00% | 7,250 | 0.68% | 2,517 | 2,229 | 183 | 105 | 17 | 15 | 2 | 0 |
| 2027/28 | | 0.00% | 7,250 | 0.68% | 2,534 | 2,244 | 184 | 106 | 17 | 15 | 1 | 1 |
| 2028/29 | | 0.00% | 7,250 | 0.68% | 2,551 | 2,259 | 185 | 107 | 17 | 15 | 1 | 1 |
| 2029/30 | | 0.00% | 7,250 | 0.68% | 2,568 | 2,274 | 186 | 108 | 17 | 15 | 1 | 1 |
| 2030/31 | 7,250 | 0.00% | 7,250 | 0.68% | 2,585 | 2,290 | 188 | 108 | 17 | 16 | 2 | 0 |
| 2031/32 | | -0.28% | 7,230 | 0.68% | 2,603 | 2,305 | 189 | 109 | 18 | 15 | 1 | 1 |
| 2032/33 | | -0.28% | 7,210 | 0.68% | 2,621 | 2,321 | 190 | 110 | 18 | 16 | 1 | 1 |
| 2033/34 | | -0.28% | 7,190 | 0.68% | 2,638 | 2,336 | 192 | 110 | 17 | 15 | 2 | 0 |
| 2034/35 | | -0.28% | 7,170 | 0.68% | 2,656 | 2,352 | 193 | 111 | 18 | 16 | 1 | 1 |
| 2035/36 | 7,150 | -0.28% | 7,150 | 0.68% | 2,674 | 2,368 | 194 | 112 | 18 | 16 | 1 | 1 |
| 2036/37 | | 0.00% | 7,150 | 0.68% | 2,692 | 2,384 | 195 | 113 | 18 | 16 | 1 | 1 |
| 2037/38 | | 0.00% | 7,150 | 0.68% | 2,710 | 2,400 | 197 | 113 | 18 | 16 | 2 | 0 |
| 2038/39 | | 0.00% | 7,150 | 0.68% | 2,728 | 2,416 | 198 | 114 | 18 | 16 | 1 | 1 |
| 2039/40 | | 0.00% | 7,150 | 0.68% | 2,747 | 2,433 | 199 | 115 | 19 | 17 | 1 | 1 |

| Year | LGA Population (Number) | | | Adopted ET growth rate | Equivalent Tenements (ETs) | | | | Annual ET Take-up (New ETs) | | | |
|-----------------------------|-------------------------|----------------------|------------|------------------------|----------------------------|-------------|------------|----------|-----------------------------|-------------|------------|----------|
| | Data points | Growth Rate (% p.a.) | Estimation | | LGA | Tenterfield | Urbenville | Jennings | LGA | Tenterfield | Urbenville | Jennings |
| 2040/41 | | 0.00% | 7,150 | 0.68% | 2,765 | 2,449 | 201 | 116 | 18 | 16 | 2 | 1 |
| 2041/42 | | 0.00% | 7,150 | 0.68% | 2,784 | 2,465 | 202 | 117 | 19 | 16 | 1 | 1 |
| 2042/43 | | 0.00% | 7,150 | 0.68% | 2,803 | 2,482 | 203 | 117 | 19 | 17 | 1 | 0 |
| 2043/44 | | 0.00% | 7,150 | 0.68% | 2,822 | 2,499 | 205 | 118 | 19 | 17 | 2 | 1 |
| 2044/45 | | 0.00% | 7,150 | 0.68% | 2,841 | 2,516 | 206 | 119 | 19 | 17 | 1 | 1 |
| 2045/46 | | 0.00% | 7,150 | 0.68% | 2,860 | 2,533 | 208 | 120 | 19 | 17 | 2 | 1 |
| 2046/47 | | 0.00% | 7,150 | 0.68% | 2,879 | 2,550 | 209 | 121 | 19 | 17 | 1 | 1 |
| 2047/48 | | 0.00% | 7,150 | 0.68% | 2,899 | 2,567 | 210 | 121 | 20 | 17 | 1 | 0 |
| 2048/49 | | 0.00% | 7,150 | 0.68% | 2,918 | 2,584 | 212 | 122 | 19 | 17 | 2 | 1 |
| Total ETs | | | | | 2,918 | 2,584 | 212 | 122 | 877 | 777 | 64 | 37 |
| Future ET Total (From 2019) | | | | | | | | | 533 | 472 | 39 | 22 |

14 Existing Capital Costs

| | Tenterfield | Urbenville | Jennings |
|------------------|-------------|------------|----------|
| New Growth ETs = | 777 | 64 | 37 |
| Total ETs = | 2,584 | 212 | 122 |
| Growth % | 30.1% | 30.2% | 30.3% |

| | | |
|--------------------|-------------|-----|
| Urbenville Share % | = 165 / 359 | 46% |
|--------------------|-------------|-----|

