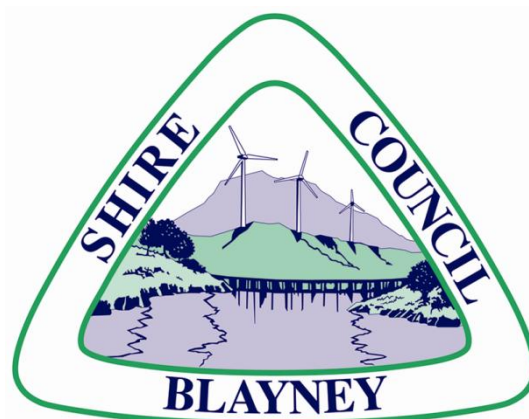


# **Strategic Business Plan for Sewerage Services**



**2013**



## Document Control

Version	Author	Reviewer	Approved for Issue	
			Name	Date
Draft V1	D. Kumarasinghe	M. Sundaravadivel	-	10/10/2013
Final Draft	D. Kumarasinghe	M. Sundaravadivel	M. Pudasaini	15/11/2013

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# Acknowledgements

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This Strategic Business Plan was prepared by Blayney Shire Council with the assistance of the Strategic Water Planning Unit of NSW Public Works.

The Plan is based on a workshop held on the 11<sup>th</sup> and 12<sup>th</sup> of September 2013, in which Councillors, senior Council staff and external stakeholder agencies were represented.

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# Abbreviations

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Abbreviation	Description
ADWG	Australian Drinking Water Guidelines
BOD	Biochemical Oxygen Demand, a measure of 'strength' of organic pollutants in wastewater/ sewage.
CENTROC	Central Regional Organisation of Councils – consisting of Bathurst, Blayney, Boorowa, Cabonne, Cowra, Forbes, Harden, Lachlan, Lithgow, Oberon, Orange, Parkes, Upper Lachlan, Weddin, Wellington, Young and Central Tablelands Water.
CWUA	Centroc Water Utilities Alliance
DCP	Development Control Plan
DLG	Division of Local Government
DMERP	Drought Management and Emergency Response Plan
EPA	Environment Protection Authority
EIS	Environmental Impact Statement
EP	Equivalent Person
IDEA	Intermittently Decanted Extended Aeration
IPR	Integrated Planning and Reporting
IWCM	Integrated Water Cycle Management
LEP	Local Environment Plan
LGA	Local Government Area
LGSA	Local Government and Shires Associations
LOS	Levels of Service
NHMRC	National Health and Medical Research Council
NOW	NSW Office of Water
NWI	National Water Initiative
OEH	Office of Environment and Heritage
PIRMP	Pollution Incidents Response Management Plan
SCADA	Supervisory Control and Data Acquisition
SEPP	State Environmental Planning Policy
STP	Sewage Treatment Plant
WDCC	Written Down Current Cost/ Fair Value
WELS	Water Efficiency Labelling and Standards
WHS	Work Health and Safety
WTP	Water Treatment Plant
TAM	Total Asset Management
TBL	Triple Bottom Line
TCM	Total Catchment Management
TRB	Typical Residential Bill

# Executive Summary

---

This Strategic Business Plan covers the development and operation of Blayney Shire Council's Sewerage Scheme. It provides supporting information for Council's Integrated Planning and Reporting (IP&R) as well as satisfying compliance requirements for the NSW Office of Water.

## Operating Environment Review

A review of operating environment explores the internal and external conditions under which Council delivers services now, and those, which will be likely to prevail in the future. Details are given in Section 5 of this Business Plan.

Council provides services to the communities listed in the Table below. Reticulated water is provided to the towns and villages in the shire by Central Tablelands Water (CTW). Rural properties and industries outside of the communities listed below generally source their water from rainwater tanks.

Council currently provides Blayney and Millthorpe with sewerage services. The remaining Shire communities use on-site sewage management systems, the inspection which is the responsibility of Council's Planning and Environmental Services section.

### Current Service Areas

Name	Estimated Population	Potable Water Supply	Sewerage Scheme
Blayney	2810	Provided by CTW	Reticulated sewerage
Millthorpe	737	Provided by CTW	Reticulated sewerage
Carcoar	215	Provided by CTW	Septic tanks
Lyndhurst (including Somers and Garland)	219	Provided by CTW (Lyndhurst only)	Septic tanks
Mandurama (including Errowanbang, Burnt Yards and Gallymont)	496	Provided by CTW	Septic tanks
Barry, Neville and Newbridge villages	305	Rainwater Tanks	Septic tanks

A more detailed description, including a service area map of Council's sewerage schemes, is presented in Section 3 of this Business Plan.

## Mission

Council has adopted the following objective for its sewerage services:

***To provide sewerage services in an efficient manner to the agreed and currently recognised health, environmental and other community standards and needs with flexibility to promote and meet development demands within the Region***

Council's corporate policies and objectives also place specific requirements on the sewerage scheme. These are detailed in Section 2 of this Business Plan.

## Levels of Service

Council's primary objective for its sewerage services is to meet its adopted Levels of Service.

### Sewerage

- Proportion of sewage treated to various standards
- Number of overflow events
- Greenhouse gas emissions

### Service interruptions

- Frequency and duration of planned and unplanned service interruptions
- Response times to service interruptions

### Customer care

- Frequency of customer complaints
- Response times for customer queries and/or complaints

Levels of Service with predicted improvements are summarised on the following page. Note the Levels of Service are the targets which Council aims to meet; they are not intended as a formal customer contract.

## Summary of Levels of Service Improvements

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Future
<b>SERVICE AVAILABILITY</b>			
Extent of area serviced	% Service area	100% of designated service areas in Blayney and Millthorpe	100% of designated service areas in Blayney, Millthorpe and villages of Carcoar, Mandurama and Lyndhurst
Time to provide a domestic individual connection in serviced area (95% of times)	Working days	7	7
<b>SYSTEM FAILURES (OVERFLOWS TO THE ENVIRONMENT)</b>			
<b>Category One</b>			
Failure due to rainfall and deficient capacity <sup>®</sup>	No./ Year	<1	<1
<b>Category Two</b>			
Failure due to pump or other breakdown including power failure	No./ Year	2	2
<b>Category Three</b>			
Failure due to main blockages and collapses <sup>®</sup>	No./ Year	25	10
<b>RESPONSE TIME SYSTEM FAILURES (OVERFLOWS TO THE ENVIRONMENT)</b>			
Time to have staff on-site commence work after notification			
<b>Priority One</b>			
Failure due to rainfall and deficient capacity <sup>®</sup>			
All Customers			
- 90% of times	Minutes	30	60
- 100% of times	Minutes	45	60
<b>Priority Two</b>			
Failure due to pump or other breakdown including power failure			
All Customers			
- 90% of times	Minutes	30	60
- 100% of times	Minutes	45	60
<b>Priority Three</b>			
Failure due to main blockages and collapses <sup>®</sup>			
All Customers			
- 90% of times	Minutes	30	60
- 100% of times	Minutes	45	60
<b>CUSTOMER FEEDBACK/ COMPLAINTS<sup>®</sup></b>			
(identified in the CRM system)			
<b>Complaints received</b>			
Service complaints	No./ 1000 connections	0	<10

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Future
Odour Complaints			
- Treatment works (outside designated buffer zone)		0	0
- Pumping Stations		<5	<5
- Reticulation system		0	0
Billing and account complaints		0	0
<b>Response Times for Feedback/ Complaints</b>			
% calls answered by an operator within 30 seconds	%		
General complaints and inquiries:			
- Written Complaints*	Working Days	7	7
- Email	Working Days	N/A	3
- Personal/ oral complaints*	Minutes	30	30
<b>ENVIRONMENT<sup>@</sup></b>			
Recycle/ reuse of wastewater (dry weather conditions)	% total volume of sewage treated	100	100
Sewage treated to:	% of total volume of sewage treated		
- Primary level only		0	0
- Up to secondary level		100	100
- Up to tertiary or advanced level		0	0
Effluent discharge compliance with licence limits	% of samples/year	100	100
Net greenhouse gas emissions <sup>@</sup>	Tonnes CO2 equivalent/ year	334 (associated with flooding event)	290

@ - NWI Performance Indicators

\* - Times apply for 95% of incidents

## Principal Issues

The current services are generally regarded as satisfactory by customers. Following are the major issues which will need to be addressed in the short term:

- Service extension to village areas (there are a number of properties within the Blayney Council that do not have access to the sewerage service);
- Equitable service pricing including developer charges; and
- Systematic rehabilitation and renewal of ageing assets (i.e. treatment plant and reticulation system, including manholes);

## Objectives and Performance Targets

Council has recognised five Key Result Areas that must be managed well to achieve success in the long-term provision of sewerage services to its customers. These are:

- Customer service;
- Environmental protection and sustainable development;
- Total asset management;
- Work force; and
- Finance.

Objectives and Performance Targets have been set in these Key Result Areas. These are summarised in Table below and detailed in Sections 8 through 12.

Notable capital work outcomes Council plans to achieve over the next 10 years include:

- Lining/ replacement of sewer mains
- Manhole rehabilitation program
- Telemetry upgrade
- Millthorpe transfer main augmentation
- Sewerage schemes for the villages of Carcoar, Mandurama and Lyndhurst

### Objectives and Performance Targets

Key Result Area	Objective	Performance Target
<b>Customer Service</b>		
Levels of Service	Levels of services are in accordance with community expectations.	100% compliance with the agreed Levels of Service.
Areas Serviced	Maintain existing designated service areas and provide service to selected un-serviced areas where economically feasible.	Achieve 100% service connections in the designated service area by June 2015. Complete feasibility study for village schemes by June 2016.
Sewer Load Management	Minimise hydraulic loads due to infiltration, inflow and illegal connections and manage any industrial and commercial pollutant loads.	Implement Infiltration/Inflow (I/I) program by 2015.
Service Pricing	Ensure scheme achieves full cost recovery and reflects best practice guidelines.	Review sewerage tariff by March 2015 Review and update developer charges by December 2014.
Customer Relations	Keep stakeholders informed of issues relating to the sewerage services and provide services in a professional and efficient manner.	Customer survey conducted every 4 years. A survey to be conducted in 2014. Achieve at least 80% customer satisfaction level in customer surveys by 2015.
Community Involvement	Engage the community in consultation in the delivery of sewerage services as appropriate.	Community involvement on all significant capital works and policy decisions.

Key Result Area	Objective	Performance Target
<b>Environmental Protection and Sustainable Development</b>		
Environment	Manage sewerage in an environmentally responsible manner.	Comply with all regulatory and licence requirements.
<b>Total Asset Management</b>		
Operations and Maintenance	Operate and maintain assets to provide agreed levels of service at minimum life cycle costs.	Prepare an Operations and Maintenance Plans by June 2015.
Capital Works	Ensure systems have adequate capacity to meet current and future levels of service at minimum life cycle costs.	Funded projects carried out on time and to budget in accordance with capital works program.
<b>Work Force</b>		
Workforce Planning	Have a proactive, productive and skilled staff with appropriate areas of expertise.	Review and update Work Force Strategy every 4 years.
<b>Finance</b>		
Financial Plan	Maintain a long-term financial plan to provide full cost recovery for scheme operation and asset replacement at an affordable level of cost to customers.	Sewerage long-term financial plan in place by March 2015.

## Projected Financial Position

Financial projections have been made considering that 50% subsidy will be available for the sewerage schemes planned for the villages of Carcoar, Mandurama and Lyndhurst. The following Table presents the summary of forecast financial position of Council's sewer fund over the next 30 years at five-year intervals. Note all projected values are in 2013/14 dollars.

