

Ballina Shire Council

Water Supply Infrastructure

Development Servicing Plans

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Executive Summary

This DSP covers water supply developer charges for all development areas serviced by Ballina Shire Council.

This DSP has been prepared in accordance with the *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (2002) issued by the Minister for Land and Water Conservation (now administered by the Department of Infrastructure Planning and Natural Resources), pursuant to section 306 (3) of the *Water Management Act 2000*.

The areas covered by this DSP are shown in Figure 1. The DSP areas and the existing proposed works serving these areas are shown in more detail on the plans in section 11.

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

Standards of service to be provided in the DSP area are summarised in section 5.

The water supply developer charges for the area covered by this DSP have been calculated as detailed in the following table.

Summary of Water Supply Developer Charges

Area	Developer Charge (\$ per ET)
<u>DSP Area A</u> Wardell	2,735
<u>DSP Area B</u> Ballina Island North Ballina West Ballina Lennox Head East Ballina Alstonville and Wollongbar	2,735
<u>DSP Area C</u> Cumbalum	1,985
<u>DSP Area D</u> Wollongbar Expansion Area	1,413

Developer charges relating to this DSP will be reviewed after a period of not more than 5 to 6 years.

In the period between any reviews, developer charges will be adjusted annually on the basis of the movements in the CPI for Sydney, excluding the impact of GST. Current contribution rates are listed in Council's Annual Fees and Charges Document.

It should also be noted that these charges are exclusive of any developer charge that may be levied by Rous Water as a contribution towards bulk water infrastructure servicing the region. Current details of these charges may be obtained either from Rous Water, or from Council.

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

A background document titled *Ballina Shire Council - Water and Sewerage Infrastructure Planning – Planning Report* (GHD, 2004) identifies the characteristics of the assets covered by this DSP and is available from Council for a fee of \$55.00 (including GST).

FIGURE 1
Water DSP Areas
(Agglomerated Service Areas)

Water DSP Areas

-  DSP Area A
-  DSP Area B
-  DSP Area C
-  DSP Area D

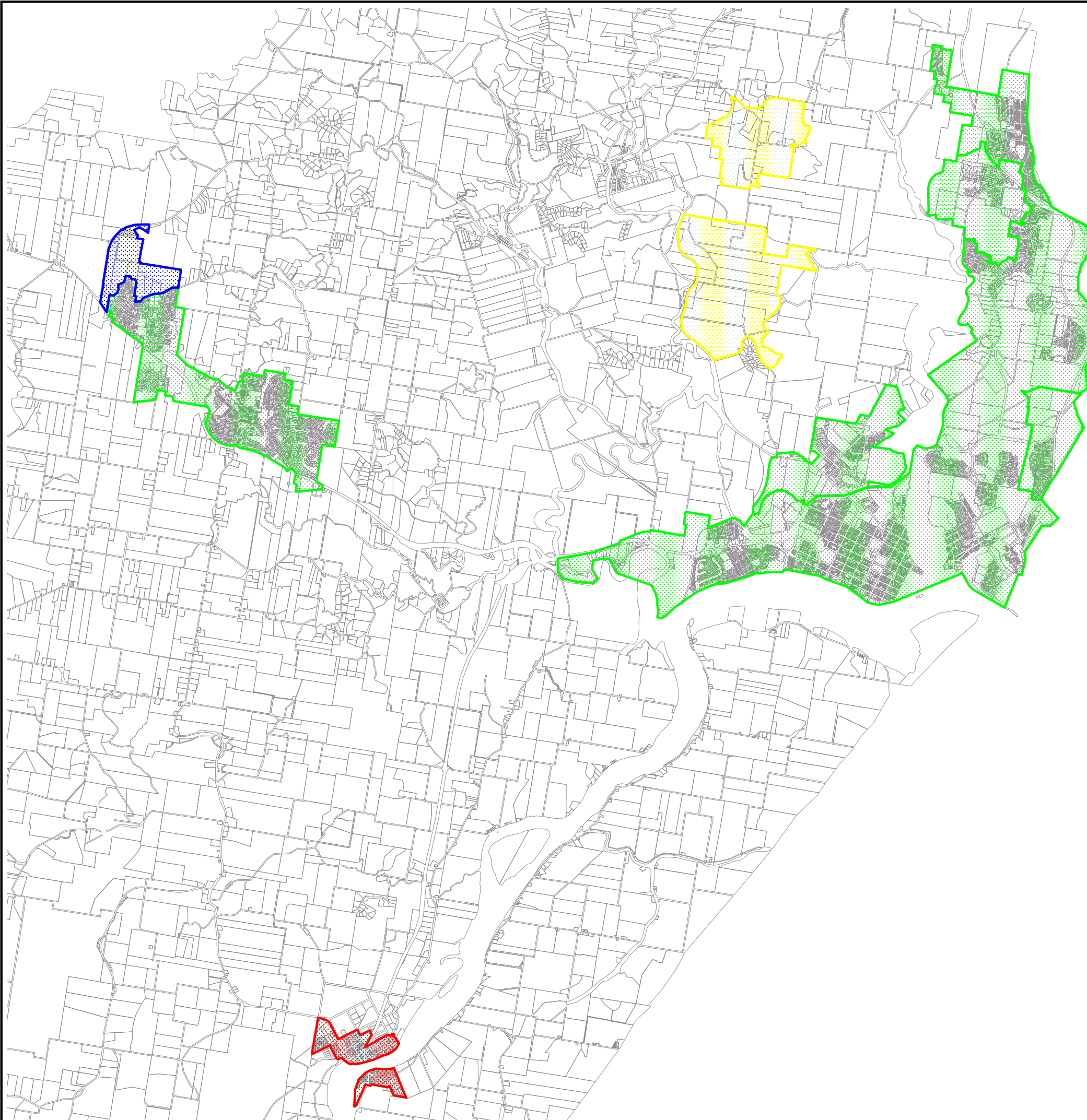
Note: Boundaries approximate only

North



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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) is a document that details the water supply developer charges to be levied on development areas utilising a water utility's water supply infrastructure.

This DSP covers water supply developer charges in regard to development areas served by Ballina Shire Council.

This DSP has been prepared in accordance with the *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (2002) issued by the Minister for Land and Water Conservation (now known as the Minister for Department of Infrastructure Planning and Natural Resources), pursuant to section 306 (3) of the *Water Management Act 2000*.

This DSP supersedes any other requirements related to water supply developer charges for the area covered by this DSP. However, it should also be noted that these charges are exclusive of any developer charge that may be levied by Rous Water as a contribution towards bulk water infrastructure servicing the region. Current details of these charges may be obtained either from Rous Water, or from Council.

This DSP takes precedence over any of Council's codes or policies where there are any inconsistencies relating to water supply developer charges.

2. Administration

2.1 Name of Development of Servicing Plan

This Development Servicing Plan (DSP) is known as Ballina Shire Council Development Servicing Plan – Water Infrastructure.

2.2 Land to Which This Plan Applies

This DSP applies to all land within the Ballina Shire Local Government Area that is within the existing and proposed service areas illustrated on Figure 1.

2.3 Date of Commencement of Plan

Council adopted this DSP on 27 May 2004. The DSP came into effect on 1 July 2004.

This Plan will apply to all Development Applications determined on or after the date the plan came into effect.

This Plan will also apply to existing development approvals that have water supply developer charges outstanding.

2.4 How Will the DSP be Applied?

In determining a Development Application, Council may impose a condition requiring payment of a monetary contribution in accordance with the provisions of this DSP.

The condition of development consent will outline the amount payable in monetary terms at the time the consent is issued. However, conditions of consent shall advise that the Developer Contributions will be at that rate which applies at the time of payment. Therefore the rate may increase from the time of issue of the development application through indexation or through the replacement or review of this DSP.

2.5 Reviewing/Updating of Calculated Developer Charges

Developer charges relating to this DSP will be reviewed after a period of not more than 5 to 6 years.

In the period between any review, developer charges will be adjusted on 1 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 those charges determined by Council from time-to-time and will be published in Council's Annual Fees and Charges.

2.6 Reticulation Works

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

2.7 Developments Requiring Forward Funding

Council will generally not support development applications, which require the provision of water infrastructure prior to the timeframes outlined within the Works schedule.

Council may however consider a Development Application that requires the provision of infrastructure prior to the planning phase subject to the developer agreeing to forward fund the infrastructure at their own cost.

Council may in these instances enter into a written agreement to reimburse the developer as Council receives developer charges from other developments reliant on that infrastructure in the area.

2.8 Payment for Developer Charges

All developer charges will be paid at the rate applicable at the time of application for a Certificate of Compliance pursuant to Division 5 of Part 2 of Chapter 6 of the Water Management Act 2000.

Generally payment of developer charges must be finalised at the following stages:

- ▶ Time of application for a Certificate of Compliance pursuant to Division 5 of Part 2 of Chapter 6 of the Water Management Act 2000.
- ▶ Development consents involving subdivisions – prior to release of linen plan;
- ▶ Development consents involving building work – prior to release of the construction certificate;
- ▶ Development consents where no construction certificate is required – at the time of issue of the notification of consent, or prior to the commencement of approved development as may be determined by Council.

2.9 Deferred Payment

In general, developer contributions need to be paid upfront. However, Council may decide to accept deferred or periodic payment of a contribution if the applicant or other person entitled to act upon the relevant consent satisfies Council that:

1. Compliance with the provisions of this Plan relating to when contributions are payable is unreasonable or unnecessary in the circumstances of the case; and
2. Non-compliance will not prejudice the timing or manner of the provision of the public amenity or public service for which the contribution was required.

The Council may, if it decides to accept the deferred or periodic payment of a contribution, require the applicant to provide:

1. A bank guarantee, in favour of the Council, by an Australian bank for the contribution or outstanding balance on the condition that the bank guarantee:
 - Requires the bank to pay the guaranteed amount unconditionally to the Council if the Council so demands in writing not earlier than 6 months from the provision

of the guarantee or completion of the development or stage of the development to which the contribution or part relates;

- Prohibits the bank from having recourse to the applicant or other person entitled to act upon the consent; or, having regard to any appeal, dispute, controversy, issue or other matter relating to the consent or the carrying out of the development in accordance with the consent, before paying the guaranteed amount;
 - Provides that the bank's obligations are discharged when payment is made to Council according to the terms of the bank guarantee, or when the related consent lapses, or if the Council otherwise notifies the bank in writing that the bank guarantee is no longer required.
2. Some other means of security for payment, which could include, but is not limited to, a caveat, public positive covenant (under section 88E of the Conveyancing Act 1919) or mortgage to be registered on the title of unencumbered, vacant land. In such circumstances, the contribution value shall be equivalent to not more than 70% of the value of the land as established by a mutually agreed valuation.
 3. For the payment of all Council related costs incurred in the acceptance of arrangements outlined in 1 and 2.

If payment is not made within 12 months of a development consent being issued the levies payable are increased at the rate of increase of the CPI.

2.10 Refunds

Ballina Shire Council does not anticipate that refunds of developer charges will be made unless the developer charges have been paid in respect of a development consent that has lapsed and the funds have not been allocated / expended on the projects identified in the DSP's work schedule.

2.11 Works in Kind

"Works in kind" involves the construction or provision of infrastructure that has been identified in a works schedule contained in the Development Services Plan in lieu of full or part payment of a contribution relating to that section of the plan.

The decision to accept "works in kind" contributions will be at the discretion of Council. Factors that Council will take into consideration include:

- ▶ The extent to which the works in kind satisfies an item identified on the works program;
- ▶ Whether the payment of the contribution in accordance with the provisions of the DSP is unreasonable or unnecessary in the circumstances of the case;
- ▶ Whether the works in kind contribution will prejudice the timing or manner of the provision of the services for which the contribution is required; and
- ▶ The value of the works in kind.

2.12 Developments Outside the Development Servicing Areas

Development areas outside the Development Servicing Plan Area (refer to relevant drawing/s in section 11), which are to be developed during the term of this policy and have no detailed DSP (and require water supply services), will be subjected to a separate DSP. The developer shall be responsible for the preparation cost of this DSP.

3. Demographic and Land Use Planning Information

3.1 Growth Projections

Growth projections for population and number of ETs are shown in Table 1 below. These projections are from the present year to 2033, which is Council's current planning horizon.

Table 1 Projected Equivalent Tenement Growth¹

Time Period	Projected Shire ET Growth	Total Serviced ET's	Total Shire Population
2003		13,970	38,388
2003 - 2008	2,090	16,090	44,012
2008 - 2013	2,030	18,140	48,027
2013 - 2018	1,700	19,850	52,027
2018 - 2023	1,510	21,360	56,077
2023 - 2028	1,160	22,520	58,921
2028 - 2033	920	23,430	61,766

Projected ET growth for the areas covered by individual DSPs are provided in Appendix A as part of the calculations of the capital charge.

3.2 Land Use Information

This DSP should be read in conjunction with Ballina Shire Council Urban Land Release Strategy - 2000 and the Ballina Shire Council Local Environmental Plan -1987 (LEP).

¹ Source: *Ballina Council – Water and Sewerage Infrastructure Planning – Planning Report* (GHD, 2004).

4. Water Supply Infrastructure

This plan levies developer charges towards the cost of providing water infrastructure to service new development. This infrastructure includes the value of both existing and future assets serving a new development area.

Works covered by this DSP include, but are not limited to:

- ▶ Distribution and Trunk Mains;
- ▶ Water Pumping Stations;
- ▶ Water Reservoirs; and,
- ▶ Water Treatment.

The existing and proposed water supply trunk infrastructure serving the area covered by this DSP shown in a spatial format in Section 11.

4.1 Estimates of Capital Cost

The estimated capital cost of works serving the area covered by this DSP are provided in Appendix A. Further information regarding how the capital costs were estimated is provided in *Shire Council Water and Sewerage Infrastructure Planning – Planning Report* (GHD, 2004).

4.2 Timing of Works

The estimated timing for works serving the area covered by this DSP are provided in Appendix A. Further information regarding how the timings were estimated for individual work items is provided in *Ballina Shire Council Water and Sewerage Infrastructure Planning – Planning Report* (GHD, 2004).

5. Standards of Service

System design and operation are based on providing the following standards of service.

5.1 Desired Standards of Service

The water supply network is planned to meet the following desired standards of service²:

Minimum pressures:

- ▶ For domestic customers, a minimum residual pressure of 20m at the property boundary at Peak Instantaneous Demand (PID);
- ▶ For industrial customers, a minimum residual pressure of 25m at the property boundary under Peak Instantaneous Demand (PID);
- ▶ A maximum residual pressure of 80 m head at the property boundary;
- ▶ A positive head must be sustained at 2/3 PID with a fire flow of 10 L/s from each successive hydrant; and,
- ▶ For Ballina, minimum pressures are to be maintained with no supply available from Knockrow reservoir, for the possible situations where a trunk main break occurs, or pipe maintenance is required.

Water Quality:

- ▶ Water quality to meet the 1996 NHMRC/ARMCANZ *Australian Drinking Water Guidelines* 98% of the time; and
- ▶ Water quality complaints less than 10 per 1,000 connected properties per annum.

Interruption of Service:

- ▶ Nil unplanned interruptions greater than 6 hours; and
- ▶ Nil programmed interruptions greater than 12 hours.

Water restrictions:

- ▶ Water restrictions applying for not greater than 10% of the time on average.

² Based on the requirements of the BSC Draft Water Reticulation Specification (2002)

6. Design Parameters

Investigation and design of water supply system components is generally based on the *Water Supply Investigation Manual* (1986). This Manual was prepared by NSW Public Works and is now managed by the DIPNR (formerly known as the DLWC). In order to determine the infrastructure requirements over the planning horizon, the trunk water supply network was modelled using Haestad Method's WaterCAD software, to determine the performance of the existing and proposed systems under projected hydraulic loads.

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

- ▶ DPWS (2003), Water Supply Trunk Main Analysis, prepared for Ballina Shire Council, 2003, and;
- ▶ Ballina Shire Council - Water and Sewerage Infrastructure Planning – Planning Report (GHD, 2004). The planning and design parameters adopted in this report are discussed in the following section.

6.1 Planning and Design Parameters

The major components of the water supply network were planned according to the following:

Rising and Gravitation Mains: Are sized to deliver Peak Daily Demand (PDD) over 22 hours and 24 hours respectively, with the diameter of a rising main sized to give the least present worth of capital and pumping costs. Gravity mains are sized by consideration of available head and grade.

Reticulation: Reticulation is to give minimum pressures, as outlined above, with the active storage of the service reservoir(s) 2/3 depleted during periods of maximum demand.

Table 2 provides the Hazen-Williams 'C' friction factor values that were adopted.

Table 2 Adopted friction factors

Nominal Diameter	Hazen-Williams 'C' Value
150 mm or less	100
200 mm – 250 mm inclusive	110
300 mm or greater	120

7. Calculated Developer Charges

7.1 Background

Developer charges are comprised of the following components:

- ▶ Capital charge – the cost of providing the asset, and;
- ▶ Reduction Amount – the cost recovered through annual charges.

The relationship between these components is as follows:

$$\text{Developer Charge} = \text{Capital Charge} - \text{Reduction Amount}$$

Once the developer charges have been calculated for each service area, the Guidelines (DLWC, 2000) permit the agglomeration of charges that are within 30% of each other. The agglomeration methodology outlined in the Guidelines (DLWC, 2000) was used to determine the adopted developer charge.

Agglomeration is intended to minimise the number of different developer charges within the local government area.

7.2 Service Areas

Developer charges were initially calculated for a number of different service areas within the Ballina Shire Local Government Area.

Service areas were determined using the following guidelines:

- ▶ Separate small towns or villages should be a separate service area;
- ▶ New development areas over 500 lots should be a separate service area.

This resulted in the adoption of the service areas detailed in Table 3 below.

Table 3 Service Areas

Service Areas	Localities Included
Existing – Ballina and Lennox Head	Ballina Island West Ballina East Ballina Lennox Head (including future release areas with less than 500 lots) Skennars Head
Existing – Alstonville and Wollongbar	Alstonville Wollongbar
Existing – Wardell	Wardell

Service Areas	Localities Included
Ballina – Release Area 1	North Ballina Southern Cross Industrial Estate Release Area located land included in the River Oaks Residential Development Control Plan at North Ballina. Includes Pt Portion 267 and 269 DP755684, Portions 268 and 422 DP755684, Lots 1 & 2 DP527161, Part Lot 6 DP243060, Part of DP241779, Lot 2 DP527161. A potential release area located at North Ballina over Lot 6 DP 565132.
Ballina – Release Area 2 (Cumbalum)	Existing and future development located at Cumbalum
Lennox – Release Area 1	Pacific Pines Estate, Lennox Head including Lots 216 & 217 DP1017615. Henderson Land Central (Area F Lennox Head Structure Plan), Lot 9 DP772192. Henderson Land South (Area G Lennox Head Structure Plan) Lot 18 DP755684.
Lennox – Release Area 2	Release area located at North Angels Beach including Lot 208 DP851318.
Alstonville – Release Area 1 (Wollongbar Expansion Area)	Release area known as the Wollongbar Expansion Area. Including Pt Lots 11 DP868264, Lot 1 DP113410, Lot 10 DP863352, Lot 10 DP876132, Lot 23 DP842886, Lot 48 DP818458, Lot 2 DP590239, Lot 1 DP 558096, Lot 3 DP 590239, Lot 1 DP 177365, Lot 5 258082.

7.3 Summary

The developer charges for the area covered by this DSP are summarised in Table 4 below.

Table 4 Calculated and Adopted Water Supply Developer Charges

Area	Capital Charge (\$ per ET)	Reduction Amount (\$ per ET)	Calculated Developer Charge (\$ per ET)	Adopted Developer Charge ³ (\$ per ET)
Existing – Ballina & Lennox Head	3,034	220	2,814	2,735
Existing – Alstonville & Wollongbar	2,537	220	2,317	2,735
Existing – Wardell	10,130	220	9,910	2,735 ⁴
Ballina – Release Area 1	2,401	220	2,181	2,735
Ballina – Release Area 2 (Cumbalum)	2,205	220	1,985	1,985
Lennox – Release Area 1	3,146	220	2,926	2,735
Lennox – Release Area 2	3,332	220	3,112	2,735
Alstonville – Release Area 1 (Wollongbar Expansion Area)	1,633	220	1,413	1,413

These amounts have been calculated on the basis of the capital charges and reduction amounts discussed in the following sections.

7.4 Capital Charge

The capital charge of an asset is calculated using the following steps, as described in the Guidelines (DLWC, 2000):

- ▶ *Estimate the period to full take-up of asset capacity, commencing in or after 1996. If information is readily available, actual take-up rates to date should be used. If not, the water utility could use an average based on the take-up rate for similar release or development areas, or other (better) estimates that are available. An estimate of the take-up of existing unused capacity should also be made.*
- ▶ *Calculate the capital charge per ET necessary to equate the present value of the stream of charges which would be derived from annual (per ET) charges and the capital cost of the asset.*

³ Charge adopted after agglomeration and/or cross-subsidisation.

⁴ Charge has been cross-subsidised – refer to section 7.7.

There are two basic approaches to calculating the capital charge per ET, the return on investment (ROI) approach and the spreadsheet approach. In accordance with the DLWC Guidelines, the latter is more appropriate for development areas where infrastructure will be developed in stages, and therefore was adopted for this DSP.

The capital charge calculations are contained in Appendix A.

7.5 Reduction Amount

Council has adopted the Direct NPV method to calculate the Reduction Amount. For this method, the reduction amount is calculated as the renewal works and works to improve standards per ET, plus part of the net debt of the utility per ET.

The reason this method was adopted is highlighted in the Guidelines (DLWC, 2000), which state:

“...By the second round of DSPs (2007-2009), water utilities with over 2000 assessments will be required to calculate the reduction amount using the NPV of Annual Charges method, which is more transparent and therefore more effective at communicating with the community and development industry.

By that time, utilities are expected to have developed robust strategic business plans with 30-year financial plans, which are a pre-requisite for using this method.

However, at this stage for most utilities, there is a significant advantage in using the Direct NPV method due to its simplicity...”

The reduction amount calculations are contained in Appendix B.

7.6 Methodology for Determining Developer Charges to be Paid

Calculation of the developer charge payable on all developments is based on the following formula:

$$\text{Development Charge Payable} = \text{Developer Charge } (\$/\text{ET}^5) \times \text{ET's}$$

When a development is assessed by Council, the only variable in this calculation is therefore the number of ET's in the proposed development. The following sections define how the number of ET's are defined for specific development types.

It should be noted that when a development is assessed, and the assessed ET's for the same falls below or is equal to the current entitlements, no developer charges will be levied, nor monies refunded on unused entitlements.

A developer charge will only be levied against a development where the ET evaluation is above the current entitlement.

⁵ Developer charge as defined by this document.

7.6.1 Existing Unconnected Lots

In the case of an existing lot to be connected to Council's system and which has not previously paid developer charges, a contribution equivalent to the relevant developer charges will be required.

7.6.2 Residential Development

ET's to be charged for residential subdivisions and additional houses/units are as follows:

Table 5 ET Classifications

Land Use	Equivalent Tenements
Residential Allotment	1 ET per lot
Medium Density – units, townhouses, duplex developments etc	0.67 ET per dwelling
Mobile Home Dwellings / Caravan Parks	0.5 ET per dwelling/van
Motel or Hotel Room	0.25 ET per room

7.6.3 Non-Residential Developments including Commercial/Industrial Developments

Developer contributions for non-residential developments are based on industry guidelines that define the number of ET's for common development types, such as commercial and industrial uses.

