



Nambucca Shire Council

Development Servicing Plan for Sewerage

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Cover photo: *The mouth of the Nambucca River in Nambucca Heads, NSW, Australia, VisitNSW – Destination NSW*

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Executive Summary

Developer Charges are an integral part of the fair pricing of water supply and sewerage services. They are up-front charges levied on developers to recover part of the infrastructure costs incurred in servicing new developments or changes to existing development. Section 64 of the Local Government Act, 1993 enables a local government council to levy developer charges for water supply, sewerage and stormwater services.

This document covers the Development Servicing Plans (DSPs) for sewerage service areas of Nambucca Shire Council (NSC). The maps of the development service areas for sewerage are shown in Appendix A.

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

The sewerage developer charges for the area covered by this DSP have been calculated with the consideration to commence from 1st July 2018, i.e., in 2018/19 dollars, and are as follows:

Sewerage DSP area	Sewerage Service Area	Agglomerated capital charge 2018/19 (\$ per ET)	Reduction amount 2018/19 (\$ per ET)	Calculated developer charge 2018/19 (\$ per ET)
Sewerage DSP Area 1	Macksville	13,154	2,590	10,564
	Nambucca Heads			
Sewerage DSP Area 2	Scotts Head	9,511	2,590	6,921
	Bowraville			

The public exhibition and adoption of calculated developer charge for implementation will be in 2019/20 therefore has to be adjusted for CPI of 1.60% p.a. for Sydney during 2018/19. The adjusted sewerage developer charges applicable from 1st July 2019 is shown below.

Sewerage DSP area	Sewerage Service Area	Adjusted calculated developer charge from 1 July 2019 (\$ per ET)
Sewerage DSP Area 1	Macksville	10,733
	Nambucca Heads	
Sewerage DSP Area 2	Scotts Head	7,032
	Bowraville	

The developer charges calculated in this DSP will be reviewed after 4-8 years, unless required otherwise. In the period between any reviews, the developer charges will be indexed annually based on the movements in the consumer price index (CPI) for Sydney, excluding the impact of GST.

The DSPs have been adopted by Council after public exhibition on *[insert date]* and the adopted developer charges are effective from *[insert date]*.

The existing sewerage assets serving NSC and the timing and expenditures for assets planned for the next 10-years are presented in Section 4. The levels of service to be provided in the DSP areas are summarised in Section 5.

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

The background documents for the sewerage DSP are listed in Appendix C. The electronic copy of these documents containing all the critical data and calculation models behind the DSP will be made available on request.

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1 Introduction

The developer charges are up-front charges levied by urban water utilities to recover part of the infrastructure costs incurred in servicing new developments or additions or changes to the existing developments.

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) documents the details of the developer charges to be levied on developments utilising a water utility's water supply, sewerage and stormwater infrastructure.

This DSP covers sewerage developer charges for the service areas of Nambucca Shire Council (NSC). The sewerage DSP areas serviced by NSC are shown in Appendix A.

The aims and objectives of this DSP are to:

- Provide an overall administrative framework under which specific sewerage assets may be co-ordinated and constructed
- Ensure that adequate sewerage infrastructure is provided for as part of the new development
- Provide a comprehensive strategy for the assessment, collection, expenditure accounting and review of contributions on an equitable basis
- Ensure that the existing community is not burdened by the provision of sewerage infrastructure as a result of future development
- Enable Council to be both publicly and financially accountable in its assessment and administration of the Development Servicing Plans.

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

Once adopted, this DSP supersedes any other requirements related to sewerage developer charges for the development areas covered by the DSP. The DSP takes precedence over any of Council's codes or policies where there are any inconsistencies relating to sewerage developer charges.

The developer charges should be indexed based on movements in the consumer price index (CPI) for Sydney, excluding the impact of GST. The developer charges calculated in this DSP will be reviewed after 4 - 8 years.

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

2 Administration

2.1 DSP areas and names

NSC operates and manages four sewerage schemes to serve townships within the Nambucca LGA. This DSP is applicable to all land within the DSP areas which is serviced by the sewerage schemes in NSC. The DSP names and the areas covered are presented in Table 2-1.

Table 2-1: DSP Names and Areas Covered

DSP Details	Sewerage schemes covered	Area covered
SDSP 1 - Sewerage DSP Area 1	Macksville	The maps of the sewerage service areas covered by these DSPs are shown in Appendix A
	Nambucca Heads	
SDSP 2 - Sewerage DSP Area 2	Scotts Head	
	Bowraville	

2.2 DSP boundaries

The DSP area boundaries are based on the existing and future developments to be serviced by the four existing sewerage schemes operated by NSC (Table 2-1). Regarding the new developments outside the sewerage DSP areas boundaries, Council may:

- apply the developer charges adopted by this Plan to the new development, or
- prepare a new DSP for the new development.

2.3 Application of developer charges

Developer charges will be levied to all land and new developments within the DSP areas. Council will assess the demand for service in terms of equivalent tenements (ET) based on the Water Directorate Guidelines for determination of Equivalent Tenements for Section 64 charges (Appendix B) and will levy developer charges proportional to the number of ETs. The developer charges will also apply to re-developments (i.e. alterations, additions or change of use for an existing development) on the basis of resulting increase in the ET for the services.

Developers shall be responsible for the full cost of the design and construction of sewer reticulation works within subdivisions.

2.4 Effective commencement date for this DSP

This DSP has been adopted by NSC on *[inset date]* and will be effective from *[inset date]*. Charges will be levied pursuant to this DSP from the day this DSP comes into effect.

2.5 Timing and payment of developer charges

The developer charges will be determined and levied in accordance with the provisions of this DSP at the time of considering an application for a compliance certificate under Section 305 of the Water Management Act 2000 or a construction certificate under Section 109 of the Environmental Planning and Assessment Act 1979 or at the time of issuing a notice or other form of written advice e.g. under the SEPP (Exempt and Complying Development Codes) 2008.

The time limit for payment of developer charges will be included in the notice of determination or will be advised to the developer by a separate notice. The amount of any developer charges not paid within the specified time limit will lapse. Any subsequent determination of developer charges will be made in accordance with Council's then current DSP.

The timing of payment of developer charges to NSC is as follows:

- subdivision – prior to the release of the linen plan or approved engineering plans, whichever occurs first;
- dwellings and other buildings – prior to the issue of construction certificate
- other developments – prior to the issuing of a notice of commencement of work, should the proposed development not involve any construction.

Other arrangements for payment are at Council's discretion and depend upon the circumstances of the contributor or the development. Where the applicant can demonstrate that the settlement of the contribution as set out above is unreasonable in the circumstances of the case, the Council may accept deferred or periodic settlement.

Payment of a developer charge is a precondition to the granting of a Compliance Certificate, which must be obtained in order to complete a development. A Compliance Certificate will not be issued until the developer charge payment has been received.

2.6 Method of payment

Developer charges must be made in the form of monetary payments to Council. The development consents will contain the conditions specifying the developer charges amount payable at the time when the consent is issued. A note will be attached to the consent condition which will advise that the developer charges 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 developer charge is actually paid to Council.