### Summary of Projected Financial Position

2013/14 \$ (000)	2013/14	2017/18	2022/23	2027/28	2032/33	2037/38	2042/43
Estimated Total Revenue	1,440	1,602	1,776	1,899	1,880	1,982	2,090
Estimated Total Expenditure	1,439	1,620	1,839	1,819	2,087	2,062	2,031
Operating Surplus / (Deficit)	1	(18)	(64)	80	(207)	(80)	59
Acquisition of Assets	231	300	100	28	3,020	120	20
Principal Loan Payments	44	52	103	92	108	128	72
Borrowings Outstanding	933	643	1,629	957	2,498	1,589	878
Cash and Investments	3,676	2,660	472	2,641	419	2,278	4,710
Total Assets	24,635	23,809	28,666	27,923	29,119	27,582	26,463
Total Liabilities	939	649	1,635	962	2,502	1,593	881



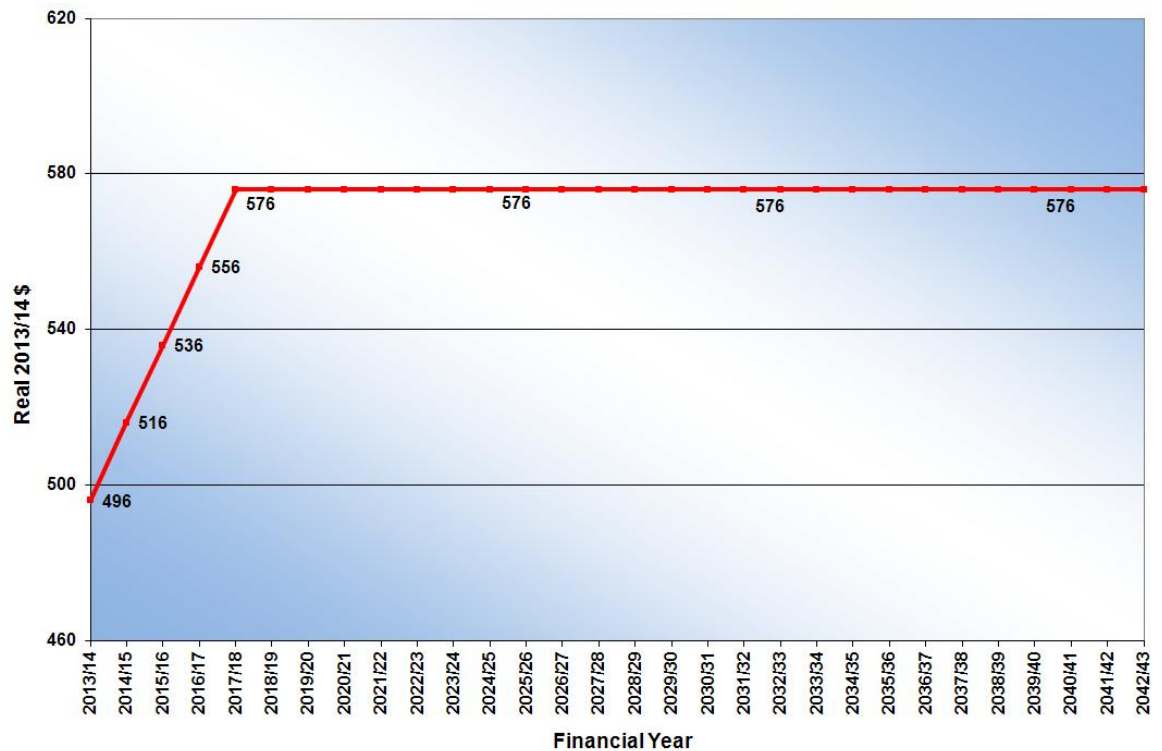
Financial modelling has demonstrated that the typical residential sewerage bill for sewerage services, measured in 2013/14 dollars, has to be increased by \$20 per year for the next 4 years from the current TRB of \$496 p.a. to \$ 576 p.a. in 2017/18 as shown below:

- TRB for 2014/15 - \$516 p.a.
- TRB for 2015/16 - \$ 536 p.a.
- TRB for 2016/17 - \$ 556 p.a.
- TRB for 2017/18 - \$ 576 p.a.

From 2018/19 onwards, the TRB can be maintained at the same level for the remainder of the forecast period. It should be noted that the TRB projections are for Blayney customers and financial model considered that residential customers of Millthorpe will be paying 1.6 times the projected TRB for Blayney. The model also considered that the residential customers of the villages of Carcoar, Mandurama and Lyndhurst will also be charged 1.6 times the Blayney residential customers.

Note the forecast TRBs are to be adjusted annually for CPI/inflation

### Typical Residential Sewer Bill



This level of typical residential charges for sewerage services is sufficient to maintain liquidity with a minimum of \$250 K of cash in hand over the period.

Over the next 10 year period, all the planned capital works will be internally funded except for a new borrowing of \$ 1.5 Million for the village sewerage schemes in the years 2020/21 and 2021/22. External borrowing will also be required for the Blayney STP augmentation and replacement works planned to start in 2031/32. The borrowing outstanding at the end of the 30-year forecast period will be \$ 878 K but can be fully retired from available cash and investments, if required.

See Section 12.4 for more financial projection details.



# 1 Introduction

---

## 1.1 Purpose of the Plan

The purpose of the strategic business plan is to provide guidance for the future management of Blayney Shire Council's sewerage businesses with the aims of:

- Providing the information for Council's Resourcing Strategy as required for compliance with the Integrated Planning and Reporting Framework and for the Management Plan;
- Focusing attention on the key issues affecting the day to day operations of sewerage services;
- Demonstrating to stakeholders that the scheme is well managed;
- Identifying the financial and other resources required to operate these services on a commercial basis;
- Providing a long term price path for services;
- Assisting in the development of a long-term capital works program with an affordable price path for the services;
- Enabling Council to model 'what-if' scenarios and see their impact on customer charges; and
- Allowing future financial performance indicators to be calculated, such as return on capital invested.

## 1.2 Integrated Planning and Reporting Framework

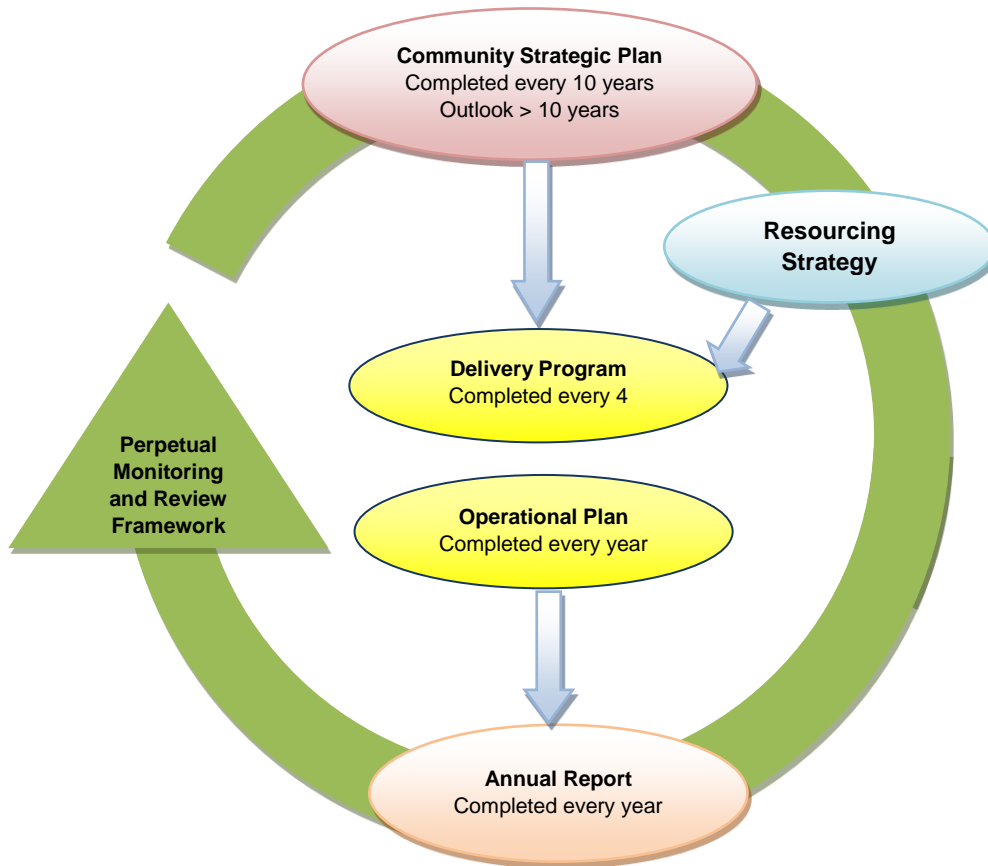
The Strategic Business Plan is required under the NSW Integrated Planning & Reporting (IPR) Framework (Figure 1). The framework is used by State Government agencies to:

- Gain an overview of the current status and future water supply and sewerage needs of non-metropolitan NSW; and
- Gather information to assist in directing policy and programs for financial and technical assistance towards the needs of the utilities.

The main elements of the IPR framework are the:

- Community Strategic Plan (CSP)
- Resourcing Strategy
- Delivery Program
- Operational Plan
- Annual Report
- Perpetual monitoring and review

**Figure 1 – Integrated Planning and Reporting Framework**



Source: NSW Water and Sewerage Strategic Business Planning Guidelines, NSW Office of Water, NSW, July 2011 (available on [www.water.nsw.gov.au](http://www.water.nsw.gov.au))

## 1.3 Benefits of Strategic Business Plans

Sewerage capital investments tend to be large and lumpy, and assets are long-lived, for example, the economic lives of sewerage infrastructure can range from 50 and 70 years. For this reason, financial projections in the Strategic Business Plans are for 30 years. The projections for the next three years are based on reasonably firm estimates of costs, and, beyond this time, projections are based on indicative amounts only.

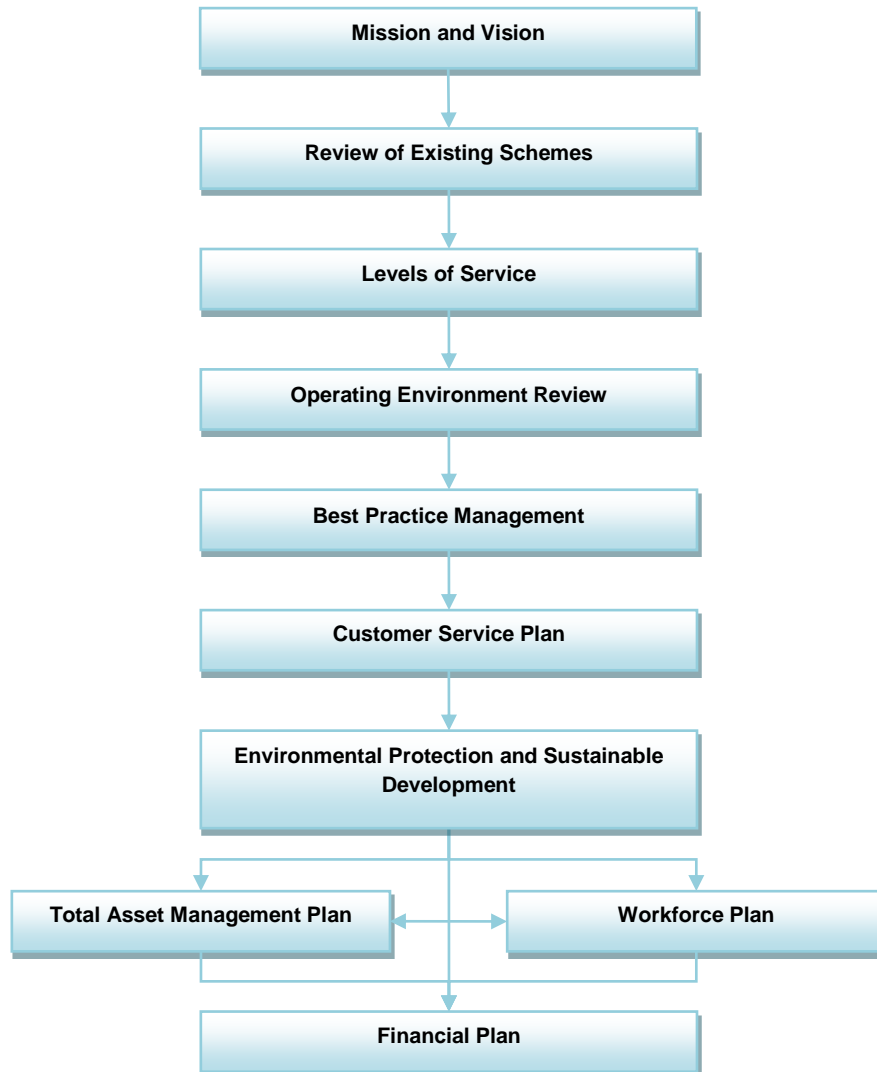
**Strategic Business Plans provide many benefits to Council including:**

- improved management performance;
- improved financial performance;
- avoidance or minimisation of increases to Typical Residential Bills (TRBs); and
- increased accountability to customers.

## 1.4 Plan Structure

The structure of this Strategic Business Plan is outlined in Figure 2.

Figure 2 – Structure of Plan



## 2 Mission and Vision

---

Strategic planning aims to optimise service delivery in terms of long term cost effectiveness and sustainability. The prime driver is Council's vision of the future and definition of a mission statement.

### 2.1 Corporate Vision

Council's vision is:

- To be a shire of welcoming communities
- Of beautiful and productive landscapes
- Recognising our rural and mining heritage
- Showing the world how agriculture, mining and industry can work together for the greatest good, and
- Be a place to live your dreams.