At the time of publishing this policy, the Department of Public Works and Services (DPWS) Guidelines were the current industry guidelines. However, it is anticipated that these will be updated prior to the first review of the DSP.

For advice on the current industry guidelines being used to calculate non-residential developer charges, please contact Ballina Shire Council's Water and Sewerage Section.

If the industry guidelines do not provide an appropriate match to the development being assessed, then the developer contribution will be determined via the use of one of the following methods:

1. Based on historical water consumption figures of similar developments (see Section 7.6.4); or
2. The number of water / wastewater fixture units (FU's – see Section 7.6.5); or
3. Information supplied by the Developer for water consumption (see Section 7.6.6).

7.6.4 Historical Water Consumption Method

This is applicable to where historical water consumption information is available.

The ET loading will be determined by assessing the historical water consumption of similar developments. (ie.: 1 ET = 250 kl/annum.)

7.6.5 Fixture Unit (FU) Method

The fixture unit method will be used in cases where the above-mentioned methods are not appropriate.

The fixture units are calculated using Tables 3.1 and 3.3 of Part 2.1 of the National Plumbing and Drainage Code – AS3500. This number is then converted to an equivalent tenement using the probable simultaneous flow rate for a single house.

7.6.6 Information Supplied by the Developer

This will normally be applicable for developments that cannot be determined by historical water consumption (such as a heavy industrial development) or where the developer proposes to utilise water saving devices that will reduce the consumption of water compared with similar developments.

For the calculation of ET's based on this method, the developer will need to supply to Council a submission outlining the proposed flow rates (instantaneous, daily and average annual flow rates) together with relevant supporting documentation.

7.7 Cross-Subsidy

The Guidelines (DLWC, 2002) permit Local Government Authorities to cross-subsidise the calculated developer charge for an area, provided the extent of cross-subsidisation is fully disclosed. It is also noted that a developer charge cannot be cross-subsidised from one area to another. Instead, a developer charge for a particular area can be cross-subsidised via a corresponding change in the annual charge being paid through water rates.

The calculated developer charge (\$9,910) for DSP Area A (Wardell) was considered by Council to be an impediment to potential development in the township. The Wardell developer charge has therefore been reduced to the next highest calculated charge (\$2,735) - the agglomerated charge for DSP Area B (Ballina / Lennox Head / Cumbalum). The extent of this cross-subsidy was calculated to be approximately \$35,875 per annum to existing water rates customers.

The calculated extent of cross subsidy was then applied to the Council's Water Charging Financial Model (Department of Commerce, 2004) to determine the impact on the annual water rates charge. The impact of this cross subsidy was estimated to be less than \$1 per bill per annum.

8. Reference Documents

Background information and calculations relating to this DSP are contained in the following documents:

- ▶ Department of Commerce (2004), Water Supply and Sewerage Strategic Business Plan;
- ▶ GHD (2004), Ballina Shire Council Water and Sewerage Infrastructure Planning – Planning Report;
- ▶ Department of Land and Water Conservation (2002), Developer Charges Guidelines for Water Supply, Sewerage and Stormwater;
- ▶ DPWS (August 2002), Ballina Shire Urban Water Management Strategy – Final Draft Options Study Summary Report, DPWS Report No. DC 02158;
- ▶ Ballina Shire Council (May 2000), Urban Land Release Strategy – 2000;
- ▶ DPWS (2003), Water Supply Trunk Main Analysis;
- ▶ DPWS (February 2003), Rous Water – Water Supply Developer Charges Calculation;
- ▶ GHD (January 2004), Ballina Shire Council – Sewerage Infrastructure – Development Servicing Plans.

These documents (in particular the Strategic Business Plan and Infrastructure Planning Report) contain more detailed reference information relevant to the derivation of the developer charges. These documents can be reviewed in Council's offices by appointment. To review the documents, please contact Council on (02) 6686 4444.

9. Other DSP's and Related Plans

Other DSP's and related plans include:

- ▶ DPWS (February 2003), Rous Water – Water Supply Developer Charges Calculation;
- ▶ GHD (January 2004), Ballina Shire Council – Sewerage Infrastructure – Development Servicing Plans.
- ▶ Ballina Shire Council also levies developer contributions for various public amenities under Section 94 of the Environmental Planning and Assessment Act, 1979.

10. Glossary

ADWF	Average Dry Weather Flow
Annual Demand	Total annual water consumption
AWWF	Average Wet Weather Flow
BOD	Biochemical oxygen demand. Used as a measure of the 'strength' of sewerage.
Capital Cost	The Present Value (MEERA basis) of assets used to service the development.
Capital Charge	Capital cost of assets per ET x Return on Investment (ROI) Factor.
CPI	Consumer Price Index
Developer Charge (DC)	A charge levied on developers to recover part of the capital cost incurred in providing infrastructure to new development.
Discount Rate	The rate used to calculate the present value of money arising in the future.
DSP	Development Servicing Plan
DCP	Development Control Plan
DLWC	Department of Land and Water Conservation – now known as DIPNR
DIPNR	Department of Infrastructure, Planning and Natural Resources – formerly known as DLWC
EP	Equivalent Person
ET	Equivalent Tenement
IPART	Independent Pricing and Regulatory Tribunal
kL/d	Kilolitres per day
LEP	Local Environmental Plan
MEERA	Modern Equivalent Engineering Replacement Asset
ML/d	Megalitres per day
NHMRC	National Health and Medical Research Council
NPV	Net Present Value
OMA	Operation, maintenance and administration (costs)
Peak Day Demand	Highest water consumption on one day in a year

Post 1996 Asset	An Asset that was commissioned by a water utility on or after 1 January 1996 or that is yet to be commissioned
Pre-1996 Asset	An Asset that was commissioned by a water utility before 1 January 1996
PV	Present value. The value now of money, or ETs, in the future.
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 present value of the capital contribution that will be paid by the occupier of a development as part of future annual charges
ROI	Return on investment. Represents the income that is, or could be, generated by investing money
PWWF	Peak Wet Weather Flow
PS	Pumping Station
Service Area	An area served by a separate water supply system, an area served by a separate sewage treatment works, a separate small town or village, or a new development of over 500 lots.
SR	Service Reservoir
SS	Suspended solids, or the concentration of particles in sewerage. Used as a measure of the 'strength' of sewage.
STW	Sewage Treatment Works
TRB	Typical residential bill
WTW	Water Treatment Works

11. Figures

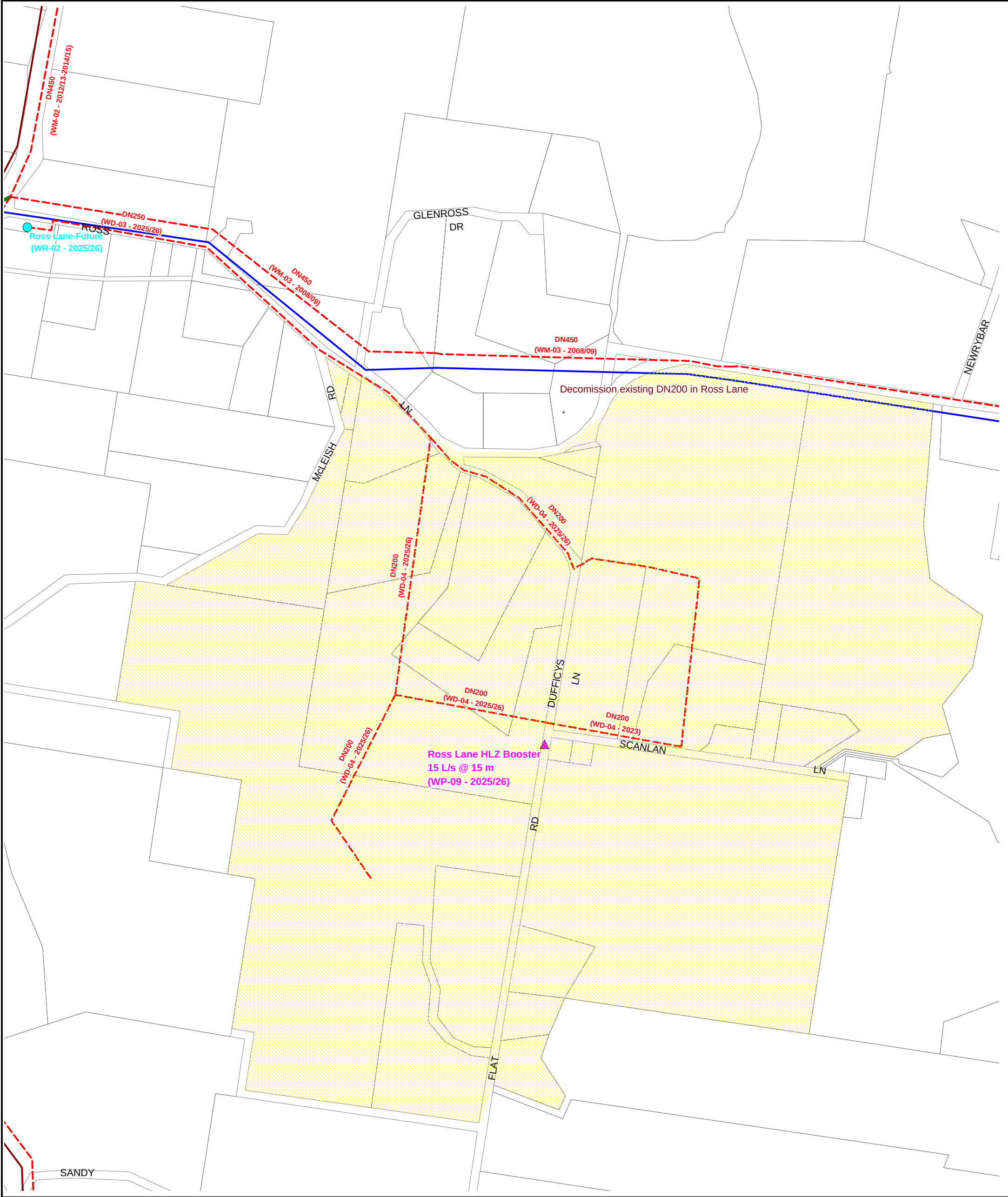
Table 6 provides an index to the figures provided in this section. Each figure (excluding Figure 1) indicates:

- ▶ The boundaries to the DSP area⁶;
- ▶ The extent of existing trunk infrastructure;
- ▶ The extent and likely timing for each proposed capital works item.

Table 6 Figure Index

Figure	Locality	Agglomerated DSP Area	Service Area
1	Ballina Shire	All DSP Areas	All Service Areas
2	Ross Lane / Cumbalum	DSP Area C	Ballina – Release Area 2
3	Cumbalum	DSP Area C	Ballina – Release Area 2
4	North Lennox Head	DSP Area B	Existing – Ballina and Lennox Head
5	Lennox Head	DSP Area B	Existing – Ballina and Lennox Head Lennox – Release Area 1
6	Angels Beach	DSP Area B	Lennox – Release Area 2
7	East Ballina	DSP Area B	Existing – Ballina and Lennox Head
8	Ballina Island / North Ballina	DSP Area B	Existing – Ballina and Lennox Head Ballina – Release Area 1
9	West Ballina	DSP Area B	Existing – Ballina and Lennox Head
10	Alstonville / Wollongbar	DSP Area B DSP Area D	Existing – Alstonville and Wollongbar Alstonville – Release Area 1
11	Wardell	DSP Area A	Existing – Wardell

⁶ The DSP boundaries indicated on all figures represent the extent of the proposed charge boundary. They do not necessarily reflect Council's approval of the extent of the serviceable area. Development within the DSP Areas is subject to Rezoning and Development Approval. For further details about development within the DSP Areas please contact Ballina Shire Council.



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G:\41\12595\Mapinfo\Workspace\Water DSP\Fig2.WOR

Existing Mains Diameter (mm)

- 100
- 150
- 200
- 225
- 250
- 300
- 375
- 450
- 500
- 525
- 600

- DSP Area A
- DSP Area B
- DSP Area C
- DSP Area D

North

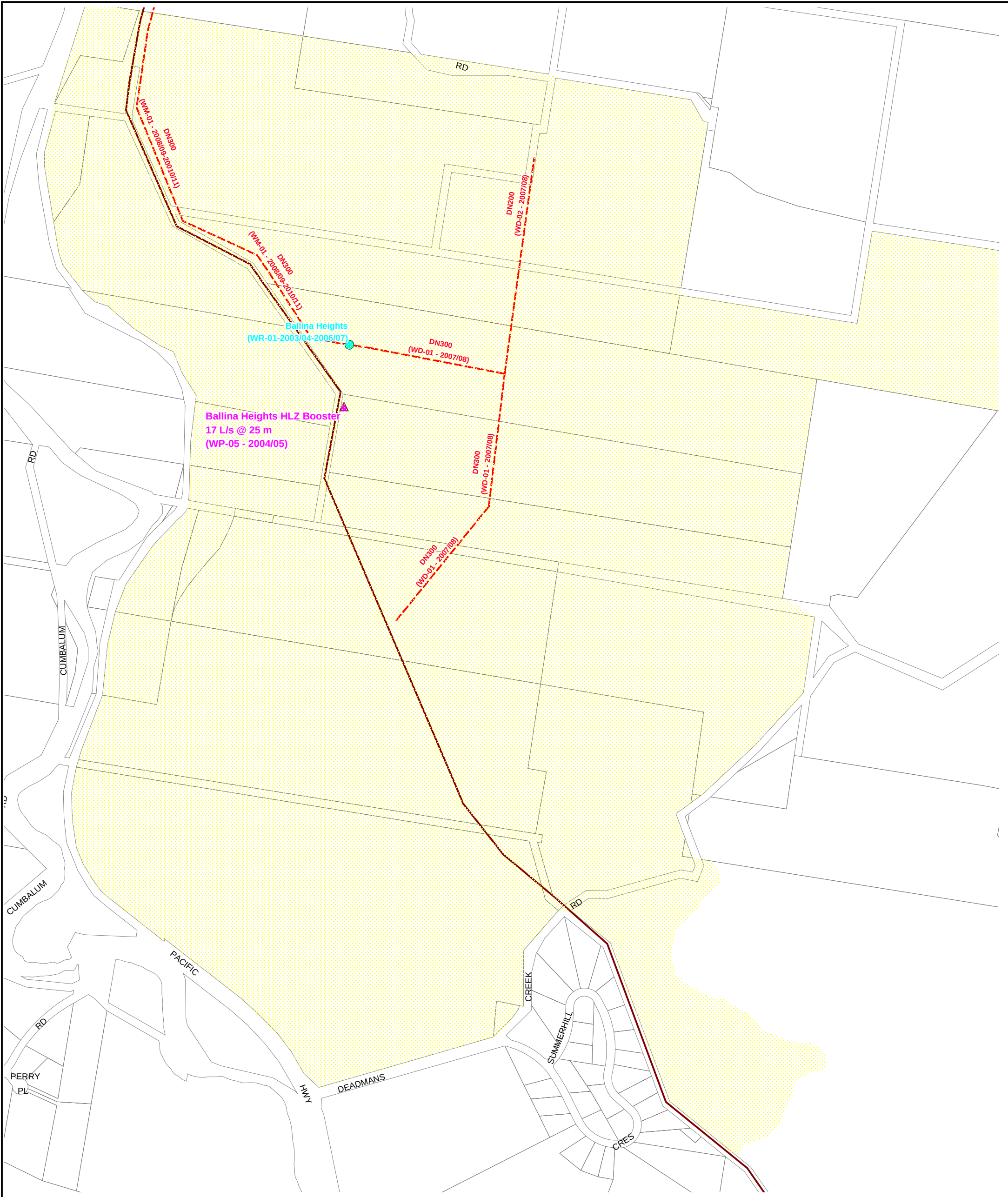


0 0.1 0.2 kilometres

Source Information: GIS Data supplied by Ballina Shire Council

Ballina Shire Council

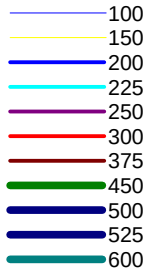
Figure 2
Ross Lane



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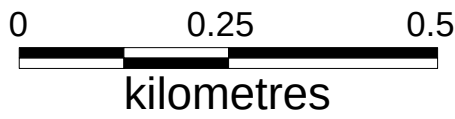
G:\41\12595\Mapinfo\Workspace\Water DSP\Fig3.WOR

Existing Mains Diameter (mm)



- DSP Area A
- DSP Area B
- DSP Area C
- DSP Area D

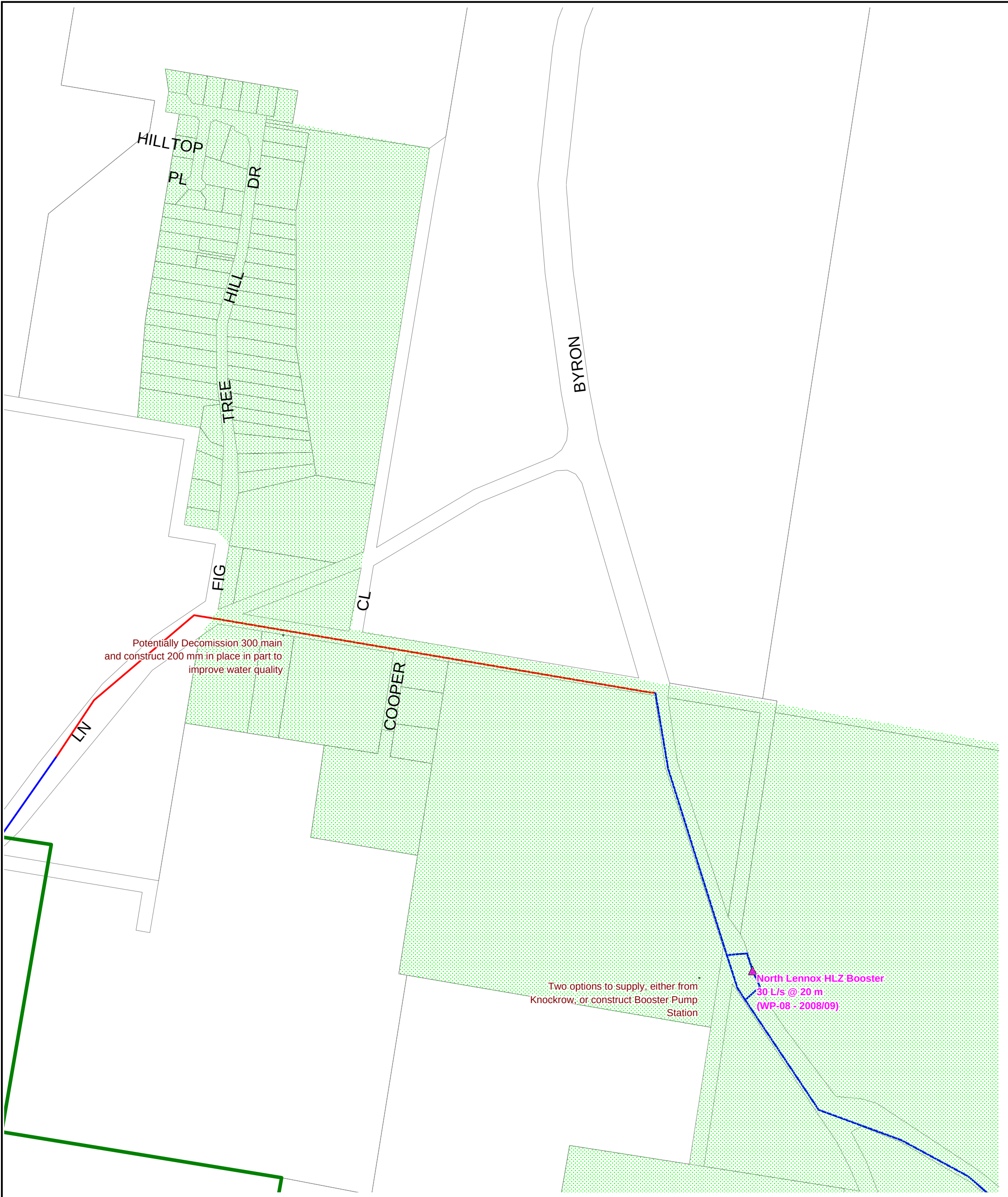
North



Source Information: GIS Data supplied by Ballina Shire Council

Ballina Shire Council

Figure 3
Ballina Heights



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G:\41\12595\Mapinfo\Workspace\Water DSP\Fig4.WOR

Existing Mains Diameter (mm)



- DSP Area A
- DSP Area B
- DSP Area C
- DSP Area D

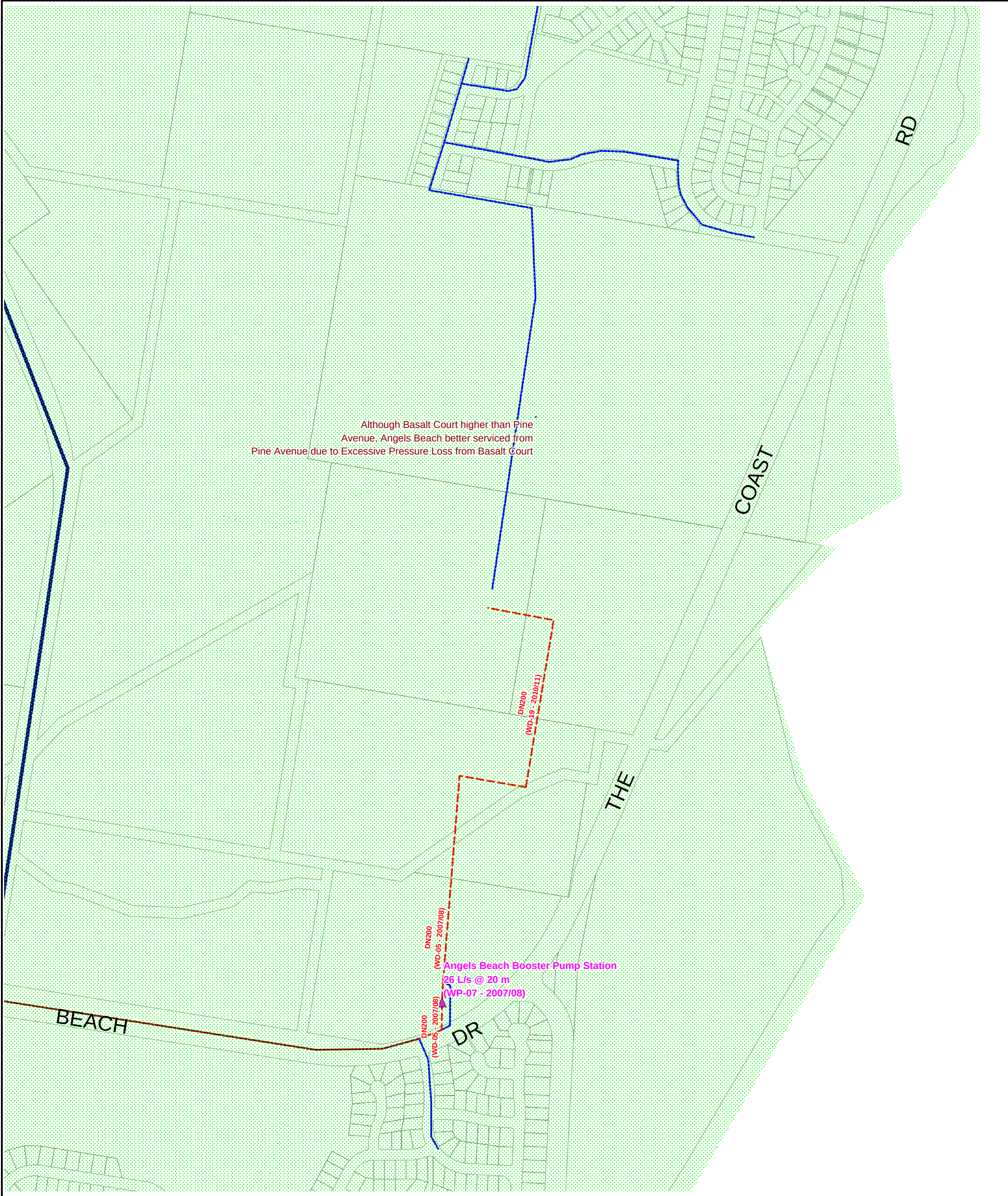
North



Source Information: GIS Data supplied by Ballina Shire Council

Ballina Shire Council

Figure 4
North Lennox Head



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Existing Mains Diameter (mm)