Developers may seek Council's agreement and approval on payment deferment. Where the applicant can demonstrate that the settlement of the contribution as set out by the Council is unreasonable in the circumstances of the case, the Council may accept deferred or periodic settlement. Any request should provide detailed reasons and should agreement be granted, deferral will be subject to the following requirements:

- 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 will be determined at the discretion of the Council. 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.

Upon Council's approval, the charges will be recorded as a debt against the property and payable at a rate applicable at the time of payment.

2.7 Exemptions from developer charges

Crown Developments:

Under Section 306 (4) and (5) of the Water Management Act 2000, the Minister for Planning may decide in regard to developer charges levied on Crown Developments.

Crown developments for essential community services (education, health, community amenities, and law and order) are exempt from general developer charges. Council may charge these developments only for that portion of the direct connection cost (e.g. for a lead-in main) relating to Crown development.

Other Developments:

The contributions set out in this DSP apply to all forms of development within NSC, except for the following:

- a. Erection of a single dwelling house on an existing vacant allotment of land that has been previously rated for a sewerage access charge
- b. Alterations or additions to a single dwelling house where such alterations do not create additional dwellings
- c. Subdivision of land that does not create any additional allotments

2.8 Out of sequence development

Council plans infrastructure development in accordance to a desired sequence of development. If a developer wishes to proceed with a development which is not in the same sequence, provided that there are no other constraints to the development, Council may approve the construction of the essential assets ahead of time. In such cases, the assets will be sized by the Council in accordance to the requirements of the DSP and the full capital cost would initially be met by this developer.

If the asset funded by this developer will serve other future development, the developer could be reimbursed when the Council collects developer charges from the future development. The Council and the developer will enter into an agreement stating how the developer will be reimbursed in the future.

It is recommended that prospective developers seek further advice from Council on out of sequence development.

2.9 “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 is 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.

It should be noted 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 broadacre 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 the 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.

2.10 Indexation

The developer charges should be indexed annually on the basis of movements in the consumer price index (CPI) for Sydney, excluding the impact of GST.

2.11 Dispute resolution

Council will adopt a transparent and consultative process for determining developer charges for a development. In case of disputes:

- If the dispute is regarding how the Council has calculated the developer charge for a development:
 - The developer may lodge a formal complaint to the Council and the General Manager of the Council will review or cause it to be reviewed

- If not satisfied with the General Manager's response, the developer may refer the complaint to the NSW Ombudsman as the Council is currently not a member of the Energy and Water Ombudsman NSW (EWON)
- If the dispute is regarding the interpretation of the 2016 Developer Charges Guidelines:
 - The developer may refer the complaint to DPIE Water, which will respond to the complaint
 - If warranted, DPIE Water may refer the matter to an expert technical panel, which will include representatives from DPIE Water, IPART, the NSW Water Directorate, the Council and the development industry, and a developer charges expert for responding to the complaint
- If the developer is still dissatisfied, may request the matter to be reviewed by way of arbitration by an arbitrator, who is to be appointed by agreement between the developer and the Council, in accordance with the Commercial Arbitration Act, 2010. Costs of arbitration are to be borne equally by the developer and the Council. The decision of the arbitrator is binding on both the developer and the Council.

3 Demographics, Growth Projections and Land Use

3.1 Existing services

The NSC provides sewerage services to the townships and villages within the Nambucca LGA. A summary of the sewerage services is included in Table 3-1.

Table 3-1: Nambucca Shire sewerage services

Town / Village	Sewerage Scheme
Bowraville	Bowraville
Macksville	Macksville
Nambucca Heads, Hyland Park and Valla Beach	Nambucca Heads
Scotts Head	Scotts Head

The historical population for the urban centres is presented in Table 3-2. These populations are obtained from ABS Census Quickstats data.

Table 3-2: Historical urban centre population of serviced areas

Urban Centre	2001	2006	2011	2016
Nambucca Heads	6,121	5,873	6,220	6,314
Macksville	2,658	2,658	2,786	2,785
Valla Beach	819	1,054	1,199	1,313
Hyland Park	315	406	441	429
Scotts Head	794	789	820	896
Bowraville	954	976	1,090	950
Total Communities	11,661	11,756	12,556	12,687

3.2 Growth Projections for the Service Areas

To apportion the cost of providing sewerage services within the Council's DSP areas, the demand in each DSP area is required. The demand in each DSP area is determined in terms of equivalent tenements (ETs). An ET is the annual load a detached residential dwelling will place on sewerage infrastructure in terms of sewage generated.

For the purpose of the Development Servicing Plans, the tenement growth forecasts adopted by the IWCM Strategy based on sewer load analysis were further reviewed and checked for use in the calculation of developer contributions. The adopted growth rates are consistent between both the documents.

The estimated equivalent tenements (ET) growth forecasts for the sewerage services used for the calculation of developer charges are summarised in Table 3-3 (see page 8).

3.3 Land use information

Information provided in this Plan should be considered in conjunction with Local Environmental Plan, Developer Control Plans (DCPs) and other planning instruments used by NSC.

Table 3-3: Nambucca Shire Council sewerage service areas estimated ET projections

Financial Year	Nambucca Heads	Macksville	Scotts Head	Bowraville
1995/96	4,099	1,486	692	430
2018/19	4,633	1,729	779	436
2019/20	4,667	1,758	784	436
2020/21	4,701	1,787	789	437
2021/22	4,764	1,809	792	437
2022/23	4,827	1,831	794	438
2023/24	4,891	1,852	797	438
2024/25	4,954	1,874	799	439
2025/26	5,017	1,896	802	439
2026/27	5,085	1,916	804	439
2027/28	5,152	1,935	807	440
2028/29	5,220	1,955	809	440
2029/30	5,287	1,974	812	441
2030/31	5,355	1,994	814	441
2031/32	5,421	2,013	822	442
2032/33	5,487	2,032	829	442
2033/34	5,552	2,051	837	443
2034/35	5,618	2,070	844	443
2035/36	5,684	2,089	852	444
2036/37	5,733	2,107	859	444
2037/38	5,781	2,125	867	444
2038/39	5,830	2,143	874	445
2039/40	5,878	2,161	882	445
2040/41	5,927	2,179	889	445
2041/42	5,977	2,197	897	445
2042/43	6,027	2,215	904	445
2043/44	6,076	2,233	912	446
2044/45	6,126	2,251	919	446
2045/46	6,176	2,269	927	446
2046/47	6,207	2,280	932	448
2047/48	6,238	2,292	936	450
2048/49	6,269	2,303	941	453

4 Infrastructure

4.1 Sewerage system overview

Nambucca Shire Council operates the following four reticulated sewerage services to service townships within the Nambucca LGA:

- Nambucca Heads sewerage scheme
- Macksville sewerage scheme
- Scotts Head sewerage scheme
- Bowraville sewerage scheme

Other rural areas use on-site management systems (for example, septic tanks) to treat wastewater.

4.2 Existing sewerage assets

Existing sewerage assets servicing the NSC DSP areas and their current MEERA costs as valued and maintained by the Council have been included in the capital charges calculation.