| | |
|------------------------------|-----|
| Indexation from 2012 to 2019 | 15% |
| Indexation from 2017 to 2019 | 6% |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|--|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|------------------------------|
| Jennings | Jennings Water Supply Main - 06/07 Additions | 2007 | 1/01/2007 | \$5,000 | | \$5,744 | 100.0% | 30.3% | \$1,740 | Asset less than 30 years old |
| Jennings | Jennings Mains Augmentation - Gladstone Street 07/08 | 2008 | 1/01/2008 | \$9,000 | | \$10,339 | 100.0% | 30.3% | \$3,131 | Asset less than 30 years old |
| Jennings | Jennings Mains Replacement - Duke St 07/08 | 2008 | 1/01/2008 | \$13,000 | | \$14,934 | 100.0% | 30.3% | \$4,523 | Asset less than 30 years old |
| Jennings | Jennings Mains Augmentation - 08/09 | 2009 | 1/01/2009 | \$2,000 | | \$2,297 | 100.0% | 30.3% | \$696 | Asset less than 30 years old |
| Jennings | Jennings Mains Replacement - 08/09 | 2009 | 1/01/2009 | \$10,000 | | \$11,487 | 100.0% | 30.3% | \$3,479 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|---|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|--|
| Jennings | Jennings Water Supply Mains - Meter Replacement | 2010 | 1/01/2010 | \$1,000 | | \$1,149 | 100.0% | 30.3% | \$348 | Asset less than 30 years old |
| Jennings | Mains Replacement | 2011 | 1/01/2011 | \$9,000 | | \$10,339 | 100.0% | 30.3% | \$3,131 | Asset less than 30 years old |
| Jennings | Mains Extension (S67) | 2011 | 1/01/2011 | \$2,000 | | \$2,297 | 100.0% | 30.3% | \$696 | Asset less than 30 years old |
| Jennings | Mains Replacement | 2019 | 1/01/2019 | | | \$10,600 | 100.0% | 30.3% | \$3,210 | Asset less than 30 years old |
| Tenterfield | Water treatment plant | 1930 | Excluded | \$258,000 | | \$296,376 | 100.0% | 30.1% | \$0 | Excluded, asset more than 30 years old |
| Tenterfield | Dam | 1932 | Excluded | \$13,842,000 | | \$15,900,923 | 100.0% | 30.1% | \$0 | Excluded, asset more than 30 years old |
| Tenterfield | Water treatment plant | 1956 | Excluded | \$3,730,000 | | \$4,284,817 | 100.0% | 30.1% | \$0 | Excluded, asset more than 30 years old |
| Tenterfield | Water treatment plant | 1967 | Excluded | \$753,000 | | \$865,005 | 100.0% | 30.1% | \$0 | Excluded, asset more than 30 years old |
| Tenterfield | Tenterfield Mains1 Armidale Street - WTM1ARMP01 | 1970 | Excluded | \$49,000 | | \$56,288 | 100.0% | 30.1% | \$0 | Excluded, asset more than 30 years old |
| Tenterfield | Tenterfield Mains1 Armidale Street - WTM1ARMP02 | 1970 | Excluded | \$53,000 | | \$60,883 | 100.0% | 30.1% | \$0 | Excluded, asset more |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|---|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|--|
| | | | | | | | | | | than 30 years old |
| Tenterfield | Tenterfield Mains1 Armidale Street - WTM1ARMP03 | 1970 | Excluded | \$227,000 | | \$260,765 | 100.0% | 30.1% | \$0 | Excluded, asset more than 30 years old |
| Tenterfield | Dam Stage 2 | 1976 | Excluded | \$3,912,000 | | \$4,493,889 | 100.0% | 30.1% | \$0 | Excluded, asset more than 30 years old |
| Tenterfield | Water treatment plant | 1983 | Excluded | \$748,000 | | \$859,261 | 100.0% | 30.1% | \$0 | Excluded, asset more than 30 years old |
| Tenterfield | High lift pump station 75kW | 2001 | 1/01/2001 | \$66,000 | | \$75,817 | 100.0% | 30.1% | \$22,795 | Asset less than 30 years old |
| Tenterfield | High lift pump station 45 kW | 2002 | 1/01/2002 | \$96,000 | | \$110,279 | 100.0% | 30.1% | \$33,156 | Asset less than 30 years old |
| Tenterfield | High lift pump station 75kW | 2002 | 1/01/2002 | \$147,000 | | \$168,865 | 100.0% | 30.1% | \$50,770 | Asset less than 30 years old |
| Tenterfield | Bore | 2003 | 1/01/2003 | \$404,000 | | \$464,093 | 100.0% | 30.1% | \$139,530 | Asset less than 30 years old |
| Tenterfield | Water storage 81168 | 2003 | 1/01/2003 | \$135,000 | | \$155,081 | 100.0% | 30.1% | \$46,625 | Asset less than 30 years old |
| Tenterfield | Water storage 81169 | 2003 | 1/01/2003 | \$127,000 | | \$145,891 | 100.0% | 30.1% | \$43,862 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|--|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|------------------------------|
| Tenterfield | Saddlers Estate Pumping Station | 2005 | 1/01/2005 | | \$45,000 | \$47,610 | 100.0% | 30.1% | \$14,314 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Supply Treatment Plant - 06/07 Additions | 2007 | 1/01/2007 | \$1,000 | | \$1,149 | 100.0% | 30.1% | \$345 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Supply Main - 06/07 Additions | 2007 | 1/01/2007 | \$168,000 | | \$192,989 | 100.0% | 30.1% | \$58,022 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment - Chemical Handling Shed 07/08 | 2008 | 1/01/2008 | \$3,000 | | \$3,446 | 100.0% | 30.1% | \$1,036 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Augmentation Townes Extension 07/08 | 2008 | 1/01/2008 | \$1,000 | | \$1,149 | 100.0% | 30.1% | \$345 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Augmentation Kelly Extension 07/08 | 2008 | 1/01/2008 | \$1,000 | | \$1,149 | 100.0% | 30.1% | \$345 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Augmentation 07/08 East Street | 2008 | 1/01/2008 | \$15,000 | | \$17,231 | 100.0% | 30.1% | \$5,181 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Augmentation Riley St Subdivision 07/08 | 2008 | 1/01/2008 | \$10,000 | | \$11,487 | 100.0% | 30.1% | \$3,454 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Meter Replacement 07/08 | 2008 | 1/01/2008 | \$16,000 | | \$18,380 | 100.0% | 30.1% | \$5,526 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Raising Fireplugs 07/08 | 2008 | 1/01/2008 | \$2,000 | | \$2,297 | 100.0% | 30.1% | \$691 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Replacement Rouse Street 07/08 | 2008 | 1/01/2008 | \$4,000 | | \$4,595 | 100.0% | 30.1% | \$1,381 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|--|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|------------------------------|
| Tenterfield | Tenterfield Mains Millrace Fire Service Rouse Street 07/08 | 2008 | 1/01/2008 | \$6,000 | | \$6,892 | 100.0% | 30.1% | \$2,072 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Stage 1 Simpson Street 07/08 | 2008 | 1/01/2008 | \$25,000 | | \$28,719 | 100.0% | 30.1% | \$8,634 | Asset less than 30 years old |
| Tenterfield | Tenterfield Reservoir - Catchment Area Fence 07/08 | 2008 | 1/01/2008 | \$34,000 | | \$39,057 | 100.0% | 30.1% | \$11,743 | Asset less than 30 years old |
| Tenterfield | Tenterfield Reservoir - Flood Warning System 07/08 | 2008 | 1/01/2008 | \$10,000 | | \$11,487 | 100.0% | 30.1% | \$3,454 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment - Chemical Handling Shed 08/09 | 2009 | 1/01/2009 | \$44,000 | | \$50,545 | 100.0% | 30.1% | \$15,196 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment - Boundary Fencing 08/09 | 2009 | 1/01/2009 | \$14,000 | | \$16,082 | 100.0% | 30.1% | \$4,835 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment - Mains Power Upgrade 08/09 | 2009 | 1/01/2009 | \$11,000 | | \$12,636 | 100.0% | 30.1% | \$3,799 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment - Fluoride Dosing Plant 08/09 | 2009 | 1/01/2009 | \$63,000 | | \$72,371 | 100.0% | 30.1% | \$21,758 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Augmentation 08/09 Martin Lane | 2009 | 1/01/2009 | \$10,000 | | \$11,487 | 100.0% | 30.1% | \$3,454 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Augmentation 08/09 Whereat Lane | 2009 | 1/01/2009 | \$8,000 | | \$9,190 | 100.0% | 30.1% | \$2,763 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Meter Replacement 08/09 | 2009 | 1/01/2009 | \$18,000 | | \$20,677 | 100.0% | 30.1% | \$6,217 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|---|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|------------------------------|
| Tenterfield | Tenterfield Mains Replacement Rouse Street 08/09 | 2009 | 1/01/2009 | \$18,000 | | \$20,677 | 100.0% | 30.1% | \$6,217 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Installation of Flow Meters 08/09 | 2009 | 1/01/2009 | \$1,000 | | \$1,149 | 100.0% | 30.1% | \$345 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Extension 08/09 Scott St Brierley | 2009 | 1/01/2009 | \$4,000 | | \$4,595 | 100.0% | 30.1% | \$1,381 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Extension 08/09 Rouse St - Tenterfield Car Centre | 2009 | 1/01/2009 | \$0 | | \$0 | 100.0% | 30.1% | \$0 | Asset less than 30 years old |
| Tenterfield | Tenterfield Mains Extension 08/09 Scott St - St Josephs | 2009 | 1/01/2009 | \$1,000 | | \$1,149 | 100.0% | 30.1% | \$345 | Asset less than 30 years old |
| Tenterfield | Tenterfield Reservoir - Flood Warning System 08/09 | 2009 | 1/01/2009 | \$47,000 | | \$53,991 | 100.0% | 30.1% | \$16,232 | Asset less than 30 years old |