- 100
- 150
- 200
- 225
- 250
- 300
- 375
- 450
- 500
- 525
- 600

- DSP Area A
- DSP Area B
- DSP Area C
- DSP Area D

North

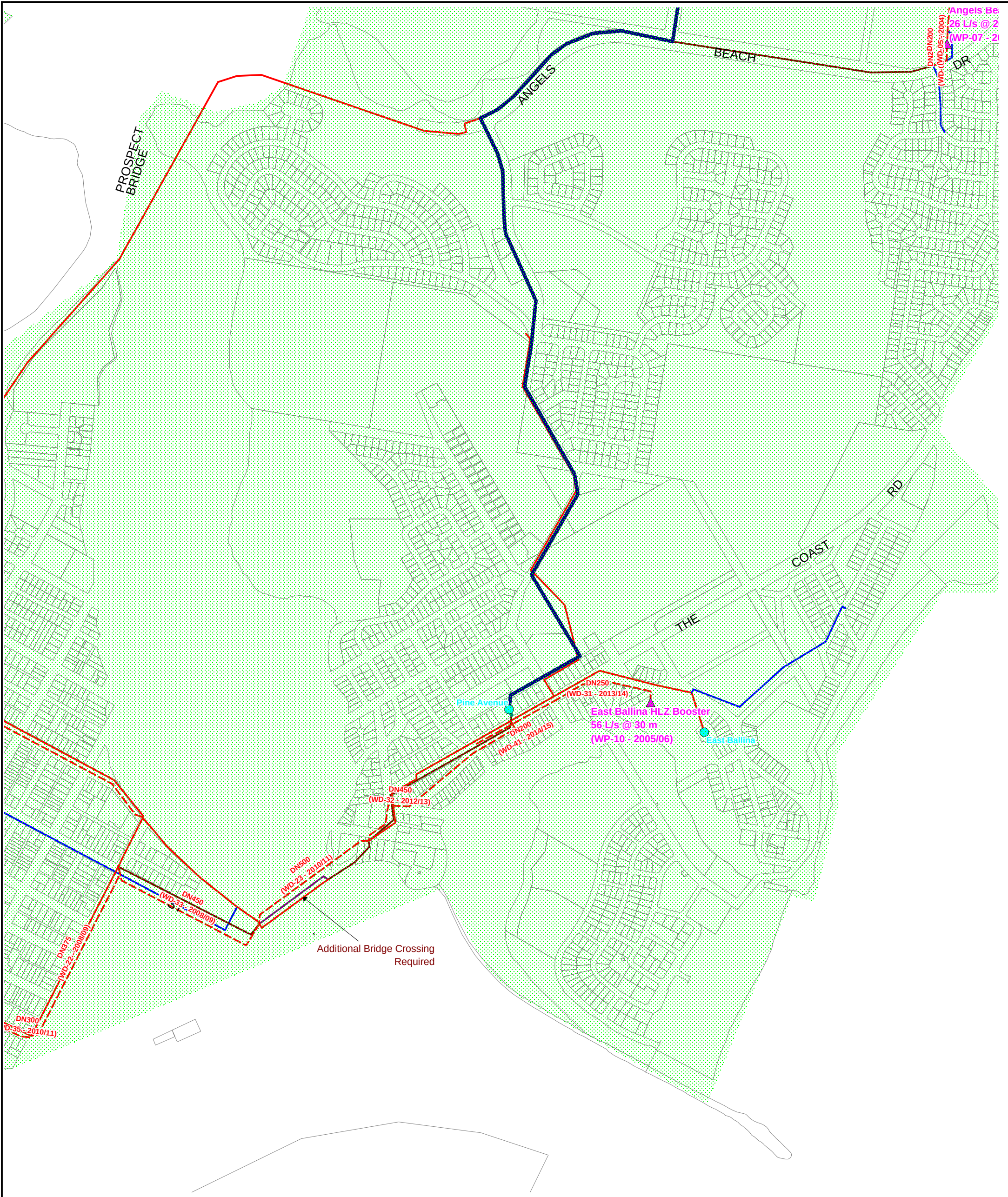


0 0.1 0.2
kilometres

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Ballina Shire Council

Figure 6
Angels Beach



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G:\41\12595\Mapinfo\Workspace\Water DSP\Fig7.WOR

Existing Mains Diameter (mm)

- 100
- 150
- 200
- 225
- 250
- 300
- 375
- 450
- 500
- 525
- 600

- DSP Area A
- DSP Area B
- DSP Area C
- DSP Area D

North

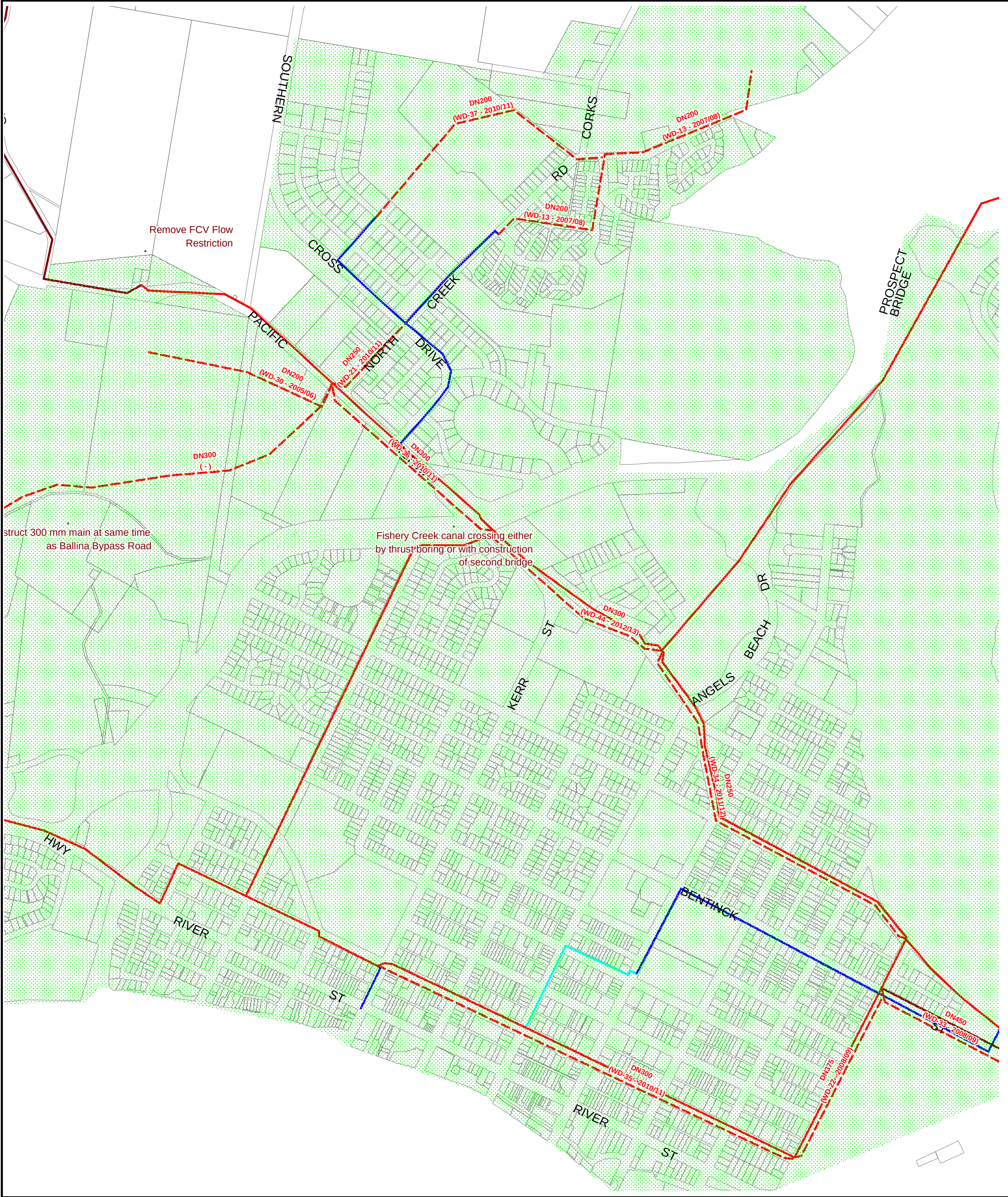


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kilometres

Source Information: GIS Data supplied by Ballina Shire Council

Ballina Shire Council

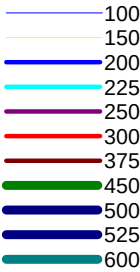
Figure 7
East Ballina



MANAGEMENT
ENGINEERING
ENVIRONMENT

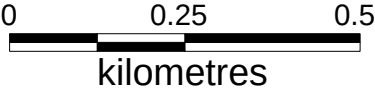
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Existing Mains Diameter (mm)



- DSP Area A
- DSP Area B
- DSP Area C
- DSP Area D

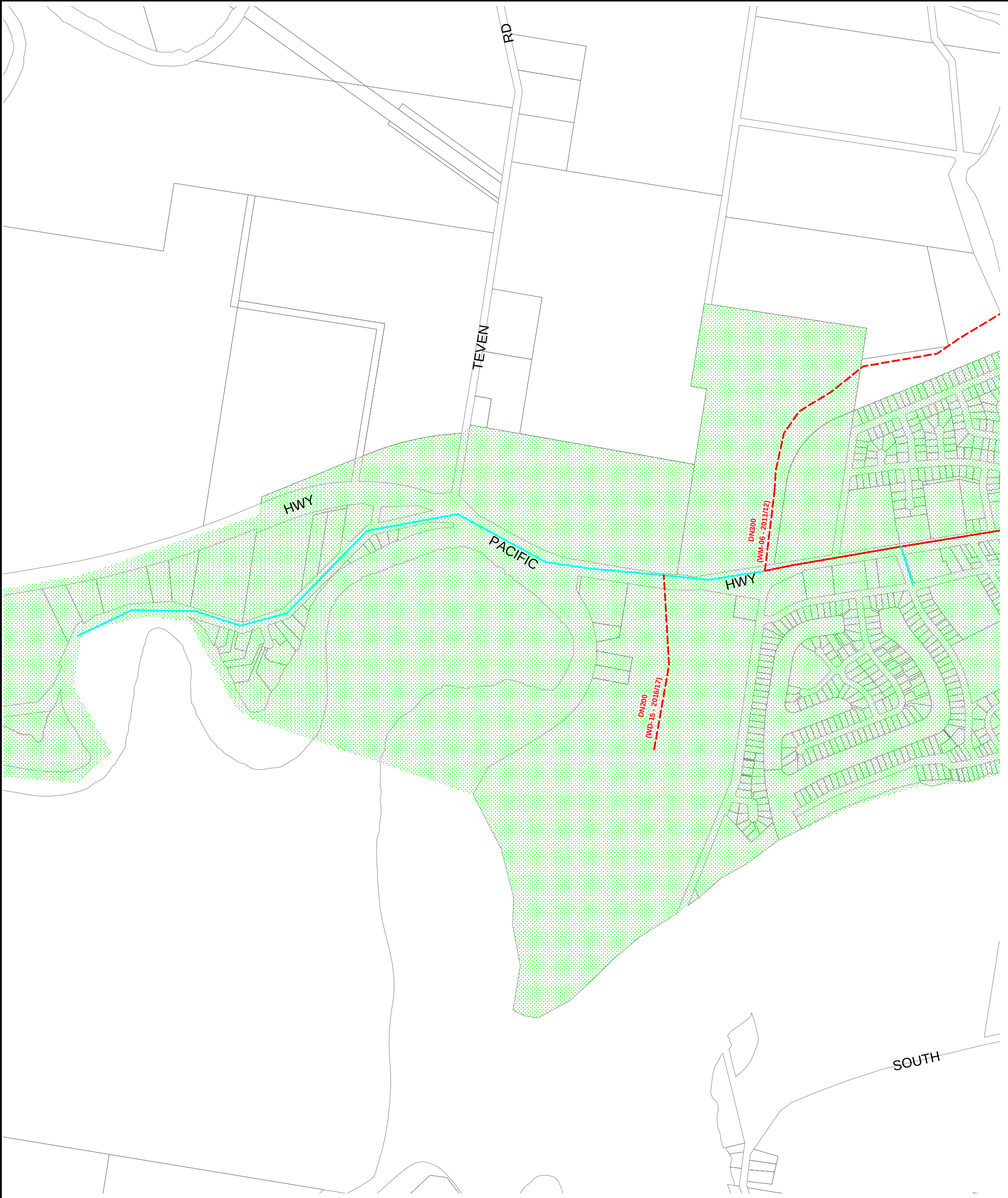
North



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Ballina Shire Council

Figure 8
Ballina Island/North Ballina



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G:\41\12595\Mapinfo\Workspace\Water DSP\Fig9.WOR

Existing Mains Diameter (mm)

- 100
- 150
- 200
- 225
- 250
- 300
- 375
- 450
- 500
- 525
- 600

- DSP Area A
- DSP Area B
- DSP Area C
- DSP Area D

North



0 0.25 0.5
kilometres

Source Information: GIS Data supplied by Ballina Shire Council

Ballina Shire Council

Figure 9
West Ballina

Figure 10
Alstonville / Wollongbar

Existing Mains Diameter (mm)

- 100
- 150
- 200
- 225
- 250
- 300
- 375
- 450
- 500
- 525
- 600

- DSP Area A
- DSP Area B
- DSP Area C
- DSP Area D

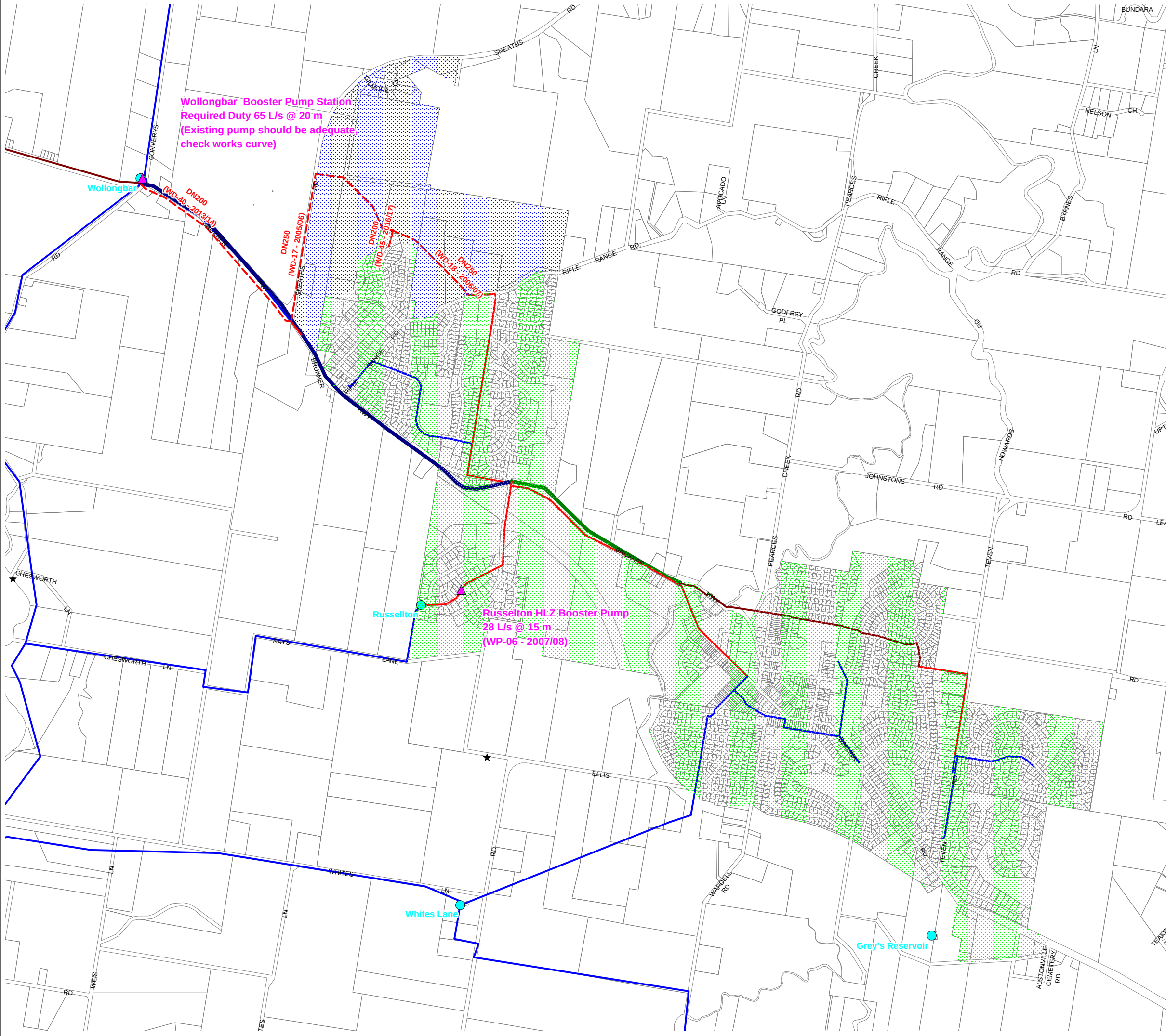
North

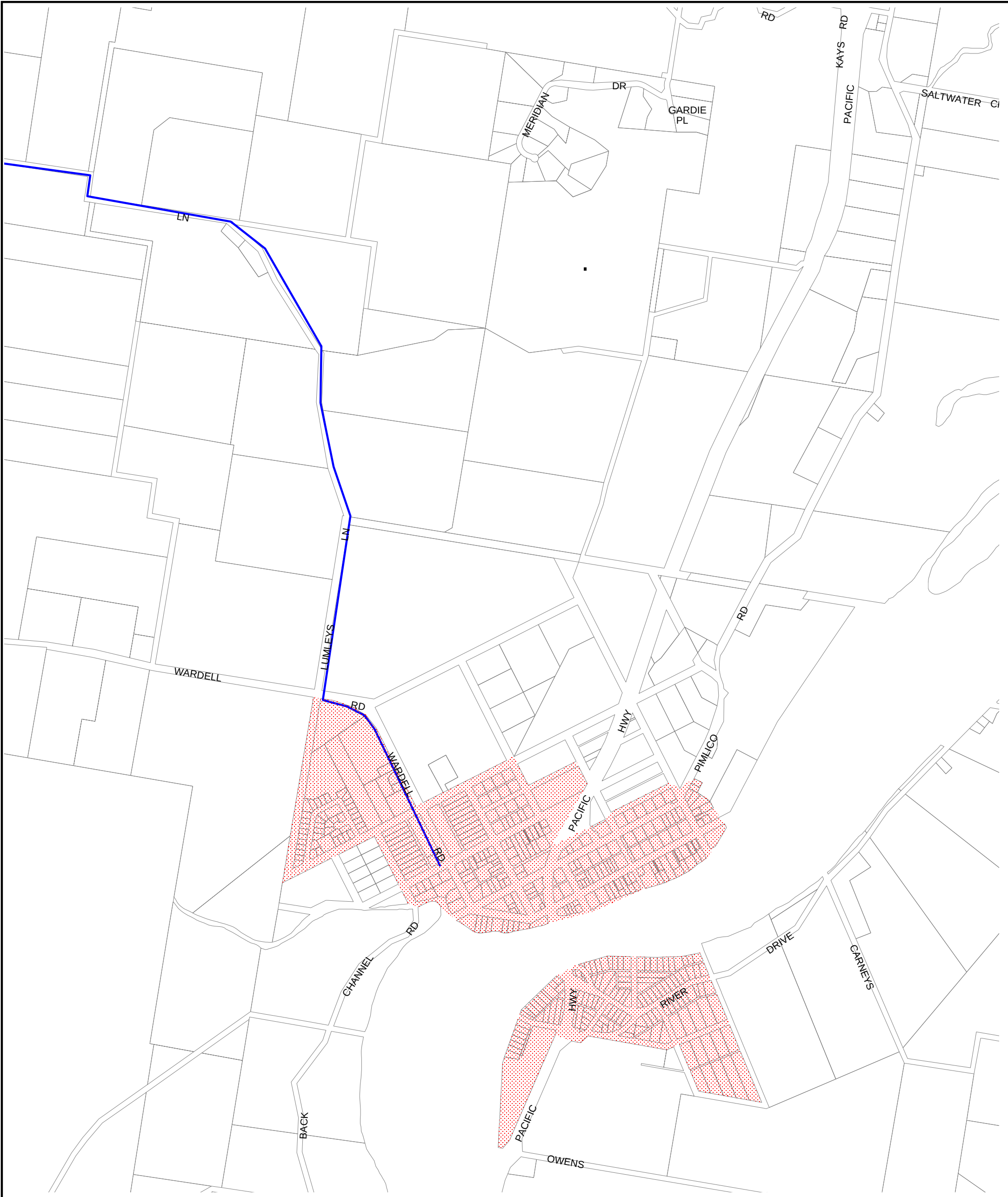


0 0.5 1
kilometres

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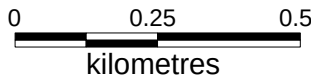
G:\41\12595\Mapinfo\Workspace\Water DSP\Fig11.WOR

Existing Mains Diameter (mm)



- DSP Area A
- DSP Area B
- DSP Area C
- DSP Area D

North



Source Information: GIS Data
supplied by Ballina Shire Council

Ballina Shire Council

Figure 11
Wardell

Appendix A

Calculation of the Capital Charge

Extracted spreadsheets from calculation process

Agglomerated DSP Area	DSP Areas	Capital Charge (\$ per ET) 2003/04 \$	30 year ET Growth	Proportion of Growth	Weighted Capital Charge (\$ per ET) 2003/04 \$	Capital Charge for Each DSP Area (\$ per ET) 2003/04 \$
DSP Area A	Existing - Wardell	\$ 9,910	150	1.6%	\$ 157	\$ 9,910
Total				1.6%	\$ 157	
DSP Area B	Lennox - Release Area 2	\$ 3,112	470	5.0%	\$ 155	\$ 2,735
	Lennox - Release Area 1	\$ 2,926	1,693	17.9%	\$ 523	
	Existing - Ballina & Lennox Head	\$ 2,814	2,609	27.6%	\$ 776	
	Existing - Alstonville & Wollongbar	\$ 2,317	260	2.7%	\$ 64	
	Ballina - Release Area 1	\$ 2,181	1,084	11.5%	\$ 250	
Total				64.6%	\$ 1,767	
DSP Area C	Ballina - Release Area 2 (Cumbalum)	\$ 1,985	2,460	26.0%	\$ 516	\$ 1,985
Total				26.0%	\$ 516	
DSP Area D	Alstonville - Release Area 1 (Wollongbar Expansion)	\$ 1,413	739	7.8%	\$ 110	\$ 1,413
Total				7.8%	\$ 110	