The current replacement cost (CRC) for the existing sewerage assets in NSC is \$114.13 Million (2018/19 \$). In accordance with the 2016 NSW Developer Charges Guidelines, all existing sewerage assets servicing NSC are included in the capital charge calculations except for the following:

- assets older than 30 years as of 2019
- assets which are unlikely to be fully utilised over the planning horizon for calculating developer charges
- reticulation assets, which are typically paid for directly by developers
- gifted assets, which were built by developers and later transferred to Council

The CRC of sewerage assets (in NSC) included for the calculation of capital charge is \$46.21 Million (2018/19 \$).

Details of the existing assets servicing the area covered by the sewerage DSP are presented in Appendix C. A summary of the current replacement costs for existing included and excluded assets is shown in Table 4-1.

Table 4-1: Summary of existing sewerage assets in Nambucca Shire Council

Service Area	Asset Type	Current Replacement Cost (2018/19 \$)	Excluded Assets (2018/19 \$)	Included Assets (2018/19 \$)
Bowraville	Sewer Gravity Mains	3,687,130	3,687,130	-
	Sewer Manhole	861,312	861,312	-
	Sewer Rising Mains	431,912	12,492	419,420
	SPS	277,537	199,689	77,848
	STP	1,691,689	1,094,710	596,979
	Bowraville Total	6,949,579	5,855,333	1,094,246
Macksville	Sewer Gravity Mains	12,306,879	11,643,392	663,487
	Sewer Manhole	3,009,100	3,009,100	-
	Sewer Rising Mains	2,596,028	581,074	2,014,954

Service Area	Asset Type	Current Replacement Cost (2018/19 \$)	Excluded Assets (2018/19 \$)	Included Assets (2018/19 \$)
	SPS	4,972,411	1,292,995	3,679,415
	STP	6,321,937	-	6,321,937
	Macksville Total	29,206,356	16,526,562	12,679,794
Nambucca Heads	Sewer Gravity Mains	26,482,446	25,375,331	1,107,115
	Sewer Manhole	6,894,259	6,894,259	-
	Sewer Rising Mains	6,247,482	1,640,006	4,607,475
	SPS	11,427,248	1,661,962	9,765,286
	STP	16,887,837	1,875,054	15,012,783
	Nambucca Heads Total	67,939,272	37,446,613	30,492,659
Scotts Head	Sewer Gravity Mains	4,277,337	4,276,713	624
	Sewer Manhole	1,322,553	1,322,553	-
	Sewer Rising Mains	505,620	84,202	421,418
	SPS	1,654,198	557,591	1,096,608
	STP	2,274,451	1,845,777	428,675
	Scotts Head Total	10,034,159	8,086,835	1,947,324
Grand Total		114,129,365	67,915,343	46,214,022

4.3 Future sewerage assets and renewals

Where DSP areas are expected to make use of future assets, the capital cost of these assets are included in the capital charges calculations. In accordance with the Developer Charges Guidelines 2016, the estimated costs of capital works (including contingencies) planned for the next 10 years as adopted by the Council and documented in the Total Asset Management Plan of the Council's IWCM Strategy, 2018, have been included for the calculation of capital charges.

The NSC sewerage capital works program comprises of works for growth, improved standards and renewals. The capital works required for Council to provide sewerage to the existing service areas and the new development areas are summarised in Table 4-2.

Table 4-2: Sewerage future capital works in Nambucca Shire Council

Sewerage capital works program	10-year capex total 2018/19 (\$'000)
New / Upgrade Works	8,562
Renewals	6,728
Total	15,290

(Source: As adopted and documented in NSC IWCM Strategy, 2018)

The timing and expenditure for the 10-year sewerage capital works covered by the DSP is shown in Figure 4-1. Details of the 10-year sewerage capital works program are shown in Figure 4-2.

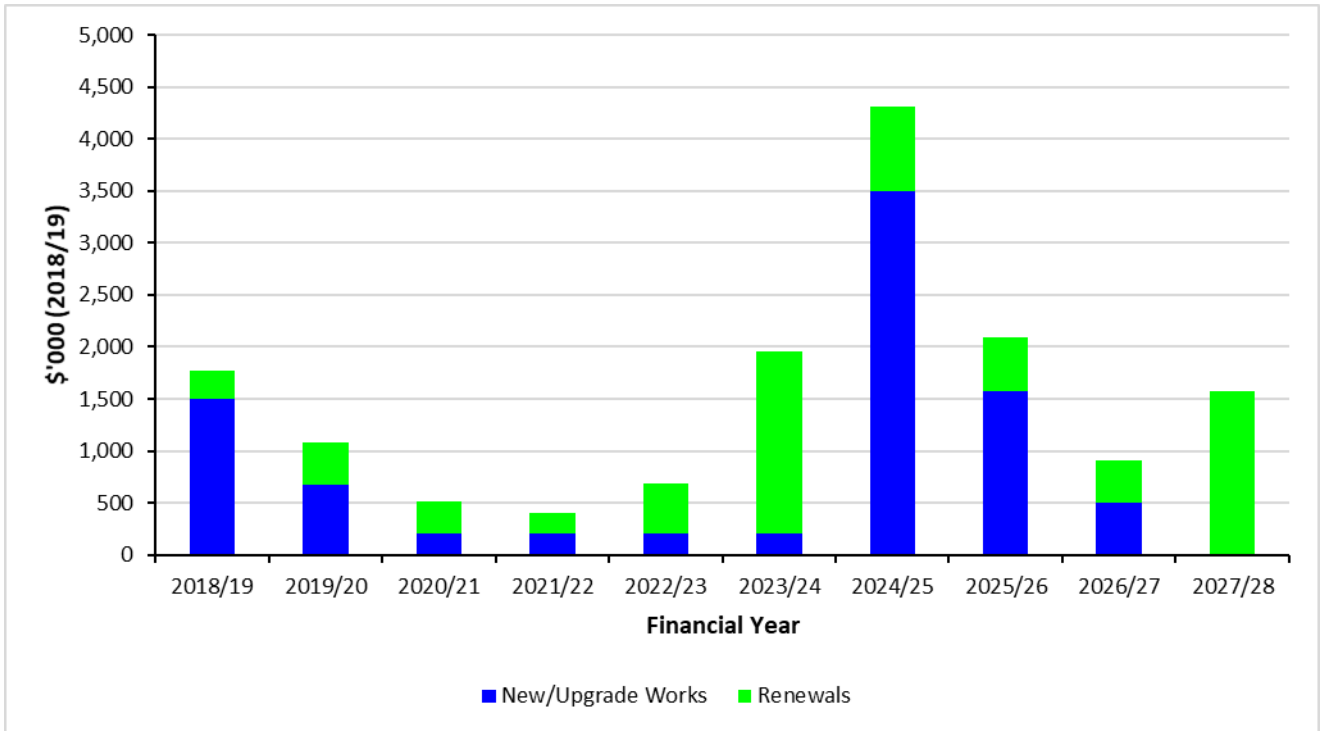


Figure 4-1: Timing of 10-year sewerage capital works program

Timing of works and expenditure are to be reviewed and updated when required. Capital cost for growth planned within the next 10 years is included while the reticulation is excluded in the capital charges calculation in this DSP. The Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2016) recommend that capital works for renewal of assets of age 30-years and over that have been excluded from the existing asset category for the calculation of capital charges but expected to be replaced within 10-years of the commencement of DSP, be included for the capital charges calculation.

