

**DEVELOPMENT SERVICING PLAN  
FOR  
GUYRA SHIRE COUNCIL  
SEWERAGE**



**ADOPTED: 21 / 03 /16  
EFFECTIVE: 21 / 03 /16**

**DECEMBER 2015**

**This is a development servicing plan which has been prepared in accordance with Section 64 of the Local Government Act, 1993, and Section 306 of the Water Management Act, 2000.**

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# GUYRA SHIRE COUNCIL

## DEVELOPMENT SERVICING PLAN (DSP) - SEWERAGE

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## **DEVELOPMENT SERVICING PLAN - SEWERAGE**

### **Summary**

This Development Servicing Plan (DSP) covers sewerage developer charges (DC) for the Guyra Shire Council.

This DSP has been prepared with consideration to *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (2002). These are the relevant guidelines, managed by the Department of Primary Industries Water (previously NSW Office of Water).

This DSP aims to:

1. Allow Council to require an equitable monetary contribution for the provision of sewerage infrastructure to meet the loading generated by development.
2. Facilitate the future provision of sewerage services to the Guyra Shire Council area which meets the required levels of service with regard to pump station capacity, collector main capacity and treated effluent quality.
3. Set out the schedule and programme of proposed works to meet increasing sewerage loads generated by development.
4. Detail the contribution rates and Guyra Shire Council's payment policies.

To enable this, a future demand estimate of sewerage load for the Council has been undertaken. The demand estimate is the basis used for determining the infrastructure required to meet the need generated by future development.

DC are applicable for existing and proposed works which serve future development. Section 3 details the existing works and proposed works schedule for sewerage infrastructure to meet the expected loading.

The calculated DC, based on full cost recovery, is \$3,059 per ET. Council has adopted this charge subject to public advertisement.

Charges are indexed each year as required until recalculated again.

<b>Adopted Developer Charge for 2015/16 is \$3,059 per ET</b>
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### General Notes

Developer charges calculations relating to this DSP will be reviewed after a period of five to six years, or when any significant changes occur in proposed works, growth projections or standards.

In the period between any reviews, developer charges will be revised on 1 July each year on the basis of movements in the Consumer Price Index (CPI) for Sydney, in the preceding 12 months to December, excluding the impact of GST.

There are a number of payment methods for DC and works-in-kind contributions are allowable subject to certain conditions.

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

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## **1. Introduction**

### **1.1 Legislation**

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*.

This DSP has been prepared in accordance with the *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (2002), managed by DPI Water, pursuant to Section 306 (3) of the *Water Management Act 2000*.

### **1.2 Purpose of the DSP**

The purpose of the DSP is to achieve the following objectives:

1. Allow Guyra Shire Council to require an equitable monetary contribution for the provision of sewerage infrastructure to meet the loads generated by new development.
2. Facilitate the provision of sewerage services to the Guyra Shire Council area which meets the required levels of service with regard to pump station capacity, collector main capacity and treated effluent quality.
3. Identify the existing relevant works and set out a schedule and programme of proposed works to meet increasing sewerage loads generated by development.
4. Detail the contribution rates and Guyra Shire Council's payment policies.

The sewerage system for which Guyra Shire Council seeks to levy DC includes collector mains, pump stations and a treatment plant. Reticulation is provided by developers as part of the subdivision/development works.

### **1.3 Land to Which the DSP Applies**

This DSP applies to all land in Guyra Shire Council area that is within the sewerage benefit area which is to be connected to the sewerage system as a result of development. This includes connection of land with existing residences and/or non-residential buildings if sewerage DC have not been paid previously; and may be in addition to costs for shared, special extension of system outside the general sewerage benefit area. Maps of sewerage areas can be found in Appendix 3. It applies to the Guyra township only – Tingha has been excluded because of the relatively high cost of connecting to the Tingha wastewater system via pods (\$14,186 in 2015/16).