**DSP Agglomeration
Charge per ET**

DSP Area	DSP Charge after reduction amount	Percentage of highest capital charge: Area A	Percentage of highest capital charge: Area B	Percentage of highest capital charge: Area C	Percentage of highest capital charge: Area D
Existing - Wardell	\$ 9,910	100%			
Lennox - Release Area 2	\$ 3,112	31%	100%		
Lennox - Release Area 1	\$ 2,926		94%		
Existing - Ballina & Lennox Head	\$ 2,814		90%		
Existing - Alstonville & Wollongbar	\$ 2,317		74%		
Ballina - Release Area 1	\$ 2,181		70%		
Ballina - Release Area 2 (Cumbalum)	\$ 1,985		64%	100%	
Alstonville - Release Area 1 (Wollongbar Expansion)	\$ 1,413			65%	100%

Ballina Shire Council							
Inputs to Cost Estimates							
Note: All costs are to supply and install							
Source: NSW DLWC Reference Rates - January 2000. Applied index for 16.3% to obtain 2004							
Index	1.163						
Water Mains							
Diameter	Indexed Cost (\$/m)	Reference Rate (\$/m)	Comments				
DN100	\$ 76	\$ 65	uPVC				
DN150	\$ 110	\$ 95	uPVC				
DN200	\$ 140	\$ 120	DICL				
DN225	\$ 152	\$ 130	DICL, average of DN200 and DN250				
DN250	\$ 163	\$ 140	DICL				
DN300	\$ 198	\$ 170	DICL				
DN375	\$ 250	\$ 215	DICL				
DN450	\$ 314	\$ 270	DICL				
DN500	\$ 349	\$ 300	DICL				
DN525	\$ 439	\$ 378	DICL, average of DN500 and DN600				
DN600	\$ 529	\$ 455	Steel				
DN750	\$ 739	\$ 635	Steel				
DN900	\$ 1,035	\$ 890	Steel				
DN1050	\$ 1,314	\$ 1,130	Steel				
DN1200	\$ 1,651	\$ 1,420	Steel				
Water Pumping Stations							
Installed Power (kW)	Indexed Cost (\$)	Reference Rate (\$)		% Civil	% Mechanical		
10	\$ 93,040	\$ 40,000		31%	69%		
20	\$ 139,560	\$ 60,000		30%	70%		
30	\$ 169,798	\$ 73,000		29%	71%		
50	\$ 244,230	\$ 105,000		28%	72%		
100	\$ 430,310	\$ 185,000		27%	73%		
200	\$ 709,430	\$ 305,000		38%	62%		
400	\$ 1,163,000	\$ 500,000		36%	64%		
600	\$ 1,593,310	\$ 685,000		34%	66%		
800	\$ 2,174,810	\$ 935,000		32%	68%		
1000	\$ 2,860,980	\$ 1,230,000		30%	70%		
1200	\$ 3,628,560	\$ 1,560,000		28%	72%		
1400	\$ 4,326,360	\$ 1,860,000		26%	74%		
1600	\$ 5,070,680	\$ 2,180,000		25%	75%		
Service Reservoirs							
Storage (ML)	Indexed Cost (\$)	Reference Rate (\$)	Comments				
0.1	\$ 38,379	\$ 33,000	Concrete				
0.2	\$ 75,595	\$ 65,000	Concrete				
0.4	\$ 151,190	\$ 130,000	Concrete				
0.5	\$ 232,600	\$ 200,000	Concrete				
1	\$ 430,310	\$ 370,000	Concrete				
2	\$ 628,020	\$ 540,000	Concrete				
4	\$ 918,770	\$ 790,000	Concrete				
5	\$ 1,069,960	\$ 920,000	Concrete				
8	\$ 1,383,970	\$ 1,190,000	Concrete				
10	\$ 1,616,570	\$ 1,390,000	Concrete				
15	\$ 2,244,590	\$ 1,930,000	Concrete				
20	\$ 2,558,600	\$ 2,200,000	Concrete				
Water Treatment Works							
Capacity (ML/day)	Indexed Cost (\$)	Reference Rate (\$)					
0.5	\$ 965,290	\$ 830,000					
0.8	\$ 1,163,000	\$ 1,000,000					
1	\$ 1,395,600	\$ 1,200,000					
2	\$ 2,209,700	\$ 1,900,000					
5	\$ 4,186,800	\$ 3,600,000					
7.5	\$ 5,349,800	\$ 4,600,000					
10	\$ 6,396,500	\$ 5,500,000					
15	\$ 8,024,700	\$ 6,900,000					
20	\$ 9,304,000	\$ 8,000,000					
30	\$ 11,630,000	\$ 10,000,000					
40	\$ 14,188,600	\$ 12,200,000					
50	\$ 17,793,900	\$ 15,300,000					
60	\$ 20,236,200	\$ 17,400,000					
70	\$ 23,725,200	\$ 20,400,000					
80	\$ 26,981,600	\$ 23,200,000					
100	\$ 33,727,000	\$ 29,000,000					

Charge per ET																	
DSP Area	Existing Infrastructure					Future Infrastructure					Existing and Future Infrastructure					Capital Charge for Shire (Weighted by Growth)	DSP Charge after reduction amount
	Reservoirs	Pumps and Bores	WTP	Pipes	Sub-Total	Reservoirs	Pumps and Bores	WTP	Pipes	Sub-Total	Reservoirs	Pumps and Bores	WTP	Pipes	Total		
Existing - Ballina & Lennox Head	\$ 355	\$ 2	\$ 65	\$ 1,216	\$ 1,638	\$ -	\$ 66	\$ -	\$ 1,331	\$ 1,396	\$ 355	\$ 68	\$ 65	\$ 2,546	\$ 3,034	\$ 836	\$ 2,814
Existing - Alstonville & Wollongbar	\$ 545	\$ -	\$ 57	\$ 1,599	\$ 2,201	\$ -	\$ 27	\$ -	\$ 309	\$ 336	\$ 545	\$ 27	\$ 57	\$ 1,908	\$ 2,537	\$ 70	\$ 2,317
Existing - Wardell	\$ 1,624	\$ 1,686	\$ 65	\$ 6,484	\$ 9,859	\$ -	\$ -	\$ -	\$ 271	\$ 271	\$ 1,624	\$ 1,686	\$ 65	\$ 6,756	\$ 10,130	\$ 161	\$ 9,910
Alstonville - Release Area 1 (Wollongbar Expansion)	\$ 548	\$ 181	\$ 58	\$ 56	\$ 842	\$ -	\$ -	\$ -	\$ 791	\$ 791	\$ 548	\$ 181	\$ 58	\$ 846	\$ 1,633	\$ 127	\$ 1,413
Ballina - Release Area 2 (Cumbalum)	\$ -	\$ -	\$ 65	\$ -	\$ 65	\$ 877	\$ 73	\$ -	\$ 1,190	\$ 2,139	\$ 877	\$ 73	\$ 65	\$ 1,190	\$ 2,205	\$ 573	\$ 1,985
Ballina - Release Area 1	\$ 288	\$ -	\$ 53	\$ 765	\$ 1,105	\$ -	\$ 24	\$ -	\$ 1,272	\$ 1,296	\$ 288	\$ 24	\$ 53	\$ 2,037	\$ 2,401	\$ 275	\$ 2,181
Lennox - Release Area 2	\$ 383	\$ -	\$ 71	\$ 1,083	\$ 1,537	\$ -	\$ 310	\$ -	\$ 1,485	\$ 1,795	\$ 383	\$ 310	\$ 71	\$ 2,568	\$ 3,332	\$ 165	\$ 3,112
Lennox - Release Area 1	\$ -	\$ -	\$ 55	\$ 438	\$ 494	\$ 1,089	\$ 89	\$ -	\$ 1,473	\$ 2,652	\$ 1,089	\$ 89	\$ 55	\$ 1,912	\$ 3,146	\$ 563	\$ 2,926
																\$ 2,770	

Existing Reservoirs

DSP Area	Component Reservoir	Total Volume (ML)	Year Commissioned	Pre or Post 1996 Asset	Effective Year of Commissioning	Capital Cost	Adopted System Capacity (ETs)	Cost per ET	Year when Capacity is Taken-Up	Take-up Period (Years)	Pre 1996 ROI Factor (Non-Uniform Lot Take Up)	Post 1996 ROI Factor (Non-Uniform Lot Take Up)	Capital Charge per ET	Total Charges
Existing - Ballina & Lennox Head	East Ballina	4.49	1968	Excluded - Pre 1970	1995/96	\$ 992,344	14,699	\$ 68	2033/34	39	1.49	2.33	\$ -	
Existing - Ballina & Lennox Head	Pine Avenue	20.33	1978	Pre	1995/96	\$ 2,579,376	14,699	\$ 175	2033/34	39	1.49	2.33	\$ 261	
Existing - Ballina & Lennox Head	Lennox Head	2.44	1968	Excluded - Pre 1970	1995/96	\$ 691,590	14,699	\$ 47	2033/34	39	1.49	2.33	\$ -	
Existing - Ballina & Lennox Head	Basalt Court	4.03	1983	Pre	1995/96	\$ 922,742	14,699	\$ 63	2033/34	39	1.49	2.33	\$ 93	\$ 355
Existing - Alstonville & Wollongbar	Wollongbar	10.37	1990	Pre	1995/96	\$ 1,663,570	3,995	\$ 416	2033/34	39	1.31	1.72	\$ 545	\$ 545
Existing - Wardell	Whites Lane	0.45	1953	Excluded - Pre 1970	1995/96	\$ 194,866	587	\$ 332	2033/34	39	1.48	2.22	\$ -	
Existing - Wardell	Meerschaum Balance Tank	0.24	1989	Pre	1995/96	\$ 89,799	587	\$ 153	2033/34	39	1.48	2.22	\$ 226	
Existing - Wardell	Wardell	1.63	1990	Pre	1995/96	\$ 555,779	587	\$ 947	2033/34	39	1.48	2.22	\$ 1,398	\$ 1,624
Ballina - Release Area 1	East Ballina	4.49	1968	Excluded - Pre 1970	1995/96	\$ 992,344	14,699	\$ 68	2033/34	39	1.21	1.48	\$ -	
Ballina - Release Area 1	Pine Avenue	20.33	1978	Pre	1995/96	\$ 2,579,376	14,699	\$ 175	2033/34	39	1.21	1.48	\$ 212	
Ballina - Release Area 1	Lennox Head	2.44	1968	Excluded - Pre 1970	1995/96	\$ 691,590	14,699	\$ 47	2033/34	39	1.21	1.48	\$ -	
Ballina - Release Area 1	Basalt Court	4.03	1983	Pre	1995/96	\$ 922,742	14,699	\$ 63	2033/34	39	1.21	1.48	\$ 76	\$ 288
Lennox - Release Area 2	East Ballina	4.49	1968	Excluded - Pre 1970	1995/96	\$ 992,344	14,699	\$ 68	2033/34	39	1.61	2.71	\$ -	
Lennox - Release Area 2	Pine Avenue	20.33	1978	Pre	1995/96	\$ 2,579,376	14,699	\$ 175	2033/34	39	1.61	2.71	\$ 282	
Lennox - Release Area 2	Lennox Head	2.44	1968	Excluded - Pre 1970	1995/96	\$ 691,590	14,699	\$ 47	2033/34	39	1.61	2.71	\$ -	
Lennox - Release Area 2	Basalt Court	4.03	1983	Pre	1995/96	\$ 922,742	14,699	\$ 63	2033/34	39	1.61	2.71	\$ 101	\$ 383
Alstonville - Release Area 1 (Wollongbar Expansion)	Wollongbar	10.37	1990	Pre	1995/96	\$ 1,663,570	3,995	\$ 416	2033/34	39	1.32	1.77	\$ 548	\$ 548

Existing Pumps and Bores

DSP Area	Component	Size	Units	Year Commissioned	Pre or Post 1996 Asset	Effective Year of Commissioning	Capital Cost	Adopted Capacity (ETs)	Cost per ET	Year when Capacity is Taken-Up	Take-up Period (Years)	Pre 1996 ROI Factor (Non-Uniform Lot Take Up)	Post 1996 ROI Factor (Non-Uniform Lot Take Up)	Capital Charge per ET	Total Charges
Existing - Ballina & Lennox Head	Basalt Court Booster	22	kW	1983	Pre	1995/96	\$ 19,820	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 2	\$ 2
Alstonville - Release Area 1 (Wollongbar Expansion)	Wollongbar Booster	22	kW	1990	Pre	1995/96	\$ 145,608	1,061	\$ 137	2033/34	39	1.32	1.77	\$ 181	\$ 181
Existing - Wardell	Gum Creek Lift Pump	55	kW	1982	Pre	1995/96	\$ 262,838	587	\$ 448	2033/34	39	1.48	2.22	\$ 661	
Existing - Wardell	Lindendale Bore and Lift Pump	22	kW	1992	Pre	1995/96	\$ 145,608	587	\$ 248	2033/34	39	1.48	2.22	\$ 366	
Existing - Wardell	Ellis Road Bore and Lift Pump	22	kW	1992	Pre	1995/96	\$ 145,608	587	\$ 248	2033/34	39	1.48	2.22	\$ 366	
Existing - Wardell	Ellis Road Booster Pump	15	kW	1992	Pre	1995/96	\$ 116,300	587	\$ 198	2033/34	39	1.48	2.22	\$ 293	\$ 1,686

Existing WTP's

DSP Area	Component	Size	Units	Year Commissioned	Pre or Post 1996 Asset	Effective Year of Commissioning	Capital Cost	Adopted Capacity (ETs)	Cost per ET	Year when Capacity is Taken-Up	Take-up Period (Years)	Pre 1996 ROI Factor (Non-Uniform Lot Take Up)	Post 1996 ROI Factor (Non-Uniform Lot Take Up)	Capital Charge per ET	Total Charges
Existing - Ballina & Lennox Head	Marom Creek Weir		ML/day	1953	Excluded - Pre 1970	1995/96	\$ 810,000	23,434	\$ 35	2033/34	39	1.49	2.33	\$ -	
Existing - Ballina & Lennox Head	Marom Creek WTP		ML/day	1980	Pre	1995/96	\$ 1,028,100	23,434	\$ 44	2033/34	39	1.49	2.33	\$ 65	\$ 65
Existing - Alstonville & Wollongbar	Marom Creek Weir		ML/day	1953	Excluded - Pre 1970	1995/96	\$ 810,000	23,434	\$ 35	2033/34	39	1.31	1.72	\$ -	
Existing - Alstonville & Wollongbar	Marom Creek WTP		ML/day	1980	Pre	1995/96	\$ 1,028,100	23,434	\$ 44	2033/34	39	1.31	1.72	\$ 57	\$ 57
Existing - Wardell	Marom Creek Weir		ML/day	1953	Excluded - Pre 1970	1995/96	\$ 810,000	23,434	\$ 35	2033/34	39	1.48	2.22	\$ -	
Existing - Wardell	Marom Creek WTP		ML/day	1980	Pre	1995/96	\$ 1,028,100	23,434	\$ 44	2033/34	39	1.48	2.22	\$ 65	\$ 65
Alstonville - Release Area 1 (Wollongbar Expansion)	Marom Creek Weir		ML/day	1953	Excluded - Pre 1970	1995/96	\$ 810,000	23,434	\$ 35	2033/34	39	1.32	1.77	\$ -	
Alstonville - Release Area 1 (Wollongbar Expansion)	Marom Creek WTP		ML/day	1980	Pre	1995/96	\$ 1,028,100	23,434	\$ 44	2033/34	39	1.32	1.77	\$ 58	\$ 58
Ballina - Release Area 2 (Cumbalum)	Marom Creek Weir		ML/day	1953	Excluded - Pre 1970	1995/96	\$ 810,000	23,434	\$ 35	2033/34	39	1.49	2.26	\$ -	
Ballina - Release Area 2 (Cumbalum)	Marom Creek WTP		ML/day	1980	Pre	1995/96	\$ 1,028,100	23,434	\$ 44	2033/34	39	1.49	2.26	\$ 65	\$ 65
Ballina - Release Area 1	Marom Creek Weir		ML/day	1953	Excluded - Pre 1970	1995/96	\$ 810,000	23,434	\$ 35	2033/34	39	1.21	1.48	\$ -	
Ballina - Release Area 1	Marom Creek WTP		ML/day	1980	Pre	1995/96	\$ 1,028,100	23,434	\$ 44	2033/34	39	1.21	1.48	\$ 53	\$ 53
Lennox - Release Area 2	Marom Creek Weir		ML/day	1953	Excluded - Pre 1970	1995/96	\$ 810,000	23,434	\$ 35	2033/34	39	1.61	2.71	\$ -	
Lennox - Release Area 2	Marom Creek WTP		ML/day	1980	Pre	1995/96	\$ 1,028,100	23,434	\$ 44	2033/34	39	1.61	2.71	\$ 71	\$ 71
Lennox - Release Area 1	Marom Creek Weir		ML/day	1953	Excluded - Pre 1970	1995/96	\$ 810,000	23,434	\$ 35	2033/34	39	1.26	1.62	\$ -	
Lennox - Release Area 1	Marom Creek WTP		ML/day	1980	Pre	1995/96	\$ 1,028,100	23,434	\$ 44	2033/34	39	1.26	1.62	\$ 55	\$ 55

Existing Pipes

DSP Area	Component	Nominal Diameter (mm)	Length (m)	Year Commissioned	Pre or Post 1996 Asset	Effective Year of Commissioning	Capital Cost	Adopted Capacity (ETs)	Cost per ET	Year when Capacity is Taken-Up	Take-up Period (Years)	Pre 1996 ROI Factor (Non-Uniform Lot Take Up)	Post 1996 ROI Factor (Non-Uniform Lot Take Up)	Capital Charge per ET	Total Charges
Existing - Ballina & Lennox Head	P-543	DN300	22		Pre	1995/96	\$ 4,400	14,229	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-336	DN300	16		Pre	1995/96	\$ 3,200	14,229	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-544	DN300	669		Pre	1995/96	\$ 132,400	14,229	\$ 9	2033/34	39	1.49	2.33	\$ 14	
Existing - Ballina & Lennox Head	P-302	DN300	284		Pre	1995/96	\$ 56,300	14,229	\$ 4	2033/34	39	1.49	2.33	\$ 6	
Existing - Ballina & Lennox Head	P-21	DN300	1260		Pre	1995/96	\$ 249,600	14,229	\$ 18	2033/34	39	1.49	2.33	\$ 26	
Existing - Ballina & Lennox Head	P-54	DN300	876		Pre	1995/96	\$ 173,500	14,229	\$ 12	2033/34	39	1.49	2.33	\$ 18	
Existing - Ballina & Lennox Head	P-68	DN300	189		Pre	1995/96	\$ 37,400	14,229	\$ 3	2033/34	39	1.49	2.33	\$ 4	
Existing - Ballina & Lennox Head	P-396	DN375	489		Pre	1995/96	\$ 122,200	14,229	\$ 9	2033/34	39	1.49	2.33	\$ 13	
Existing - Ballina & Lennox Head	P-87	DN500	49		Pre	1995/96	\$ 17,200	14,229	\$ 1	2033/34	39	1.49	2.33	\$ 2	
Existing - Ballina & Lennox Head	P-83	DN250	268		Pre	1995/96	\$ 43,600	14,229	\$ 3	2033/34	39	1.49	2.33	\$ 5	
Existing - Ballina & Lennox Head	P-11	DN300	642		Pre	1995/96	\$ 127,100	14,229	\$ 9	2033/34	39	1.49	2.33	\$ 13	
Existing - Ballina & Lennox Head	P-552	DN450	19		Pre	1995/96	\$ 6,100	14,229	\$ 0	2033/34	39	1.49	2.33	\$ 1	
Existing - Ballina & Lennox Head	P-85	DN375	186		Pre	1995/96	\$ 46,400	14,229	\$ 3	2033/34	39	1.49	2.33	\$ 5	
Existing - Ballina & Lennox Head	P-550	DN300	215		Pre	1995/96	\$ 42,500	14,229	\$ 3	2033/34	39	1.49	2.33	\$ 4	
Existing - Ballina & Lennox Head	P-65	DN300	92		Pre	1995/96	\$ 18,300	14,229	\$ 1	2033/34	39	1.49	2.33	\$ 2	
Existing - Ballina & Lennox Head	P-66	DN300	20		Pre	1995/96	\$ 3,900	14,229	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-397	DN375	158		Pre	1995/96	\$ 39,500	14,229	\$ 3	2033/34	39	1.49	2.33	\$ 4	
Existing - Ballina & Lennox Head	P-12	DN300	1074		Pre	1995/96	\$ 212,600	14,229	\$ 15	2033/34	39	1.49	2.33	\$ 22	
Existing - Ballina & Lennox Head	P-399	DN300	431		Pre	1995/96	\$ 85,400	14,229	\$ 6	2033/34	39	1.49	2.33	\$ 9	
Existing - Ballina & Lennox Head	P-67	DN300	220		Pre	1995/96	\$ 43,500	14,229	\$ 3	2033/34	39	1.49	2.33	\$ 5	
Existing - Ballina & Lennox Head	P-86	DN600	24		Pre	1995/96	\$ 12,800	14,229	\$ 1	2033/34	39	1.49	2.33	\$ 1	
Existing - Ballina & Lennox Head	P-28	DN375	503		Pre	1995/96	\$ 125,800	14,229	\$ 9	2033/34	39	1.49	2.33	\$ 13	
Existing - Ballina & Lennox Head	P-69	DN300	128		Pre	1995/96	\$ 25,400	14,229	\$ 2	2033/34	39	1.49	2.33	\$ 3	
Existing - Ballina & Lennox Head	P-10	DN300	404		Pre	1995/96	\$ 80,000	14,229	\$ 6	2033/34	39	1.49	2.33	\$ 8	
Existing - Ballina & Lennox Head	P-51	DN500	693		Pre	1995/96	\$ 241,700	14,229	\$ 17	2033/34	39	1.49	2.33	\$ 25	
Existing - Ballina & Lennox Head	P-88	DN300	628		Pre	1995/96	\$ 124,300	14,229	\$ 9	2033/34	39	1.49	2.33	\$ 13	
Existing - Ballina & Lennox Head	P-70	DN300	49		Pre	1995/96	\$ 9,700	14,229	\$ 1	2033/34	39	1.49	2.33	\$ 1	
Existing - Ballina & Lennox Head	P-84	DN300	256		Pre	1995/96	\$ 50,800	14,229	\$ 4	2033/34	39	1.49	2.33	\$ 5	
Existing - Ballina & Lennox Head	P-221	DN500	249		Pre	1995/96	\$ 87,100	14,229	\$ 6	2033/34	39	1.49	2.33	\$ 9	
Existing - Ballina & Lennox Head	P-572	DN500	299		Pre	1995/96	\$ 104,300	14,229	\$ 7	2033/34	39	1.49	2.33	\$ 11	
Existing - Ballina & Lennox Head	P-576	DN500	707		Pre	1995/96	\$ 246,600	14,229	\$ 17	2033/34	39	1.49	2.33	\$ 26	
Existing - Ballina & Lennox Head	P-577	DN500	817		Pre	1995/96	\$ 285,200	14,229	\$ 20	2033/34	39	1.49	2.33	\$ 30	
Existing - Ballina & Lennox Head	P-369	DN500	9		Pre	1995/96	\$ 3,200	13,139	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-370	DN500	1653		Pre	1995/96	\$ 576,800	14,699	\$ 39	2033/34	39	1.49	2.33	\$ 58	
Existing - Ballina & Lennox Head	P-194	DN500	1570		Pre	1995/96	\$ 548,000	14,699	\$ 37	2033/34	39	1.49	2.33	\$ 56	
Existing - Ballina & Lennox Head	P-338	DN500	13		Pre	1995/96	\$ 4,700	13,139	\$ 0	2033/34	39	1.49	2.33	\$ 1	
Existing - Ballina & Lennox Head	P-342	DN450	97		Pre	1995/96	\$ 30,400	14,362	\$ 2	2033/34	39	1.49	2.33	\$ 3	
Existing - Ballina & Lennox Head	P-508	DN450	195		Pre	1995/96	\$ 61,300	14,362	\$ 4	2033/34	39	1.49	2.33	\$ 6	
Existing - Ballina & Lennox Head	P-362	DN450	4		Pre	1995/96	\$ 1,300	14,362	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-44	DN450	66		Pre	1995/96	\$ 20,900	14,362	\$ 1	2033/34	39	1.49	2.33	\$ 2	
Existing - Ballina & Lennox Head	P-343	DN450	14		Pre	1995/96	\$ 4,300	14,362	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-509	DN450	430		Pre	1995/96	\$ 135,000	14,362	\$ 9	2033/34	39	1.49	2.33	\$ 14	
Existing - Ballina & Lennox Head	P-363	DN450	5		Pre	1995/96	\$ 1,500	14,362	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-341	DN450	8		Pre	1995/96	\$ 2,500	14,362	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-364	DN500	221		Pre	1995/96	\$ 77,100	16,392	\$ 5	2033/34	39	1.49	2.33	\$ 7	
Existing - Ballina & Lennox Head	P-289	DN450	928		Pre	1995/96	\$ 291,300	16,392	\$ 18	2033/34	39	1.49	2.33	\$ 26	
Existing - Ballina & Lennox Head	P-365	DN500	31		Pre	1995/96	\$ 10,700	16,392	\$ 1	2033/34	39	1.49	2.33	\$ 1	
Existing - Ballina & Lennox Head	P-32	DN450	984		Pre	1995/96	\$ 309,000	16,392	\$ 19	2033/34	39	1.49	2.33	\$ 28	
Existing - Ballina & Lennox Head	P-191	DN450	2011		Pre	1995/96	\$ 631,400	16,392	\$ 39	2033/34	39	1.49	2.33	\$ 57	
Existing - Ballina & Lennox Head	P-288	DN450	1496		Pre	1995/96	\$ 469,600	16,392	\$ 29	2033/34	39	1.49	2.33	\$ 43	
Existing - Ballina & Lennox Head	P-122	DN200	352		Pre	1995/96	\$ 49,300	12,669	\$ 4	2033/34	39	1.49	2.33	\$ 6	
Existing - Ballina & Lennox Head	P-123	DN200	130		Pre	1995/96	\$ 18,200	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 2	
Existing - Ballina & Lennox Head	P-124	DN200	113		Pre	1995/96	\$ 15,800	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 2	
Existing - Ballina & Lennox Head	P-125	DN200	440		Pre	1995/96	\$ 61,700	12,669	\$ 5	2033/34	39	1.49	2.33	\$ 7	
Existing - Ballina & Lennox Head	P-126	DN200	231		Pre	1995/96	\$ 32,300	12,669	\$ 3	2033/34	39	1.49	2.33	\$ 4	
Existing - Ballina & Lennox Head	P-128	DN200	49		Pre	1995/96	\$ 6,800	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 1	
Existing - Ballina & Lennox Head	P-14	DN300	1980		Pre	1995/96	\$ 392,100	12,669	\$ 31	2033/34	39	1.49	2.33	\$ 46	
Existing - Ballina & Lennox Head	P-143	DN200	48		Pre	1995/96	\$ 6,700	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 1	
Existing - Ballina & Lennox Head	P-15	DN300	394		Pre	1995/96	\$ 78,000	12,669	\$ 6	2033/34	39	1.49	2.33	\$ 9	
Existing - Ballina & Lennox Head	P-16	DN225	115		Pre	1995/96	\$ 17,500	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 2	
Existing - Ballina & Lennox Head	P-186	DN200	191		Pre	1995/96	\$ 26,800	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 3	
Existing - Ballina & Lennox Head	P-187	DN200	467		Pre	1995/96	\$ 65,300	12,669	\$ 5	2033/34	39	1.49	2.33	\$ 8	
Existing - Ballina & Lennox Head	P-199	DN225	290		Pre	1995/96	\$ 44,000	12,669	\$ 3	2033/34	39	1.49	2.33	\$ 5	
Existing - Ballina & Lennox Head	P-227	DN200	751		Pre	1995/96	\$ 105,200	12,669	\$ 8	2033/34	39	1.49	2.33	\$ 12	
Existing - Ballina & Lennox Head	P-230	DN200	3		Pre	1995/96	\$ 400	12,669	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-231	DN200	2		Pre	1995/96	\$ 300	12,669	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-232	DN200	2		Pre	1995/96	\$ 300	12,669	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-233	DN200	6		Pre	1995/96	\$ 800	12,669	\$ 0	2033/34	39	1.49	2.33	\$ 0	
Existing - Ballina & Lennox Head	P-246	DN200	106		Pre	1995/96	\$ 14,800	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 2	