Sewer reticulation

Reticulation is defined as the local pipes providing sewerage service to individual properties. Reticulation assets are excluded from the calculation of developer charges as the developers are responsible for the full cost of the design and construction of sewer reticulation works within subdivisions. However, LWUs may calculate a reticulation supplement which would be payable by developers that have not provided the reticulation assets.

SEWER - 30-Year Capital Works Program															
Current Year															
2018/19															
CAPITAL WORKS IN 2018/19 (\$'000)															
						1	2	3	4	5	6	7	8	9	10
						2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
	SUBSIDY	ILOS	GROWTH	RENEW	Total										
Bowraville:															
Bowraville STP:															
-Upgrade to treatment train - sand filter and UV		100%			1,226	1,226									
- General STP Renewals				100%	67		67								
Scotts Head															
Scotts Head STP															
- STP upgrade - Additional 1000 EP MBR			100%		0										0
- General STP Renewals				100%	511						511				
New Gravity Mains - 150 mm dia. PVC No Depth				100%	8	8									
Macksville:															
Upgrade SPS 4			100%		153						153				
Upgrade SPS 13			100%		868							868			
Upgrade SPS 10 Raising Main			100%		0										0
SPS 16 upgrade - New overflow tank and Rising Main			100%		327								327		
General SPS Renewals				100%	69	69									
Sewer Main Services - Macksville Hospital			100%		185	185									
Nambucca Heads:															
Pressure Sewer - Valla UGA		100%			470		470								
Nambucca Heads - General renewals				100%	18	18									
Nambucca Heads															
- Electrical/telemetry renewals				100%	30	30									
- SPS pump renewals				100%	44	44									
- New sewer manholes			100%		11	11									
Valla Beach															
- Electrical/telemetry renewals				100%	11	11									
- SPS pump renewals				100%	35	35									
- New SPS magnesium hydroxide dosing unit components			100%		17	17									
Hyland Park Subdivision new works (gravity mains, manholes)			100%		65	65									
IWCM Initiatives															
VGA Sewage Transport to NH STP -Option 4			100%		3,344						3,344				
SHGA Sewage Transport to SH STP - Option 2			100%		876							707	169		
Renewals:															
Sewer Main Replacement + Odour Management				100%	970	0	102	102	102	102	112	112	112	112	112
SPS facilities renewal				100%	459	0	51	51	51	51	51	51	51	51	51
Plant and equipment replacement (net)				100%	296	55	83	13	17	13	19	38	19	19	19
Inflow /infiltration Management Works		100%			1,021	0	204	204	204	204	204	0	0	0	0
Allowance for Asset Renewal (AM Plan 2017)				100%	4,212	0	97	143	26	317	1,567	102	337	235	1,389
GRAND TOTAL					15,290	1,771	1,075	514	400	687	1,954	4,311	2,094	913	1,571

Figure 4-2: 10-year sewerage capital works program for Nambucca Shire Council

5 Levels of service

Sewerage system design capacity and operation are based on providing the adopted levels of service (LOS). The LOS for the sewerage services adopted following consultation with the Project Reference Group including community representatives as part of the development of Council's IWCM Strategy, 2019 are shown in Table 5-1.

Table 5-1: Nambucca Shire Council's sewerage levels of service

Description	Unit	Levels of Service	
		Current LOS	Target LOS
Availability of Service			
Extent of area serviced	% Service Area	99% of urban areas	100% of current and future urban areas
System Failures			
<i>Category One:</i> Failure due to rainfall and deficient capacity (overflows to the environment)	No./year	<50	<10
<i>Category Two:</i> Failures due to pump or other breakdown including power failure	No./year	0	0
<i>Category Three:</i> Failure due to main blockages and collapses [#]	No./year	<100	<100
Response Times for Service Interruptions (Defined as time to have staff on-site to commence rectification after notification of problem)			
<i>Priority One:</i> (Major spill, significant environmental or health impact, or affecting large number of consumers i.e. a major main)			
- During working hour:	Minutes	180	90
- During afterhours:	Minutes	180	120
<i>Priority Two:</i> (Moderate Spill, some environmental or health impact, or affecting small number of consumers i.e. other mains)			
- During working hour:	Minutes	180	90
- During afterhours:	Minutes	180	120
<i>Priority Three:</i> (Minor spill, little environmental or health impact, or affecting small number of consumers i.e. other mains)			
- During working hour:	Minutes	180	180
- During afterhours:	Minutes	180	180

Description	Unit	Levels of Service	
		Current LOS	Target LOS
Customer Feedback/ Complaints			
Service complaints	No./1000 connections	<10	<5
Odour complaints	No./1000 connections		
- Treatment works		0	0
- Pumping Stations		<1	0
- Reticulation System		<1	0
Billing and account complaints	No./1000 connections	<10	<10
Other complaints	No./1000 connections	<10	<10
Response time for feedback/ complaints			
Average connect time to a telephone operator	Seconds	30	30
General complaints and inquiries:			
- Written complaints	Working days	10	10
- Personal/ Verbal complaints	Working days	5	5
<i>Note: Times apply for 95% of complaints</i>			
Environment			
Sewage treated to	% of total volume of sewage treated		
- Primary level only		100	100
- Secondary level		100	100
- Tertiary level		30	90
Recycle/ reuse of effluent	% total volume of sewage treated	8	8
Effluent discharge compliance with licence limits	% of samples/ year	98	100

6 Design parameters

Investigation and design of sewerage system components are based on the following technical documentations:

- Nambucca Shire Council's levels of service (Refer to Section 5)
- Manual of Practice: Sewer Design (1984)
- Manual of Practice: Sewage Pumping Station Design (1986)
- WSAA Gravity Sewerage Code of Australia V3.1 – WSA 02-2014
- WSAA Pressure Sewerage Code of Australia V1.1 – WSA 07 – 2007

Other references used for the development of this DSP are contained in the following documents:

- Developer Charges Guidelines for Water Supply, Sewerage and Stormwater 2016, DPIE Water
- NSW Water and Sewerage Strategic Business Planning Guidelines, DPIE Water, July 2011
- TAM and Financial Plans of Nambucca Shire Council IWCM Strategy, 2019.

7 Developer charges calculation methodology

7.1 Developer charge concept

The developer charges calculation methodology is based on the net present value (NPV) approach with a view to fully recover the capital cost invested for servicing a development area. The investment is recovered as the up-front developer charges and the net income over time from the annual bills/charges.

The calculation of developer charges is a two-step process. First, the capital charge is calculated as the present value of the capital cost of assets required over time to service the development area. The capital charge will include the capital cost component that will be recovered through annual bills, which needs to be reduced from the calculated capital charge. Hence, the second step is to calculate the reduction amount, which is the present value of the expected annual charges over time to be paid by the development in excess of operation, maintenance and administration (OMA) costs i.e. net income from annual bills.