### **1.4 Calculation Guidelines**

This DSP has been prepared with consideration given to *Guidelines - Developer Charges for Water Supply, Sewerage and Stormwater*, 2002. These were the latest relevant guidelines from the DPI, at the time of DC calculation, and are based on recommendations of the Independent Pricing and Regulatory Tribunal (IPART)

### **1.5 Date From Which This DSP Comes Into Effect**

This DSP was adopted by Guyra Shire Council on ....../.../2016 and came into effect on ....../.../2016

Charges will be levied pursuant to this DSP, as a condition of development consent to applications lodged on or after the day this DSP came into effect.

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## **1.6 Relationship Between The DSP and other Existing Policies or Plans**

A number of environmental planning instruments apply to the development of land to which this DSP relates. They include State Environmental Planning Policies.

A full listing of State Environmental Planning Policies applying to Guyra Shire Council is attached to this DSP as Appendix No. 1. Various other Guyra Shire Council Development Servicing Plans are also relevant, as listed in Appendix 2.

This DSP supersedes any other requirements related to sewerage DC for the area covered by this DSP. This DSP takes precedence over any of Guyra Shire Council's codes or policies where there are any inconsistencies relating to sewerage developer charges. (The term "Developer Contributions" may formerly have been used to refer to Developer Charges.)

## **1.7 Assets Relevant to the DSP**

The purpose of the DSP is that new development should pay for assets from which they benefit. Collection systems and treatment works are provided by Guyra Shire Council and paid for through developer charges. Reticulation works are provided by the developer. Asset categories are defined as follows:

### **1.7.1 Collection Systems**

For the purposes of this DSP sewage collection systems comprise trunk mains, major pumping stations and rising mains.

### **1.7.2 Treatment Works**

The capacity of a treatment works can be expressed in terms of equivalent tenements. This assumes a domestic strength sewage with pollutant concentrations similar to that from residential areas.

For developments with domestic strength sewage, the number of additional equivalent tenements is directly related to volume of discharge.

For developments with high strength sewage, the number of additional equivalent tenements is related to the pollutant load.

### **1.7.2 Reticulation**

Reticulation generally consists of all the internal distribution pipes within the subdivision or which specifically serve that subdivision. In some instances, Guyra Shire Council is the developer.

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

Plans of sewerage infrastructure are in Appendix 3.

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## 2. Methodology

### 2.1 Calculation Method for Developer Charges

#### 2.1.1 General Methodology

In its most simplistic description, the calculation determines the equivalent cost of one brand new set of assets to serve development as if those assets could be constructed now. Practically, however, sewerage infrastructure consists of an on-going progression of old and new assets with complex interconnection. Sewerage assets may be constructed many years ahead of full capacity to reflect cost effective and practical staging of works.

Only collection system and treatment works have been taken into account in the DC calculation. The construction of any reticulation pipework required will be the responsibility of the developer.

The methodology used was developed with consideration given to the latest (final) guidelines, managed by DPI, *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater* (2002). The NPV of Annual Charges Method was used and this is based on the following general equation, as recommended by the Independent Pricing and Regulatory Tribunal (IPART).

***Developer charge = Capital charge – Reduction amount.***

The ***capital charge*** is the cost of beneficial assets plus a return on investment, which reflects the cost incurred by Council by providing the assets ahead of development.

The ***reduction amount*** is the present value of those capital works costs included in the total capital charge which may be deemed to be already included in annual charges. This value has been adopted as 50% (allowable because there are less than 2,000 assessments).