Existing - Ballina & Lennox Head	P-247	DN200	186	Pre	1995/96	\$ 26,000	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 3
Existing - Ballina & Lennox Head	P-249	DN200	544	Pre	1995/96	\$ 76,200	12,669	\$ 6	2033/34	39	1.49	2.33	\$ 9
Existing - Ballina & Lennox Head	P-250	DN200	460	Pre	1995/96	\$ 64,400	12,669	\$ 5	2033/34	39	1.49	2.33	\$ 8
Existing - Ballina & Lennox Head	P-284	DN200	714	Pre	1995/96	\$ 100,000	12,669	\$ 8	2033/34	39	1.49	2.33	\$ 12
Existing - Ballina & Lennox Head	P-287	DN300	630	Pre	1995/96	\$ 124,800	12,669	\$ 10	2033/34	39	1.49	2.33	\$ 15
Existing - Ballina & Lennox Head	P-293	DN300	232	Pre	1995/96	\$ 45,900	12,669	\$ 4	2033/34	39	1.49	2.33	\$ 5
Existing - Ballina & Lennox Head	P-297	DN200	341	Pre	1995/96	\$ 47,800	12,669	\$ 4	2033/34	39	1.49	2.33	\$ 6
Existing - Ballina & Lennox Head	P-33	DN200	1001	Pre	1995/96	\$ 140,200	12,669	\$ 11	2033/34	39	1.49	2.33	\$ 16
Existing - Ballina & Lennox Head	P-344	DN200	219	Pre	1995/96	\$ 30,700	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 4
Existing - Ballina & Lennox Head	P-345	DN300	8	Pre	1995/96	\$ 1,500	12,669	\$ 0	2033/34	39	1.49	2.33	\$ 0
Existing - Ballina & Lennox Head	P-346	DN300	16	Pre	1995/96	\$ 3,100	12,669	\$ 0	2033/34	39	1.49	2.33	\$ 0
Existing - Ballina & Lennox Head	P-347	DN300	9	Pre	1995/96	\$ 1,700	12,669	\$ 0	2033/34	39	1.49	2.33	\$ 0
Existing - Ballina & Lennox Head	P-388	DN200	91	Pre	1995/96	\$ 12,700	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 1
Existing - Ballina & Lennox Head	P-389	DN200	905	Pre	1995/96	\$ 126,700	12,669	\$ 10	2033/34	39	1.49	2.33	\$ 15
Existing - Ballina & Lennox Head	P-40	DN200	185	Pre	1995/96	\$ 25,900	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 3
Existing - Ballina & Lennox Head	P-403	DN200	141	Pre	1995/96	\$ 19,700	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 2
Existing - Ballina & Lennox Head	P-404	DN300	317	Pre	1995/96	\$ 62,700	12,669	\$ 5	2033/34	39	1.49	2.33	\$ 7
Existing - Ballina & Lennox Head	P-406	DN300	340	Pre	1995/96	\$ 67,400	12,669	\$ 5	2033/34	39	1.49	2.33	\$ 8
Existing - Ballina & Lennox Head	P-407	DN300	475	Pre	1995/96	\$ 94,000	12,669	\$ 7	2033/34	39	1.49	2.33	\$ 11
Existing - Ballina & Lennox Head	P-422	DN225	1362	Pre	1995/96	\$ 206,300	12,669	\$ 16	2033/34	39	1.49	2.33	\$ 24
Existing - Ballina & Lennox Head	P-423	DN225	477	Pre	1995/96	\$ 72,300	12,669	\$ 6	2033/34	39	1.49	2.33	\$ 8
Existing - Ballina & Lennox Head	P-43	DN200	73	Pre	1995/96	\$ 10,200	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 1
Existing - Ballina & Lennox Head	P-46	DN200	181	Pre	1995/96	\$ 25,300	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 3
Existing - Ballina & Lennox Head	P-47	DN200	319	Pre	1995/96	\$ 44,600	12,669	\$ 4	2033/34	39	1.49	2.33	\$ 5
Existing - Ballina & Lennox Head	P-48	DN200	571	Pre	1995/96	\$ 79,900	12,669	\$ 6	2033/34	39	1.49	2.33	\$ 9
Existing - Ballina & Lennox Head	P-527	DN200	201	Pre	1995/96	\$ 28,100	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 3
Existing - Ballina & Lennox Head	P-538	DN200	387	Pre	1995/96	\$ 54,200	12,669	\$ 4	2033/34	39	1.49	2.33	\$ 6
Existing - Ballina & Lennox Head	P-539	DN200	1102	Pre	1995/96	\$ 154,200	12,669	\$ 12	2033/34	39	1.49	2.33	\$ 18
Existing - Ballina & Lennox Head	P-540	DN200	70	Pre	1995/96	\$ 9,800	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 1
Existing - Ballina & Lennox Head	P-551	DN300	141	Pre	1995/96	\$ 27,900	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 3
Existing - Ballina & Lennox Head	P-573	DN300	499	Pre	1995/96	\$ 98,900	12,669	\$ 8	2033/34	39	1.49	2.33	\$ 12
Existing - Ballina & Lennox Head	P-574	DN300	820	Pre	1995/96	\$ 162,400	12,669	\$ 13	2033/34	39	1.49	2.33	\$ 19
Existing - Ballina & Lennox Head	P-575	DN300	8	Pre	1995/96	\$ 1,600	12,669	\$ 0	2033/34	39	1.49	2.33	\$ 0
Existing - Ballina & Lennox Head	P-578	DN300	20	Pre	1995/96	\$ 4,000	12,669	\$ 0	2033/34	39	1.49	2.33	\$ 0
Existing - Ballina & Lennox Head	P-58	DN300	453	Pre	1995/96	\$ 89,700	12,669	\$ 7	2033/34	39	1.49	2.33	\$ 11
Existing - Ballina & Lennox Head	P-595	DN200	334	Pre	1995/96	\$ 46,800	12,669	\$ 4	2033/34	39	1.49	2.33	\$ 5
Existing - Ballina & Lennox Head	P-596	DN200	467	Pre	1995/96	\$ 65,400	12,669	\$ 5	2033/34	39	1.49	2.33	\$ 8
Existing - Ballina & Lennox Head	P-599	DN200	48	Pre	1995/96	\$ 6,700	12,669	\$ 1	2033/34	39	1.49	2.33	\$ 1
Existing - Ballina & Lennox Head	P-600	DN200	579	Pre	1995/96	\$ 81,100	12,669	\$ 6	2033/34	39	1.49	2.33	\$ 10
Existing - Ballina & Lennox Head	P-71	DN200	1147	Pre	1995/96	\$ 160,600	14,699	\$ 11	2033/34	39	1.49	2.33	\$ 16
Existing - Ballina & Lennox Head	P-72	DN200	294	Pre	1995/96	\$ 41,200	14,699	\$ 3	2033/34	39	1.49	2.33	\$ 4
Existing - Ballina & Lennox Head	P-73	DN300	584	Pre	1995/96	\$ 115,600	14,699	\$ 8	2033/34	39	1.49	2.33	\$ 12
Existing - Ballina & Lennox Head	P-74	DN300	915	Pre	1995/96	\$ 181,200	14,699	\$ 12	2033/34	39	1.49	2.33	\$ 18
Existing - Ballina & Lennox Head	P-75	DN300	467	Pre	1995/96	\$ 92,400	14,699	\$ 6	2033/34	39	1.49	2.33	\$ 9
Existing - Ballina & Lennox Head	P-76	DN300	500	Pre	1995/96	\$ 99,000	14,699	\$ 7	2033/34	39	1.49	2.33	\$ 10
Existing - Ballina & Lennox Head	P-13	DN300	1444	Pre	1995/96	\$ 285,800	14,699	\$ 19	2033/34	39	1.49	2.33	\$ 29
Existing - Ballina & Lennox Head	P-19	DN225	526	Pre	1995/96	\$ 79,700	14,699	\$ 5	2033/34	39	1.49	2.33	\$ 8
Existing - Ballina & Lennox Head	P-77	DN200	150	Pre	1995/96	\$ 21,000	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 2
Existing - Ballina & Lennox Head	P-89	DN300	127	Pre	1995/96	\$ 25,200	12,669	\$ 2	2033/34	39	1.49	2.33	\$ 3
Existing - Ballina & Lennox Head	P-56	DN300	1314	Pre	1995/96	\$ 260.100	12,669	\$ 21	2033/34	39	1.49	2.33	\$ 31
Existing - Ballina & Lennox Head	P-220	DN500	1808	Pre	1995/96	\$ 630,900	12,669	\$ 50	2033/34	39	1.49	2.33	\$ 74
Existing - Ballina & Lennox Head	P-59	DN200	627	Pre	1995/96	\$ 87,800	12,669	\$ 7	2033/34	39	1.49	2.33	\$ 10
													\$ 1,216
Existing - Alstonville & Wollongbar	P-255	DN200	4	Pre	1995/96	\$ 600	3,995	\$ 0	2033/34	39	1.31	1.72	\$ 0
Existing - Alstonville & Wollongbar	P-258	DN200	933	Pre	1995/96	\$ 130,600	3,995	\$ 33	2033/34	39	1.31	1.72	\$ 43
Existing - Alstonville & Wollongbar	P-256	DN200	22	Pre	1995/96	\$ 3,100	3,995	\$ 1	2033/34	39	1.31	1.72	\$ 1
Existing - Alstonville & Wollongbar	P-259	DN200	244	Pre	1995/96	\$ 34,100	3,995	\$ 9	2033/34	39	1.31	1.72	\$ 11
Existing - Alstonville & Wollongbar	P-257	DN200	8	Pre	1995/96	\$ 1,100	3,995	\$ 0	2033/34	39	1.31	1.72	\$ 0
Existing - Alstonville & Wollongbar	P-100	DN300	452	Pre	1995/96	\$ 89,400	2,934	\$ 30	2033/34	39	1.31	1.72	\$ 40
Existing - Alstonville & Wollongbar	P-101	DN200	107	Pre	1995/96	\$ 15,000	2,934	\$ 5	2033/34	39	1.31	1.72	\$ 7
Existing - Alstonville & Wollongbar	P-102	DN200	229	Pre	1995/96	\$ 32,100	2,934	\$ 11	2033/34	39	1.31	1.72	\$ 14
Existing - Alstonville & Wollongbar	P-103	DN200	482	Pre	1995/96	\$ 67,500	2,934	\$ 23	2033/34	39	1.31	1.72	\$ 30
Existing - Alstonville & Wollongbar	P-104	DN200	437	Pre	1995/96	\$ 61,200	2,934	\$ 21	2033/34	39	1.31	1.72	\$ 27
Existing - Alstonville & Wollongbar	P-105	DN200	183	Pre	1995/96	\$ 25,700	2,934	\$ 9	2033/34	39	1.31	1.72	\$ 11
Existing - Alstonville & Wollongbar	P-106	DN200	914	Pre	1995/96	\$ 128,000	2,934	\$ 44	2033/34	39	1.31	1.72	\$ 57
Existing - Alstonville & Wollongbar	P-108	DN300	278	Pre	1995/96	\$ 55,100	2,934	\$ 19	2033/34	39	1.31	1.72	\$ 25
Existing - Alstonville & Wollongbar	P-109	DN300	467	Pre	1995/96	\$ 92,400	2,934	\$ 31	2033/34	39	1.31	1.72	\$ 41
Existing - Alstonville & Wollongbar	P-111	DN200	94	Pre	1995/96	\$ 13,100	2,934	\$ 4	2033/34	39	1.31	1.72	\$ 6
Existing - Alstonville & Wollongbar	P-117	DN450	844	Pre	1995/96	\$ 265,100	2,934	\$ 90	2033/34	39	1.31	1.72	\$ 118
Existing - Alstonville & Wollongbar	P-118	DN300	835	Pre	1995/96	\$ 165,400	2,934	\$ 56	2033/34	39	1.31	1.72	\$ 74
Existing - Alstonville & Wollongbar	P-120	DN500	1204	Pre	1995/96	\$ 420,300	2,934	\$ 143	2033/34	39	1.31	1.72	\$ 188
Existing - Alstonville & Wollongbar	P-146	DN300	178	Pre	1995/96	\$ 35,200	2,934	\$ 12	2033/34	39	1.31	1.72	\$ 16
Existing - Alstonville & Wollongbar	P-149	DN525	1042	Pre	1995/96	\$ 457,500	2,934	\$ 156	2033/34	39	1.31	1.72	\$ 204