| Tenterfield | Tenterfield Reservoir - Boundary Fence 08/09 | 2009 | 1/01/2009 | \$20,000 | | \$22,975 | 100.0% | 30.1% | \$6,907 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment Plant Chemicals Handling Shed | 2010 | 1/01/2010 | \$4,000 | | \$4,595 | 100.0% | 30.1% | \$1,381 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment Plant - Boundary Fence | 2010 | 1/01/2010 | \$18,000 | | \$20,677 | 100.0% | 30.1% | \$6,217 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Mains Augmentation | 2010 | 1/01/2010 | \$31,000 | | \$35,611 | 100.0% | 30.1% | \$10,707 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Mains Extension | 2010 | 1/01/2010 | \$23,000 | | \$26,421 | 100.0% | 30.1% | \$7,944 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|---|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|------------------------------|
| Tenterfield | Tenterfield Water Riley Street Subdivision | 2010 | 1/01/2010 | \$96,000 | | \$110,279 | 100.0% | 30.1% | \$33,156 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Meter Replacement | 2010 | 1/01/2010 | \$6,000 | | \$6,892 | 100.0% | 30.1% | \$2,072 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Card Reader at Standpine | 2010 | 1/01/2010 | \$22,000 | | \$25,272 | 100.0% | 30.1% | \$7,598 | Asset less than 30 years old |
| Tenterfield | Tenterfield Reservoirs - Dam Anchor Testing | 2010 | 1/01/2010 | \$155,000 | | \$178,055 | 100.0% | 30.1% | \$53,533 | Asset less than 30 years old |
| Tenterfield | Chemical Handling Shed 10/11 | 2011 | 1/01/2011 | \$2,000 | | \$2,297 | 100.0% | 30.1% | \$691 | Asset less than 30 years old |
| Tenterfield | Fluoride Dosing Plant | 2011 | 1/01/2011 | \$13,000 | | \$14,934 | 100.0% | 30.1% | \$4,490 | Asset less than 30 years old |
| Tenterfield | Mains Augmentation - Martin St | 2011 | 1/01/2011 | \$14,000 | | \$16,082 | 100.0% | 30.1% | \$4,835 | Asset less than 30 years old |
| Tenterfield | Meter Replacement | 2011 | 1/01/2011 | \$18,000 | | \$20,677 | 100.0% | 30.1% | \$6,217 | Asset less than 30 years old |
| Tenterfield | Riley Street Subdivision | 2011 | 1/01/2011 | \$80,000 | | \$91,900 | 100.0% | 30.1% | \$27,630 | Asset less than 30 years old |
| Tenterfield | Melaleuca St Pumping Station | 2011 | 1/01/2011 | | \$69,787 | \$73,835 | 100.0% | 30.1% | \$22,198 | Asset less than 30 years old |
| Tenterfield | Melaleuca St Pumping Station | 2011 | 1/01/2011 | | \$20,347 | \$21,527 | 100.0% | 30.1% | \$6,472 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|--|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|------------------------------|
| Tenterfield | Melaleuca St Pumping Station | 2011 | 1/01/2011 | | \$56,842 | \$60,139 | 100.0% | 30.1% | \$18,081 | Asset less than 30 years old |
| Tenterfield | Melaleuca St Pumping Station | 2011 | 1/01/2011 | | \$14,653 | \$15,503 | 100.0% | 30.1% | \$4,661 | Asset less than 30 years old |
| Tenterfield | Flood Warning System | 2012 | 1/01/2012 | | \$37,000 | \$39,146 | 100.0% | 30.1% | \$11,769 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment Boat & Storage Shed | 2013 | 1/01/2013 | | \$36,097 | \$38,191 | 100.0% | 30.1% | \$11,482 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment variable speed drive | 2014 | 1/01/2014 | | \$18,653 | \$19,735 | 100.0% | 30.1% | \$5,933 | Asset less than 30 years old |
| Tenterfield | Tenterfield WTP - In Line Telemetry | 2014 | 1/01/2014 | | \$18,289 | \$19,350 | 100.0% | 30.1% | \$5,818 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment Generator Slab/ Shed | 2014 | 1/01/2014 | | \$17,992 | \$19,036 | 100.0% | 30.1% | \$5,723 | Asset less than 30 years old |
| Tenterfield | Tenterfield WTP - Alchor Tank, Pumps | 2014 | 1/01/2014 | | \$7,610 | \$8,051 | 100.0% | 30.1% | \$2,421 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment Solar Energy System | 2014 | 1/01/2014 | | \$2,237 | \$2,367 | 100.0% | 30.1% | \$712 | Asset less than 30 years old |
| Tenterfield | Tenterfield Pump Station Shirely Park Bore | 2014 | 1/01/2014 | | \$1,000 | \$1,058 | 100.0% | 30.1% | \$318 | Asset less than 30 years old |
| Tenterfield | Tenterfield WTP - Solar Energy System | 2015 | 1/01/2015 | | \$13,532 | \$14,317 | 100.0% | 30.1% | \$4,304 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|--|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|------------------------------|
| Tenterfield | Tenterfield Water Treatment Amenities Room | 2015 | 1/01/2015 | | \$11,258 | \$11,911 | 100.0% | 30.1% | \$3,581 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Treatment Alchor Tank Pumps | 2015 | 1/01/2015 | | \$8,726 | \$9,232 | 100.0% | 30.1% | \$2,776 | Asset less than 30 years old |
| Tenterfield | Tenterfield WTP - Calibration of Testing Equipment | 2015 | 1/01/2015 | | \$5,532 | \$5,853 | 100.0% | 30.1% | \$1,760 | Asset less than 30 years old |
| Tenterfield | Tenterfield Pump Station Sludge Pump | 2015 | 1/01/2015 | | \$1,000 | \$1,058 | 100.0% | 30.1% | \$318 | Asset less than 30 years old |
| Tenterfield | Tenterfield WTP - Options & Design Development | 2015 | 1/01/2015 | | \$74,243 | \$78,549 | 100.0% | 30.1% | \$23,616 | Asset less than 30 years old |
| Tenterfield | Tenterfield Water Booster Pump Shed | 2016 | 1/01/2016 | | \$5,000 | \$5,290 | 100.0% | 30.1% | \$1,590 | Asset less than 30 years old |
| Tenterfield | Tenterfield Trunk Mains Replacement | 2018 | 1/01/2018 | \$87,187 | | \$100,156 | 100.0% | 30.1% | \$30,112 | Asset less than 30 years old |
| Tenterfield | Dam Wall Design and Repairs | 2019 | 1/01/2019 | | | \$7,300,000 | 100.0% | 30.1% | \$2,194,755 | Asset less than 30 years old |
| Tenterfield | Shirley Park Bore | 2019 | 1/01/2019 | | | \$30,000 | 100.0% | 30.1% | \$9,020 | Asset less than 30 years old |
| Tenterfield | APEX Park Bore | 2019 | 1/01/2019 | | | \$20,000 | 100.0% | 30.1% | \$6,013 | Asset less than 30 years old |
| Tenterfield | Mains Replacement | 2019 | 1/01/2019 | | | \$262,700 | 100.0% | 30.1% | \$78,981 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|---|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|--|
| Tenterfield | Meter Replacement | 2019 | 1/01/2019 | | | \$0 | 100.0% | 30.1% | \$0 | Excluded, Reticulation |
| Tenterfield | Flood Warning System (Gas Bubbler) | 2019 | 1/01/2019 | | | \$16,800 | 100.0% | 30.1% | \$5,051 | Asset less than 30 years old |
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2019 | 1/01/2019 | | | \$2,000 | 100.0% | 30.1% | \$601 | Asset less than 30 years old |
| Tenterfield | Valve Renewal | | Excluded | | | \$0 | 100.0% | 30.1% | \$0 | Excluded, Reticulation |
| Urbenville | Toolom Ck Weir | 1967 | Excluded | \$18,000 | | \$20,677 | 46.0% | 30.2% | \$0 | Excluded, asset more than 30 years old |
| Urbenville | Water treatment plant | 1982 | Excluded | \$18,000 | | \$20,677 | 46.0% | 30.2% | \$0 | Excluded, asset more than 30 years old |
| Urbenville | Urbenville Main1 Tooloom Falls Road -WUM1TFRP02 | 1996 | 1/01/1996 | \$2,000 | | \$2,297 | 46.0% | 30.2% | \$319 | Asset less than 30 years old |
| Urbenville | Urbenville Main1 Tooloom Falls Road -WUM1TFRP04 | 1996 | 1/01/1996 | \$6,000 | | \$6,892 | 46.0% | 30.2% | \$957 | Asset less than 30 years old |
| Urbenville | Raw water pump station | 2001 | 1/01/2001 | \$87,000 | | \$99,941 | 46.0% | 30.2% | \$13,875 | Asset less than 30 years old |
| Urbenville | Urbenville Water Supply Treatment Plant - 06/07 Additions | 2007 | 1/01/2007 | \$24,000 | | \$27,570 | 46.0% | 30.2% | \$3,828 | Asset less than 30 years old |
| Urbenville | Urbenville Water Supply Main - 06/07 Additions | 2007 | 1/01/2007 | \$2,000 | | \$2,297 | 46.0% | 30.2% | \$319 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|--|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|------------------------------|
| Urbenville | Urbenville Water Treatment Plant Augmentation 07/08 | 2008 | 1/01/2008 | \$34,000 | | \$39,057 | 46.0% | 30.2% | \$5,423 | Asset less than 30 years old |
| Urbenville | Urbenville Water Treatment Plant Emergency Works 07/08 | 2008 | 1/01/2008 | \$75,000 | | \$86,156 | 46.0% | 30.2% | \$11,962 | Asset less than 30 years old |
| Urbenville | Urbenville Mains - Meter Replacement 07/08 | 2008 | 1/01/2008 | \$1,000 | | \$1,149 | 46.0% | 30.2% | \$159 | Asset less than 30 years old |
| Urbenville | Urbenville Water Treatment Plant Augmentation 08/09 | 2009 | 1/01/2009 | \$62,000 | | \$71,222 | 46.0% | 30.2% | \$9,888 | Asset less than 30 years old |
| Urbenville | Urbenville Treatment Plant Augmentation | 2010 | 1/01/2010 | \$1,994,000 | | \$2,290,597 | 46.0% | 30.2% | \$318,020 | Asset less than 30 years old |
| Urbenville | Urbenville Water Main - Replace Faulty Valves | 2010 | 1/01/2010 | \$2,000 | | \$2,297 | 46.0% | 30.2% | \$319 | Asset less than 30 years old |
| Urbenville | Urbenville Water Main - Mains Replacement | 2010 | 1/01/2010 | \$3,000 | | \$3,446 | 46.0% | 30.2% | \$478 | Asset less than 30 years old |
| Urbenville | Main Reservoir | 2010 | 1/01/2010 | | \$88,500 | \$93,633 | 46.0% | 30.2% | \$13,011 | Asset less than 30 years old |
| Urbenville | WTP - Augmentation | 2011 | 1/01/2011 | \$39,000 | | \$44,801 | 46.0% | 30.2% | \$6,220 | Asset less than 30 years old |
| Urbenville | WTP - Augmentation - Contract Management | 2011 | 1/01/2011 | \$44,000 | | \$50,545 | 46.0% | 30.2% | \$7,017 | Asset less than 30 years old |
| Urbenville | WTP - Augmentation - Other Expenses | 2011 | 1/01/2011 | \$82,000 | | \$94,197 | 46.0% | 30.2% | \$13,078 | Asset less than 30 years old |