Council's values are:

- With a generosity of spirit we will:
- Be inclusive and united
- Act honestly and respect each other
- Have a "can do" attitude
- Think outside the square and
- Back ourselves

Blayney Shire strategic outcomes are:

- Grow the wealth of the Shire
- A centre for sports and culture
- Develop and maintain Shire infrastructure
- Develop strong and connected communities
- Leadership

### 2.2 Sewerage Objective

Council's corporate objective for sewerage is:

***To provide sewerage services in an efficient manner to the agreed and currently recognised health, environmental and other community standards and needs with flexibility to promote and meet development demands within the Region.***

## 2.3 Implications of Vision Statements

The implications of Council's vision and objectives for the provision of sewerage services can be summarised as follows:

- To have sufficient capacity for community growth, this will require increasing the serviced areas and upgrading the capacity of some existing infrastructure.
- To provide environmentally and financially sustainable service, this will require improved environmental performance and
- To develop public confidence in the staff and services, this will require improving levels of service, customer care and customer education.

### 3 Existing Schemes

Blayney Shire Council provides sewerage services to the community of Blayney and Millthorpe directly. The rest of the communities within the LGA uses on-site sewerage management systems (usually septic tanks, though some other systems may be in use). Council’s Planning and Environment section is responsible for the management of these on-site septic systems.

Council provides services to the communities listed in Table 3-1. Reticulated water supplies are provided by Central Tablelands Water (CTW). CTW provides water to the townships of Blayney and Millthorpe as well as the villages of Carcoar, Mandurama and Lyndhurst. The availability and quality of the water provided, influences the volume and quality of sewage produced by these communities.

Rural properties and industries outside of the communities listed below generally source their water from rainwater tanks.

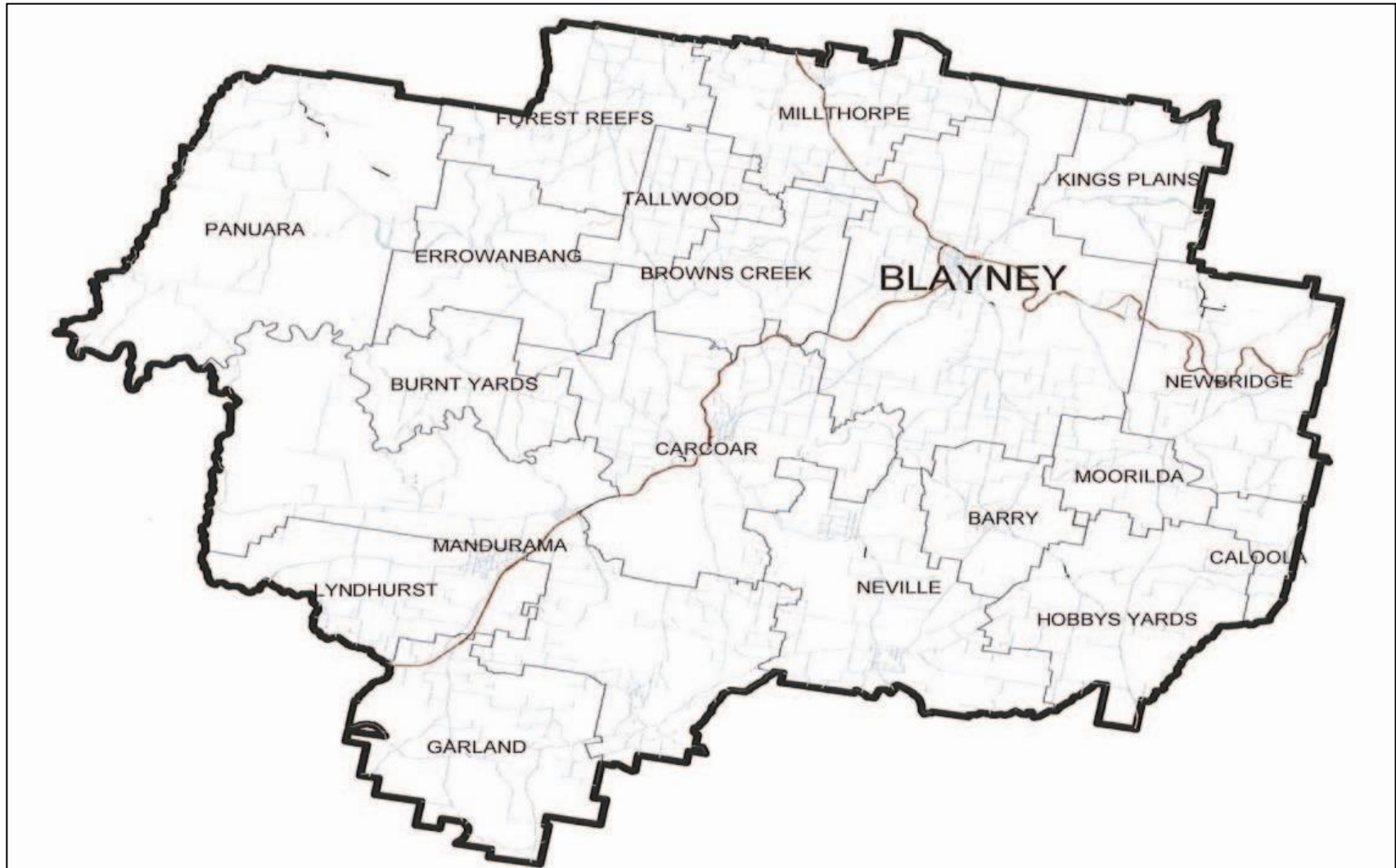
**Table 3-1: Communities provided with services**

Name	Estimated Population	Water Supply	Sewerage
Blayney	2810	Provided by CTW	Reticulated sewerage
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Carcoar	215	Provided by CTW	Septic tanks
Lyndhurst (including Somers and Garland)	219	Provided by CTW (Lyndhurst only)	Septic tanks
Mandurama (including Errowanbang, Burnt Yards and Gallymont)	496	Provided by CTW	Septic tanks
Barry, Neville and Newbridge villages	305	Rainwater Tanks	Septic tanks

A map of the Blayney Shire Council Local Government Area (LGA), including most of these communities, is shown in Figure 3.



Figure 3 – Map of Blayney Shire Council



## 3.1 Blayney Sewerage Scheme

The Blayney reticulation system consists of 51 km of AC and uPVC mains and six pumping stations. The original reticulation system in Blayney was constructed in late 1960s with considerable augmentation in 1970's, 80's, 90's and in 2003.

The Blayney Sewage Treatment Works is located on the south eastern outskirts of town on the north side of Hobby Yards Road. The original works, constructed in 1966, consisted of a Biological filter (Trickling filter) with a capacity of 2,100 E.P. The original treatment works was replaced by an Intermittently Decanted Extended Aeration (IDEA) activated sludge treatment plant with a design capacity of 7,000 E.P in 1989.

The STP fully treats all predicted inflows and currently has excess capacity based on the future design load.

Cadia mine currently takes all treated effluent. Any effluent that may not be pumped to Cadia mine due to the operational issues is released to the wetland, which then overflows to the Belubula River. Wetland has been provided as a supplementary structure to impart additional effluent polishing treatment. Flows to the wetland have been limited to wet weather events.

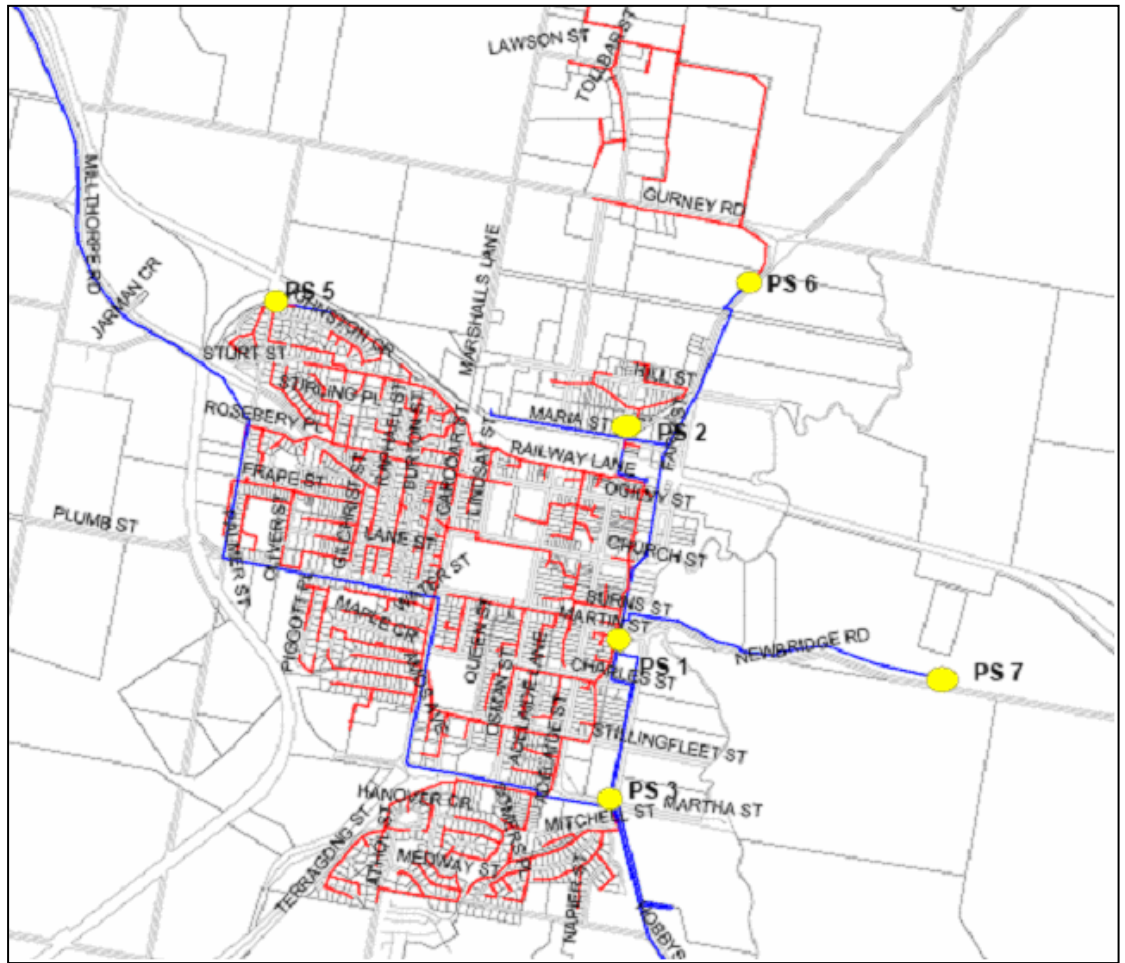
Sludge from sludge lagoons are dried at drying beds while supernatant is gravitated back to the IDEA plant.

The service area map of Blayney town sewerage scheme is shown in Figure 4**Error! Reference source not found.**

## 3.2 Millthorpe Sewerage Scheme

Millthorpe sewerage services about 600 people in the village of Millthorpe. The sewer reticulation was commissioned in 2003. The system consists of 9.7 Km of uPVC gravity sewer mains and one pumping station. Collected sewage is pumped to the balancing tank of Blayney STP for treatment. The service area map of Millthorpe sewerage scheme is shown in Figure 5**Error! Reference source not found.**

Figure 4 - Blayney Town Sewerage Service Area



**Figure 5 - Millthorpe Sewerage Service Area**



### **3.2.1 Sewerage Assets Summary**

Blayney Shire Council has prepared an asset register and the locations of all major sewerage assets have been recorded. Council is continuously updating the asset register.

In 2012 Council carried out a valuation of the sewerage assets as required by the Division of Local Government, including the inspection of a representative sample of sewer pipes. Estimates of the timing for replacement needs in the medium and long term are based on the nominal lives of the assets combined with the results of the inspections and a general idea of the condition of the assets based on the day to day experience of the maintenance staff. A projection of costs has been made for modelling purposes based on this knowledge and the asset register data.

The currently estimated condition rating of Council's major sewerage assets is presented in Table 3-2 and the estimated value is presented in Table 3-3.