The developer charge per equivalent tenement is defined as the capital charge less the reduction amount.

$$\text{Developer Charge (\$/ET)} = \text{Capital Charge (\$/ET)} - \text{Reduction Amount (\$/ET)}$$

7.2 Capital charge

The calculated capital charge represents the efficient capital cost of assets used in providing sewerage services in the DSP areas. This includes the cost of both existing and future assets per equivalent tenement (ET) to be used to service the DSP areas.

Generally, the capacity of a sewerage asset would not be fully utilised until some years after construction of the asset. The calculation takes into account the time to full take-up of the capacity of an asset over the planning horizon (30 years).

The Return on Investment (ROI) is based on the cost of early investment and the recovery of the investment over time. The annual payments have to provide a return of investment to reflect the discounting of future payments.

In accordance with IPART's Determination 9, 2000, the ROI is calculated using the discount rates in Table 7-1.

Table 7-1: Discount rates used in capital charge calculation

Assets	Discount rate
Pre-1996 assets	3% pa
Post 1996 assets	5% pa

7.3 Exemption

The assets groups included and excluded from the capital charges calculations are shown in Table 7-2

Table 7-2: Assets included and excluded in capital charges calculations

Group	Capital charge calculation inclusion
Existing assets	Assets less than 30 years old at the commencement of this Plan are included.
Future assets (new growth)	Assets planned within the next 10 years as adopted by Council are included.
Future assets (renewals)	Assets planned for renewal within the next 10 years are included, if replacing assets older than 30 years.
Reticulation (existing and future)	Reticulation assets are excluded from the calculation of developer charges.
Assets for out-of-sequence development	Excluded if the developer is required to meet the full cost of such needs.
Developer provided assets	Excluded unless the developer is reimbursed fully or partially.

7.4 Reduction amount

The reduction amount is the amount by which the capital charge is reduced to arrive at the developer charge. The reduction amount represents the portion of the efficient cost of assets LWUs expect to recover from the new developments as part of their future annual bills for the service provision in the DSP areas.

Council has adopted the NPV of annual bills method to calculate the reduction amount. The reduction amount has been calculated using the NPV for 30 years of the future net income from the annual charge (annual bills less OMA cost) per PV of new ETs.

8 Sewerage developer charges

8.1 Sewerage capital charge and agglomeration

The details of capital charge calculations and agglomeration of sewerage service areas are presented in Appendix C. When the capital charges for two or more service areas are within 30%, they can be agglomerated into a single DSP area. Capital charges for Macksville and Nambucca Heads service areas are within 30% of each other, hence, are agglomerated into a single DSP area (Sewerage DSP Area 1). Scotts Head and Bowraville service area capital charges are within 30% of each other and are agglomerated into a single DSP area (Sewerage DSP Area 2). A summary of the capital charges for the service areas and their agglomeration into the DSP areas are presented in Table 8-1 and Table 8-2.

Table 8-1: Sewerage capital charge for service areas

Sewerage Service Area	Capital charge for pre-1996 assets 2018/19 (\$ per ET)	Capital charge for post-1996 assets 2018/19 (\$ per ET)	Capital charge 2018/19 (\$ per ET)
Macksville	260	16,114	16,374
Nambucca Heads	1,127	10,820	11,947
Scotts Head	1,296	8,299	9,595
Bowraville	463	7,144	7,607

Table 8-2: Agglomeration of sewerage service areas

Sewerage Service Area	Capital charge 2018/19 (\$ per ET)	% of highest capital charge DSP Area 1	% of highest capital charge DSP Area 2	Agglomerated DSP area	Agglomerated capital charge 2018/19 (\$ per ET)
Macksville	16,374	100	-	Sewerage DSP Area 1	13,154
Nambucca Heads	11,947	73	-		
Scotts Head	9,595	59	100	Sewerage DSP Area 2	9,511
Bowraville	7,607	-	79		

8.2 Reduction amount calculation

The reduction amount has been calculated using NPV of annual bill method on a utility-wide basis as Council has adopted a uniform tariff structure. The details of reduction amount calculation are presented in Appendix C and a summary is shown in Table 8-3.

Table 8-3: Summary of Reduction Amount Calculation

Discount rate, p.a.	5%
Annual residential sewerage charge, 2018/19 (\$/ET)	603
Annual sewerage OMA, 2018/19 (\$/ET)	391
Estimated net operating income (\$/ET)	212
PV of new ETs	1,241
PV of net income over 30 years (\$)	3,215,142
Reduction Amount, 2018/19 (\$/ET)	2,590

8.3 Sewerage developer charges

Developer charge is capital charge less the reduction amount. The details of capital charge and reduction amount calculations are presented in Appendix C. The calculated sewerage developer charges in 2018/19 dollars are shown below in Table 8-4.

Table 8-4: Sewerage developer charge

Sewerage DSP area	Sewerage Service Area	Agglomerated capital charge 2018/19 (\$ per ET)	Reduction amount 2018/19 (\$ per ET)	Calculated developer charge 2018/19 (\$ per ET)
Sewerage DSP Area 1	Macksville	13,154	2,590	10,564
	Nambucca Heads			
Sewerage DSP Area 2	Scotts Head	9,511	2,590	6,921
	Bowraville			

Council proposes to adopt and implement the calculated developer charges following public exhibition during 2019/20. The calculated developer charge has therefore to be adjusted for CPI of 1.60% p.a. for Sydney during 2018/19. The adjusted sewerage developer charges from 1st July 2019 is shown in Table 8-5.

Table 8-5: Sewerage developer charge after adjustment for CPI

Sewerage DSP area	Adjusted calculated developer charge from 1 July 2019 (\$ per ET)
Sewerage DSP Area 1	10,733
Sewerage DSP Area 2	7,032

8.4 Sewerage cross-subsidy

The calculated developer charges are the maximum that may be levied by a water utility. Council proposes to adopt the calculated developer charges for both the sewerage DSP areas, hence, no cross-subsidy is involved.

9 Reviewing / updating of calculated developer charges

Developer charges are to be reviewed by Council every 4-8 years. The developer charges should be adjusted 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.

If there is a major change such as the need for significant capital works that has not been included in the existing DSP, Council may carry out a review in less than four years, subject to DPIE Water's approval.

10 Background documents

The references used for the development of this DSP are contained in the following documents:

- Developer Charges Guidelines for Water Supply, Sewerage and Stormwater 2016, DPIE Water
- NSW Water and Sewerage Strategic Business Planning Guidelines, DPIE Water, July 2011
- NSC IWCM Strategy, 2018

The background documents providing details of the sewerage developer charges calculations is included in Appendix C. The background information contains details on commission dates, size, capacity and MEERA valuation of existing sewerage assets. They also include the details of calculations of the capital charges, reduction amount and the developer charges.