| Asset Service Area(s) | Asset | Commissioning Year | Effective Commission Date | Capital Cost (2012) | Capital Cost (2017) | MEERA (2019) | Shared Proportion | Growth Proportion | Recoverable MEERA | Justification |
|-----------------------|-------------------------------------|--------------------|---------------------------|---------------------|---------------------|--------------|-------------------|-------------------|-------------------|------------------------------|
| Urbenville | Urbenville Meter Replacement 10/11 | 2011 | 1/01/2011 | \$1,000 | | \$1,149 | 46.0% | 30.2% | \$159 | Asset less than 30 years old |
| Urbenville | Urbenville WTP - Solar Installation | 2015 | 1/01/2015 | | \$19,607 | \$20,744 | 46.0% | 30.2% | \$2,883 | Asset less than 30 years old |
| Urbenville | Urbenville Secure Yield | 2015 | 1/01/2015 | | \$8,000 | \$8,464 | 46.0% | 30.2% | \$1,176 | Asset less than 30 years old |
| Urbenville | Urbenville Water Treatment Plant | 2019 | 1/01/2019 | | | \$5,000 | 46.0% | 30.2% | \$694 | Asset less than 30 years old |

15 Future Capital Works Program

| | Tenterfield | Urbenville | Jennings |
|------------------|-------------|------------|----------|
| New Growth ETs = | 472 | 39 | 22 |
| Total ETs = | 2,584 | 212 | 122 |
| Growth % | 18.3% | 18.4% | 18.0% |

| | |
|--------------------|-----|
| Urbenville share % | 46% |
|--------------------|-----|

| Asset Service Area(s) | Asset Details | Year | Cost Estimate | Shared Proportion | Growth Proportion | Recoverable Cost | Justification |
|-----------------------|--|------|---------------|-------------------|-------------------|------------------|-------------------------------------|
| Jennings | Water main replacement | 2020 | \$10,600 | 100% | 18.0% | \$1,908.8 | Future renewal within next 10 years |
| Jennings | Water main replacement | 2021 | \$10,900 | 100% | 18.0% | \$1,962.9 | Future renewal within next 10 years |
| Jennings | Water main replacement | 2022 | \$11,200 | 100% | 18.0% | \$2,016.9 | Future renewal within next 10 years |
| Jennings | Water main replacement | 2023 | \$11,500 | 100% | 18.0% | \$2,070.9 | Future renewal within next 10 years |
| Jennings | Water main replacement | 2024 | \$11,800 | 100% | 18.0% | \$2,124.9 | Future renewal within next 10 years |
| Jennings | Water main replacement | 2025 | \$12,100 | 100% | 18.0% | \$2,179.0 | Future renewal within next 10 years |
| Jennings | Water main replacement | 2026 | \$12,700 | 100% | 18.0% | \$2,287.0 | Future renewal within next 10 years |
| Jennings | Water main replacement | 2027 | \$12,700 | 100% | 18.0% | \$2,287.0 | Future renewal within next 10 years |
| Jennings | Water main replacement | 2028 | \$12,700 | 100% | 18.0% | \$2,287.0 | Future renewal within next 10 years |
| Jennings | Water main replacement | 2029 | \$12,700 | 100% | 18.0% | \$2,287.0 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2020 | \$262,700 | 100% | 18.3% | \$47,978.2 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2020 | \$16,800 | 100% | 18.3% | \$3,068.3 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2020 | \$21,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2020 | \$2,000 | 100% | 18.3% | \$365.3 | Future renewal within next 10 years |
| Tenterfield | Hospital Hill Reservoir | 2020 | \$100,000 | 100% | 18.3% | \$18,263.5 | Future renewal within next 10 years |
| Tenterfield | Water Supply, Drought Augmentation | 2020 | \$636,771 | 100% | 18.3% | \$116,296.7 | New asset |

| Asset Service Area(s) | Asset Details | Year | Cost Estimate | Shared Proportion | Growth Proportion | Recoverable Cost | Justification |
|-----------------------|--|------|---------------|-------------------|-------------------|------------------|-------------------------------------|
| Tenterfield | Water treatment plant | 2021 | \$9,350,000 | 100% | 18.3% | \$1,707,638.2 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2021 | \$269,300 | 100% | 18.3% | \$49,183.6 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2021 | \$17,200 | 100% | 18.3% | \$3,141.3 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2021 | \$21,500 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2021 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2022 | \$276,000 | 100% | 18.3% | \$50,407.3 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2022 | \$17,600 | 100% | 18.3% | \$3,214.4 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2022 | \$22,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2022 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2023 | \$282,900 | 100% | 18.3% | \$51,667.5 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2023 | \$18,000 | 100% | 18.3% | \$3,287.4 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2023 | \$22,600 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Tenterfield Mains Augmentation | 2023 | \$10,900 | 100% | 18.3% | \$1,990.7 | Future Asset |
| Tenterfield | Air Scour - Pipe Renewal Program | 2023 | \$60,000 | 100% | 18.3% | \$10,958.1 | Future renewal within next 10 years |
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2023 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2024 | \$289,550 | 100% | 18.3% | \$52,882.0 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2024 | \$18,400 | 100% | 18.3% | \$3,360.5 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2024 | \$23,200 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Sludge Removal | 2024 | \$10,000 | 100% | 18.3% | \$1,826.4 | Future renewal within next 10 years |
| Tenterfield | Valve Renewal | 2024 | \$50,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | UV Disinfection System | 2024 | \$21,000 | 100% | 18.3% | \$3,835.3 | Future renewal within next 10 years |
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2024 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2025 | \$296,280 | 100% | 18.3% | \$54,111.1 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2025 | \$19,500 | 100% | 18.3% | \$3,561.4 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2025 | \$23,800 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Valve Renewal | 2025 | \$20,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |

| Asset Service Area(s) | Asset Details | Year | Cost Estimate | Shared Proportion | Growth Proportion | Recoverable Cost | Justification |
|-----------------------|--|------|---------------|-------------------|-------------------|------------------|-------------------------------------|
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2025 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2026 | \$303,010 | 100% | 18.3% | \$55,340.3 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2026 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2026 | \$24,400 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Valve Renewal | 2026 | \$20,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2026 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2027 | \$309,740 | 100% | 18.3% | \$56,569.4 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2027 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2027 | \$25,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Valve Renewal | 2027 | \$20,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2027 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2028 | \$316,470 | 100% | 18.3% | \$57,798.5 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2028 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2028 | \$25,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Valve Renewal | 2028 | \$20,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Tenterfield | Shirley Park Bore Flood Damage Restoration | 2028 | \$20,000 | 100% | 18.3% | \$3,652.7 | Future renewal within next 10 years |
| Tenterfield | Water main replacement | 2029 | \$323,200 | 100% | 18.3% | \$59,027.7 | Future renewal within next 10 years |
| Tenterfield | Flood Warning System | 2029 | \$20,400 | 100% | 18.3% | \$3,725.8 | Future renewal within next 10 years |
| Tenterfield | Meter Replacement | 2029 | \$25,000 | 0% | 18.3% | \$0.0 | Excluded, reticulation |
| Urbenville | Mains Extension | 2020 | \$5,000 | 46% | 18.4% | \$423.0 | Future renewal within next 10 years |
| Urbenville | Water treatment plant | 2021 | \$5,000 | 46% | 18.4% | \$423.0 | Future renewal within next 10 years |
| Urbenville | Water treatment plant | 2023 | \$5,000 | 46% | 18.4% | \$423.0 | Future renewal within next 10 years |
| Urbenville | Mains Extension | 2024 | \$20,000 | 46% | 18.4% | \$1,692.1 | Future Asset |
| Urbenville | Meter Replacement in WTP | 2024 | \$20,000 | 46% | 18.4% | \$1,692.1 | Future renewal within next 10 years |
| Urbenville | Valve/ Hydrant Replacement | 2024 | \$20,000 | 0% | 18.4% | \$0.0 | Excluded, reticulation |
| Urbenville | Meter Replacement | 2024 | \$10,000 | 0% | 18.4% | \$0.0 | Excluded, reticulation |

| Asset Service Area(s) | Asset Details | Year | Cost Estimate | Shared Proportion | Growth Proportion | Recoverable Cost | Justification |
|-----------------------|-----------------------|------|---------------|-------------------|-------------------|------------------|-------------------------------------|
| Urbenville | Water treatment plant | 2025 | \$5,000 | 46% | 18.4% | \$423.0 | Future renewal within next 10 years |