Existing - Alstonville & Wollongbar	P-202	DN525	107	Pre	1995/96	\$ 47,000	2,934	\$ 16	2033/34	39	1.31	1.72	\$ 21	\$ 1,599
Existing - Alstonville & Wollongbar	P-203	DN525	393	Pre	1995/96	\$ 172,500	2,934	\$ 59	2033/34	39	1.31	1.72	\$ 77	
Existing - Alstonville & Wollongbar	P-260	DN300	134	Pre	1995/96	\$ 26,500	2,934	\$ 9	2033/34	39	1.31	1.72	\$ 12	
Existing - Alstonville & Wollongbar	P-266	DN200	201	Pre	1995/96	\$ 28,200	2,934	\$ 10	2033/34	39	1.31	1.72	\$ 13	
Existing - Alstonville & Wollongbar	P-267	DN200	511	Pre	1995/96	\$ 71,600	2,934	\$ 24	2033/34	39	1.31	1.72	\$ 32	
Existing - Alstonville & Wollongbar	P-269	DN300	234	Pre	1995/96	\$ 46,300	2,934	\$ 16	2033/34	39	1.31	1.72	\$ 21	
Existing - Alstonville & Wollongbar	P-277	DN525	80	Pre	1995/96	\$ 35,100	2,934	\$ 12	2033/34	39	1.31	1.72	\$ 16	
Existing - Alstonville & Wollongbar	P-278	DN525	23	Pre	1995/96	\$ 9,900	2,934	\$ 3	2033/34	39	1.31	1.72	\$ 4	
Existing - Alstonville & Wollongbar	P-279	DN200	279	Pre	1995/96	\$ 39,100	2,934	\$ 13	2033/34	39	1.31	1.72	\$ 17	
Existing - Alstonville & Wollongbar	P-280	DN200	94	Pre	1995/96	\$ 13,100	2,934	\$ 4	2033/34	39	1.31	1.72	\$ 6	
Existing - Alstonville & Wollongbar	P-281	DN300	28	Pre	1995/96	\$ 5,600	2,934	\$ 2	2033/34	39	1.31	1.72	\$ 2	
Existing - Alstonville & Wollongbar	P-319	DN200	15	Pre	1995/96	\$ 2,100	2,934	\$ 1	2033/34	39	1.31	1.72	\$ 1	
Existing - Alstonville & Wollongbar	P-320	DN200	456	Pre	1995/96	\$ 63,900	2,934	\$ 22	2033/34	39	1.31	1.72	\$ 29	
Existing - Alstonville & Wollongbar	P-321	DN200	481	Pre	1995/96	\$ 67,300	2,934	\$ 23	2033/34	39	1.31	1.72	\$ 30	
Existing - Alstonville & Wollongbar	P-493	DN300	505	Pre	1995/96	\$ 99,900	2,934	\$ 34	2033/34	39	1.31	1.72	\$ 45	
Existing - Alstonville & Wollongbar	P-502	DN300	712	Pre	1995/96	\$ 140,900	2,934	\$ 48	2033/34	39	1.31	1.72	\$ 63	
Existing - Alstonville & Wollongbar	P-556	DN300	263	Pre	1995/96	\$ 52,100	2,934	\$ 18	2033/34	39	1.31	1.72	\$ 23	
Existing - Alstonville & Wollongbar	P-559	DN300	148	Pre	1995/96	\$ 29,400	2,934	\$ 10	2033/34	39	1.31	1.72	\$ 13	
Existing - Alstonville & Wollongbar	P-560	DN300	36	Pre	1995/96	\$ 7,100	2,934	\$ 2	2033/34	39	1.31	1.72	\$ 3	
Existing - Alstonville & Wollongbar	P-93	DN450	287	Pre	1995/96	\$ 90,100	2,934	\$ 31	2033/34	39	1.31	1.72	\$ 40	
Existing - Alstonville & Wollongbar	P-94	DN200	14	Pre	1995/96	\$ 2,000	2,934	\$ 1	2033/34	39	1.31	1.72	\$ 1	
Existing - Alstonville & Wollongbar	P-95	DN300	285	Pre	1995/96	\$ 56,400	2,934	\$ 19	2033/34	39	1.31	1.72	\$ 25	
Existing - Alstonville & Wollongbar	P-96	DN375	1554	Pre	1995/96	\$ 388,500	2,934	\$ 132	2033/34	39	1.31	1.72	\$ 173	
Existing - Alstonville & Wollongbar	P-99	DN300	208	Pre	1995/96	\$ 41,200	2,934	\$ 14	2033/34	39	1.31	1.72	\$ 18	
Existing - Wardell	P-133	DN200	2770	Pre	1995/96	\$ 387,800	587	\$ 661	2033/34	39	1.48	2.22	\$ 975	\$ 6,484
Existing - Wardell	P-134	DN200	25	Pre	1995/96	\$ 3,500	587	\$ 6	2033/34	39	1.48	2.22	\$ 9	
Existing - Wardell	P-136	DN200	18	Pre	1995/96	\$ 2,500	587	\$ 4	2033/34	39	1.48	2.22	\$ 6	
Existing - Wardell	P-137	DN150	1971	Pre	1995/96	\$ 216,800	587	\$ 369	2033/34	39	1.48	2.22	\$ 545	
Existing - Wardell	P-304	DN200	1372	Pre	1995/96	\$ 192,000	587	\$ 327	2033/34	39	1.48	2.22	\$ 483	
Existing - Wardell	P-306	DN200	6333	Pre	1995/96	\$ 886,600	587	\$ 1,510	2033/34	39	1.48	2.22	\$ 2,230	
Existing - Wardell	P-307	DN200	17	Pre	1995/96	\$ 2,400	587	\$ 4	2033/34	39	1.48	2.22	\$ 6	
Existing - Wardell	P-322	DN150	1130	Pre	1995/96	\$ 124,300	587	\$ 212	2033/34	39	1.48	2.22	\$ 313	
Existing - Wardell	P-323	DN200	1365	Pre	1995/96	\$ 191,100	587	\$ 326	2033/34	39	1.48	2.22	\$ 481	
Existing - Wardell	P-324	DN200	791	Pre	1995/96	\$ 110,700	587	\$ 189	2033/34	39	1.48	2.22	\$ 278	
Existing - Wardell	P-325	DN150	1417	Pre	1995/96	\$ 155,800	587	\$ 265	2033/34	39	1.48	2.22	\$ 392	
Existing - Wardell	P-326	DN200	25	Pre	1995/96	\$ 3,500	587	\$ 6	2033/34	39	1.48	2.22	\$ 9	
Existing - Wardell	P-327	DN200	25	Pre	1995/96	\$ 3,500	587	\$ 6	2033/34	39	1.48	2.22	\$ 9	
Existing - Wardell	P-332	DN150	1265	Pre	1995/96	\$ 139,200	587	\$ 237	2033/34	39	1.48	2.22	\$ 350	
Existing - Wardell	P-333	DN150	18	Pre	1995/96	\$ 2,000	587	\$ 3	2033/34	39	1.48	2.22	\$ 5	
Existing - Wardell	P-428	DN200	532	Pre	1995/96	\$ 74,500	587	\$ 127	2033/34	39	1.48	2.22	\$ 187	
Existing - Wardell	P-429	DN200	584	Pre	1995/96	\$ 81,700	587	\$ 139	2033/34	39	1.48	2.22	\$ 206	
Lennox - Release Area 2	P-369	DN500	9	Pre	1995/96	\$ 3,200	13,139	\$ 0	2033/34	39	1.61	2.71	\$ 0	\$ 1,083
Lennox - Release Area 2	P-370	DN500	1653	Pre	1995/96	\$ 576,800	14,699	\$ 39	2033/34	39	1.61	2.71	\$ 63	
Lennox - Release Area 2	P-194	DN500	1570	Pre	1995/96	\$ 548,000	14,699	\$ 37	2033/34	39	1.61	2.71	\$ 60	
Lennox - Release Area 2	P-338	DN500	13	Pre	1995/96	\$ 4,700	13,139	\$ 0	2033/34	39	1.61	2.71	\$ 1	
Lennox - Release Area 2	P-364	DN500	221	Pre	1995/96	\$ 77,100	16,392	\$ 5	2033/34	39	1.61	2.71	\$ 8	
Lennox - Release Area 2	P-289	DN450	928	Pre	1995/96	\$ 291,300	16,392	\$ 18	2033/34	39	1.61	2.71	\$ 29	
Lennox - Release Area 2	P-365	DN500	31	Pre	1995/96	\$ 10,700	16,392	\$ 1	2033/34	39	1.61	2.71	\$ 1	
Lennox - Release Area 2	P-32	DN450	984	Pre	1995/96	\$ 309,000	16,392	\$ 19	2033/34	39	1.61	2.71	\$ 30	
Lennox - Release Area 2	P-191	DN450	2011	Pre	1995/96	\$ 631,400	16,392	\$ 39	2033/34	39	1.61	2.71	\$ 62	
Lennox - Release Area 2	P-288	DN450	1496	Pre	1995/96	\$ 469,600	16,392	\$ 29	2033/34	39	1.61	2.71	\$ 46	
Lennox - Release Area 2	P-52	DN375	780	Pre	1995/96	\$ 195,000	470	\$ 415	2033/34	39	1.61	2.71	\$ 668	
Lennox - Release Area 2	P-53	DN200	185	Pre	1995/96	\$ 25,900	470	\$ 55	2033/34	39	1.61	2.71	\$ 89	
Lennox - Release Area 2	P-81	DN300	40	Pre	1995/96	\$ 7,900	470	\$ 17	2033/34	39	1.61	2.71	\$ 27	
Lennox - Release Area 1	P-342	DN450	97	Pre	1995/96	\$ 30,400	14,362	\$ 2	2033/34	39	1.26	1.62	\$ 3	
Lennox - Release Area 1	P-508	DN450	195	Pre	1995/96	\$ 61,300	14,362	\$ 4	2033/34	39	1.26	1.62	\$ 5	
Lennox - Release Area 1	P-362	DN450	4	Pre	1995/96	\$ 1,300	14,362	\$ 0	2033/34	39	1.26	1.62	\$ 0	
Lennox - Release Area 1	P-44	DN450	66	Pre	1995/96	\$ 20,900	14,362	\$ 1	2033/34	39	1.26	1.62	\$ 2	
Lennox - Release Area 1	P-343	DN450	14	Pre	1995/96	\$ 4,300	14,362	\$ 0	2033/34	39	1.26	1.62	\$ 0	
Lennox - Release Area 1	P-509	DN450	430	Pre	1995/96	\$ 135,000	14,362	\$ 9	2033/34	39	1.26	1.62	\$ 12	
Lennox - Release Area 1	P-363	DN450	5	Pre	1995/96	\$ 1,500	14,362	\$ 0	2033/34	39	1.26	1.62	\$ 0	
Lennox - Release Area 1	P-341	DN450	8	Pre	1995/96	\$ 2,500	14,362	\$ 0	2033/34	39	1.26	1.62	\$ 0	
Lennox - Release Area 1	P-364	DN500	221	Pre	1995/96	\$ 77,100	16,392	\$ 5	2033/34	39	1.26	1.62	\$ 6	
Lennox - Release Area 1	P-289	DN450	928	Pre	1995/96	\$ 291,300	16,392	\$ 18	2033/34	39	1.26	1.62	\$ 22	
Lennox - Release Area 1	P-365	DN500	31	Pre	1995/96	\$ 10,700	16,392	\$ 1	2033/34	39	1.26	1.62	\$ 1	
Lennox - Release Area 1	P-32	DN450	984	Pre	1995/96	\$ 309,000	16,392	\$ 19	2033/34	39	1.26	1.62	\$ 24	
Lennox - Release Area 1	P-191	DN450	2011	Pre	1995/96	\$ 631,400	16,392	\$ 39	2033/34	39	1.26	1.62	\$ 49	
Lennox - Release Area 1	P-288	DN450	1496	Pre	1995/96	\$ 469,600	16,392	\$ 29	2033/34	39	1.26	1.62	\$ 36	
Lennox - Release Area 1	P-364	DN500	221	Pre	1995/96	\$ 77,100	16,392	\$ 5	2033/34	39	1.26	1.62	\$ 6	
Lennox - Release Area 1	P-289	DN450	928	Pre	1995/96	\$ 291,300	16,392	\$ 18	2033/34	39	1.26	1.62	\$ 22	

Lennox - Release Area 1	P-365	DN500	31	Pre	1995/96	\$ 10,700	16,392	\$ 1	2033/34	39	1.26	1.62	\$ 1
Lennox - Release Area 1	P-32	DN450	984	Pre	1995/96	\$ 309,000	16,392	\$ 19	2033/34	39	1.26	1.62	\$ 24
Lennox - Release Area 1	P-191	DN450	2011	Pre	1995/96	\$ 631,400	16,392	\$ 39	2033/34	39	1.26	1.62	\$ 49
Lennox - Release Area 1	P-288	DN450	1496	Pre	1995/96	\$ 469,600	16,392	\$ 29	2033/34	39	1.26	1.62	\$ 36
Lennox - Release Area 1	P-141	DN200	25	Pre	1995/96	\$ 3,500	1,693	\$ 2	2033/34	39	1.26	1.62	\$ 3
Lennox - Release Area 1	P-290	DN200	720	Pre	1995/96	\$ 100,700	1,693	\$ 59	2033/34	39	1.26	1.62	\$ 75
Lennox - Release Area 1	P-291	DN200	518	Pre	1995/96	\$ 72,500	1,693	\$ 43	2033/34	39	1.26	1.62	\$ 54
Lennox - Release Area 1	P-292	DN200	82	Pre	1995/96	\$ 11,500	1,693	\$ 7	2033/34	39	1.26	1.62	\$ 9
													\$ 438
Ballina - Release Area 1	P-543	DN300	22	Pre	1995/96	\$ 4,400	14,229	\$ 0	2033/34	39	1.21	1.48	\$ 0
Ballina - Release Area 1	P-336	DN300	16	Pre	1995/96	\$ 3,200	14,229	\$ 0	2033/34	39	1.21	1.48	\$ 0
Ballina - Release Area 1	P-544	DN300	669	Pre	1995/96	\$ 132,400	14,229	\$ 9	2033/34	39	1.21	1.48	\$ 11
Ballina - Release Area 1	P-302	DN300	284	Pre	1995/96	\$ 56,300	14,229	\$ 4	2033/34	39	1.21	1.48	\$ 5
Ballina - Release Area 1	P-21	DN300	1260	Pre	1995/96	\$ 249,600	14,229	\$ 18	2033/34	39	1.21	1.48	\$ 21
Ballina - Release Area 1	P-54	DN300	876	Pre	1995/96	\$ 173,500	14,229	\$ 12	2033/34	39	1.21	1.48	\$ 15
Ballina - Release Area 1	P-68	DN300	189	Pre	1995/96	\$ 37,400	14,229	\$ 3	2033/34	39	1.21	1.48	\$ 3
Ballina - Release Area 1	P-396	DN375	489	Pre	1995/96	\$ 122,200	14,229	\$ 9	2033/34	39	1.21	1.48	\$ 10
Ballina - Release Area 1	P-87	DN500	49	Pre	1995/96	\$ 17,200	14,229	\$ 1	2033/34	39	1.21	1.48	\$ 1
Ballina - Release Area 1	P-83	DN250	268	Pre	1995/96	\$ 43,600	14,229	\$ 3	2033/34	39	1.21	1.48	\$ 4
Ballina - Release Area 1	P-11	DN300	642	Pre	1995/96	\$ 127,100	14,229	\$ 9	2033/34	39	1.21	1.48	\$ 11
Ballina - Release Area 1	P-552	DN450	19	Pre	1995/96	\$ 6,100	14,229	\$ 0	2033/34	39	1.21	1.48	\$ 1
Ballina - Release Area 1	P-85	DN375	186	Pre	1995/96	\$ 46,400	14,229	\$ 3	2033/34	39	1.21	1.48	\$ 4
Ballina - Release Area 1	P-550	DN300	215	Pre	1995/96	\$ 42,500	14,229	\$ 3	2033/34	39	1.21	1.48	\$ 4
Ballina - Release Area 1	P-65	DN300	92	Pre	1995/96	\$ 18,300	14,229	\$ 1	2033/34	39	1.21	1.48	\$ 2
Ballina - Release Area 1	P-66	DN300	20	Pre	1995/96	\$ 3,900	14,229	\$ 0	2033/34	39	1.21	1.48	\$ 0
Ballina - Release Area 1	P-397	DN375	158	Pre	1995/96	\$ 39,500	14,229	\$ 3	2033/34	39	1.21	1.48	\$ 3
Ballina - Release Area 1	P-12	DN300	1074	Pre	1995/96	\$ 212,600	14,229	\$ 15	2033/34	39	1.21	1.48	\$ 18
Ballina - Release Area 1	P-399	DN300	431	Pre	1995/96	\$ 85,400	14,229	\$ 6	2033/34	39	1.21	1.48	\$ 7
Ballina - Release Area 1	P-67	DN300	220	Pre	1995/96	\$ 43,500	14,229	\$ 3	2033/34	39	1.21	1.48	\$ 4
Ballina - Release Area 1	P-86	DN600	24	Pre	1995/96	\$ 12,800	14,229	\$ 1	2033/34	39	1.21	1.48	\$ 1
Ballina - Release Area 1	P-28	DN375	503	Pre	1995/96	\$ 125,800	14,229	\$ 9	2033/34	39	1.21	1.48	\$ 11
Ballina - Release Area 1	P-69	DN300	128	Pre	1995/96	\$ 25,400	14,229	\$ 2	2033/34	39	1.21	1.48	\$ 2
Ballina - Release Area 1	P-10	DN300	404	Pre	1995/96	\$ 80,000	14,229	\$ 6	2033/34	39	1.21	1.48	\$ 7
Ballina - Release Area 1	P-51	DN500	693	Pre	1995/96	\$ 241,700	14,229	\$ 17	2033/34	39	1.21	1.48	\$ 21
Ballina - Release Area 1	P-88	DN300	628	Pre	1995/96	\$ 124,300	14,229	\$ 9	2033/34	39	1.21	1.48	\$ 11
Ballina - Release Area 1	P-70	DN300	49	Pre	1995/96	\$ 9,700	14,229	\$ 1	2033/34	39	1.21	1.48	\$ 1
Ballina - Release Area 1	P-84	DN300	256	Pre	1995/96	\$ 50,800	14,229	\$ 4	2033/34	39	1.21	1.48	\$ 4
Ballina - Release Area 1	P-221	DN500	249	Pre	1995/96	\$ 87,100	14,229	\$ 6	2033/34	39	1.21	1.48	\$ 7
Ballina - Release Area 1	P-572	DN500	299	Pre	1995/96	\$ 104,300	14,229	\$ 7	2033/34	39	1.21	1.48	\$ 9
Ballina - Release Area 1	P-576	DN500	707	Pre	1995/96	\$ 246,600	14,229	\$ 17	2033/34	39	1.21	1.48	\$ 21
Ballina - Release Area 1	P-577	DN500	817	Pre	1995/96	\$ 285,200	14,229	\$ 20	2033/34	39	1.21	1.48	\$ 24
Ballina - Release Area 1	P-364	DN500	221	Pre	1995/96	\$ 77,100	16,392	\$ 5	2033/34	39	1.21	1.48	\$ 6
Ballina - Release Area 1	P-289	DN450	928	Pre	1995/96	\$ 291,300	16,392	\$ 18	2033/34	39	1.21	1.48	\$ 21
Ballina - Release Area 1	P-365	DN500	31	Pre	1995/96	\$ 10,700	16,392	\$ 1	2033/34	39	1.21	1.48	\$ 1
Ballina - Release Area 1	P-32	DN450	984	Pre	1995/96	\$ 309,000	16,392	\$ 19	2033/34	39	1.21	1.48	\$ 23
Ballina - Release Area 1	P-191	DN450	2011	Pre	1995/96	\$ 631,400	16,392	\$ 39	2033/34	39	1.21	1.48	\$ 46
Ballina - Release Area 1	P-288	DN450	1496	Pre	1995/96	\$ 469,600	16,392	\$ 29	2033/34	39	1.21	1.48	\$ 35
Ballina - Release Area 1	P-7	DN200	500	Pre	1995/96	\$ 70,000	1,560	\$ 45	2033/34	39	1.21	1.48	\$ 54
Ballina - Release Area 1	P-8	DN200	450	Pre	1995/96	\$ 63,000	1,560	\$ 40	2033/34	39	1.21	1.48	\$ 49
Ballina - Release Area 1	P-9	DN200	505	Pre	1995/96	\$ 70,700	1,560	\$ 45	2033/34	39	1.21	1.48	\$ 55
Ballina - Release Area 1	P-220	DN500	1808	Pre	1995/96	\$ 630,900	14,229	\$ 44	2033/34	39	1.21	1.48	\$ 54
Ballina - Release Area 1	P-370	DN500	1653	Pre	1995/96	\$ 576,800	14,699	\$ 39	2033/34	39	1.21	1.48	\$ 47
Ballina - Release Area 1	P-194	DN500	1570	Pre	1995/96	\$ 548,000	14,699	\$ 37	2033/34	39	1.21	1.48	\$ 45
Ballina - Release Area 1	P-71	DN200	1147	Pre	1995/96	\$ 160,600	14,699	\$ 11	2033/34	39	1.21	1.48	\$ 13
Ballina - Release Area 1	P-72	DN200	294	Pre	1995/96	\$ 41,200	14,699	\$ 3	2033/34	39	1.21	1.48	\$ 3
Ballina - Release Area 1	P-73	DN300	584	Pre	1995/96	\$ 115,600	14,699	\$ 8	2033/34	39	1.21	1.48	\$ 9
Ballina - Release Area 1	P-74	DN300	915	Pre	1995/96	\$ 181,200	14,699	\$ 12	2033/34	39	1.21	1.48	\$ 15
Ballina - Release Area 1	P-75	DN300	467	Pre	1995/96	\$ 92,400	14,699	\$ 6	2033/34	39	1.21	1.48	\$ 8
Ballina - Release Area 1	P-76	DN300	500	Pre	1995/96	\$ 99,000	14,699	\$ 7	2033/34	39	1.21	1.48	\$ 8
Ballina - Release Area 1	P-13	DN300	1444	Pre	1995/96	\$ 285,800	14,699	\$ 19	2033/34	39	1.21	1.48	\$ 23
Ballina - Release Area 1	P-19	DN225	526	Pre	1995/96	\$ 79,700	14,699	\$ 5	2033/34	39	1.21	1.48	\$ 7
													\$ 765
Alstonville - Release Area 1 (Wollongbar Expansion)	P-255	DN200	4	Pre	1995/96	\$ 600	3,995	\$ 0	2033/34	39	1.32	1.77	\$ 0
Alstonville - Release Area 1 (Wollongbar Expansion)	P-258	DN200	933	Pre	1995/96	\$ 130,600	3,995	\$ 33	2033/34	39	1.32	1.77	\$ 43
Alstonville - Release Area 1 (Wollongbar Expansion)	P-256	DN200	22	Pre	1995/96	\$ 3,100	3,995	\$ 1	2033/34	39	1.32	1.77	\$ 1
Alstonville - Release Area 1 (Wollongbar Expansion)	P-259	DN200	244	Pre	1995/96	\$ 34,100	3,995	\$ 9	2033/34	39	1.32	1.77	\$ 11
Alstonville - Release Area 1 (Wollongbar Expansion)	P-257	DN200	8	Pre	1995/96	\$ 1,100	3,995	\$ 0	2033/34	39	1.32	1.77	\$ 0
													\$ 56

Future Reservoirs
Base Year

2003/04

DSP Area	Component Reservoir	Works Code	Size	Units	Year of Construction	Total Service ETs	New Service ETs	NPV of New Service ETs	Capital Cost	Effective Capital Cost	NPV of Capital Cost (@ 7%)	Capital Charge per ET	Total Charges
Ballina - Release Area 2 (Cumbalum)	Ballina Heights Reservoir - Stage 1	WR-01	4.00	ML	2003/04	2,460	2,460	1,089	\$ 50,000	\$ 50,000	\$ 50,000	\$ 46	
Ballina - Release Area 2 (Cumbalum)	Ballina Heights Reservoir - Stage 2	WR-01	4.00	ML	2004/05	2,460	2,460	1,089	\$ 300,000	\$ 300,000	\$ 280,374	\$ 258	
Ballina - Release Area 2 (Cumbalum)	Ballina Heights Reservoir - Stage 3	WR-01	4.00	ML	2005/06	2,460	2,460	1,089	\$ 300,000	\$ 300,000	\$ 262,032	\$ 241	
Ballina - Release Area 2 (Cumbalum)	Ballina Heights Reservoir - Stage 4	WR-01	4.00	ML	2006/07	2,460	2,460	1,089	\$ 270,000	\$ 270,000	\$ 220,400	\$ 202	
Ballina - Release Area 2 (Cumbalum)	Ross Lane Reservoir	WR-02	2.00	ML	2025/26	2,460	2,460	1,089	\$ 630,000	\$ 630,000	\$ 142,199	\$ 131	\$ 877
Lennox - Release Area 1	Pacific Pines Reservoir - Stage 1	WR-03	6.00	ML	2005/06	1,693	1,693	1,045	\$ 50,000	\$ 50,000	\$ 43,672	\$ 42	
Lennox - Release Area 1	Pacific Pines Reservoir - Stage 2	WR-03	6.00	ML	2006/07	1,693	1,693	1,045	\$ 300,000	\$ 300,000	\$ 244,889	\$ 234	
Lennox - Release Area 1	Pacific Pines Reservoir - Stage 3	WR-03	6.00	ML	2007/08	1,693	1,693	1,045	\$ 300,000	\$ 300,000	\$ 228,869	\$ 219	
Lennox - Release Area 1	Pacific Pines Reservoir - Stage 4	WR-03	6.00	ML	2008/09	1,693	1,693	1,045	\$ 600,000	\$ 600,000	\$ 427,792	\$ 409	
Lennox - Release Area 1	Pacific Pines Reservoir - Stage 5	WR-03	6.00	ML	2009/10	1,693	1,693	1,045	\$ 290,000	\$ 290,000	\$ 193,239	\$ 185	\$ 1,089
Total									\$ 3,090,000		\$ 2,093,466		

Future Pumps
Base Year

2003/04

DSP Area	Component Pump Station	Works Code	Size	Units	Year of Construction	Total Service ETs	New Service ETs	NPV of New Service ETs	Capital Cost	Effective Capital Cost	NPV of Capital Cost (@ 7%)	Capital Charge per ET	Total Charges	Comments
Existing - Ballina & Lennox Head	East Ballina HLZ Booster	WP-10	16	kW	2005/06	12,669	2,609	1,119	\$ 120,000	\$ 24,712	\$ 21,585	\$ 19		
Existing - Ballina & Lennox Head	North Lennox HLZ Booster	WP-08	6	kW	2008/09	12,669	2,609	1,119	\$ 70,000	\$ 14,416	\$ 10,278	\$ 9		
Existing - Ballina & Lennox Head	Basalt Court Booster Upgrade	WP-02	13	kW	2009/10	12,669	2,609	1,119	\$ 110,000	\$ 22,653	\$ 15,095	\$ 13		
Existing - Ballina & Lennox Head	North Creek Road Booster	WP-01	44	kW	2011/12	16,392	5,856	3,070	\$ 350,000	\$ 125,037	\$ 72,772	\$ 24	\$ 66	Shared amongst DSPs
Existing - Alstonville & Wollongbar	Russellton HLZ Booster	WP-06	3	kW	2007/08	2,934	260	151	\$ 60,000	\$ 5,317	\$ 4,056	\$ 27	\$ 27	
Lennox - Release Area 2	Angels Beach HLZ Booster	WP-07	5	kW	2007/08	470	470	173	\$ 65,000	\$ 65,000	\$ 49,588	\$ 286		
Lennox - Release Area 2	North Creek Road Booster	WP-01	44	kW	2011/12	16,392	5,856	3,070	\$ 350,000	\$ 125,037	\$ 72,772	\$ 24	\$ 310	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Ballina Heights HLZ Booster	WP-05	4	kW	2004/05	2,460	2,460	1,089	\$ 70,000	\$ 70,000	\$ 65,421	\$ 60		
Ballina - Release Area 2 (Cumbalum)	Ross Lane HLZ Booster	WP-09	2	kW	2025/26	2,460	2,460	1,089	\$ 60,000	\$ 60,000	\$ 13,543	\$ 12	\$ 73	
Lennox - Release Area 1	Pacific Pines HLZ Booster	WP-03	13	kW	2010/11	1,693	1,693	1,045	\$ 110,000	\$ 110,000	\$ 68,502	\$ 66		
Lennox - Release Area 1	North Creek Road Booster	WP-01	44	kW	2011/12	16,392	5,856	3,070	\$ 350,000	\$ 125,037	\$ 72,772	\$ 24	\$ 89	Shared amongst DSPs
Ballina - Release Area 1	North Creek Road Booster	WP-01	44	kW	2011/12	16,392	5,856	3,070	\$ 350,000	\$ 125,037	\$ 72,772	\$ 24	\$ 24	Shared amongst DSPs