11 Other DSPs and related contribution plans

Council's other related contribution plans include:

- NSC Water Supply Development Servicing Plan
- NSC Development Control Plan
- NSC Section 94 Contributions Plans

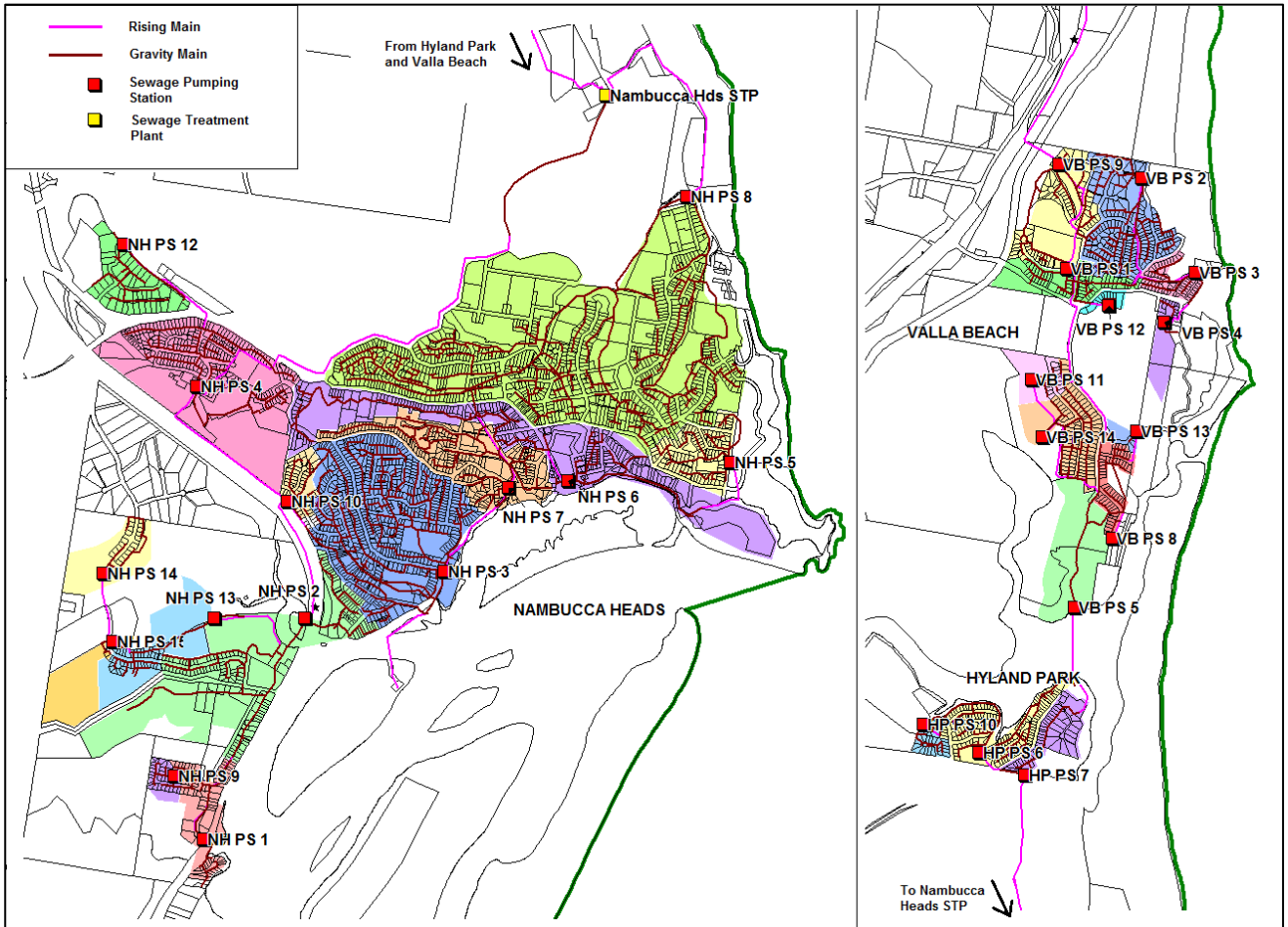
Glossary

Glossary of Terms	
Annual bill	Local Water Utility's annual sewerage bill for an annual demand of 1 ET
Asset	An asset (or part of an asset) including land and headworks assets that directly provides, or will provide, the developer services to developments within the DSP area for which the Developer Charge is payable
ADWF	Average dry weather flow. One of the design parameters for flow in sewers
Capital cost	The Present Value (MEERA basis) of all expenditure on assets used to service the development
Capital charge	Capital cost of assets per ET adjusted for commercial return on investment (ROI)
CPI	Consumer price index
CRC	Current replacement cost
Developer charge	Charge levied on developers to recover part of the capital cost incurred in providing infrastructure to new development
Development area	See DSP area
Discount rate	The rate used to calculate the present value of money arising in the future
DPIE Water	Department of Planning, Industry and Environment - Water
DSP	Development Servicing Plan
DSP area	That is part of a sewerage scheme area covered by a particular Development Servicing Plan. Also referred to as Development Area
EP	Equivalent Persons (or equivalent population). Used as a design parameter for loadings of sewage treatment works
ET	Equivalent tenement. The annual demand a detached residential dwelling will place on the infrastructure in terms of the sewage discharge
LGA	Local Government Area
LWU	Local water utility (NSW). Excludes Sydney Water Corporation, Hunter Water Corporation, Gosford Council, Wyong Council, Essential Water and Fish River Water Supply
MEERA	Modern Equivalent Engineering Replacement Asset
Net income	Annual bill minus OMA cost per ET
NPV	Net present value means the difference between the Present Value of a revenue stream and the Present Value of a cost stream
OMA cost	Operation, maintenance and administration cost

Glossary of Terms	
Operating cost	In relation to a DSP is the operation, maintenance and administration cost (excluding depreciation and interest) of a LWU in providing Customer services to a DSP area
Post-1996 asset	An asset that was commissioned by a LWU on or after 1 January 1996 or that is yet to be commissioned
Pre-1996 asset	An asset that was commissioned by a LWU before 1 January 1996
PV	Present value. The current value of future money or ETs
NSC	Nambucca Shire Council
Reduction amount	The amount by which the capital charge is reduced to arrive at the developer charge. This amount reflects the capital contribution that will be paid by the occupier of a development as part of future annual bills
Reticulation assets	Reticulation is defined as the local pipes connecting water supply and sewerage service for individual properties. Reticulation assets are excluded from the calculation of developer charges as the developers are responsible for the full cost of the design and construction of sewerage reticulation works within subdivisions
ROI	Return on investment. Represents the income that is, or could be, generated by investing money
Service area	An area serviced by a separate sewage treatment works, a separate small town or village, or a new development of over 500 ETs
STP	Sewage treatment plant
TRB	Typical residential bill, which is the principal indicator of the overall cost of a sewerage system and is the annual sewerage charge paid by a residential customer.