**Table 3-2: Sewerage Scheme System Assets Summary**

<b>Asset</b>	<b>No./Length/ Capacity</b>	<b>Average Remaining Life (Years)</b>	<b>Condition 1 = As New 5 = Poor</b>
Gravity mains including Trunk mains	53 km	35	3.2
Sewage pumping stations	8	24	3.2
Rising mains	23.3 km	58	1.2
Sewage Treatment Plants	7000 EP	37	2.7
Buildings, Plant and Equipment including Telemetry			
- Telemetry	8 stations	11	2.2
- Buildings	4	38	2.5
- Plant	5	6	2.5

**Table 3-3: Estimated Values of Sewerage Assets**

<b>Asset</b>	<b>Current Replacement Cost (\$'000)</b>	<b>Annual Depreciation (\$'000)</b>	<b>Written Down Value (\$'000)</b>
Gravity mains including Trunk mains	14,000	120	10,000
Sewage pumping stations	2,774	51	1,784
Rising mains	5,200	69	4,400
Sewage Treatment Plant	3,840	80	2,610
Buildings, Plant and Equipment including Telemetry			
- Telemetry	61	4	42
- Buildings	338	2	267
- Plant	210	24	163

### 3.2.2 Capital Works Program for Sewerage

The following is a summary of the major sewerage capital works planned for Blayney Shire Council over the next 10 years. The justifications for the works are shown below.

**Table 3-4: Major Sewerage Capital Works**

<b>Proposed Capital Work</b>	<b>Year</b>	<b>Justification</b>
Lining/ Replacement of sewer mains	2013 - 2019	Renewal and refurbishment of ageing assets
Manhole rehabilitation program	2014 - 2019	Improved levels of sewerage service and STP performance
Telemetry upgrade	2014/15	Improved scheme operation for better performance
Millthorpe transfer main augmentation	2014 - 2016	Refurbishment of ageing assets
Sewerage schemes for Carcoar, Mandurama and Lyndhurst	2018 - 2022	Extension of service to backlog areas and public health improvement

## 4 Levels of Service

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The Levels of Service:

- define explicitly the standards required;
- are an expansion of the mission statements; and
- largely shape Council's detailed planning.

The Levels of Service define the deliverables and are the driving force for the management and development of sewerage schemes. Achieving the target Levels of Service is the **primary goal**.

Council uses its judgement in setting standards and while there are statutory service standards in some areas such as effluent quality, noise, and sludge management, in other areas, stakeholders may be consulted (see Section 5.4 for details) and may desire levels of service which are even more stringent than the regulatory requirements.

While Council endeavours to close any perceived gap between the stakeholder expectations and the levels of services provided, this is also subject to economic, social and environmental considerations. This Plan presents Council's proposed approach to future service delivery.

It should be noted that while the current Levels of Service are the target, which Council aims to meet, they are not intended as a formal customer contract. It is Council's responsibility to strive for continual improvement to achieve these levels in the most cost effective way.

The current and target levels of service are shown in the following tables.

**Table 4-1: Levels of Service**

DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Future
<b>SERVICE AVAILABILITY</b>			
Extent of area serviced	% Service area	100% of designated service areas in Blayney and Millthorpe	100% of designated service areas in Blayney and Millthorpe
Time to provide a domestic individual connection in serviced area (95% of times)	Working days	7	7
<b>SYSTEM FAILURES (OVERFLOWS TO THE ENVIRONMENT)</b>			
<b>Category One</b>			
Failure due to rainfall and deficient capacity <sup>®</sup>	No./ Year	<1	<1
<b>Category Two</b>			
Failure due to pump or other breakdown including power failure	No./ Year	2	2
Critical locations			
Other locations			
<b>Category Three</b>			
Failure due to main blockages and collapses <sup>®</sup>	No./ Year	25	10
Time to have staff on-site commence work after notification			
<b>Priority One</b>			
Failure due to rainfall and deficient capacity <sup>®</sup>			
All Customers			
- 90% of times	Minutes	30	60
- 100% of times	Minutes	45	60
<b>Priority Two</b>			
Failure due to pump or other breakdown including power failure			
All Customers			
- 90% of times	Minutes	30	60
- 100% of times	Minutes	45	60
<b>Priority Three</b>			
Failure due to main blockages and collapses <sup>®</sup>			
All Customers			
- 90% of times	Minutes	30	60
- 100% of times	Minutes	45	60
<b>CUSTOMER FEEDBACK/ COMPLAINTS<sup>®</sup></b> (identified in the CRM system)			
<b>Complaints received</b>	No./ 1000 connections		
Service complaints		<10	<10



DESCRIPTION	UNIT	LEVEL OF SERVICE	
		Current	Future
Odour Complaints			
- Treatment works (outside designated buffer zone)		0	0
- Pumping Stations		<5	<5
- Reticulation system		0	0
Billing and account complaints		0	0
<b>Response Times for Feedback/ Complaints</b>			
% calls answered by an operator within 30 seconds	%		
General complaints and inquiries:			
- Written Complaints*	Working Days	7	7
- Personal/ oral complaints*	Minutes	30	30
<b>ENVIRONMENT<sup>@</sup></b>			
Recycle/ reuse of wastewater (dry weather conditions)	% total volume of sewage treated	100	100
Sewage treated to:	% of total volume of sewage treated		
- Primary level only		0	0
- Up to secondary level		100	100
- Up to tertiary or advanced level		0	0
Effluent discharge compliance with licence limits	% of samples/year	100	100
Net greenhouse gas emissions <sup>@</sup>	Tonnes CO2 equivalent/ year	334	334

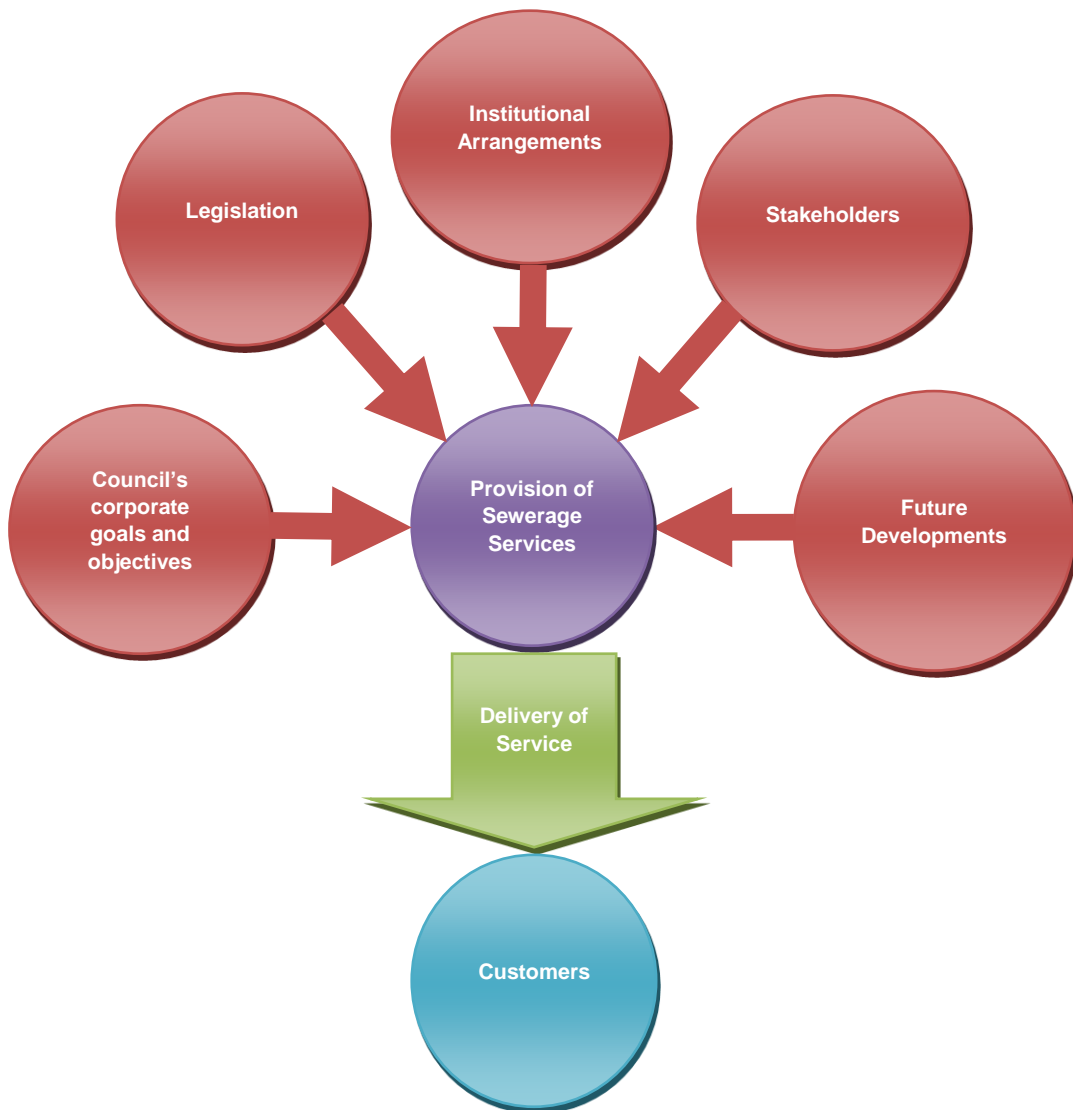
@ - NWI Performance Indicators

\* - Times apply for 95% of incidents

# 5 Operating Environment Review

The delivery of sewerage services to the scheme’s customers is subject to a large number of constraints, requirements, guidelines and other factors, which collectively are referred to as the operating environment. The five major elements of the operating environment are shown in the following figure.

Figure 6 – Operating Environment



## 5.1 Institutional Arrangements

There are several institutional arrangements available to Council as potential structures for providing sewerage services. These include institutional models such as Amalgamation, County Councils, Commercialisation, Strategic Alliances, Corporatisation, Regional Corporation and Privatisation.

These models have been suggested in the options paper issued by the LGSA and the NSW Water Directorate to assist Councils in making a submission to the NSW Government Inquiry into Local Water Utilities.

Blayney Shire Council has adopted the Strategic Alliance model by becoming part of the CENTROC Water Utility Alliance (CWUA) and running its sewerage services in a commercially viable manner in accordance with the NOW Best Practice Management Guidelines. The CWUA facilitates a unified approach to water management in the central NSW region and includes the member councils of Bathurst, Blayney, Young, Cabonne, Cowra, Forbes, Harden, Lachlan, Lithgow, Oberon, Orange, Parkes, Upper Lachlan, Weddin, Wellington, Young and Central Tablelands Water.

The definitions of these arrangements are:

- **Commercialisation:** Where a Council operates on a commercial basis, i.e. each aspect of the Council's operations is self-sustaining. This arrangement is believed to be able to reflect the true cost to customers, be more efficient and provide better service choices. There is however some concern this model can lead to some valuable services being abandoned, based on an economic and commercial basis.
- **Strategic Alliance:** Where a Council joins other participating Councils in the region/catchment through a Memorandum of Understanding, in order to pool in available staff and other resources to provide sewerage services. This arrangement aims to help provide crucial pooled professional and technical resources for efficient delivery of services. The major concern regarding this sort of alliance is that if not mandatory, it may risk falling apart in the face of difficulties, agreed scope of pooled activities or lack of interest.

Council would like to continue with the current Commercialisation / Strategic Alliance model for the foreseeable future.

## 5.2 Legislative Framework

Numerous Acts influence the way in which Council can provide sewerage services to the community. Appendix B provides a discussion of the relevant legislation and the specific implications it has for Council's operations.

In general, more regulation, stringent enforcement and fewer subsidies from the State and Federal Governments is imposing heavy burden on Council's sewerage service management responsibilities and hence on its finances.

Additionally, the latest State Government policies tend to transfer more regulatory responsibilities to Local Government; this increases the burden on the Council.

## 5.3 Corporate Policies

Blayney Shire Council currently has the following corporate policies that are relevant to the operation of its sewerage scheme.

**Table 5-1: Council Corporate Policies**

Policy	Impacts
Model Code of Conduct for Local Councils	- Socially responsible
Asset Management Plan - Sewer	- Provision of required service infrastructure in a sustainable manner - Meeting legislative requirements
Water saving rules (Demand Management Plan by Central Tablelands Water)	- Encouraging to be water-wise - Demand management
Liquid Trade Waste Policy	- Identification and monitoring of trade wastes according to NOW and EPA Guidelines
Developers contribution for sewage	- Equitable distribution of infrastructure costs
Pollution Incident Response Management Plan	- Environmental Protection and notification

## 5.4 Stakeholder Review

Stakeholders are defined as individuals and organisations, both internal and external, with an interest and/or equity in the sewerage services provided by the Council. They typically include:

- Property Owners/Ratepayers
  - Residents/Families
  - Pensioners
  - Commercial and Industrial Consumers
- Councillors
- Management Staff
- Council Employees
- Government Agencies
- Tourists
- Special Interest Groups such as Environmental groups and Chambers of Commerce

Typically the expectations of the stakeholders cover a wide spectrum of issues and aspects of service delivery including operational levels of service relating to service reliability, responsiveness to complaints, etc., which are not covered by regulation. Such expectations may significantly impact on the development and operation of the schemes. A stakeholder review was undertaken at the planning workshop, the participants were asked to rate Council's service provision both from a Council and a Stakeholder point of view for a number of criteria generally of importance to the stakeholders. The results are included in Appendix C. Some of the criteria include:

- Quality of water in waterways downstream of the communities and sewage treatment plants;
- Public perception of the Council;
- Staff satisfaction; and
- External agency perception.