Future Pipes and Miscellaneous Items
Base Year

Year	DSP Area	Component Trunk Pipe	Works Code	Size	Units	Year of Construction	Total Service ETs	New Service ETS	NPV of New Service ETs	Capital Cost	Effective Capital Cost	NPV of Capital Cost (@ 7%)	Capital Charge per ET	Total Charges	Comments
	Existing - Ballina & Lennox Head	Ballina System - Laneway Mains DN100	WZ-01	DN100	mm	2005/06	12,669	2,609	1,119	\$ 350,000	\$ 72,078	\$ 62,955	\$ 56		
	Existing - Ballina & Lennox Head	Ballina System - Laneway Mains DN150	WZ-02	DN150	mm	2005/06	12,669	2,609	1,119	\$ 200,000	\$ 41,187	\$ 35,974	\$ 32		
	Existing - Ballina & Lennox Head	Lennox Head System - Laneway Mains DN100	WZ-03	DN100	mm	2005/06	12,669	2,609	1,119	\$ 130,000	\$ 26,772	\$ 23,383	\$ 21		
	Existing - Ballina & Lennox Head	Lennox Head System - Laneway Mains DN150	WZ-04	DN150	mm	2005/06	12,669	2,609	1,119	\$ 60,000	\$ 12,356	\$ 10,792	\$ 10		
	Existing - Ballina & Lennox Head	Basalt Court - Distribution Main Upgrade	WD-43	DN200	mm	2005/06	12,669	2,609	1,119	\$ 40,000	\$ 8,237	\$ 7,195	\$ 6		
	Existing - Ballina & Lennox Head	Basalt Court - Pressure Zone Distribution - Area 1	WD-10	DN200	mm	2006/07	12,669	2,609	1,119	\$ 40,000	\$ 8,237	\$ 6,724	\$ 6		
	Existing - Ballina & Lennox Head	Ballina Island - Pressure Zone Distribution - Augmentation for Coastal Growth	WD-22	DN375	mm	2008/09	12,669	2,609	1,119	\$ 150,000	\$ 30,890	\$ 22,024	\$ 20		
	Existing - Ballina & Lennox Head	Ballina Island - Pressure Zone Distribution - Augmentation for Coastal Growth	WD-35	DN300	mm	2010/11	12,669	2,609	1,119	\$ 280,000	\$ 57,662	\$ 35,909	\$ 32		
	Existing - Ballina & Lennox Head	East Ballina - Distribution Main Upgrade	WD-32	DN450	mm	2012/13	12,669	2,609	1,119	\$ 190,000	\$ 39,128	\$ 21,283	\$ 19		
	Existing - Ballina & Lennox Head	East Ballina - HLZ Distribution	WD-31	DN250	mm	2013/14	12,669	2,609	1,119	\$ 70,000	\$ 14,416	\$ 7,328	\$ 7		
	Existing - Ballina & Lennox Head	East Ballina - HLZ Distribution	WD-41	DN200	mm	2014/15	12,669	2,609	1,119	\$ 60,000	\$ 12,356	\$ 5,870	\$ 5		
	Existing - Ballina & Lennox Head	East Ballina - Reticulation Duplication for Rezoning to HLZ	WD-42	DN250	mm	2015/16	12,669	2,609	1,119	\$ 150,000	\$ 30,890	\$ 13,716	\$ 12		
	Existing - Ballina & Lennox Head	Lennox Head - Distribution Main Upgrade	WD-26	DN300	mm	2010/11	12,669	2,609	1,119	\$ 240,000	\$ 49,425	\$ 30,779	\$ 28		
	Existing - Ballina & Lennox Head	Lennox Head - Distribution Main Upgrade	WD-27	DN200	mm	2011/12	12,669	2,609	1,119	\$ 60,000	\$ 12,356	\$ 7,191	\$ 6		
	Existing - Ballina & Lennox Head	West Ballina - Pressure Zone Distribution - Area 1	WM-06	DN300	mm	2011/12	12,669	2,609	1,119	\$ 40,000	\$ 8,237	\$ 4,794	\$ 4		
	Existing - Ballina & Lennox Head	North Ballina - New Highway main	WM-07	DN300	mm	2014/15	12,669	2,609	1,119	\$ 570,000	\$ 117,383	\$ 55,768	\$ 50		
	Existing - Ballina & Lennox Head	West Ballina - Pressure Zone Distribution - Area 2	WD-15	DN200	mm	2016/17	12,669	2,609	1,119	\$ 70,000	\$ 14,416	\$ 5,982	\$ 5		
	Existing - Ballina & Lennox Head	Ballina Island - Main parallel to Missingham Bridge	WD-23	DN500	mm	2010/11	14,229	3,693	1,851	\$ 130,000	\$ 33,740	\$ 21,012	\$ 11		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina Island - Thrust boring parallel to Missingham Bridge	WD-23	DN500	mm	2011/12	14,229	3,693	1,851	\$ 380,000	\$ 98,625	\$ 57,401	\$ 31		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina Island - Pressure Zone Distribution - Augmentation for Coastal Growth	WD-33	DN450	mm	2009/10	14,229	3,693	1,851	\$ 160,000	\$ 41,526	\$ 27,671	\$ 15		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina Island - Pressure Zone Distribution - Augmentation to North Ballina	WD-34	DN250	mm	2011/12	14,229	3,693	1,851	\$ 210,000	\$ 54,503	\$ 31,722	\$ 17		Shared amongst DSPs
	Existing - Ballina & Lennox Head	North Ballina - Distribution Main Fishery Ck Canal Crossing	WD-36	DN300	mm	2010/11	14,229	3,693	1,851	\$ 130,000	\$ 33,740	\$ 21,012	\$ 11		Shared amongst DSPs
	Existing - Ballina & Lennox Head	North Ballina - Distribution Main Upgrade	WD-36	DN300	mm	2010/11	14,229	3,693	1,851	\$ 140,000	\$ 36,336	\$ 22,628	\$ 12		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina Island - Pressure Zone Distribution - Augmentation to North Ballina	WD-44	DN300	mm	2012/13	14,229	3,693	1,851	\$ 120,000	\$ 31,145	\$ 16,941	\$ 9		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina Heights - Reservoir Supply Main - Stage 1	WM-01	DN300	mm	2008/09	18,852	8,316	4,159	\$ 100,000	\$ 44,112	\$ 31,451	\$ 8		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina Heights - Reservoir Supply Main - Stage 2	WM-01	DN300	mm	2009/10	18,852	8,316	4,159	\$ 500,000	\$ 220,560	\$ 146,969	\$ 35		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina Heights - Reservoir Supply Main - Stage 3	WM-01	DN300	mm	2010/11	18,852	8,316	4,159	\$ 390,000	\$ 172,037	\$ 107,136	\$ 26		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 1	WM-02	DN450	mm	2012/13	18,852	8,316	4,159	\$ 60,000	\$ 26,467	\$ 14,396	\$ 3		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 2	WM-02	DN450	mm	2013/14	18,852	8,316	4,159	\$ 250,000	\$ 110,280	\$ 56,061	\$ 13		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 3	WM-02	DN450	mm	2014/15	18,852	8,316	4,159	\$ 160,000	\$ 70,579	\$ 33,532	\$ 8		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Ballina System - Replacement of DN200 Ross Lane	WM-03	DN450	mm	2008/09	18,852	8,316	4,159	\$ 1,160,000	\$ 511,700	\$ 364,835	\$ 88		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Miscellaneous Plant Replacement	M-01	NA	-	2013/14	23,434	9,465	4,796	\$ 1,500,000	\$ 605,850	\$ 307,984	\$ 64		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Miscellaneous Water Main Replacement	M-02	NA	-	2003/04	23,434	9,465	4,796	\$ 300,000	\$ 121,170	\$ 121,170	\$ 25		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Install Miscel Mag Flow Meters	M-03	NA	-	2003/04	23,434	9,465	4,796	\$ 20,000	\$ 8,078	\$ 8,078	\$ 2		Shared amongst DSPs
	Existing - Ballina & Lennox Head	GIS Water Supply Layer	M-06	NA	-	2003/04	23,434	9,465	4,796	\$ 50,000	\$ 20,195	\$ 20,195	\$ 4		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Bulk Water Station Renewals	M-07	NA	-	2003/04	23,434	9,465	4,796	\$ 50,000	\$ 20,195	\$ 20,195	\$ 4		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Marom Crk WTP Catchment Plan	M-08	NA	-	2003/04	23,434	9,465	4,796	\$ 40,000	\$ 16,156	\$ 16,156	\$ 3		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Miscellaneous Telemetry Installation	M-09	NA	-	2003/04	23,434	9,465	4,796	\$ 50,000	\$ 20,195	\$ 20,195	\$ 4		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Marom Crk WTP switchboard	M-13	NA	-	2003/04	23,434	9,465	4,796	\$ 60,000	\$ 24,234	\$ 24,234	\$ 5		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Water Main Renewals	M-14	NA	-	2019/20	23,434	9,465	4,796	\$ 4,800,000	\$ 1,938,722	\$ 656,712	\$ 137		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Meter Replacement Programme	M-15	NA	-	2005/06	23,434	9,465	4,796	\$ 300,000	\$ 121,170	\$ 105,835	\$ 22		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Security Fence Pine Ave Reservoir	M-04	NA	-	2003/04	14,699	4,163	2,025	\$ 25,000	\$ 7,080	\$ 7,080	\$ 3		Shared amongst DSPs
	Existing - Ballina & Lennox Head	East Ballina Reservoir Internal Painting	M-05	NA	-	2003/04	14,699	4,163	2,025	\$ 160,000	\$ 45,315	\$ 45,315	\$ 22		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Pine Avenue Reservoir Mixer	M-10	NA	-	2003/04	14,699	4,163	2,025	\$ 20,000	\$ 5,664	\$ 5,664	\$ 3		Shared amongst DSPs
	Existing - Ballina & Lennox Head	East Ballina Reservoir Mixer	M-11	NA	-	2003/04	14,699	4,163	2,025	\$ 10,000	\$ 2,832	\$ 2,832	\$ 1		Shared amongst DSPs
	Existing - Ballina & Lennox Head	Lennox Meadows Trunk Main	M-12	-	-	2003/04	14,832	4,772	2,337	\$ 120,000	\$ 38,608	\$ 38,608	\$ 17		Shared amongst DSPs
	Existing - Ballina & Lennox Head	P-155	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 40,500	\$ 17,865	\$ 16,697	\$ 4		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-172	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 83,800	\$ 36,966	\$ 34,548	\$ 8		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-173	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 729,800	\$ 321,930	\$ 300,869	\$ 72		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-176	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 227,200	\$ 100,223	\$ 93,666	\$ 23		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-179	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 303,300	\$ 133,792	\$ 125,039	\$ 30		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-2	PR-1	DN200	mm	2004/05	18,852	8,316	4,159	\$ 1,200	\$ 529	\$ 495	\$ 0		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-357	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 163,800	\$ 72,256	\$ 67,529	\$ 16		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-358	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 145,000	\$ 63,962	\$ 59,778	\$ 14		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-62	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$ 20,700	\$ 9,131	\$ 8,534	\$ 2		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-63	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$ 1,294,300	\$ 570,942	\$ 533,591	\$ 128		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-64	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 386,000	\$ 170,272	\$ 159,133	\$ 38		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
	Existing - Ballina & Lennox Head	P-161	PR-1	DN375	mm	2004/05	18,852	8,316	4,159</						

Lennox - Release Area 2	Ballina Heights - Reservoir Supply Main - Stage 1	WM-01	DN300	mm	2008/09	18,852	8,316	4,159	\$	100,000	\$	44,112	\$	31,451	\$	8	Shared amongst DSPs
Lennox - Release Area 2	Ballina Heights - Reservoir Supply Main - Stage 2	WM-01	DN300	mm	2009/10	18,852	8,316	6,898	\$	500,000	\$	220,560	\$	146,969	\$	21	Shared amongst DSPs
Lennox - Release Area 2	Ballina Heights - Reservoir Supply Main - Stage 3	WM-01	DN300	mm	2010/11	18,852	8,316	6,082	\$	390,000	\$	172,037	\$	107,136	\$	18	Shared amongst DSPs
Lennox - Release Area 2	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 1	WM-02	DN450	mm	2012/13	18,852	8,316	4,159	\$	60,000	\$	26,467	\$	14,396	\$	3	Shared amongst DSPs
Lennox - Release Area 2	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 2	WM-02	DN450	mm	2013/14	18,852	8,316	4,159	\$	250,000	\$	110,280	\$	56,061	\$	13	Shared amongst DSPs
Lennox - Release Area 2	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 3	WM-02	DN450	mm	2014/15	18,852	8,316	4,159	\$	160,000	\$	70,579	\$	33,532	\$	8	Shared amongst DSPs
Lennox - Release Area 2	Ballina System - Replacement of DN200 Ross Lane	WM-03	DN450	mm	2008/09	18,852	8,316	4,159	\$	1,160,000	\$	511,700	\$	364,835	\$	88	Shared amongst DSPs
Lennox - Release Area 2	Miscellaneous Plant Replacement	M-01	NA	-	2013/14	23,434	9,465	4,796	\$	1,500,000	\$	605,850	\$	307,984	\$	64	Shared amongst DSPs
Lennox - Release Area 2	Miscellaneous Water Main Replacement	M-02	NA	-	2003/04	23,434	9,465	4,796	\$	300,000	\$	121,170	\$	121,170	\$	25	Shared amongst DSPs
Lennox - Release Area 2	Install Miscel Mag Flow Meters	M-03	NA	-	2003/04	23,434	9,465	4,796	\$	20,000	\$	8,078	\$	8,078	\$	2	Shared amongst DSPs
Lennox - Release Area 2	GIS Water Supply Layer	M-06	NA	-	2003/04	23,434	9,465	4,796	\$	50,000	\$	20,195	\$	20,195	\$	4	Shared amongst DSPs
Lennox - Release Area 2	Bulk Water Station Renewals	M-07	NA	-	2003-04	23,434	9,465	4,796	\$	50,000	\$	20,195	\$	20,195	\$	4	Shared amongst DSPs
Lennox - Release Area 2	Marom Crk WTP Catchment Plan	M-08	NA	-	2003/04	23,434	9,465	4,796	\$	40,000	\$	16,156	\$	16,156	\$	3	Shared amongst DSPs
Lennox - Release Area 2	Miscellaneous Telemetry Installation	M-09	NA	-	2003/04	23,434	9,465	4,796	\$	50,000	\$	20,195	\$	20,195	\$	4	Shared amongst DSPs
Lennox - Release Area 2	Marom Crk WTP switchboard	M-13	NA	-	2003/04	23,434	9,465	4,796	\$	60,000	\$	24,234	\$	24,234	\$	5	Shared amongst DSPs
Lennox - Release Area 2	Water Main Renewals	M-14	NA	-	2019/20	23,434	9,465	4,796	\$	4,800,000	\$	1,938,722	\$	656,712	\$	137	Shared amongst DSPs
Lennox - Release Area 2	Meter Replacement Programme	M-15	NA	-	2005/06	23,434	9,465	4,796	\$	300,000	\$	121,170	\$	105,835	\$	22	Shared amongst DSPs
Lennox - Release Area 2	Security Fence Pine Ave Reservoir	M-04	NA	-	2003/04	14,699	4,163	2,025	\$	25,000	\$	7,080	\$	7,080	\$	3	Shared amongst DSPs
Lennox - Release Area 2	East Ballina Reservoir Internal Painting	M-05	NA	-	2003/04	14,699	4,163	2,025	\$	160,000	\$	45,315	\$	45,315	\$	22	Shared amongst DSPs
Lennox - Release Area 2	Pine Avenue Reservoir Mixer	M-10	NA	-	2003/04	14,699	4,163	2,025	\$	20,000	\$	5,664	\$	5,664	\$	3	Shared amongst DSPs
Lennox - Release Area 2	East Ballina Reservoir Mixer	M-11	NA	-	2003/04	14,699	4,163	2,025	\$	10,000	\$	2,832	\$	2,832	\$	1	Shared amongst DSPs
Lennox - Release Area 2	Lennox Meadows Trunk Main	M-12	-	-	2003/04	14,832	4,772	2,337	\$	120,000	\$	38,608	\$	38,608	\$	17	Shared amongst DSPs
Lennox - Release Area 2	P-155	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	40,500	\$	17,865	\$	16,697	\$	4	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-172	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	83,800	\$	36,966	\$	34,548	\$	8	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-173	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	729,800	\$	321,930	\$	300,869	\$	72	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-176	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	227,200	\$	100,223	\$	93,666	\$	23	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-179	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	303,300	\$	133,792	\$	125,039	\$	30	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-2	PR-1	DN200	mm	2004/05	18,852	8,316	4,159	\$	1,200	\$	529	\$	495	\$	0	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-357	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	163,800	\$	72,256	\$	67,529	\$	16	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-358	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	145,000	\$	63,962	\$	59,778	\$	14	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-62	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$	20,700	\$	9,131	\$	8,534	\$	2	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-63	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$	1,294,300	\$	570,942	\$	533,591	\$	128	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-64	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	386,000	\$	170,272	\$	159,133	\$	38	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 2	P-161	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	686,300	\$	302,741	\$	282,935	\$	68	\$ 1,485 Supplies Multiple DSPs, Capacity is 2033 Service ET for all DSPs
Ballina - Release Area 2 (Cumbalum)	Ballina Heights - Pressure Zone Trunk	WD-01	DN300	mm	2007/08	2,460	2,460	1,089	\$	220,000	\$	220,000	\$	167,837	\$	154	
Ballina - Release Area 2 (Cumbalum)	Ballina Heights - Pressure Zone Distribution	WD-02	DN200	mm	2007/08	2,460	2,460	1,089	\$	80,000	\$	80,000	\$	61,032	\$	56	
Ballina - Release Area 2 (Cumbalum)	Ross Lane - Pressure Zone Distribution - Stage 1	WD-04	DN200	mm	2025/26	2,460	2,460	1,089	\$	410,000	\$	410,000	\$	92,542	\$	85	
Ballina - Release Area 2 (Cumbalum)	Ross Lane - Pressure Zone Trunk	WD-03	DN250	mm	2025/26	2,460	2,460	1,089	\$	180,000	\$	180,000	\$	40,628	\$	37	
Ballina - Release Area 2 (Cumbalum)	Ballina Heights - Reservoir Supply Main - Stage 1	WM-01	DN300	mm	2008/09	18,852	8,316	4,159	\$	100,000	\$	44,112	\$	31,451	\$	8	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Ballina Heights - Reservoir Supply Main - Stage 2	WM-01	DN300	mm	2009/10	18,852	8,316	4,159	\$	500,000	\$	220,560	\$	146,969	\$	35	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Ballina Heights - Reservoir Supply Main - Stage 3	WM-01	DN300	mm	2010/11	18,852	8,316	4,159	\$	390,000	\$	172,037	\$	107,136	\$	26	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 1	WM-02	DN450	mm	2012/13	18,852	8,316	4,159	\$	60,000	\$	26,467	\$	14,396	\$	3	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 2	WM-02	DN450	mm	2013/14	18,852	8,316	4,159	\$	250,000	\$	110,280	\$	56,061	\$	13	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 3	WM-02	DN450	mm	2014/15	18,852	8,316	4,159	\$	160,000	\$	70,579	\$	33,532	\$	8	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Ballina System - Replacement of DN200 Ross Lane	WM-03	DN450	mm	2008/09	18,852	8,316	4,159	\$	1,160,000	\$	511,700	\$	364,835	\$	88	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Miscellaneous Plant Replacement	M-01	NA	-	2013/14	23,434	9,465	4,796	\$	1,500,000	\$	605,850	\$	307,984	\$	64	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Miscellaneous Water Main Replacement	M-02	NA	-	2003/04	23,434	9,465	4,796	\$	300,000	\$	121,170	\$	121,170	\$	25	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Install Miscel Mag Flow Meters	M-03	NA	-	2003/04	23,434	9,465	4,796	\$	20,000	\$	8,078	\$	8,078	\$	2	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	GIS Water Supply Layer	M-06	NA	-	2003/04	23,434	9,465	4,796	\$	50,000	\$	20,195	\$	20,195	\$	4	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Bulk Water Station Renewals	M-07	NA	-	2003-04	23,434	9,465	4,796	\$	50,000	\$	20,195	\$	20,195	\$	4	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Marom Crk WTP Catchment Plan	M-08	NA	-	2003/04	23,434	9,465	4,796	\$	40,000	\$	16,156	\$	16,156	\$	3	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Miscellaneous Telemetry Installation	M-09	NA	-	2003/04	23,434	9,465	4,796	\$	50,000	\$	20,195	\$	20,195	\$	4	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Marom Crk WTP switchboard	M-13	NA	-	2003/04	23,434	9,465	4,796	\$	60,000	\$	24,234	\$	24,234	\$	5	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Water Main Renewals	M-14	NA	-	2019/20	23,434	9,465	4,796	\$	4,800,000	\$	1,938,722	\$	656,712	\$	137	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	Meter Replacement Programme	M-15	NA	-	2005/06	23,434	9,465	4,796	\$	300,000	\$	121,170	\$	105,835	\$	22	Shared amongst DSPs
Ballina - Release Area 2 (Cumbalum)	P-155	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	40,500	\$	17,865	\$	16,697	\$	4	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-172	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	83,800	\$	36,966	\$	34,548	\$	8	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-173	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	729,800	\$	321,930	\$	300,869	\$	72	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-176	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	227,200	\$	100,223	\$	93,666	\$	23	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-179	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	303,300	\$	133,792	\$	125,039	\$	30	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-2	PR-1	DN200	mm	2004/05	18,852	8,316	4,159	\$	1,200	\$	529	\$	495	\$	0	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-357	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	163,800	\$	72,256	\$	67,529	\$	16	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-358	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	145,000	\$	63,962	\$	59,778	\$	14	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-62	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$	20,700	\$	9,131	\$	8,534	\$	2	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-63	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$	1,294,300	\$	570,942	\$	533,591	\$	128	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-64	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	386,000	\$	170,272	\$	159,133	\$	38	Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 2 (Cumbalum)	P-161	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$	686,300	\$	302,741	\$	282,935	\$	68	\$ 1,190 Supplies Multiple DSPs, Capacity is 2033 Service ET for all DSPs
Lennox - Release Area 1	Pacific Pines - Pressure Zone Trunk - Stage 1 (DN300)	WD-08	DN300	mm	2006/07	1,693	1,693	1,045	\$	300,000	\$	300,000	\$	244,889	\$	234	
Lennox - Release Area 1	Pacific Pines - Pressure Zone Trunk - Stage 1 (DN375)	WD-07	DN375	mm	2006/07	1,693	1,693	1,045	\$	100,000	\$	100,000	\$	81,630	\$	78	
Lennox - Release Area 1	Pacific Pines - Reservoir Supply Main	WD-06	DN250	mm	2006/07	1,693	1,693	1,045	\$	70,000	\$	70,000	\$	57,141	\$	55	
Lennox - Release Area 1	Pacific Pines - Pressure Zone Distribution - Stage 1	WD-09	DN200	mm	2010/11	1,693	1,693	1,045	\$	240,000	\$	240,000	\$	149,460	\$	143	
Lennox - Release Area 1	Pacific Pines - Pressure Zone Distribution - Stage 2	WD-28	DN200	mm	2010/11	1,693	1,693	1,045	\$	150,000	\$	150,000	\$	93,412	\$	89	
Lennox - Release Area 1	Ballina Heights - Reservoir Supply Main - Stage 1	WM-01	DN300	mm	2008/09	18,852	8,316	4,159	\$	100,000	\$	44,112	\$	31,451	\$	8	Shared amongst DSPs
Lennox - Release Area 1	Ballina Heights - Reservoir Supply Main - Stage 2	WM-01	DN300	mm	2009/10	18,852	8,316	4,15									