16 Calculation of the Capital Charge

| Dates and General information | Value | Source |
|--|------------|----------------|
| Year of Calculation | 2019 | |
| Assessment date | 30/06/2019 | |
| Discount rate date | 1/01/1996 | |
| 30yr cut-off date | 30/06/1989 | |
| DISCOUNT RATE (pa) FOR ASSETS CONSTRUCTED BEFORE 1 JANUARY 1996 : | 3% | DSP Guidelines |
| DISCOUNT RATE (pa) FOR ASSETS CONSTRUCTED ON OR AFTER 1 JANUARY 1996 : | 5% | DSP Guidelines |
| DISCOUNT RATE (pa) FOR PROPOSED FUTURE ASSETS : | 5% | DSP Guidelines |

16.1 Tenterfield

| Tenterfield | | | |
|-----------------------------|-------------|---------|----------------|
| | NPV Assets | NPV ETs | Capital Charge |
| Existing Assets (Pre 1996) | \$0 | 370 | \$0 |
| Existing Assets (Post 1996) | \$1,958,435 | 253 | \$7,732 |
| | | Total | \$7,732 |

| Year | Annual ET Take-up (ET) | Existing Assets (Pre 1996) | Existing Assets (Post 1996) | Historical Index | PV of Historical ETs (3%) | PV of Historical ETs (5%) | PV Existing Assets (Pre 1996) (3%) | PV Existing Assets (Post 1996) (5%) |
|---------|------------------------|----------------------------|-----------------------------|------------------|---------------------------|---------------------------|------------------------------------|-------------------------------------|
| 1988/89 | | \$0 | | | | | | |
| 1989/90 | | \$0 | | | | | | |
| 1990/91 | | \$0 | | | | | | |
| 1991/92 | | \$0 | | | | | | |
| 1992/93 | | \$0 | | | | | | |
| 1993/94 | | \$0 | | | | | | |
| 1994/95 | | \$0 | | | | | | |
| 1995/96 | 0 | | \$0 | 0 | 0 | 0 | 0 | \$0 |
| 1996/97 | 12 | | \$0 | 1 | 12 | 11 | | \$0 |
| 1997/98 | 13 | | \$0 | 2 | 12 | 12 | | \$0 |
| 1998/99 | 12 | | \$0 | 3 | 11 | 10 | | \$0 |
| 1999/00 | 13 | | \$0 | 4 | 12 | 11 | | \$0 |
| 2000/01 | 12 | | \$22,795 | 5 | 10 | 9 | | \$17,860 |
| 2001/02 | 13 | | \$83,925 | 6 | 11 | 10 | | \$62,626 |
| 2002/03 | 13 | | \$230,018 | 7 | 11 | 9 | | \$163,469 |
| 2003/04 | 13 | | \$0 | 8 | 10 | 9 | | \$0 |

| Year | Annual ET Take-up (ET) | Existing Assets (Pre 1996) | Existing Assets (Post 1996) | Historical Index | PV of Historical ETs (3%) | PV of Historical ETs (5%) | PV Existing Assets (Pre 1996) (3%) | PV Existing Assets (Post 1996) (5%) |
|---------|------------------------|----------------------------|-----------------------------|------------------|---------------------------|---------------------------|------------------------------------|-------------------------------------|
| 2004/05 | 13 | | \$14,314 | 9 | 10 | 8 | | \$9,227 |
| 2005/06 | 13 | | \$0 | 10 | 10 | 8 | | \$0 |
| 2006/07 | 13 | | \$58,368 | 11 | 9 | 8 | | \$34,126 |
| 2007/08 | 13 | | \$43,862 | 12 | 9 | 7 | | \$24,424 |
| 2008/09 | 14 | | \$89,451 | 13 | 10 | 7 | | \$47,438 |
| 2009/10 | 13 | | \$122,607 | 14 | 9 | 7 | | \$61,925 |
| 2010/11 | 14 | | \$95,275 | 15 | 9 | 7 | | \$45,829 |
| 2011/12 | 13 | | \$11,769 | 16 | 8 | 6 | | \$5,392 |
| 2012/13 | 14 | | \$11,482 | 17 | 8 | 6 | | \$5,010 |
| 2013/14 | 14 | | \$20,924 | 18 | 8 | 6 | | \$8,694 |
| 2014/15 | 13 | | \$36,355 | 19 | 7 | 5 | | \$14,387 |
| 2015/16 | 14 | | \$1,590 | 20 | 8 | 5 | | \$599 |
| 2016/17 | 15 | | \$0 | 21 | 8 | 5 | | \$0 |
| 2017/18 | 14 | | \$30,112 | 22 | 7 | 5 | | \$10,294 |
| 2018/19 | 14 | | \$2,294,421 | 23 | 7 | 5 | | \$746,998 |
| 2019/20 | 14 | | \$185,972 | 24 | 7 | 4 | | \$57,664 |
| 2020/21 | 15 | | \$1,763,616 | 25 | 7 | 4 | | \$520,801 |
| 2021/22 | 14 | | \$57,274 | 26 | 6 | 4 | | \$16,108 |
| 2022/23 | 15 | | \$71,556 | 27 | 7 | 4 | | \$19,166 |
| 2023/24 | 14 | | \$65,557 | 28 | 6 | 4 | | \$16,723 |
| 2024/25 | 15 | | \$61,325 | 29 | 6 | 4 | | \$14,899 |
| 2025/26 | 15 | | \$62,646 | 30 | 6 | 3 | | \$14,495 |
| 2026/27 | 15 | | \$63,875 | 31 | 6 | 3 | | \$14,075 |
| 2027/28 | 15 | | \$65,104 | 32 | 6 | 3 | | \$13,663 |
| 2028/29 | 15 | | \$62,753 | 33 | 6 | 3 | | \$12,543 |
| 2029/30 | 15 | | \$0 | 34 | 5 | 3 | | \$0 |
| 2030/31 | 16 | | \$0 | 35 | 6 | 3 | | \$0 |
| 2031/32 | 15 | | \$0 | 36 | 5 | 3 | | \$0 |
| 2032/33 | 16 | | \$0 | 37 | 5 | 3 | | \$0 |
| 2033/34 | 15 | | \$0 | 38 | 5 | 2 | | \$0 |
| 2034/35 | 16 | | \$0 | 39 | 5 | 2 | | \$0 |
| 2035/36 | 16 | | \$0 | 40 | 5 | 2 | | \$0 |
| 2036/37 | 16 | | \$0 | 41 | 5 | 2 | | \$0 |
| 2037/38 | 16 | | \$0 | 42 | 5 | 2 | | \$0 |
| 2038/39 | 16 | | \$0 | 43 | 4 | 2 | | \$0 |
| 2039/40 | 17 | | \$0 | 44 | 5 | 2 | | \$0 |
| 2040/41 | 16 | | \$0 | 45 | 4 | 2 | | \$0 |
| 2041/42 | 16 | | \$0 | 46 | 4 | 2 | | \$0 |
| 2042/43 | 17 | | \$0 | 47 | 4 | 2 | | \$0 |
| 2043/44 | 17 | | \$0 | 48 | 4 | 2 | | \$0 |

| Year | Annual ET Take-up (ET) | Existing Assets (Pre 1996) | Existing Assets (Post 1996) | Historical Index | PV of Historical ETs (3%) | PV of Historical ETs (5%) | PV Existing Assets (Pre 1996) (3%) | PV Existing Assets (Post 1996) (5%) |
|---------|------------------------|----------------------------|-----------------------------|------------------|---------------------------|---------------------------|------------------------------------|-------------------------------------|
| 2044/45 | 17 | | \$0 | 49 | 4 | 2 | | \$0 |
| 2045/46 | 17 | | \$0 | 50 | 4 | 1 | | \$0 |
| 2046/47 | 17 | | \$0 | 51 | 4 | 1 | | \$0 |
| 2047/48 | 17 | | \$0 | 52 | 4 | 1 | | \$0 |
| 2048/49 | 17 | | \$0 | 53 | 4 | 1 | | \$0 |
| | 777 | | | | 370 | 253 | \$0 | \$1,958,435 |