## 5.5 Future Development

Council's vision for a 30-year planning horizon for sewerage services reflects the changing operating environment due to future growth and developments that in turn influence the service requirements. Council considers the following factors as having significant influence on the future sewerage services provided and the general quality of life of the residents.

### 5.5.1 Population Growth

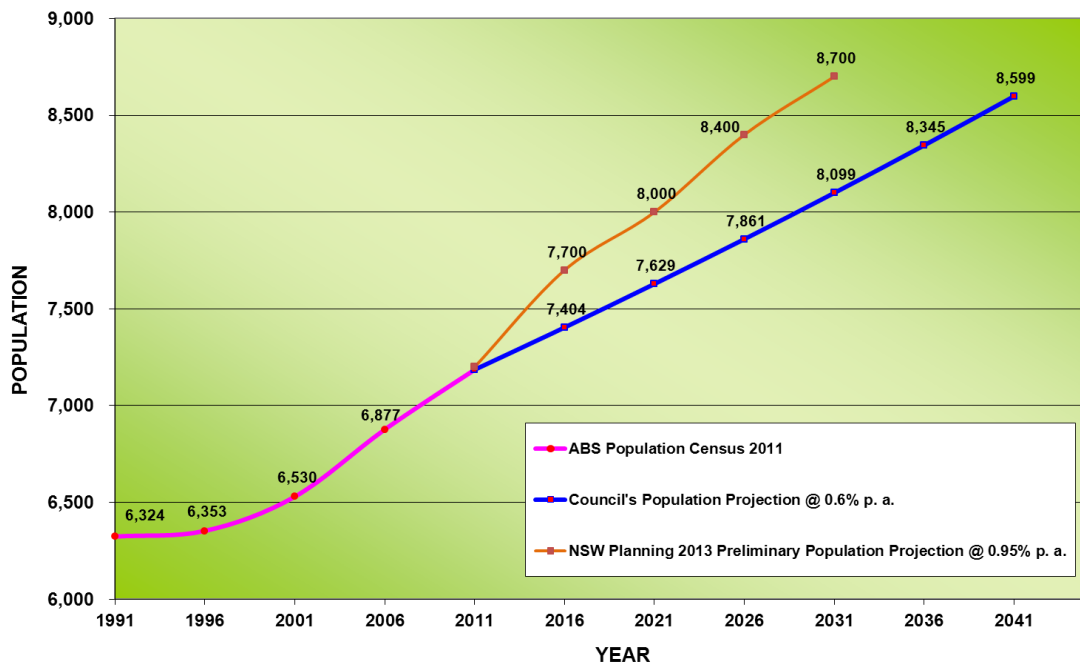
Blayney Shire Council has had a compounding population growth of 0.6% p.a. during the 20-year period between 1991 and 2011 (Based on ABS data – Regional Population Growth, Local Government Areas, NSW - 1991 – 2011, April 2013, Ref. 3218.0).

Population growth for Council has been estimated to be at 1.2% p.a. by Centroc (Western Research Institute - WRI, 2008). NSW Planning (2013) projected that the population would grow on average by 0.95% p.a. during the period between 2011 and 2031.

Council has adopted a long term average growth rate of 0.6% p.a. for sewerage services planning purposes (based on data from Central Tablelands Water Joint Integrated Water Cycle Management (IWCM) Detailed Strategy Study, NSW, June 2013)

The ABS census data, NSW Planning forecasts and Council's projection for sewerage service planning are shown graphically in the figure next page.

**Figure 7 – Blayney Shire Council Population Growth Projections**



For sewer fund financial modelling purposes, the projected number of assessments adopted is based on the 1,927 (Residential: 1,639; Non-residential: 288) assessments in June 2013 (Reference: Blayney Shire Council Special Schedule 5 for the year 2012/13) and factored up on a pro-rata basis in line with the adopted growth forecasts.

### 5.5.2 Development

- The key sectors driving economic output within the LGA are agriculture, manufacturing and mining.
- The major employers within the Shire are Newcrest/ Cadia Mining, Linfox and Nestle. Sea-link, a cold storage facility also operates in Blayney.
- New mines may be opened within the LGA increasing the potential for growth in the near term.
- Land releases are planned in North Millthorpe (96 rural residential lots)

### 5.5.3 Public Health

- The residents of Blayney Shire are within reasonable distance to major regional centres including Orange, Bathurst and Sydney. The nearest base hospitals are located in Orange and Bathurst.
- Limited medical services in the Shire are considered an impediment to growth in the region.

### 5.5.4 Environment

- Algal blooms are now commonplace in the regional waterways; flows of almost all of which are regulated.

- The Shire continues to have good air quality however increasing through traffic of heavy vehicles may contribute in the long-term to air pollution due to vehicular emissions.

### **5.5.5 Transport and Tourism**

- Blayney and Millthorpe are well connected to Orange, Bathurst, Dubbo and Sydney by road.
- The upgrade of the Mid-Western Highway is expected to drive growth of industrial properties in and around the Shire.
- Blayney is the railhead for the container terminal that exports to Port Botany and Port Kembla.
- Council is collaborating with Wellington Shire Council, Cabonne Council and the Regional Tourism Board to increase tourism in the area.

### **5.5.6 Technology and Information**

- Advanced information management would provide better financial and operational analysis and lead to continual service improvement.
- Improvements in reliable mobile access and availability of high-speed (broadband) internet access in future will enhance opportunities for growth and development. This would also provide opportunities for tele-commuting.

### **5.5.7 Government Legislation/ Policy**

- Potential for changes to effluent quality requirements and EPA licence requirements will have drastic impact on Council finances
- The notion that State Government shifting responsibility and costs to councils is considered a major threat to the Council
- Possible loss of council, headquarters, local representation either due to amalgamation or centralisation of government services is considered a major government policy related issue for the Council.

## 5.6 Service Provision

Council's future growth projections indicate that there is insufficient extra capacity in the sewerage system to meet the expected future demand due to forecast growth and development in the LGA for the next 30-years. Also, the sewerage scheme will need to be maintained to cope with ageing assets and increasing demand. Council plans to extend services to urban growth areas as required.

Council's response to the forecast of likely future demands and changes to service provision are summarised in the table below.

**Table 5-2: Future Demands and Responses**

Changes	Council Actions
Customer Growth Rate	<ul style="list-style-type: none"> <li>Extend services to villages areas, where financially feasible</li> <li>Account for growth in demand plans</li> </ul>
Commercial Growth	<ul style="list-style-type: none"> <li>Extend services to urban development areas</li> <li>Account for growth in demand plans</li> </ul>
Environmental Changes	<ul style="list-style-type: none"> <li>Attempt to collect more climate data to improve yield models</li> </ul>
Service Culture	<ul style="list-style-type: none"> <li>Provide refresher training to staff on customer service</li> </ul>
Technology Changes	<ul style="list-style-type: none"> <li>Monitor technology changes to enable appropriate decisions to be made during refurbishments, upgrades, augmentations etc.</li> </ul>
Tourism Growth	<ul style="list-style-type: none"> <li>Account for growth in demand plans</li> </ul>
Government Policy	<ul style="list-style-type: none"> <li>Keep abreast of changes in Government policies and Acts</li> <li>Apply for grants and subsidies</li> </ul>
Ongoing changes	<ul style="list-style-type: none"> <li>Participate actively in Centroc</li> </ul>

## 5.7 Service Delivery

The Federal Industry Commission Report on the Australian Water Industry indicated that there should be an efficient use of resources in the water industry – natural, physical and financial. The 1992 recommendations were wide-ranging and covered matters such as pricing and structural reforms. This has been followed up by the NSW Government's Competition Policy and the Independent Pricing and Regulatory Tribunal's Pricing Principles for Local Water Authorities. In addition, the Local Government Association has issued a guideline to self-regulation, which suggests ways Councils can improve their service delivery.

Council has considered the advantages and disadvantages of various methods of service delivery including full service contract, part-service contract, BOOT (Build, Own, Operate and Transfer), resource/ service sharing, and in-house resourcing.

Currently the majority of operation and maintenance works are carried out using in-house resources. Council contracts out work for minor operations such as maintenance and pipeline cleaning.

Council will contract out major works and will consider contracting out where in-house expertise and resources are limited and where more economical solutions may be available. A BOOT approach is not seen as desirable.



Resource sharing/ shared services and knowledge/ information sharing (e.g. trade waste and road safety) etc. are of particular interest to Council and across the region. Considerations include rates, hire agreements, qualifications, skills, shared service agreements, panel contracts, long-term contracts, buying power, etc.

Main advantages of resource sharing are:

- There would be a reduction in the number of resources required by Council as these would be shared with the other organisations.
- By sharing the resources associated with the provision of sewerage services with other organisations economies of scale would be achieved.
- May enables specialist expert team to be established and used on a regional basis.

This option is along the lines of Strategic Alliance discussed under the institutional arrangement alternatives. Council, in conjunction with Centroc, is planning to identify areas of co-operating with neighbouring Councils.

## 5.7.1 Conclusion

The various service delivery arrangements were rated on a scale of +1 (very possible) to -1 (very unlikely) as listed below.

**Table 5-3: Service Delivery Options**

Option	Ranking
Full Service Contract	-1
Part-Service Contract	+1
BOOT	-1
Resource/Service Share	+1

Council believes that under the current operating environment only part-service contract options and resource sharing will hold any real advantages in the foreseeable future.

## 6 Best Practice Management

### 6.1 Compliance Status

The NSW Office of Water (NOW) is responsible for the administration of the *Guidelines for Best-Practice Management of Water Supply and Sewerage* pursuant to section 409(6) (NSW Department of Water and Energy, 2007) of the Local Government Act 1993. A summary of Blayney Shire Council's current compliance status of the guidelines is listed in Table 6-1.

**Table 6-1: Best Practice compliance**

Best Practice Requirement	Status
Strategic Business Plan (including Financial Plan)	This document
Sewerage Service Pricing	
- Full cost recovery without significant cross subsidies	Compliant
- Complying residential charges, independent of land value	Compliant
- Complying non-residential charges	Compliant
- Development service plan including commercial developer charges	Compliant
- Appropriate liquid trade waste fees and charges	Compliant
- Complying liquid trade waste policy and approval for all discharges	Compliant
Performance Reporting	Compliant
Integrated Water Cycle Management (CTW)	Compliant
Asset Management*	
30-year capital works plan	Compliant (part of SBP)
Operations and Maintenance Plans	Compliant

\* Note: Development of Asset Management Plan is not currently a requirement of NOW Best Practice Guidelines; however, it is required to comply with DLG Integrated Planning and Reporting Framework, 2010.

## 6.2 Principal Issues

A number of issues have been identified as important to the future operation of the sewerage scheme. Table 6-2 presents a list of major issues and where they have been addressed in this Strategic Business Plan.