Lennox - Release Area 1	Water Main Renewals	M-14	NA	-	2019/20	23,434	9,465	4,796	\$ 4,800,000	\$ 1,938,722	\$ 656,712	\$ 137		Shared amongst DSPs
Lennox - Release Area 1	Meter Replacement Programme	M-15	NA	-	2005/06	23,434	9,465	4,796	\$ 300,000	\$ 121,170	\$ 105,835	\$ 22		Shared amongst DSPs
Lennox - Release Area 1	Lennox Meadows Trunkmain	M-12	-	-	2003/04	14,832	4,772	2,337	\$ 120,000	\$ 38,608	\$ 38,608	\$ 17		Shared amongst DSPs
Lennox - Release Area 1	P-155	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 40,500	\$ 17,865	\$ 16,697	\$ 4		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-172	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 83,800	\$ 36,966	\$ 34,548	\$ 8		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-173	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 729,800	\$ 321,930	\$ 300,869	\$ 72		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-176	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 227,200	\$ 100,223	\$ 93,666	\$ 23		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-179	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 303,300	\$ 133,792	\$ 125,039	\$ 30		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-2	PR-1	DN200	mm	2004/05	18,852	8,316	4,159	\$ 1,200	\$ 529	\$ 495	\$ 0		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-357	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 163,800	\$ 72,256	\$ 67,529	\$ 16		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-358	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 145,000	\$ 63,962	\$ 59,778	\$ 14		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-62	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$ 20,700	\$ 9,131	\$ 8,534	\$ 2		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-63	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$ 1,294,300	\$ 570,942	\$ 533,591	\$ 128		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-64	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 386,000	\$ 170,272	\$ 159,133	\$ 38		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Lennox - Release Area 1	P-161	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 686,300	\$ 302,741	\$ 282,935	\$ 68	\$ 1,473	Supplies Multiple DSPs, Capacity is 2033 Service ET for all DSPs
Ballina - Release Area 1	North Ballina - Pressure Zone Distribution - Area 1	WD-13	DN200	mm	2007/08	1,560	1,084	732	\$ 250,000	\$ 173,718	\$ 132,529	\$ 181		
Ballina - Release Area 1	North Ballina - Pressure Zone Distribution - Area 2	WD-30	DN200	mm	2005/06	1,560	1,084	732	\$ 80,000	\$ 55,590	\$ 48,554	\$ 66		
Ballina - Release Area 1	North Ballina - Pressure Zone Distribution - Area 1 - Supply Augmentation	WD-21	DN250	mm	2010/11	1,560	1,084	732	\$ 50,000	\$ 34,744	\$ 21,637	\$ 30		
Ballina - Release Area 1	Ballina Island - Main parallel to Missingham Bridge	WD-23	DN500	mm	2010/11	14,229	3,693	1,851	\$ 130,000	\$ 33,740	\$ 21,012	\$ 11		Shared amongst DSPs
Ballina - Release Area 1	Ballina Island - Thrust boring parallel to Missingham Bridge	WD-23	DN500	mm	2011/12	14,229	3,693	1,851	\$ 380,000	\$ 98,625	\$ 57,401	\$ 31		Shared amongst DSPs
Ballina - Release Area 1	Ballina Island - Pressure Zone Distribution - Augmentation for Coastal Growth	WD-33	DN450	mm	2008/09	14,229	3,693	1,851	\$ 160,000	\$ 41,526	\$ 29,608	\$ 16		Shared amongst DSPs
Ballina - Release Area 1	Ballina Island - Pressure Zone Distribution - Augmentation to North Ballina	WD-34	DN250	mm	2011/12	14,229	3,693	1,851	\$ 210,000	\$ 54,503	\$ 31,722	\$ 17		Shared amongst DSPs
Ballina - Release Area 1	North Ballina - Distribution Main Fishery Ck Canal Crossing	WD-36	DN300	mm	2010/11	14,229	3,693	1,851	\$ 130,000	\$ 33,740	\$ 21,012	\$ 11		Shared amongst DSPs
Ballina - Release Area 1	North Ballina - Distribution Main Upgrade	WD-36	DN300	mm	2010/11	14,229	3,693	1,851	\$ 140,000	\$ 36,336	\$ 22,628	\$ 12		Shared amongst DSPs
Ballina - Release Area 1	Ballina Island - Pressure Zone Distribution - Augmentation to North Ballina	WD-44	DN300	mm	2012/13	14,229	3,693	1,851	\$ 120,000	\$ 31,145	\$ 16,941	\$ 9		Shared amongst DSPs
Ballina - Release Area 1	Ballina Heights - Reservoir Supply Main - Stage 1	WM-01	DN300	mm	2008/09	18,852	8,316	4,159	\$ 100,000	\$ 44,112	\$ 31,451	\$ 8		Shared amongst DSPs
Ballina - Release Area 1	Ballina Heights - Reservoir Supply Main - Stage 2	WM-01	DN300	mm	2009/10	18,852	8,316	4,159	\$ 500,000	\$ 220,560	\$ 146,969	\$ 35		Shared amongst DSPs
Ballina - Release Area 1	Ballina Heights - Reservoir Supply Main - Stage 3	WM-01	DN300	mm	2010/11	18,852	8,316	4,159	\$ 390,000	\$ 172,037	\$ 107,136	\$ 26		Shared amongst DSPs
Ballina - Release Area 1	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 1	WM-02	DN450	mm	2012/13	18,852	8,316	4,159	\$ 60,000	\$ 26,467	\$ 14,396	\$ 3		Shared amongst DSPs
Ballina - Release Area 1	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 2	WM-02	DN450	mm	2013/14	18,852	8,316	4,159	\$ 250,000	\$ 110,280	\$ 56,061	\$ 13		Shared amongst DSPs
Ballina - Release Area 1	Ballina System - Duplication of DN375 Knockrow Reservoir to Ross Lane - St 3	WM-02	DN450	mm	2014/15	18,852	8,316	4,159	\$ 160,000	\$ 70,579	\$ 33,532	\$ 8		Shared amongst DSPs
Ballina - Release Area 1	Ballina System - Replacement of DN200 Ross Lane	WM-03	DN450	mm	2008/09	18,852	8,316	4,159	\$ 1,160,000	\$ 511,700	\$ 364,835	\$ 88		Shared amongst DSPs
Ballina - Release Area 1	Miscellaneous Plant Replacement	M-01	NA	-	2013/14	23,434	9,465	4,796	\$ 1,500,000	\$ 605,850	\$ 307,984	\$ 64		Shared amongst DSPs
Ballina - Release Area 1	Miscellaneous Water Main Replacement	M-02	NA	-	2003/04	23,434	9,465	4,796	\$ 300,000	\$ 121,170	\$ 121,170	\$ 25		Shared amongst DSPs
Ballina - Release Area 1	Install Miscel Mag Flow Meters	M-03	NA	-	2003/04	23,434	9,465	4,796	\$ 20,000	\$ 8,078	\$ 8,078	\$ 2		Shared amongst DSPs
Ballina - Release Area 1	GIS Water Supply Layer	M-06	NA	-	2003/04	23,434	9,465	4,796	\$ 50,000	\$ 20,195	\$ 20,195	\$ 4		Shared amongst DSPs
Ballina - Release Area 1	Bulk Water Station Renewals	M-07	NA	-	2003-04	23,434	9,465	4,796	\$ 50,000	\$ 20,195	\$ 20,195	\$ 4		Shared amongst DSPs
Ballina - Release Area 1	Marom Crk WTP Catchment Plan	M-08	NA	-	2003/04	23,434	9,465	4,796	\$ 40,000	\$ 16,156	\$ 16,156	\$ 3		Shared amongst DSPs
Ballina - Release Area 1	Miscellaneous Telemetry Installation	M-09	NA	-	2003/04	23,434	9,465	4,796	\$ 50,000	\$ 20,195	\$ 20,195	\$ 4		Shared amongst DSPs
Ballina - Release Area 1	Marom Crk WTP switchboard	M-13	NA	-	2003/04	23,434	9,465	4,796	\$ 60,000	\$ 24,234	\$ 24,234	\$ 5		Shared amongst DSPs
Ballina - Release Area 1	Water Main Renewals	M-14	NA	-	2019/20	23,434	9,465	4,796	\$ 4,800,000	\$ 1,938,722	\$ 656,712	\$ 137		Shared amongst DSPs
Ballina - Release Area 1	Meter Replacement Programme	M-15	NA	-	2005/06	23,434	9,465	4,796	\$ 300,000	\$ 121,170	\$ 105,835	\$ 22		Shared amongst DSPs
Ballina - Release Area 1	Security Fence Pine Ave Reservoir	M-04	NA	-	2003/04	14,699	4,163	2,025	\$ 25,000	\$ 7,080	\$ 7,080	\$ 3		Shared amongst DSPs
Ballina - Release Area 1	East Ballina Reservoir Internal Painting	M-05	NA	-	2003/04	14,699	4,163	2,025	\$ 160,000	\$ 45,315	\$ 45,315	\$ 22		Shared amongst DSPs
Ballina - Release Area 1	Pine Avenue Reservoir Mixer	M-10	NA	-	2003/04	14,699	4,163	2,025	\$ 20,000	\$ 5,664	\$ 5,664	\$ 3		Shared amongst DSPs
Ballina - Release Area 1	East Ballina Reservoir Mixer	M-11	NA	-	2003/04	14,699	4,163	2,025	\$ 10,000	\$ 2,832	\$ 2,832	\$ 1		Shared amongst DSPs
Ballina - Release Area 1	P-155	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 40,500	\$ 17,865	\$ 16,697	\$ 4		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-172	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 83,800	\$ 36,966	\$ 34,548	\$ 8		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-173	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 729,800	\$ 321,930	\$ 300,869	\$ 72		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-176	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 227,200	\$ 100,223	\$ 93,666	\$ 23		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-179	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 303,300	\$ 133,792	\$ 125,039	\$ 30		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-2	PR-1	DN200	mm	2004/05	18,852	8,316	4,159	\$ 1,200	\$ 529	\$ 495	\$ 0		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-357	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 163,800	\$ 72,256	\$ 67,529	\$ 16		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-358	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 145,000	\$ 63,962	\$ 59,778	\$ 14		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-62	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$ 20,700	\$ 9,131	\$ 8,534	\$ 2		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-63	PR-1	DN450	mm	2004/05	18,852	8,316	4,159	\$ 1,294,300	\$ 570,942	\$ 533,591	\$ 128		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-64	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 386,000	\$ 170,272	\$ 159,133	\$ 38		Supplies Multiple DSPs, Existing Asset purchased from Rous Water
Ballina - Release Area 1	P-161	PR-1	DN375	mm	2004/05	18,852	8,316	4,159	\$ 686,300	\$ 302,741	\$ 282,935	\$ 68	\$ 1,272	Supplies Multiple DSPs, Capacity is 2033 Service ET for all DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Wollongbar Boosted - Pressure Zone Distribution - Area 1	WD-17	DN250	mm	2005/06	1,061	739	418	\$ 130,000	\$ 90,547	\$ 79,087	\$ 189		
Alstonville - Release Area 1 (Wollongbar Expansion	Wollongbar Boosted - Pressure Zone Distribution - Area 2	WD-18	DN250	mm	2006/07	1,061	739	418	\$ 210,000	\$ 146,268	\$ 119,398	\$ 285		
Alstonville - Release Area 1 (Wollongbar Expansion	Wollongbar Boosted - Pressure Zone Distribution - Area 1	WD-45	DN200	mm	2016/17	1,061	739	418	\$ 10,000	\$ 6,965	\$ 2,890	\$ 7		
Alstonville - Release Area 1 (Wollongbar Expansion	Wollongbar Boosted - Distribution Main Upgrade	WD-40	DN200	mm	2013/14	3,995	999	569	\$ 170,000	\$ 42,511	\$ 21,610	\$ 38		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Miscellaneous Plant Replacement	M-01	NA	-	2013/14	23,434	9,465	4,796	\$ 1,500,000	\$ 605,850	\$ 307,984	\$ 64		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Miscellaneous Water Main Replacement	M-02	NA	-	2003/04	23,434	9,465	4,796	\$ 300,000	\$ 121,170	\$ 121,170	\$ 25		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Install Miscel Mag Flow Meters	M-03	NA	-	2003/04	23,434	9,465	4,796	\$ 20,000	\$ 8,078	\$ 8,078	\$ 2		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	GIS Water Supply Layer	M-06	NA	-	2003/04	23,434	9,465	4,796	\$ 50,000	\$ 20,195	\$ 20,195	\$ 4		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Bulk Water Station Renewals	M-07	NA	-	2003-04	23,434	9,465	4,796	\$ 50,000	\$ 20,195	\$ 20,195	\$ 4		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Marom Crk WTP Catchment Plan	M-08	NA	-	2003/04	23,434	9,465	4,796	\$ 40,000	\$ 16,156	\$ 16,156	\$ 3		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Miscellaneous Telemetry Installation	M-09	NA	-	2003/04	23,434	9,465	4,796	\$ 50,000	\$ 20,195	\$ 20,195	\$ 4		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Marom Crk WTP switchboard	M-13	NA	-	2003/04	23,434	9,465	4,796	\$ 60,000	\$ 24,234	\$ 24,234	\$ 5		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Water Main Renewals	M-14	NA	-	2019/20	23,434	9,465	4,796	\$ 4,800,000	\$ 1,938,722	\$ 656,712	\$ 137		Shared amongst DSPs
Alstonville - Release Area 1 (Wollongbar Expansion	Meter Replacement Programme	M-15	NA	-	2005/06	23,434	9,465	4,796	\$ 300,000	\$ 121,170	\$ 105,835	\$ 22	\$ 791	Shared amongst DSPs

ET Growth and Return On Investment (ROI) Factor Calculations

Pre-1996 Assets Discount Rate

3%

Post 1996 Assets Discount Rate

7%

[illegible]

Pre 1996 ROI Factor - Has Available Capacity Until:																																
DSP Area	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
Existing - Ballina & Lennox Head	1.00	1.01	1.03	1.04	1.06	1.11	1.14	1.16	1.18	1.20	1.22	1.24	1.25	1.27	1.29	1.30	1.31	1.33	1.34	1.36	1.37	1.38	1.39	1.40	1.41	1.43	1.44	1.46	1.47	1.49		
Existing - Alstonville & Wollongbar	1.00	1.01	1.03	1.04	1.06	1.10	1.12	1.14	1.15	1.16	1.17	1.18	1.21	1.22	1.23	1.24	1.25	1.26	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.38	1.39	1.41		
Existing - Wardell	1.00	1.01	1.03	1.04	1.06	1.07	1.08	1.10	1.11	1.12	1.14	1.16	1.17	1.19	1.21	1.22	1.24	1.26	1.28	1.29	1.31	1.33	1.35	1.37	1.38	1.40	1.42	1.44	1.46	1.48		
Ballina - Release Area 1 (Wollongbar Expansion)	1.00	1.01	1.03	1.04	1.06	1.06	1.07	1.08	1.08	1.09	1.11	1.13	1.15	1.17	1.19	1.21	1.23	1.24	1.26	1.28	1.29	1.29	1.30	1.31	1.32	1.32	1.32	1.32	1.32	1.32		
Alstonville - Release Area 2 (Cumbalum)	1.00	1.01	1.03	1.04	1.06	1.08	1.09	1.11	1.12	1.14	1.15	1.17	1.19	1.20	1.22	1.24	1.26	1.28	1.29	1.31	1.32	1.34	1.36	1.38	1.39	1.41	1.43	1.45	1.47	1.49		
Lennox - Release Area 1	1.00	1.01	1.03	1.04	1.06	1.08	1.11	1.12	1.14	1.15	1.16	1.17	1.19	1.20	1.21	1.22	1.24	1.26	1.28	1.29	1.31	1.32	1.34	1.36	1.38	1.40	1.42	1.44	1.46	1.48		
Lennox - Release Area 2	1.00	1.01	1.03	1.04	1.06	1.08	1.10	1.11	1.12	1.14	1.15	1.16	1.17	1.19	1.21	1.22	1.24	1.26	1.28	1.29	1.31	1.32	1.34	1.36	1.38	1.40	1.42	1.44	1.46	1.48		
Lennox - Release Area 1	1.00	1.01	1.03	1.04	1.06	1.07	1.07	1.08	1.09	1.10	1.12	1.13	1.15	1.16	1.18	1.19	1.20	1.21	1.22	1.24	1.24	1.24	1.25	1.25	1.26	1.26	1.26	1.26	1.26	1.26		

[illegible]

Developer Charges Guidelines States (Section 2, Page 23) "In calculating the ROI factor, it is appropriate to assume that the lot take-up commences in the year of commissioning. This is based on the assumption (for the purposes of the calculation) that the asset is commissioned in January and that, due to the time lag between subdivision and building, all development in that financial year (July to June) is served by the assets commissioned in January."

Note 1:

Column	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	40	41	42	43	44	45	46	47
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Charge Boundary Code	DSP Area
W1	Existing - Ballina & Lennox Head
W2	Existing - Wollongbar & Alstonville Village
W3	Existing - Wardell
W4	Release - Lennox Head
W5	Release - Angels Beach
W6	Release - North Ballina
W7	Release - Cumbalum
W8	Release - Wollongbar Expansion Area

Appendix B

Calculation of the Reduction Amount

Extracted spreadsheets from calculation process

Table - Calculation of Developer Charges using the Direct NPV Method
Ballina Shire Council - Water Supply

Base Data Capital charge per ET (2003/04\$)2,771 Year 12003/04 Debt at end of 2002/03 (\$'000)39 Cash and investments at end of 2002/03 (\$'000)8,100 Net debt (\$'000)(8,061) Discount rate for future works7% Enter Year 1 of Analysis - this is the financial year in which the DSP is expected to be implemented eg. 2000/01 include borrowings and overdraft include all cash and investments, including sinking fund etc																						
Assessments at year end Year No.0123456789101112131415161718192021 Year2002/032003/042004/052005/062006/072007/082008/092009/102010/112011/122012/132013/142014/152015/162016/172017/182018/192019/202020/212021/222022/232023/24 Residential (including backlog works)14,39214,81615,23915,66316,08616,49716,90917,32017,73218,14318,48318,82419,16419,50519,84520,14720,45020,75221,05521,35721,58921,821 Non-residential ET per Residential assessment1 ET per non-residential assessment Capacity for future customers (ET)-																						
Capital works Base year2003/04 Year2003/042004/052005/062006/072007/082008/092009/102010/112011/122012/132013/142014/152015/162016/172017/182018/192019/202020/212021/222022/232023/24 Renewals (2003/04\$'000)629.679.879.879.879.879.8339.8229.8229.8229.8241.8265.8289.8261229.8229.8229.8229.8229.8229.8 3.00%P Enter (R)ecorded or (P)rojected in space to left Inflation from Base year to Year 1 (%)3.00% Capital Works for Improved Standards (2003/04\$'000)128.14185271.4185204.234.4619.7619.7619.7619.7650.443.2108 Government Grant on Works for Improved standards (2003/04\$'000)00000000 Inflation from 2003/04 to 2003/04 (%)3.00% Last year of the program2015/16 Enter the last year in which there is an expenditure on Improved Standards																						
NPV of renewal works Year No.0123456789101112131415161718192021 Renewals (\$'000) in 2003/04\$6488282828282350237237237237249274298269237237237237237 NPV Renewals at discount rate of 7% pa3,057 Total equivalent assessments (ET)14,39214,81615,23915,66316,08616,49716,90917,32017,73218,14318,48318,82419,16419,50519,84520,14720,45020,75221,05521,35721,58921,821 Growth (ET)423423423423411411411411411340340340340340302302302302302232.2 NPV of 50 years of growth (ET)4,830 NPV ETs19,222 NPV Renewals per ET (\$)159																						
NPV of Works for Improved Standards to existing population Year No.123456789101112131415161718192021 Works for Improved Standards (\$'000) in 2003/04\$ after Government grant132191280191210352020202052441110000000000 NPV of works for Improved Standards at discount rate of 7% pa1,041 Growth in (ET) - cut off at 13 years423423423423411411411411411340340340340000000000 NPV of 13 years of growth (ET)3,159 NPV ETs17,552 NPV Standards per ET (\$)59																						
The Reduction Amount is the greater of (1)NPV Renewals per ET + NPV Standards per ET218 (2)Capital Charge - {[N/(N-F)] * [Capital Charge - NPV Renewals per ET - NPV Standards per ET - Net Debt per ET]}-326 Where:Capital Charge =2,771 N - Present ETs =14,816 F - Capacity for future customers =0 Net debt per ET-544																						
Developer Charge Calculation Reduction Amount is therefore\$218 say\$220 Developer Charge for 2003/04 in 2003/04\$Capital Charge\$2,771 lessReduction amount\$220 Developer Charge\$2,551																						
Note: The value for inflation from the 2003/04 to 2003/04 of 3.00% is based on the projected inflation of 3.0% in the year to December 2004 (1.0300=1.03).																						

22 2024/25	23 2025/26	24 2026/27	25 2027/28	26 2028/29	27 2029/30	28 2030/31	29 2031/32	30 2032/33	31 2033/34	32 2034/35	33 2035/36	34 2036/37	35 2037/38	36 2038/39	37 2039/40	38 2040/41	39 2041/42	40 2042/43	41 2043/44	42 2044/45	43 2045/46	44 2046/47	45 2047/48	46 2048/49	47 2049/50	48 2050/51	49 2051/52	50 2052/53
22,054	22,286	22,518	22,701	22,884	23,068	23,251	23,434	25,977	26,123	26,269	26,415	26,561	26,707	26,853	26,999	27,145	27,291	27,437	27,583	27,729	27,875	28,021	28,167	28,313	28,459	28,605	28,751	28,897

2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42	2042/43	2043/44	2044/45	2045/46	2046/47	2047/48	2048/49	2049/50	2050/51	2051/52	2052/53
229.8	229.8	229.8	229.8	229.8	229.8	229.8	229.8	229.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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22 237	23 237	24 237	25 237	26 237	27 237	28 237	29 237	30 237	31 0	32 0	33 0	34 0	35 0	36 0	37 0	38 0	39 0	40 0	41 0	42 0	43 0	44 0	45 0	46 0	47 0	48 0	49 0	50 0
22,054 232	22,286 232	22,518 232	22,701 183	22,884 183	23,068 183	23,251 183	23,434 183	25,977 2,543	26,123 146	26,269 146	26,415 146	26,561 146	26,707 146	26,853 146	26,999 146	27,145 146	27,291 146	27,437 146	27,583 146	27,729 146	27,875 146	28,021 146	28,167 146	28,313 146	28,459 146	28,605 146	28,751 146	28,897 146

22 0	23 0	24 0	25 0	26 0	27 0	28 0	29 0	30 0	31 0	32 0	33 0	34 0	35 0	36 0	37 0	38 0	39 0	40 0	41 0	42 0	43 0	44 0	45 0	46 0	47 0	48 0	49 0	50 0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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