16.2 Urbenville

| Urbenville | | | |
|-----------------------------|------------|--------------|-----------------|
| | NPV Assets | NPV ETs | Capital Charge |
| Existing Assets (Pre 1996) | \$0 | 30 | \$0 |
| Existing Assets (Post 1996) | \$213,172 | 21 | \$10,228 |
| | | Total | \$10,228 |

| Year | Annual ET Take-up (ET) | Existing Assets (Pre 1996) | Existing Assets (Post 1996) | Historical Index | PV of Historical ETs (3%) | PV of Historical ETs (5%) | PV Existing Assets (Pre 1996) (3%) | PV Existing Assets (Post 1996) (5%) |
|---------|------------------------|----------------------------|-----------------------------|------------------|---------------------------|---------------------------|------------------------------------|-------------------------------------|
| 1988/89 | | \$0 | | | | | | |
| 1989/90 | | \$0 | | | | | | |
| 1990/91 | | \$0 | | | | | | |
| 1991/92 | | \$0 | | | | | | |
| 1992/93 | | \$0 | | | | | | |
| 1993/94 | | \$0 | | | | | | |
| 1994/95 | | \$0 | | | | | | |
| 1995/96 | 0 | | \$1,276 | 0 | 0 | 0 | 0 | \$1,276 |
| 1996/97 | 1 | | \$0 | 1 | 1 | 1 | | \$0 |
| 1997/98 | 1 | | \$0 | 2 | 1 | 1 | | \$0 |
| 1998/99 | 1 | | \$0 | 3 | 1 | 1 | | \$0 |
| 1999/00 | 1 | | \$0 | 4 | 1 | 1 | | \$0 |
| 2000/01 | 1 | | \$13,875 | 5 | 1 | 1 | | \$10,872 |
| 2001/02 | 1 | | \$0 | 6 | 1 | 1 | | \$0 |
| 2002/03 | 1 | | \$0 | 7 | 1 | 1 | | \$0 |
| 2003/04 | 1 | | \$0 | 8 | 1 | 1 | | \$0 |
| 2004/05 | 1 | | \$0 | 9 | 1 | 1 | | \$0 |
| 2005/06 | 2 | | \$0 | 10 | 1 | 1 | | \$0 |
| 2006/07 | 1 | | \$4,147 | 11 | 1 | 1 | | \$2,424 |
| 2007/08 | 1 | | \$17,544 | 12 | 1 | 1 | | \$9,769 |
| 2008/09 | 1 | | \$9,888 | 13 | 1 | 1 | | \$5,244 |
| 2009/10 | 1 | | \$331,828 | 14 | 1 | 1 | | \$167,596 |
| 2010/11 | 1 | | \$26,475 | 15 | 1 | 0 | | \$12,735 |
| 2011/12 | 1 | | \$0 | 16 | 1 | 0 | | \$0 |
| 2012/13 | 1 | | \$0 | 17 | 1 | 0 | | \$0 |
| 2013/14 | 1 | | \$0 | 18 | 1 | 0 | | \$0 |
| 2014/15 | 2 | | \$4,059 | 19 | 1 | 1 | | \$1,606 |
| 2015/16 | 1 | | \$0 | 20 | 1 | 0 | | \$0 |
| 2016/17 | 1 | | \$0 | 21 | 1 | 0 | | \$0 |
| 2017/18 | 1 | | \$0 | 22 | 1 | 0 | | \$0 |
| 2018/19 | 1 | | \$694 | 23 | 1 | 0 | | \$226 |

| Year | Annual ET Take-up (ET) | Existing Assets (Pre 1996) | Existing Assets (Post 1996) | Historical Index | PV of Historical ETs (3%) | PV of Historical ETs (5%) | PV Existing Assets (Pre 1996) (3%) | PV Existing Assets (Post 1996) (5%) |
|---------|------------------------|----------------------------|-----------------------------|------------------|---------------------------|---------------------------|------------------------------------|-------------------------------------|
| 2019/20 | 1 | | \$423 | 24 | 0 | 0 | | \$131 |
| 2020/21 | 1 | | \$423 | 25 | 0 | 0 | | \$125 |
| 2021/22 | 2 | | \$0 | 26 | 1 | 1 | | \$0 |
| 2022/23 | 1 | | \$423 | 27 | 0 | 0 | | \$113 |
| 2023/24 | 1 | | \$3,384 | 28 | 0 | 0 | | \$863 |
| 2024/25 | 1 | | \$423 | 29 | 0 | 0 | | \$103 |
| 2025/26 | 1 | | \$0 | 30 | 0 | 0 | | \$0 |
| 2026/27 | 2 | | \$0 | 31 | 1 | 0 | | \$0 |
| 2027/28 | 1 | | \$423 | 32 | 0 | 0 | | \$89 |
| 2028/29 | 1 | | \$0 | 33 | 0 | 0 | | \$0 |
| 2029/30 | 1 | | \$0 | 34 | 0 | 0 | | \$0 |
| 2030/31 | 2 | | \$0 | 35 | 1 | 0 | | \$0 |
| 2031/32 | 1 | | \$0 | 36 | 0 | 0 | | \$0 |
| 2032/33 | 1 | | \$0 | 37 | 0 | 0 | | \$0 |
| 2033/34 | 2 | | \$0 | 38 | 1 | 0 | | \$0 |
| 2034/35 | 1 | | \$0 | 39 | 0 | 0 | | \$0 |
| 2035/36 | 1 | | \$0 | 40 | 0 | 0 | | \$0 |
| 2036/37 | 1 | | \$0 | 41 | 0 | 0 | | \$0 |
| 2037/38 | 2 | | \$0 | 42 | 1 | 0 | | \$0 |
| 2038/39 | 1 | | \$0 | 43 | 0 | 0 | | \$0 |
| 2039/40 | 1 | | \$0 | 44 | 0 | 0 | | \$0 |
| 2040/41 | 2 | | \$0 | 45 | 1 | 0 | | \$0 |
| 2041/42 | 1 | | \$0 | 46 | 0 | 0 | | \$0 |
| 2042/43 | 1 | | \$0 | 47 | 0 | 0 | | \$0 |
| 2043/44 | 2 | | \$0 | 48 | 0 | 0 | | \$0 |
| 2044/45 | 1 | | \$0 | 49 | 0 | 0 | | \$0 |
| 2045/46 | 2 | | \$0 | 50 | 0 | 0 | | \$0 |
| 2046/47 | 1 | | \$0 | 51 | 0 | 0 | | \$0 |
| 2047/48 | 1 | | \$0 | 52 | 0 | 0 | | \$0 |
| 2048/49 | 2 | | \$0 | 53 | 0 | 0 | | \$0 |
| | 64 | | | | 30 | 21 | \$0 | \$213,172 |

16.3 Jennings

| Jennings | | | |
|-----------------------------|------------|---------|----------------|
| | NPV Assets | NPV ETs | Capital Charge |
| Existing Assets (Pre 1996) | \$0 | 30 | \$0 |
| Existing Assets (Post 1996) | \$213,172 | 21 | \$10,228 |
| | | Total | \$10,228 |