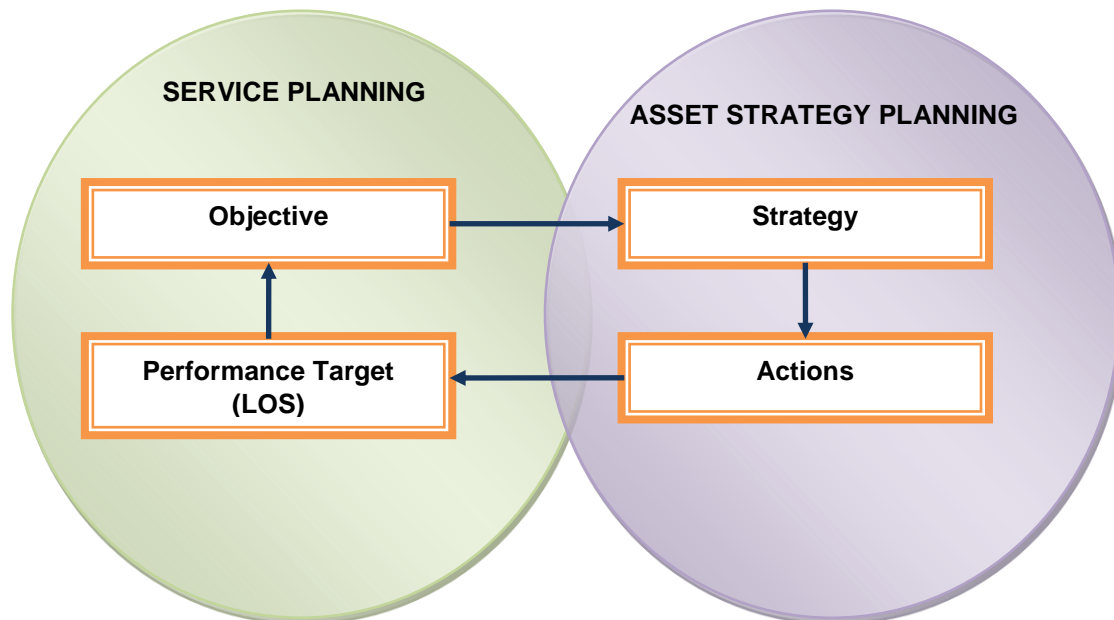
**Table 6-2: Principal Issues**

Issue	Section where this is addressed
Meeting NOW Best Practice Management Guidelines and the adopted levels of service	Performance Management (Levels of Service Review) (Section 8.1)
Service extension to urban growth areas (there are a number of villages that only have access to on-site sewage systems)	Areas Served (Section 8.2) Capital Works (Section 10.3)
Equitable service pricing including developer charges	Service Pricing (Section 8.4) Finance (Section 12)
Systematic rehabilitation and renewal of ageing assets (i.e. treatment plant and reticulation system, including manholes)	Maintenance (Section 10.2) Capital Works (Section 10.3) Finance (Section 12)
Meeting EPA license conditions	Performance Management (Levels of Service Review) (Section 8.1) Sewer Load Management (Section 8.3) Environmental Protection and Sustainable Development (Section 9)
Maintaining skilled staff resources	Work Force (Section 11)

# 7 Action Planning Overview

The relationship between “Service Solutions” and “Asset Strategy Planning” is represented in Figure 8.

**Figure 8 – Relationship between Service Planning and Asset Strategy Planning**



In order to achieve the levels of service, a number of objectives have been defined along with the actions that will aid Council in achieving these targets. An “Objectives and Actions” table has been created for each area of the Action Plan. The definitions for each of the key terms used in these tables is summarised in Table 7-1.

**Table 7-1: Key Terms in Objectives & Action Tables**

Section	Description of Contents
Objective (Goal)	Defines how key result areas contribute to service goals
Performance Targets	Expected Outcomes
Strategies	The plan for achieving the objective(s), expressed in general terms rather than specifics
Actions	Specific tasks to implement strategies and achieve objective(s)
Responsibility	Person in charge of task completion
Cost	Implementation (Implement) – One off cost Ongoing - Cost incurred annually over a number of years or at regular intervals

The responsibility for ensuring that each of the actions is undertaken has been assigned to a member of Council’s management team. Each member of the team is identified by the acronym used for their position. A brief description of the responsibilities of each team member is contained in Table 7-2.

**Table 7-2: Positions and Responsibilities**

Abbreviation	Position
GM	General Manager
DIS	Director Infrastructure Services
DPES	Director Planning and Environmental Services
DCS	Director of Corporate Services
IM	Infrastructure Manager
HRM	Human Resources Manager
MFS	Manager Financial Services
OM	Operations Manager
EHO	Environmental Health Officer
RO	Risk Officer
SSS	Sewer System Supervisor

With respect to the expenditure, where the current levels of expenditure are considered sufficient to cover the required activities the acronym NAE (No Additional Expenditure) has been entered.

## 7.1 Service Planning

There is a relationship between the Levels of Service (LOS) to be provided to consumers and the actions that will be undertaken by Council. The following table shows how the Levels of Service map into the key result area action-planning framework. As such, it would be expected that any changes to current LOS would be addressed in the indicated objectives.

**Table 7-3: Relationship between Objectives and Levels of Service**

Objective	Levels of Service
Service Performance Management	Sustainability
Area Serviced	Availability of Service
Sewer Load Management	Discharge – Trade Wastes Failures (Inflow/Infiltration)
Pricing	Availability – user pays Rebates – pensioners
Customer Relations	Interruption advice Complaints/Enquiries
Community Consultation	Service pricing Environmental Impacts
Environment	Sewage overflows/ treatment Effluent and sludge disposal/ reuse
Operations	Sewer blockages Response times

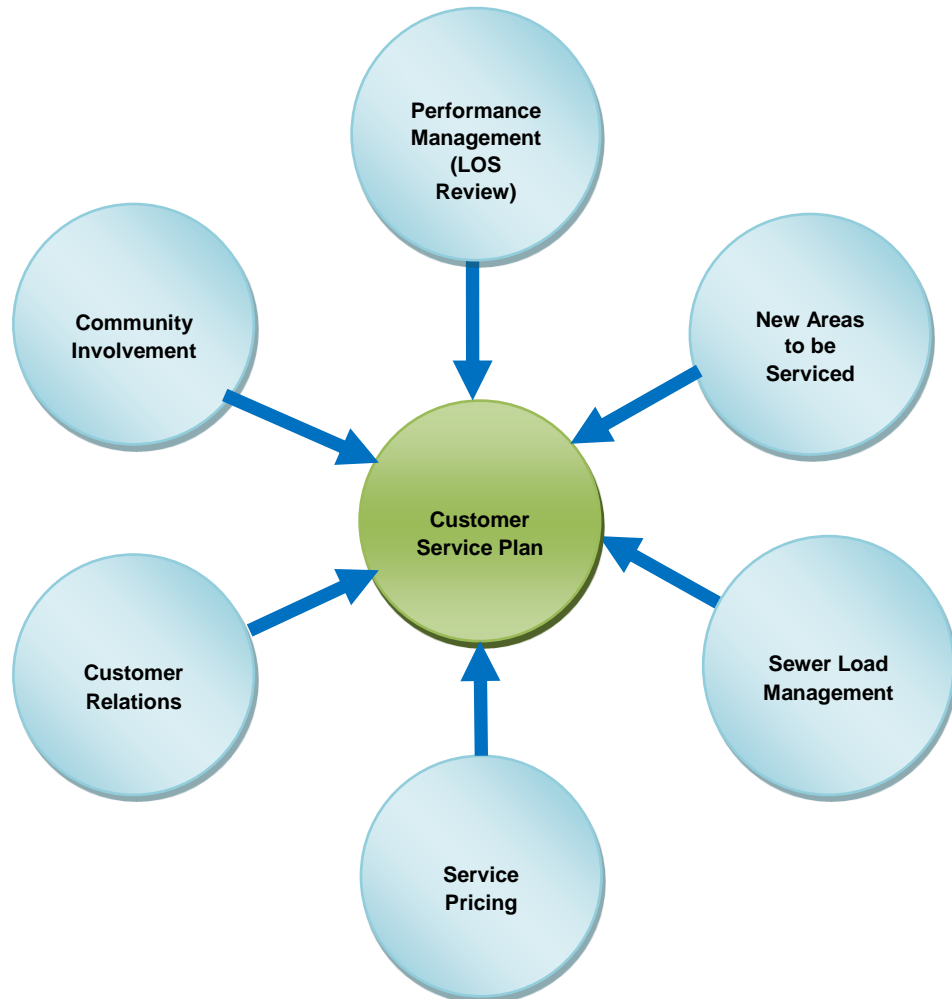
Objective	Levels of Service
Maintenance	Failure – breakdowns Interruptions – planned and unplanned
Capital Works	Failures/ service interruptions – asset renewal program Effluent disposal - compliance
Work Force	Interruptions – staff on call Customer complaints/ requests Response times
Finance	Financial sustainability/ Business continuity Affordability - model

## 8 Customer Service Plan

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The Customer Service Plan covers activities, which involve interaction between Council, its customers and the wider community as illustrated in Figure 9.

**Figure 9 – Components of the Customer Service Plan**



## 8.1 Performance Management (Levels of Service Review)

The Levels of Service discussed in Section 4, are designed to reflect an optimisation of the desired service provision, what is affordable, and the system's capability. These considerations take into account legislative requirements, industry standards and customer demands.

This section reviews the services currently provided by the Council's sewerage scheme. In addition to identifying areas where improvements are necessary, the review also refers to aspects of the operation that are being performed well.

The Levels of Service Review objective should enable the community to be aware of, and endorse the Levels of Service provided. As a public document, this report provides the necessary background information.

To demonstrate continuous improvement, Council will seek to provide the target Levels of Service in the most efficient manner. A number of items are of particular importance and these will be addressed under the relevant key result areas.

Under the NOW Best Practice Management Guidelines, a performance review is required to demonstrate that Council is either achieving the Level of Service or progressing towards achieving the target levels. Monitoring and benchmarking are needed to help Council determine if the methods are appropriate or more effective than other Councils. Performance data is forwarded to NOW in September each year.

A benchmarking exercise is then conducted to ensure Levels of Service are comparable to others in the industry at present. The outcome of the benchmarking exercise is provided as a feedback from NOW to the Councils as a 2-page Triple Bottom Line (TBL) report. The TBL report should be reviewed and an action plan to address areas of under-performance prepared by the Council.

In accordance with the Inter-Government Agreement on a National Water Initiative signed between the Commonwealth and the State Governments, NOW has introduced independent auditing of the performance data reported by all non-major water utilities for a comprehensive set of performance indicators developed by the National Water Commission (2012). The audit verifies the reliability and accuracy of the performance data reported by Water Utilities and enables meaningful state-wide and nation-wide benchmarking and comparison of key issues affecting water utilities and their customers. The performance audit is to be undertaken at least once in three years. Currently, audits are only applicable for utilities with more than 10,000 connections and hence not applicable to Blayney Shire Council.

Generally Council has been performing well in respect of the Levels of Service. Maintaining the levels of service is Council's current priority.



**Table 8-1: Objective & Actions – Levels of Service**

<b>Objective</b>					
Levels of services are in accordance with community expectations					
<b>Performance Target</b>					
100% compliance with the agreed Levels of Service					
<b>Strategies</b>					
Comply with Best Practice Guidelines					
Action	Start	End	Responsible	Cost (\$'000)	
				Implement	Ongoing
Review and update Strategic Business Plan	2013	4 yearly ongoing	DIS/ IM		20 every 4 years
Implement and monitor SBP Action Plans		Ongoing	IM/ OM		NAE
Monitor and review LOS targets and report performance to NOW	Annually	Ongoing	OM		NAE
Report key performance indicators and TBL reports to Council	Annually	Ongoing	DIS		NAE
Input and review of special schedules for Div. of Local Govt. in the financial statements	Annually	Ongoing	MFS/ IM		NAE
EPA compliance reporting for licence renewal	Annually	Ongoing	OM		NAE
SoE reporting	Annually	Ongoing	DPES		NAE

## 8.2 Areas Serviced

This section of the Customer Service Plan addresses Council's intentions in the provision of sewerage services for the next thirty years.

The extension of sewerage services to new areas is dependent on a range of factors, the most important of which are:

- The growth in rural settlements
- The impact on levels of service to existing customers
- The environmental impact of the works
- Cost to customers associated with extending services

When extending services, Council will:

- Treat all residents as equal for the provision of services
- Consider residents expectation of service
- Consult community when considering new development areas or backlog programs
- Compete with neighbouring Councils in attracting commercial and industrial developments;

The main issues considered are:

- Providing sewerage services to future growth and development areas
- Ensuring that sewerage planning in line with the LEP is integrated with overall Council planning to eliminate pressure from developers and avoid the under-utilisation of services

With regard to the development of new areas identified in Table 8-2, it has been assumed that there will be some form of development over the next 30 years.

Council have indicated that they may consider providing reticulated sewage services to Carcoar, Lyndhurst and Mandurama in the medium to long term.

The villages of Barry, Neville and Newbridge are not connected to a sewage system. Residents live on large blocks where onsite septic tanks are used. It is not considered financially practical to connect to the existing system.