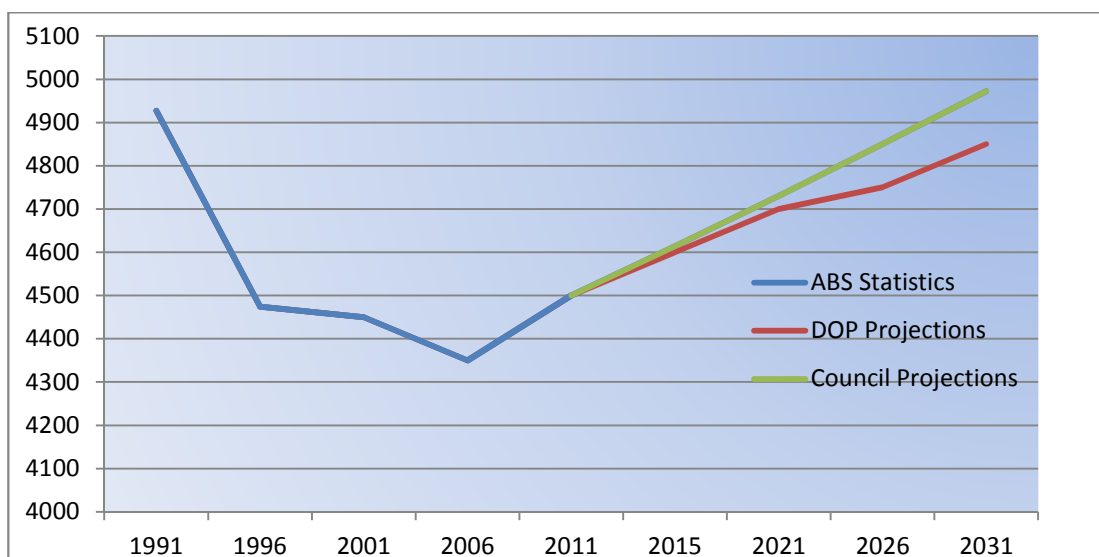
The calculated DC is based on full cost recovery.

### 2.2 Tenement and Demand Estimates

Most types of development will increase the demand on the sewerage system. Sewerage assets may directly or indirectly benefit a development by allowing increased loading to be serviced. Growth of equivalent tenements (ET) is based on population growth as shown in the graph over.

Guyla	2015	2020	2025	2030	2035	2040	2045	2050	2055
Residential	884	906	929	953	977	1001	1027	1053	1079
Non res.	136	139	143	147	150	154	158	162	166
Total No	1020	1046	1072	1099	1127	1155	1185	1215	1245
Total ET's	957	981	1006	1031	1057	1084	1111	1139	1168

A growth rate of 0.5% per annum has been adopted.



**Population versus Year**

For residential subdivisions, the increased demand is directly related to the number of additional tenements created.

Equivalent tenements (ET's) vary depending on the type of development, for example, 1 bedroom units are equivalent to 0.5 ET's in terms of discharge to the sewer system.

The increased demands generated by other types of development (including non-residential) need to be assessed in terms of additional equivalent tenements. The number of additional equivalent tenements is calculated in accordance with the NSW Water Directorate publication *Section 64 Determinations of Equivalent Tenements Guidelines (2009)*.

Planned development of the sewerage system is based on these long-term growth projections.

DC pay for the provision of system capacity to suit new development. New development may be served by a combination of existing and/or new works.

### **2.3 Works Covered by This DSP**

The existing and proposed works covered by this DSP are itemised in Appendix 4.. All Guyra Shire Council's collection systems and treatment works, subject to DC Guidelines, are shown on these tables.

### **2.4 Cost Estimates**

"Current replacement" cost estimates of the existing and proposed works are based on unit rates for construction published in the *NSW Reference Rates for Valuation of Existing Water Supply, Sewerage and Stormwater Assets* by NSW Department of Land and Water Conservation, managed by DPI. These cost estimates are shown in Appendix 4.