| Year | Annual ET Take-up (ET) | Existing Assets (Pre 1996) | Existing Assets (Post 1996) | Historical Index | PV of Historical ETs (3%) | PV of Historical ETs (5%) | PV Existing Assets (Pre 1996) (3%) | PV Existing Assets (Post 1996) (5%) |
|---------|------------------------|----------------------------|-----------------------------|------------------|---------------------------|---------------------------|------------------------------------|-------------------------------------|
| 1988/89 | | \$0 | | | | | | |
| 1989/90 | | \$0 | | | | | | |
| 1990/91 | | \$0 | | | | | | |
| 1991/92 | | \$0 | | | | | | |
| 1992/93 | | \$0 | | | | | | |
| 1993/94 | | \$0 | | | | | | |
| 1994/95 | | \$0 | | | | | | |
| 1995/96 | 0 | | \$0 | 0 | 0 | 0 | 0 | \$0 |
| 1996/97 | 1 | | \$0 | 1 | 1 | 1 | | \$0 |
| 1997/98 | 1 | | \$0 | 2 | 1 | 1 | | \$0 |
| 1998/99 | 0 | | \$0 | 3 | 0 | 0 | | \$0 |
| 1999/00 | 1 | | \$0 | 4 | 1 | 1 | | \$0 |
| 2000/01 | 0 | | \$0 | 5 | 0 | 0 | | \$0 |
| 2001/02 | 1 | | \$0 | 6 | 1 | 1 | | \$0 |
| 2002/03 | 1 | | \$0 | 7 | 1 | 1 | | \$0 |
| 2003/04 | 0 | | \$0 | 8 | 0 | 0 | | \$0 |
| 2004/05 | 1 | | \$0 | 9 | 1 | 1 | | \$0 |
| 2005/06 | 0 | | \$0 | 10 | 0 | 0 | | \$0 |
| 2006/07 | 1 | | \$1,740 | 11 | 1 | 1 | | \$1,017 |
| 2007/08 | 1 | | \$7,654 | 12 | 1 | 1 | | \$4,262 |
| 2008/09 | 0 | | \$4,175 | 13 | 0 | 0 | | \$2,214 |
| 2009/10 | 1 | | \$348 | 14 | 1 | 1 | | \$176 |
| 2010/11 | 1 | | \$3,827 | 15 | 1 | 0 | | \$1,841 |
| 2011/12 | 0 | | \$0 | 16 | 0 | 0 | | \$0 |
| 2012/13 | 1 | | \$0 | 17 | 1 | 0 | | \$0 |
| 2013/14 | 1 | | \$0 | 18 | 1 | 0 | | \$0 |
| 2014/15 | 0 | | \$0 | 19 | 0 | 0 | | \$0 |
| 2015/16 | 1 | | \$0 | 20 | 1 | 0 | | \$0 |
| 2016/17 | 0 | | \$0 | 21 | 0 | 0 | | \$0 |
| 2017/18 | 1 | | \$0 | 22 | 1 | 0 | | \$0 |
| 2018/19 | 1 | | \$3,210 | 23 | 1 | 0 | | \$1,045 |

| Year | Annual ET Take-up (ET) | Existing Assets (Pre 1996) | Existing Assets (Post 1996) | Historical Index | PV of Historical ETs (3%) | PV of Historical ETs (5%) | PV Existing Assets (Pre 1996) (3%) | PV Existing Assets (Post 1996) (5%) |
|---------|------------------------|----------------------------|-----------------------------|------------------|---------------------------|---------------------------|------------------------------------|-------------------------------------|
| 2019/20 | 1 | | \$1,909 | 24 | 0 | 0 | | \$592 |
| 2020/21 | 0 | | \$1,963 | 25 | 0 | 0 | | \$580 |
| 2021/22 | 1 | | \$2,017 | 26 | 0 | 0 | | \$567 |
| 2022/23 | 1 | | \$2,071 | 27 | 0 | 0 | | \$555 |
| 2023/24 | 0 | | \$2,125 | 28 | 0 | 0 | | \$542 |
| 2024/25 | 1 | | \$2,179 | 29 | 0 | 0 | | \$529 |
| 2025/26 | 1 | | \$2,287 | 30 | 0 | 0 | | \$529 |
| 2026/27 | 0 | | \$2,287 | 31 | 0 | 0 | | \$504 |
| 2027/28 | 1 | | \$2,287 | 32 | 0 | 0 | | \$480 |
| 2028/29 | 1 | | \$2,287 | 33 | 0 | 0 | | \$457 |
| 2029/30 | 1 | | \$0 | 34 | 0 | 0 | | \$0 |
| 2030/31 | 0 | | \$0 | 35 | 0 | 0 | | \$0 |
| 2031/32 | 1 | | \$0 | 36 | 0 | 0 | | \$0 |
| 2032/33 | 1 | | \$0 | 37 | 0 | 0 | | \$0 |
| 2033/34 | 0 | | \$0 | 38 | 0 | 0 | | \$0 |
| 2034/35 | 1 | | \$0 | 39 | 0 | 0 | | \$0 |
| 2035/36 | 1 | | \$0 | 40 | 0 | 0 | | \$0 |
| 2036/37 | 1 | | \$0 | 41 | 0 | 0 | | \$0 |
| 2037/38 | 0 | | \$0 | 42 | 0 | 0 | | \$0 |
| 2038/39 | 1 | | \$0 | 43 | 0 | 0 | | \$0 |
| 2039/40 | 1 | | \$0 | 44 | 0 | 0 | | \$0 |
| 2040/41 | 1 | | \$0 | 45 | 0 | 0 | | \$0 |
| 2041/42 | 1 | | \$0 | 46 | 0 | 0 | | \$0 |
| 2042/43 | 0 | | \$0 | 47 | 0 | 0 | | \$0 |
| 2043/44 | 1 | | \$0 | 48 | 0 | 0 | | \$0 |
| 2044/45 | 1 | | \$0 | 49 | 0 | 0 | | \$0 |
| 2045/46 | 1 | | \$0 | 50 | 0 | 0 | | \$0 |
| 2046/47 | 1 | | \$0 | 51 | 0 | 0 | | \$0 |
| 2047/48 | 0 | | \$0 | 52 | 0 | 0 | | \$0 |
| 2048/49 | 1 | | \$0 | 53 | 0 | 0 | | \$0 |
| | 37 | | | | 18 | 12 | \$0 | \$15,890 |

17 Calculation of the Reduction Amount

| Income | Water | Source |
|-------------------------|-------------|---------------------------------|
| Income | \$2,217,470 | 2019-2020 Operation Plan (pg75) |
| Ops, Mnt and Admin | \$2,790,875 | 2019-2020 Operation Plan (pg75) |
| ET's | 2,385 | |
| Income / ET | \$930 | |
| Ops, Mnt and Admin / ET | \$1,170 | |
| Net income per ET | -\$240 | |

| | NPV Income | NPV ETs | Reduction Amount |
|------------------|------------|---------|------------------|
| Reduction Amount | -\$753,780 | 267 | -\$2,826 |

| Year | Total ETs | New ETs | PV Future ETs (5%) | Cumulative ETs | Net Income | PV Net income (5%) |
|---------|-----------|---------|--------------------|----------------|------------|--------------------|
| 2018/19 | 2,385 | | | | | |
| 2019/20 | 2401 | 16 | 15 | 16 | -\$3,847 | -\$3,664 |
| 2020/21 | 2417 | 16 | 15 | 32 | -\$7,694 | -\$6,979 |
| 2021/22 | 2434 | 17 | 15 | 49 | -\$11,781 | -\$10,177 |
| 2022/23 | 2450 | 16 | 13 | 65 | -\$15,628 | -\$12,857 |
| 2023/24 | 2467 | 17 | 13 | 82 | -\$19,715 | -\$15,448 |
| 2024/25 | 2483 | 16 | 12 | 98 | -\$23,562 | -\$17,583 |
| 2025/26 | 2500 | 17 | 12 | 115 | -\$27,650 | -\$19,650 |
| 2026/27 | 2517 | 17 | 12 | 132 | -\$31,737 | -\$21,481 |
| 2027/28 | 2534 | 17 | 11 | 149 | -\$35,824 | -\$23,093 |
| 2028/29 | 2551 | 17 | 10 | 166 | -\$39,912 | -\$24,502 |
| 2029/30 | 2568 | 17 | 10 | 183 | -\$43,999 | -\$25,725 |
| 2030/31 | 2585 | 17 | 9 | 200 | -\$48,086 | -\$26,776 |
| 2031/32 | 2603 | 18 | 10 | 218 | -\$52,414 | -\$27,796 |
| 2032/33 | 2621 | 18 | 9 | 236 | -\$56,742 | -\$28,658 |
| 2033/34 | 2638 | 17 | 8 | 253 | -\$60,829 | -\$29,260 |
| 2034/35 | 2656 | 18 | 8 | 271 | -\$65,157 | -\$29,849 |
| 2035/36 | 2674 | 18 | 8 | 289 | -\$69,485 | -\$30,316 |
| 2036/37 | 2692 | 18 | 7 | 307 | -\$73,812 | -\$30,671 |
| 2037/38 | 2710 | 18 | 7 | 325 | -\$78,140 | -\$30,923 |
| 2038/39 | 2728 | 18 | 7 | 343 | -\$82,468 | -\$31,081 |
| 2039/40 | 2747 | 19 | 7 | 362 | -\$87,036 | -\$31,241 |
| 2040/41 | 2765 | 18 | 6 | 380 | -\$91,364 | -\$31,233 |
| 2041/42 | 2784 | 19 | 6 | 399 | -\$95,932 | -\$31,233 |
| 2042/43 | 2803 | 19 | 6 | 418 | -\$100,500 | -\$31,162 |
| 2043/44 | 2822 | 19 | 6 | 437 | -\$105,068 | -\$31,027 |

| Year | Total ETs | New ETs | PV Future ETs (5%) | Cumulative ETs | Net Income | PV Net income (5%) |
|---------|-----------|---------|--------------------|----------------|------------|--------------------|
| 2044/45 | 2841 | 19 | 5 | 456 | -\$109,637 | -\$30,834 |
| 2045/46 | 2860 | 19 | 5 | 475 | -\$114,205 | -\$30,590 |
| 2046/47 | 2879 | 19 | 5 | 494 | -\$118,773 | -\$30,298 |
| 2047/48 | 2899 | 20 | 5 | 514 | -\$123,582 | -\$30,024 |
| 2048/49 | 2918 | 19 | 4 | 533 | -\$128,150 | -\$29,651 |
| | | | 267 | | | -\$753,780 |