**Table 8-2: Current and Future Service Areas**

TOWNS	Current (2012)		Future (2041)	
	Population	Service	Population Growth	Service
Blayney	2810	Reticulated sewerage	3971	Reticulated sewerage
Millthorpe	737	Reticulated sewerage	1168	Reticulated sewerage
Carcoar	215	Septic tanks	256	Reticulated sewerage
Lyndhurst (including Somers and Garland)	219	Septic tanks	260	Reticulated sewerage for the village of Lyndhurst
Mandurama (including Errowanbang, Burnt Yards and Gallymont)	496	Septic tanks	590	Reticulated sewerage for the village of Mandurama
Villages of Barry, Neville and Newbridge	305	Septic tanks	305	Septic tanks

**Table 8-3: Objective & Actions – Areas to be serviced**

<b>Objective</b>					
Maintain existing designated service areas and provide service to selected un-serviced areas where economically feasible					
<b>Performance Target</b>					
Achieve 100% service connections in the designated service area by June 2015					
Complete feasibility study for village schemes by June 2016					
<b>Strategies</b>					
Encourage ongoing infill urban development to maximise use of existing facilities and investigate economic feasibility of servicing the villages of Carcoar, Mandurama and Lyndhurst					
Action	Start	End	Responsible	Cost (\$'000)	
				Implement	Ongoing
Identify infill service areas	Started	June 2014	DPES	NAE	
Undertake feasibility studies for village sewerage schemes	July 2015	June 2016	DIS/ DPES	50	
Investigate and implement options for 100% service connections within designated service areas	January 2014	June 2015	DPES/MFS	NAE	
Provide sewerage services to villages as required	As identified			Refer to Capital Works Program	

## 8.3 Sewer Load Management

This section of the Plan outlines Council's intention in the management of loadings on the sewerage systems. While the impacts and management practices are of concern to the Customer Service Plan, the solutions must be an integrated part of the Asset Management Plan since they involve long-term system maintenance strategies.

Reducing hydraulic and biochemical loading on the system can:

- Effectively prolong the life of the existing assets;
- Defer new works programs;
- Make treatment processes more effective;
- Reduce siltation in the system and reduce pump wear;
- Reduce operation costs; and
- Improve environmental performance.

Problems of load management may occur due to changing development patterns affecting design capacity, trade waste discharges, stormwater, or ground water.

### 8.3.1 Inflow and Infiltration Management

Although water demand management can reduce the hydraulic load on the treatment works, the major factor is usually the ingress of water into the system. The challenge is to control and reduce any significant inflow and infiltration (I/I). The main reference for the management of Inflow and Infiltration was written by the Department of Land and Water Conservation (DLWC) in 1996. The section responsible for this study is currently part of NOW. The definitions used were:

- Inflow is stormwater that entered the sewerage system through direct ingress from illegal connections of roof drains, back yards and low gullies, manhole covers, surface water drain connections etc.
- Infiltration is stormwater that entered the sewerage system as a result of damage to the sewers due to cracking, breakage, open joints and broken junctions etc. Infiltration can occur in dry weather as well as wet weather if the pipes are below the water table, or adjacent to a streambed

The main issues identified with regards to inflow and infiltration are:

- Wet weather inflow and infiltration (I/I) caused by a combination of illegal connections, defective pipes and access chambers; and
- Wet weather hydraulic loads and associated operational impacts on STPs.

The primary strategies for reducing I/I are:

- Education of plumbers and the general public regarding illegal connections; and
- Inspection of sewers to find damaged areas; and
- Smoke testing to find illegal connections.

Currently, during large, infrequent wet weather events, surcharging/overflows occur at the STP inlet works. This problem is being addressed through the inflow/infiltration program.

### **8.3.2 Trade Waste Management**

The treatment system functions can be jeopardised by shock loads of high nutrient or high biological oxygen demand wastes or toxic chemical loads. These loads are more likely to come from trade waste than domestic waste. Therefore, Council needs to assess the current levels of liquid trade waste discharges by non-residential customers into the town sewer system.

Council needs to review and update its trade waste policy and regulatory framework to control commercial and industrial discharges into the system. The policy is to be fully implemented in accordance with NOW guidelines by June 2014.

Further, as industry develops, trade waste policy will be reviewed to outline service expectations to developers, targeting in particular, chemicals, fuels, oils and hospital discharges and would start with a survey to determine the contributors.

Council plans to address the following main issues in this regard by updating the trade waste register and implementing trade waste policy to protect the sewers and STP from the impacts of high strength waste discharges.

**Table 8-4: Objective & Actions – Sewer Load Management**

<b>Objective</b>					
Minimise hydraulic loads due to infiltration, inflow and illegal connections and manage any industrial and commercial pollutant loads					
<b>Performance Target</b>					
Implement Infiltration/Inflow (I/I) program by 2015					
<b>Strategies</b>					
Implement Inflow/Infiltration program					
Implement Trade Waste Policy					
Action	Start	End	Responsible	Cost (\$'000)	
				Implement	Ongoing
Undertake inspection of mains for Inflows/ Infiltration - smoke testing - CCTV program - Pump flow/ flow gauge analysis	Started	2019	DIS/ OM		Refer to Recurrent cost schedule
Send out notices and enforce removal of illegal connections		Ongoing	DIS/OM		
Prepare analysis/defects report and develop work program		Ongoing	IM/ OM		
Sewer relining/replacement program	Started	June 2019	DIS/OM	1,000	
Implement sewer manhole rehabilitation program	July 2014	June 2019	OM	500	
Maintain trade waste register and report to NOW		Ongoing	EHO		20
Liquid trade waste awareness campaign	March 2014	Annually ongoing	EHO		NAE
Monitor oil & grease traps services		Ongoing	EHO		5

## 8.4 Pricing

This section of the Plan outlines Council's intentions regarding the pricing of sewerage services.

Council's pricing policy will conform to the following general principles:

**Equity** - adoption of user pays principles. Residential and non-residential revenue to be collected via a two-part tariff which reflects the level of water used and hence the load on the sewer system. (It is considered equitable that people pay for the cost of the services they use).

**Financial** - provision of adequate cash flows to meet operating costs and to fund future capital works (as determined in the financial plans).

**Customers** - provision of a service of desired quality and reliability at a fair and affordable price.

**Cross subsidies** - should be fully disclosed in Council's reporting.

**Community service obligations** - provision of services to pensioners, disadvantaged groups and general community amenities, to be recognised.

**Other** - simplicity of pricing structure for ease of understanding by customers and stability of income.

### 8.4.1 Sewerage Charges

Best Practice Pricing Guidelines for sewerage services recommend adoption of two-part tariff structure for non-residential customers that has features such as:

- Uniform annual charges for residential customers
- A two-part, access and usage charges for non-residential customers;
- Trade waste charges for identified commercial and industrial customers; and
- Assessment and adoption of appropriate sewage discharge factors for commercial and industrial customers

The best practice tariff structure provides revenue stability and sustainability for the sewerage services and sends signals to business and industrial customers to conserve water as a resource.

The current non-residential sewerage charges do not comply with the current Best Practice recommendation. Council's sewerage charges are shown below.

**Table 8-5: Charges for Blayney Sewerage Services**

Charge	2013/14
Residential:	
- General	\$496/year
- Vacant/unmetered	\$256/year
Non-Residential*	
- Access charge (20mm water service)	\$436/year
- Access charge (25mm water service)	\$676/year
- Access charge (32mm water service)	\$1,108/year
- Access charge (40mm water service)	\$1,732/year



Charge	2013/14
- Access charge (50mm water service)	\$2,705/year
- Access charge (80mm water service)	\$6,693/year
- Access charge (100mm water service)	\$10,812/year
- Access charge (150mm water service)	\$23,328/year
- Vacant/unmetered	\$256/year
- Usage charge (\$/KL)	\$1.15
* The charges are adjusted for discharge factor and are subject to a minimum total annual charge equivalent to occupied residential charges	

**Table 8-6: Charges for Millthorpe Sewerage Services**

Charge	2013/14
Residential:	
- General	\$788/year
- Vacant/unmetered	\$701/year
Non-Residential*	
- Access charge (20mm water service)	\$740/year
- Access charge (25mm water service)	\$1,156/year
- Access charge (32mm water service)	\$1,892/year
- Access charge (40mm water service)	\$2,956/year
- Access charge (50mm water service)	\$4,624/year
- Access charge (80mm water service)	\$11,832/year
- Access charge (100mm water service)	\$18,484/year
- Access charge (150mm water service)	\$41,592/year
- Vacant/unmetered	\$701/year
- Usage charge (\$/KL)	\$1.15
* The charges are adjusted for discharge factor and are subject to a minimum total annual charge equivalent to occupied residential charges	

## 8.4.2 Developer charges

Developer Charges are up-front charges levied under Section 64 of the Local Government Act to recover part of the infrastructure costs incurred in servicing new developments or additions/changes to existing developments. Developer charges serve two related functions:

- They provide a source of funding for infrastructure required for new urban development.
- They impact on the costs of urban development and thus encourage less costly forms and areas of development.

Current developer charges are shown below.

**Table 8-7: Developer Charges**

Service	Area	2012/2013
Sewer	Blayney	\$2,367
	Millthorpe	\$6,215

Council's Development Servicing Plan (DSP) is currently under review in accordance with NOW Developer Charges Guidelines. Council intends to adopt the DSP in 2015.

**Table 8-8: Objectives & Actions – Service Pricing**

<b>Objective</b>					
Ensure scheme achieves full cost recovery and reflects best practice guidelines					
<b>Performance Target</b>					
Review sewerage tariff by March 2014					
Review and update developer charges by December 2014					
<b>Strategies</b>					
Rates and charges reviewed annually to meet financial planning revenue goals					
Action	Start	End	Responsible	Cost (\$'000)	
				Implement	Ongoing
Complete review and update of DSP including developer charges	July 2014	Dec 2014	DPES/ DIS	15	
Review and update sewerage tariffs in conjunction with sewer fund LTFP	January 2014	March 2014	MFS	NAE	

## 8.5 Customer Relations

Council aims to maintain good customer relations through the:

- provision of a quality service,
- keeping customers informed of Council's intentions,
- responding to customer and community needs

Council believes it operates a service that is reliable, has a good level of service and provides a quick response to problems.

Customer satisfaction is measured in a variety of ways to suit the circumstances and to give a valid indication of the extent to which customers feel satisfied with the type, quality, cost and performance of service provided. Keeping customers informed is agreed by Council to be important for good customer relationship. Council has adopted a 'Complaints Policy' and developed and adopted a detailed complaints handling and resolution procedure. It also maintains requests and complaints register that classify and record requests and complaints, these are analysed to identify where conditions are deteriorating. Actions should then be seen to be taken to improve these situations.

Council promotes a customer focussed, socially responsive communications culture for service provision issues.

Regarding customer relations, Council currently:

- Undertakes regular staff training on customer relations procedures.
- Included sewerage information in the regular Council new section of the local newspaper, examples include updates on major construction project
- Public meetings through monthly report at Council meetings
- Customer surveys – project specific e.g. IWCM
- Customer contact – phone and front desk
- Public display of Management Plans, Annual Reports and Business Plans
- Information brochures and flyers
- Council website

Adherence to the published levels of service is important and notification of any planned failure to comply should be given wherever possible. Performance monitoring and reporting is very important for updating and review of the Strategic Business Plan.

In order to carry out Council's mission to focus on the community expectations, a level of communication is required so that the community is satisfied that the Council's decisions are responsive to their needs.

**Table 8-9: Objectives & Actions – Customer Relations**

<b>Objective</b>					
Keep stakeholders informed of issues relating to the sewerage services and provide services in a professional and efficient manner					
<b>Performance Targets</b>					
Customer survey conducted every 4 years					
Achieve at least 80% customer satisfaction level in customer surveys by 2014					
<b>Strategies</b>					
Keep staff well trained in providing good customer relations.					
Action	Start	End	Responsible	Cost (\$'000)	
				Implement	Ongoing
Implement customer feedback system		Ongoing	DCS	NAE	
Analyse and monitor feedback reports		Ongoing	DIS		NAE
Staff training on customer relations	Started	Every 5 years	DIS/DCS		NAE
Conduct customer survey	Started	Every 4 years	DCS		NAE
Notify customers of planned service interruptions		Ongoing	DIS		NAE

## 8.6 Community Involvement

This section of the Plan outlines Council's intentions in involving the community in decision-making during the development of major infrastructure schemes. Community consultation is not only highly desirable in terms of major capital works, but there are requirements under the Environmental Planning and Assessment Act and the Local Government Act, which need to be satisfied. The aims of community consultation are to:

- Develop ownership of the service delivery issues by the community, and to gain agreement that action is required;
- Ensure that the concerns of the community, particularly social and environmental concerns, are taken into account;
- Allow the community to propose options it wants evaluated and ensure that the costs associated with decisions are acceptable; and
- Demonstrate to the community that Council is making the best decisions after the proper evaluation of all the issues.

Development and review of the Local Environmental Plan, sewage treatment process improvements, revision of tariff structure and developer charges, all benefit from direct involvement of the community. Periods of public display, public comment and notices to ratepayers and business groups to advertise the opportunity to comment are typical consultation processes.