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### **3. Levels of Service and Design Parameters for Sewerage**

#### **3.1 Levels of Service**

System design and operation are based on providing the following Levels of Service to Guyra Shire Council:

## Levels of Service – Sewerage

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target
<b>Availability of Service</b> – Extent of area serviced	% Service area	100% of designated service areas in Guyra	100% of designated service areas in Guyra
<b>System Failures</b> <i>Category One:</i> – Failure due to rainfall and deficient capacity (overflows)  <i>Category Two:</i> – Failures due to pump or other breakdown including power failure  <i>Category Three:</i> – Failures due to main blockages and collapses	No./year  No./ 5year  No./ 5year	2  2  Private - 5 Public – <20 Sensitive - 1	1  <1  Private - 5 Public – <15 Sensitive - <1
<b>Response Times for System Failures</b> (Defined as the maximum time to have staff on site to commence rectification after notification.)  <i>Priority One:</i> (Major spill, significant environmental or health impact, or affecting large number of consumers ie a major main) – During working hours: – During after hours:  <i>Priority Two:</i> (Moderate spill, some environmental or health impact, or affecting small number of consumers ie other mains) – During working hours: – During after hours:  <i>Priority Three:</i> (Minor spill, little environmental or health impact, or affecting a couple of consumers) – During working hours	Hours Hours  Hours Hours  Hours	1 2  3 4  3	1 2  2 3  3

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Target
- During after hours	Hours	12	12
<b>Response Times for Complaints</b> <i>General Complaints and Inquiries:</i>			
- Written complaints	Working days	10	5
- Oral complaints	Working days	2	2
<i>Note: Times apply for 95% of complaints</i>			
<i>Odour Complaints:</i>			
- Treatment works	No. /year	Nil	Nil
- Pumping Stations	No. /year	Nil	Nil
- Reticulation system	No./year	Nil	Nil
<b>Effluent Discharge and Sludge Management</b>			
Failure to meet licence limits and statutory requirements (100 percentile)	No. of samples/ year	3 (Phosphorus limit)	0
<b>Impact of STP on Surrounding Residents</b>			
- Noise	DB	< 5 above background noise level	< 5 above background noise level
- Odour outside buffer zone	-	Nil	Nil
<b>Discharge Licence Conditions</b>			
Discharge Site			
Quantity	ML/year	Laura Creek	Laura Creek
Biochemical Oxygen Demand	mg/L	218	218
Total Suspended Solids	mg/L	<15	<15
Total Nitrogen	mg/L	<20	<20
Oil and Grease	mg/L	<15	<15
Total Phosphorus	mg/L	<10	<10
		<1	<1

Note: The Levels of Service are the targets, which Council aims to meet; they are not intended as a formal customer contract.

### 3.2 Design Parameters

Investigation and design of sewerage system components is based on the *Manual of Practice: Sewer Design* (1984) and the *Manual of Practice: Sewerage Pumping Station Design* (1986). These manuals were prepared by NSW Public Works and are now managed by DPI.

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Technical reports relating to the system components in the DSP are included in Section 5, References.

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## 4. Developer Charges

### 4.1 Collection Systems and Treatment Works

The calculated DC is tabulated below. This is based on full cost recovery.

Calculated Developer Charges are currently based on Guyra assets only:

The calculated DC, based on full cost recovery, is \$3,059 per ET. Council has resolved to set the figure at \$3,059 per ET.

Charges are indexed each year as required until recalculated again.

<b>Adopted Developer Charge for 2015/16 is \$3,059 per ET</b>
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### 4.2 Reticulation

Guyra Shire Council does not charge a monetary charge for the construction of reticulation pipework. Developers are responsible for the provision of these works. These may be handed over to Guyra Shire Council upon completion of the development.

### 4.3 Payment of Developer Charges

#### 5.3.1 Timing of Payments

Subject to clauses 5.3.2 and 5.3.3 the timing for payments of developer charges is as follows:

For complying development

Following the issuing of a complying development certificate and prior to the commencement of work (whether or not the certificate is issued by Council or an accredited certifier).

For other development

Prior to the release of the Construction Certificate or the issuing of a Notice of Commencement of Work should the proposed development not involve construction.