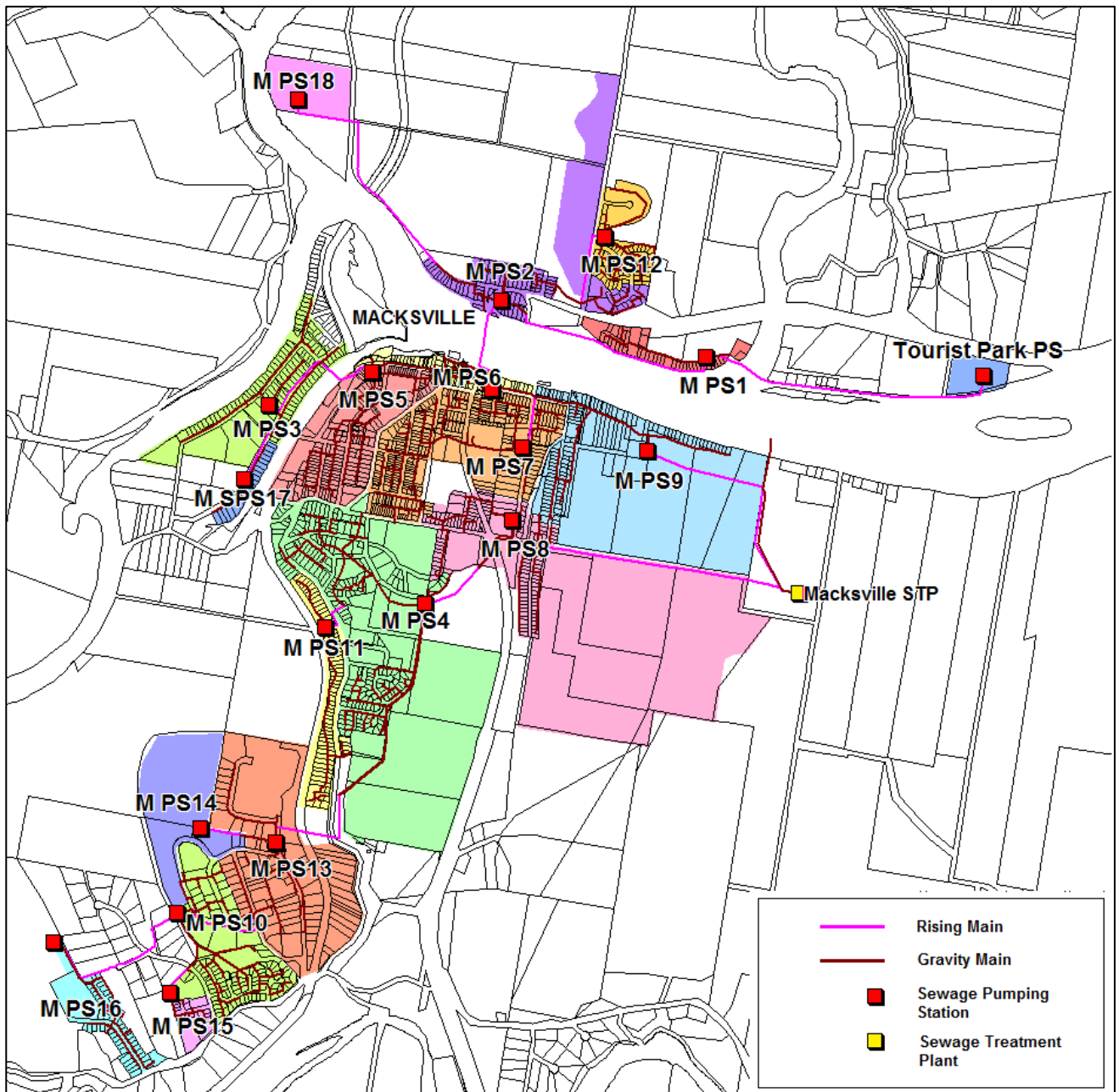
Appendix A DSP service areas

A.1 Nambucca Heads sewerage scheme service area



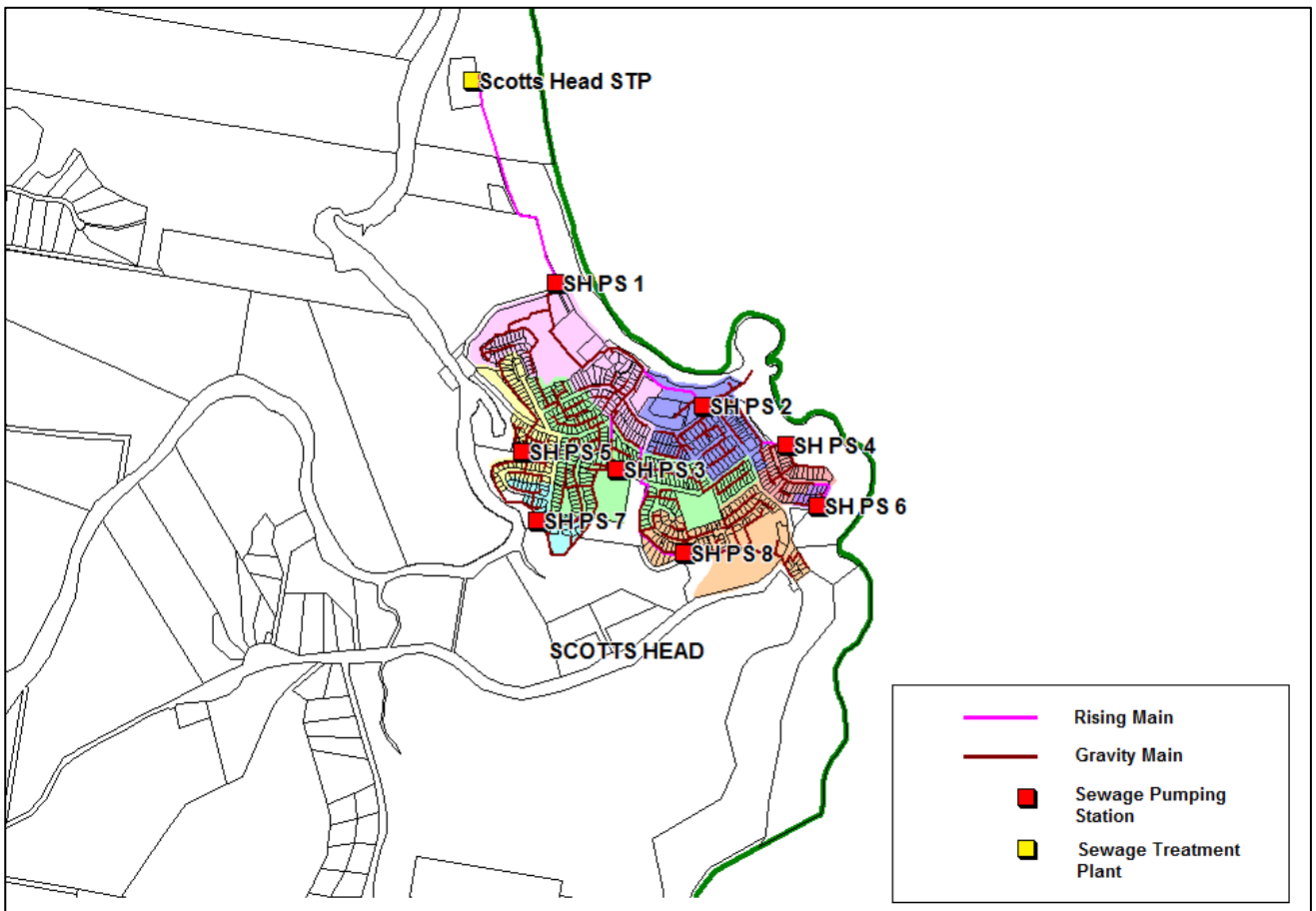
Source: NSC IWCM Strategy, May 2018

A.2 Macksville sewerage scheme service area



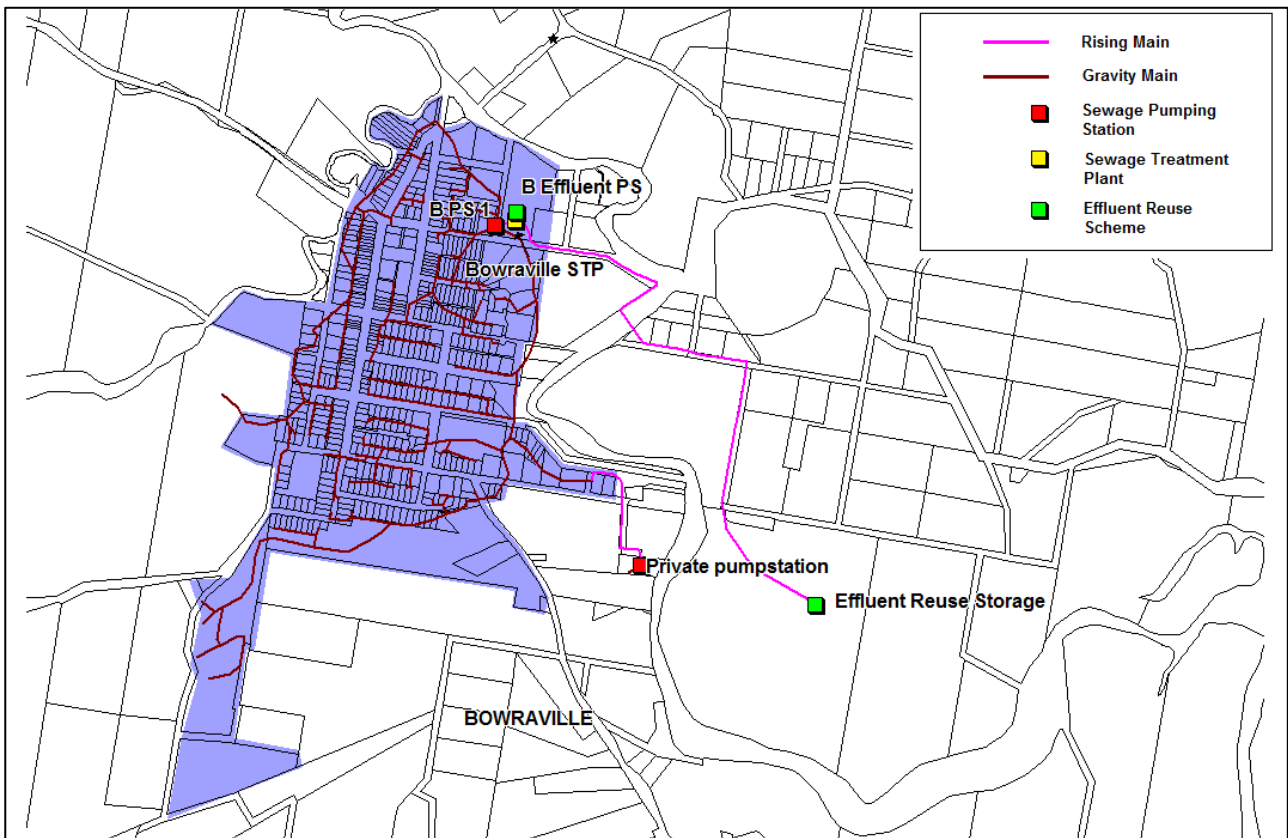
Source: NSC IWCM Strategy, May 2018

A.3 Scotts Head sewerage scheme service area



Source: NSC IWCM Strategy, May 2018

A.4 Bowraville sewerage scheme service area



Source: NSC IWCM Strategy, May 2018

Appendix B Determination of Equivalent Tenements

Appendix C Sewerage DSP background documents

Appendix D Outline of Legislation

Local Government Act 1993

The power for local government councils to levy developer charges for water supply, sewerage and stormwater derives from Section 64 of the *Local Government Act 1993* by means of a cross-reference in that Act to the relevant provisions of the *Water Management Act 2000*.

Section 64 of the *Local Government Act* states that:

Division 5 of Part 2 of Chapter 6 of the *Water Management Act 2000* applies to a council exercising functions under this Division in the same way as it applies to a water supply authority exercising functions under that Act.

Environmental Planning and Assessment Act 1979

Prior to the introduction of the *Local Government Act* in 1993, councils used the provisions of Section 94 of the Environmental Planning and Assessment Act 1979 to obtain developer contributions for water supply and sewerage services. As part of the *Local Government (Consequential Provisions) Act 1993*, amendment was made to the Environmental Planning and Assessment Act so that Section 94 no longer applied for water supply and sewerage services.

However, Councils can levy developer charges for stormwater under either *Local Government Act* or *Water Management Act*.

Water Management Act 2000

Section 305 (1) and (2) of the *Water Management Act* states that:

- 1) A person may apply to a water supply authority for a certificate of compliance for development carried out, or proposed to be carried out, within the water supply authority's area.
- 2) as a pre-condition to granting a certificate of compliance for development, a water supply authority may, by notice in writing served on the applicant, require the applicant to do either or both of the following:
 - a) to pay a specified amount to the Authority by way of contribution towards the cost of such water management works as are specified in the notice, being existing works or projected works, or both,
 - b) to construct water management works to serve the development.

Section 305 (3) of the *Water Management Act* states that:

- 3) In calculating an amount for the purposes of subsection (2) (a):
 - a) the value of existing water management works and the estimated cost of projected water management works may be taken into consideration, and
 - b) the amount of any government subsidy or similar payment is not to be deducted from the relevant value or cost of the water management works, and
 - c) consideration is to be given to any guidelines issued for the time being for the purposes of this section by the Minister.

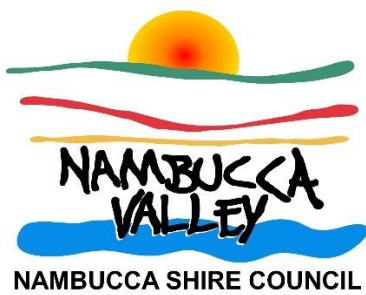
In 2011, the Minister for Primary Industries became responsible for non-metropolitan NSW town water services. The Minister is responsible for the issue of guidelines for water utilities on the calculation of water supply, sewerage and stormwater developer charges.

Note: Use of moneys raised from developer charges is discussed in Section 2.7 on page 10 of the guidelines.

Local Government (Savings and Transitional) Regulation 1993

The *Local Government (Savings and Transitional) Regulation 1993* covers the matter of developer contributions which had previously been obtained by councils under the *Environmental Planning and Assessment Act* as follows:

- 9) Any monetary contribution held by a council immediately before the commencement of this Regulation, being a contribution arising from a condition:
 - (a) that was imposed under section 94 of the *Environmental Planning and Assessment Act 1979*; and
 - (b) that specifies that the contribution is to be applied towards providing specified water or sewerage services or towards providing water or sewerage services generally, is to be applied towards the construction of works within the meaning of Division 2 of Part 3 of the *Water Supply Authorities Act 1987*, or towards the repayment of money borrowed for the construction of such works, and is not to be applied towards any other purpose.



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