18 Cross-Subsidy Calculations

Council has elected to not apply a cross-subsidy to the developer charges for water services. The following calculations are provided for reference only.

| Option 1 - No Cross Subsidy | | | | | | | |
|-----------------------------|--------------|-----------------------------|------------|-----------|--------------------|-----------------------------------|--|
| DSP Area | Service Area | Calculated Developer Charge | PV New ETs | Weighting | Weighted component | Weighted average developer charge | Weighted average cross-subsidy to developer charge |
| DSP Area A | Tenterfield | \$10,746 | 250 | 89% | \$9,511 | \$10,464 | \$0 |
| | Urbenville | | 20 | 7% | \$778 | | |
| DSP Area B | Jennings | \$4,108 | 12 | 4% | \$175 | | |

| OPTION 2 - 20% DISCOUNT | | | | | | | |
|-------------------------|--------------|-----------------------------|------------|-----------|--------------------|-----------------------------------|--|
| DSP Area | Service Area | Calculated Developer Charge | PV New ETs | Weighting | Weighted component | Weighted average developer charge | Weighted average cross-subsidy to developer charge |
| DSP Area A | Tenterfield | \$9,162 | 250 | 89% | \$8,109 | \$8,936 | \$1,528 |
| | Urbenville | | 20 | 7% | \$664 | | |
| DSP Area B | Jennings | \$3,851 | 12 | 4% | \$164 | | |

| Option | Required annual water supply / sewerage bill per ET (\$) | Resulting increase in annual water supply/ sewerage bill (%) |
|---------------------------------|--|--|
| 1 – No Cross-subsidy | \$930 | |
| 2 – Adopted Cross-subsidy (20%) | \$940 | 1.10% |

| Option 2 - 20% Discount | |
|-------------------------|-------------|
| Weighted subsidy | \$1,527.66 |
| Income | \$2,217,470 |
| ETs | 2,385 |
| Annual Bill 0% | \$930 |
| Annual Bill 10% | \$940 |
| Increase % | 1.10% |

| Year | Total ETs | New ET's | Annual Subsidy | PV Annual with Subsidy | Annual Bill revenue - no subsidy | Annual Bill revenue - with subsidy | Additional amount required (Difference) | PV Additional Amount |
|---------|-----------|----------|----------------|------------------------|----------------------------------|------------------------------------|---|----------------------|
| 2018/19 | 2,385 | | | | | | | |
| 2019/20 | 2,401 | 16 | \$24,443 | \$24,443 | \$2,232,443 | \$2,257,027 | \$24,584 | \$24,584 |
| 2020/21 | 2,417 | 16 | \$24,443 | \$23,279 | \$2,247,517 | \$2,272,266 | \$24,750 | \$23,571 |
| 2021/22 | 2,434 | 17 | \$25,970 | \$23,556 | \$2,262,693 | \$2,287,609 | \$24,917 | \$22,600 |
| 2022/23 | 2,450 | 16 | \$24,443 | \$21,114 | \$2,277,971 | \$2,303,056 | \$25,085 | \$21,669 |
| 2023/24 | 2,467 | 17 | \$25,970 | \$21,366 | \$2,293,352 | \$2,318,607 | \$25,254 | \$20,777 |
| 2024/25 | 2,483 | 16 | \$24,443 | \$19,151 | \$2,308,837 | \$2,334,262 | \$25,425 | \$19,921 |
| 2025/26 | 2,500 | 17 | \$25,970 | \$19,379 | \$2,324,427 | \$2,350,024 | \$25,597 | \$19,101 |
| 2026/27 | 2,517 | 17 | \$25,970 | \$18,457 | \$2,340,122 | \$2,365,892 | \$25,769 | \$18,314 |
| 2027/28 | 2,534 | 17 | \$25,970 | \$17,578 | \$2,355,923 | \$2,381,867 | \$25,943 | \$17,560 |
| 2028/29 | 2,551 | 17 | \$25,970 | \$16,741 | \$2,371,831 | \$2,397,950 | \$26,119 | \$16,836 |
| 2029/30 | 2,568 | 17 | \$25,970 | \$15,943 | \$2,387,846 | \$2,414,141 | \$26,295 | \$16,143 |
| 2030/31 | 2,585 | 17 | \$25,970 | \$15,184 | \$2,403,969 | \$2,430,442 | \$26,473 | \$15,478 |
| 2031/32 | 2,603 | 18 | \$27,498 | \$15,312 | \$2,420,202 | \$2,446,853 | \$26,651 | \$14,840 |
| 2032/33 | 2,621 | 18 | \$27,498 | \$14,583 | \$2,436,543 | \$2,463,374 | \$26,831 | \$14,229 |
| 2033/34 | 2,638 | 17 | \$25,970 | \$13,117 | \$2,452,995 | \$2,480,008 | \$27,012 | \$13,643 |
| 2034/35 | 2,656 | 18 | \$27,498 | \$13,227 | \$2,469,559 | \$2,496,753 | \$27,195 | \$13,081 |
| 2035/36 | 2,674 | 18 | \$27,498 | \$12,597 | \$2,486,234 | \$2,513,612 | \$27,378 | \$12,542 |
| 2036/37 | 2,692 | 18 | \$27,498 | \$11,997 | \$2,503,021 | \$2,530,584 | \$27,563 | \$12,026 |
| 2037/38 | 2,710 | 18 | \$27,498 | \$11,426 | \$2,519,922 | \$2,547,672 | \$27,749 | \$11,530 |
| 2038/39 | 2,728 | 18 | \$27,498 | \$10,882 | \$2,536,937 | \$2,564,874 | \$27,937 | \$11,056 |
| 2039/40 | 2,747 | 19 | \$29,025 | \$10,939 | \$2,554,067 | \$2,582,193 | \$28,125 | \$10,600 |
| 2040/41 | 2,765 | 18 | \$27,498 | \$9,870 | \$2,571,313 | \$2,599,628 | \$28,315 | \$10,164 |
| 2041/42 | 2,784 | 19 | \$29,025 | \$9,922 | \$2,588,675 | \$2,617,181 | \$28,507 | \$9,745 |
| 2042/43 | 2,803 | 19 | \$29,025 | \$9,450 | \$2,606,154 | \$2,634,853 | \$28,699 | \$9,344 |
| 2043/44 | 2,822 | 19 | \$29,025 | \$9,000 | \$2,623,752 | \$2,652,644 | \$28,893 | \$8,959 |

| Year | Total ETs | New ET's | Annual Subsidy | PV Annual with Subsidy | Annual Bill revenue - no subsidy | Annual Bill revenue - with subsidy | Additional amount required (Difference) | PV Additional Amount |
|---------|-----------|----------|----------------|------------------------|----------------------------------|------------------------------------|---|----------------------|
| 2044/45 | 2,841 | 19 | \$29,025 | \$8,571 | \$2,641,468 | \$2,670,556 | \$29,088 | \$8,590 |
| 2045/46 | 2,860 | 19 | \$29,025 | \$8,163 | \$2,659,303 | \$2,688,588 | \$29,284 | \$8,236 |
| 2046/47 | 2,879 | 19 | \$29,025 | \$7,774 | \$2,677,260 | \$2,706,742 | \$29,482 | \$7,897 |
| 2047/48 | 2,899 | 20 | \$30,553 | \$7,794 | \$2,695,337 | \$2,725,018 | \$29,681 | \$7,571 |
| 2048/49 | 2,918 | 19 | \$29,025 | \$7,052 | \$2,713,537 | \$2,743,418 | \$29,881 | \$7,260 |
| | | | | \$427,866 | | | | \$427,866 |