For subdivision

Prior to the release of the Linen Plan.

#### 4.3.2 Method of Payment

Developer charges must be made in the form of monetary payments to Guyra Shire Council. Development consents requiring the payment of a DC will contain a condition specifying the amount payable in monetary terms at the time the consent is issued. A note will be attached to the consent condition which will advise that the DC will be at the rate which applies at the time of payment. That is the rate may increase, through indexation or replacement of this DSP with a new one, from the time the condition appears on the notice of development consent until the time the DC is actually paid to Council.

The deferral of payment of contributions is only permissible subject to formal resolution by Council prior to this occurring. Any request should provide detailed reasons and should agreement be granted, deferral will be subject to the following requirements:

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- The applicant is to arrange for a Bank Guarantee to be prepared to the value of contributions payable as agreed to by Council (this is to include indexation where applicable),
  - The Bank Guarantee is to be made in favour of Council,
  - Council is to be the custodian of the original Bank Guarantee, and
  - The maximum time frame granted for deferment is (6) months. Should the contributions not be paid by this time, Council will exercise its right under the agreement to call in the Bank Guarantee without notice. Should the approved deferment overlap into the following financial year, then the contribution(s) payable will be subject to indexation.

Council does not permit the payment of contributions in instalments, rather opting for the preparation of a Bank Guarantee in lieu of payment of contributions.

#### 4.3.3 Works in Kind Contributions

Upon written request, Council will consider an offer by the applicant to make a contribution by way of “works in kind” provided that:

- (a) The proposed work satisfies the demands for the kind of public amenities and facilities for which the contribution is sought,
- (b) The proposed work will not prejudice the timing or the manner of the provision of the amenity or facility for which the contribution was required,
- (c) The value of the work is at least equal to the value of the contribution assessed in accordance with this plan and that this value is adequately documented,
- (d) Agreement has been reached as to the standard of work to be undertaken, and
- (e) Where the difference of the value of the work in kind is less than the contribution assessed in accordance with this plan, the balance shall be made by way of monetary contribution.

As part of the Council’s decision making process, a request would only be considered provided the applicant was agreeable to all of the following stipulations:

- An agreement between the applicant and Council on the cost of the works (and value of the work in kind) which is to be determined by reference to satisfactory plans, breakdown of costs, review of audited statements and accounts or similar submitted by the applicant. There would be no indexing of the value of the work in kind or credits so granted.
- The number of credits for a particular type of contribution will be determined by dividing the agreed value of the proposed work by the rate applying to that contribution at the time of the agreement. The credits so agreed will be progressively reduced as the development proceeds. The agreed works schedule may specify those works that may be considered as works in kind.
- An agreed 12 month Defects Liability Period for the cost of the agreed work.
- An agreed standard of workmanship.
- An agreed timetable for the inspection of the works.

- 
- An agreed program for the completion of works.
  - Submission of an itemised statement of costs (including all receipts) of the completed works. Where the final cost of the works is less than the initial agreed cost of works, the balance is to be paid to Council as a monetary contribution. The costs of works are to also include a breakdown of all labour costs.

Please note that Council will not acknowledge any costs incurred associated with the agreement of Works in Kind as part of above itemised statement.

The decision to accept settlement of a contribution by way of a work in kind is at the sole discretion of Council and will require a Council resolution prior to implementation.

It is Council's preference that for broad acre release areas that Council accepts works in kind and that these are to be fully constructed prior to the release of the Linen Plan or at such time as identified in a "written agreement" between Council and the developer.

Should works in kind that have been agreed to by Council be later withdrawn by the applicant for any reason, then the applicant will be liable for the payment of contributions in accordance with the conditions of development consent or complying development certificate plus any indexations that may have occurred since the approval date.

#### **4.4 Staged Subdivision/Development**

In the event of a staged subdivision or development, Guyra Shire Council will accept the staged payment of developer charges as specified above, ie prior to the release of the linen plan for each stage of subdivision and prior to the release of any building approval for a particular stage of a development.

Deferred payment of DC other than in accordance with Guyra Shire Council's requirements for Staged Subdivision and Development, is not permitted by Guyra Shire Council.

#### **4.5 DC Waiver**

Guyra Shire Council may waive DC ordinarily attributable to subdivision and development, where the proponent demonstrates to Guyra Shire Council's satisfaction, that it is a non-profit and charitable organisation, which by virtue of carrying out such development, is considered by the Guyra Shire Council to be making a significant and positive contribution to the community.

#### **4.6 Reviewing and Revising of Developer Charges**

Developer charges calculations relating to this DSP will be reviewed after a period of five to six years, or when any significant changes occur in proposed works, growth projections or standards.

In the period between any reviews, developer charges will be revised on 1 July each year on the basis of movements in the Consumer Price Index (CPI) for Sydney, in the preceding 12 months to December, excluding the impact of GST.

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## 5. References

Department of Water and Energy, *Guidelines - Developer Charges for Water Supply, Sewerage and Stormwater* (2002)

NSW Water Directorate Section 64 Determination of Equivalent Tenement Guidelines (2009).

NSW Department of Primary Industries - NSW Reference Rates Manual – Valuation of water supply, sewerage and stormwater assets (2014)





## APPENDIX No. 2 - Capital Charge Calculation

Asset Details	Capital cost \$,000	Year dollars	Cost 2015 \$,000	Year Commissioned	Effective year (for ROI)	Capacity EP	Capacity ET's	Capital cost per ET	Year of full uptake	Discount rate	ROI Factor	Capital charge \$/ET
<b>Existing Pump Stations</b>												
SG 1	\$320	2014	\$325	2001	2001			\$476	2045	7	2.26	\$1,074
SG 2	\$320	2014	\$325	2001	2001			\$476	2045	7	2.26	\$1,074
<b>Total</b>	<b>\$640</b>		<b>\$650</b>			<b>1654</b>	<b>683</b>	<b>\$951</b>	<b>2045</b>	<b>7</b>	<b>2.26</b>	<b>\$2,148</b>
<b>Existing Treatment</b>												
Siteworks	\$480	2014	\$487	1970	1996			\$343	2045	3	1.49	\$509
Non Mech	\$120	2014	\$122	1970	1996			\$86	2045	3	1.49	\$127
Sludge lagoon	\$350	2014	\$355	1970	1996			\$250	2045	3	1.49	\$371
Aeration tank	\$2,200	2014	\$2,233	1970	1996			\$1,570	2045	3	1.49	\$2,333
UV disinfection	\$231	2014	\$234	1970	1996			\$165	2045	3	1.49	\$245
<b>Treatment Total</b>	<b>\$9,710</b>		<b>\$3,432</b>			<b>3,300</b>	<b>1,422</b>	<b>\$2,413</b>	<b>2045</b>	<b>3</b>	<b>1.49</b>	<b>\$3,585</b>
New Pump Station	\$150	2007	\$189	2007	2016	3,300	1,422	\$174	2045	7	2.26	\$300
Outlet flow measurement structure	\$30	2007	\$38	2017	2017	3,300	1,422	\$27	2045	7	2.26	\$60
Telemetry upgrade	\$20	2015	\$20	2015	2015	3,300	1,422	\$14	2045	7	1.76	\$25
<b>Total New Works</b>	<b>\$200</b>		<b>\$247</b>			<b>3,300</b>	<b>1,422</b>	<b>\$174</b>				<b>\$385</b>

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**Grand Total Calculated Capital Charge per ET = \$6,118**  
**Reduction Amount (50%) = \$3,059**  
**Calculated Developer Charge = \$3,059 per ET**

Notes: Existing infrastructure shown in black, **proposed capital works shown in red**