Methods that Council uses to consult the community include:

- Project specific advisory committees (e.g. IWCM)
- Community meetings (as appropriate)
- Public meetings and village tours (as required – for example school trips to the STP)
- Public forum at Council meetings
- Councillors' feedback
- Newsletters/Media

The following aspects are considered when undertaking community consultation:

- Members of community who are not directly affected by a project may also have concerns;
- There must be a balance between due process and risks in order that a satisfactory level of progress can be maintained; and
- While community consultation on projects is highly desirable, it can be a lengthy and costly process. Project lead times and budgets need to be programmed to take account of this.

Proposed sewerage issues that Council will consider for community consultation include:

- Service extension under the LEP
- Section 64 charges review

Council intends to maintain the existing methods of consultation for all major capital works or decisions.

Council's current objectives and actions with regards to community involvement are shown below.

**Table 8-10: Objectives & Actions – Community Involvement**

<b>Objective</b>					
Engage the community in consultation in the delivery of sewerage services as appropriate					
<b>Performance Target</b>					
Community involvement on all significant capital works and policy decisions					
<b>Strategies</b>					
Ensure community consultation and awareness					
Action	Start	End	Responsible	Cost (\$'000)	
				Implement	Ongoing
Implement Community Engagement Strategy		Ongoing	DIS		NAE
Review of prospective consultation program and report to Council	January Annually	Ongoing	DIS		NAE
Liaise with the community and carry out stakeholder consultation as required	As required	Ongoing	DIS	Included in the capital works	

## 9 Environmental Protection and Sustainable Development

The Environment objective addresses Council's intentions in managing the sewerage scheme to minimise the impact on the environment, protect environmentally sensitive areas and promote ecological sustainability.

It is recognised by Council that a responsible, region-wide approach to environmental protection and sustainable development is needed. Council's vision is to conserve and enhance the natural environment through sustainable management practices. Council's program will focus on identifying sensitive areas and undesirable outcomes. The driver is simply the need for the improvement of existing practices. As part of Council's due diligence, the following will be considered:

- Achieving environmental objectives should strengthen, not threaten the local economy; and
- Local knowledge and enthusiasm for sustainability should be harnessed.

The table below summarises the 'state of the environment' in regard to sewerage operations.

**Table 9-1: State of the Environment for Sewerage Operations**

Receiving Environment	Location	Activities impacting on the environment	Response of the Council/ Government/ Community
Land	Waste disposal sites	Disposal of detritus, screenings from STP Disposal of sludge	- Tipping - Tipping/ Application on land
Air	Pump stations Sewage Treatment Plant	Odour pollution	- Ongoing maintenance of pumping stations - Deodorisation beds - Monitoring and control of liquid trade waste contributors through trade waste approvals
Water	Stormwater drainage Creeks Rivers	Downstream pollution	- Minimising discharge to Belubula River by reuse - Minimising stormwater overflow



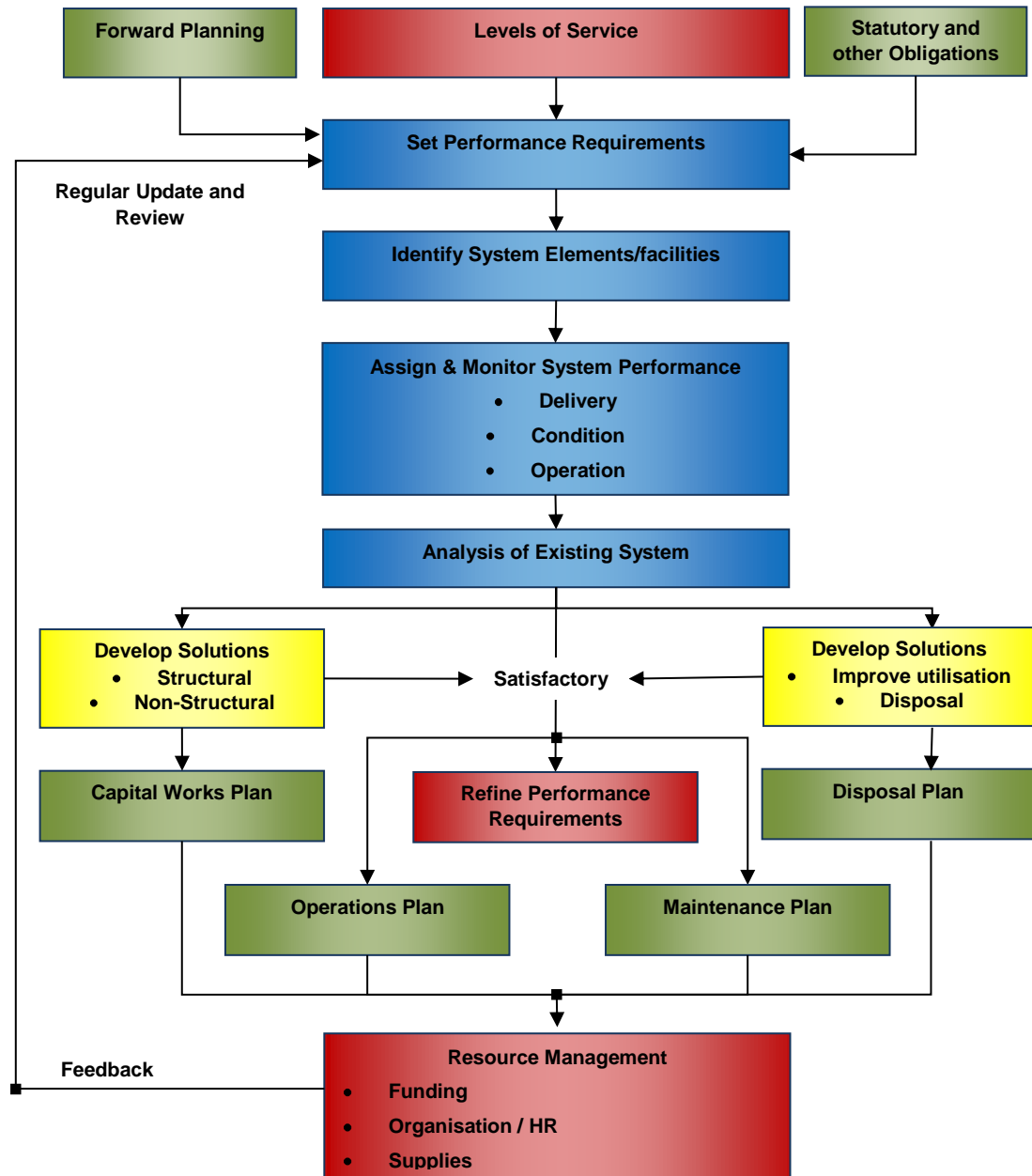
**Table 9-2: Objectives & Actions – Environment & Sustainability**

<b>Objective</b>					
Manage sewerage in an environmentally responsible manner					
<b>Performance Target</b>					
Comply with all regulatory and licence requirements					
<b>Strategies</b>					
Practice due diligence to ensure compliance with regulatory requirements					
Minimise environmental impacts					
Action	Start	End	Responsible	Cost (\$'000)	
				Implement	Ongoing
Prepare and implement Bio-solids Management Plan - Regular testing - Identify and evaluate options for beneficial reuse	July 2014	June 2015	OM	10	
Carry out Energy Audit - Review energy usage - Implement audit recommendations - Energy saving measures such as VSD pumps, pump operating procedures etc.	Started	June 2014	OM	10	
Implement PIRMP		Ongoing	OM/ RO		NAE
Monitor implementation of LTW Policy		Ongoing	EHO		NAE

# 10 Total Asset Management Plan

This section contains information that Council will use in managing its sewerage assets throughout their whole life cycle. This includes asset creation, operation, maintenance, replacement and disposal. The Best Practice approach to asset management is outlined in Figure 10.

Figure 10 – Best Practice Asset Management Approach



Current Government policy is directed towards lifecycle asset management. Solutions in the past have often been capital intensive so there is the potential to generally reduce capital works costs for councils over the long term. The 'best practice' flow chart describes a methodology for improving asset management planning. This model is not intended to reflect the structure of the Asset Management Plan but rather provides a guide for continuous improvement. Some of the benefits of implementing this model are:

- Appropriate asset solutions;
- Optimal balance of capital works and maintenance;
- Maximisation of asset life and utility; and
- Cost effective and sustainable asset management.

The type of asset portfolio involved in sewerage services warrants significant investment of resources for its management. Council intends to adopt a Total Asset Management (TAM) approach for the schemes' management to ensure that assets are managed as effectively as possible i.e. optimisation of the whole of the asset lifecycle rather than focusing on asset creation alone. Following the TAM Approach, this section of the business plan reviews and develops objectives and strategies for the management of:

- Operations;
- Maintenance; and
- Capital Works.

Each of these components of the Plan deals with separate issues relating to the Scheme, but since they are interlinked several combinations of structured and non-structured solutions could result in providing the same level of service.

The implementation of an asset management system by Council will provide a vital repository for Council's asset related information such as: asset location, aerial photographs, financial and asset costs, construction and acquisition details and other asset attributes such dimensions. Key functions of the system include:

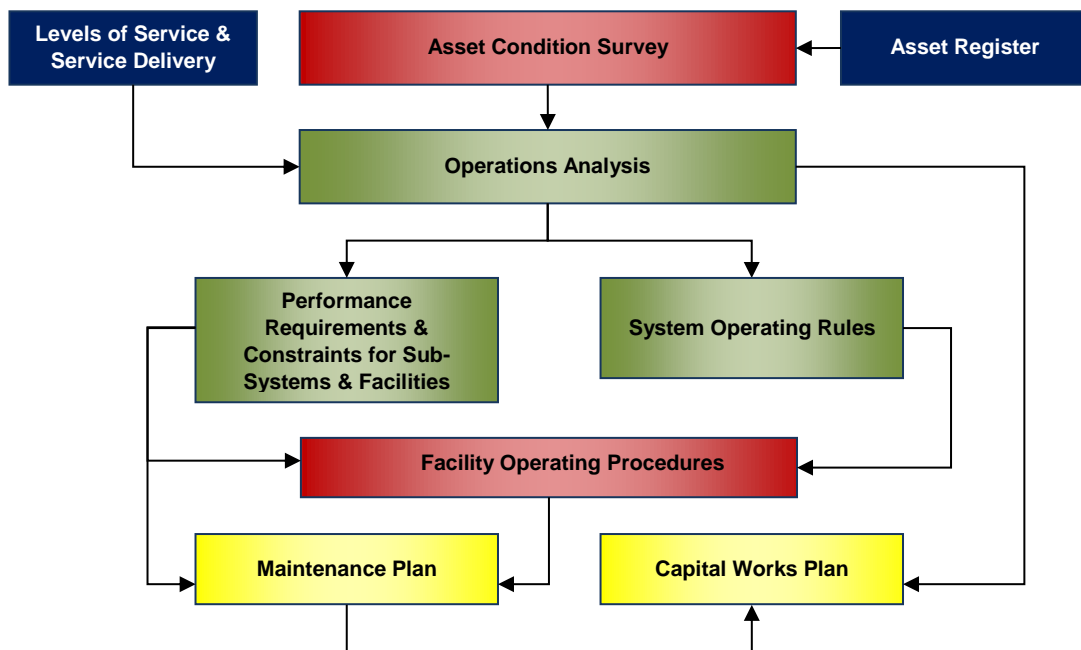
- Maintenance history;
- Maintenance planning;
- Operations management;
- Asset condition rating and values;
- Capital works planning;
- Asset disposals; and
- Customised reporting.

Anticipating the need for asset replacement is vital given the significant investment of resources involved and the need to ensure funds are available. Under the Total Asset Management approach a schedule of expected capital works is estimated into the future. Both current and projected capital works to satisfy future demands in terms of growth, improved Levels of Service and replacement of existing assets are identified. Appropriate operation and maintenance activities also are identified, to suit the desired level of service delivery. This includes documentation of the rules and procedures at system and facility level. All these details are used in the financial plan to ensure that required funds are available when needed.

## 10.1 Operations Plan

This section of the Plan outlines Council's strategy for operation of the sewerage scheme in the future. The function of an operations plan is to ensure that the service objectives are achieved at the least cost, with minimal interruptions to services. This may be achieved through the process illustrated in Figure 11.

Figure 11 – Operations Flowchart



Provision of the agreed Levels of Service to customers is dependent on the efficient and effective running of operations. An operations analysis will form the interface between the operations and capital works plans by identifying what level of service the existing assets can provide and what additional works are needed to bridge any gap between existing and desired service levels.

The operations plan is based on knowledge of the system assets and as such, there are ongoing requirements for maintaining an appropriate asset register and for investigating the condition of key elements of the systems that affect the ability to deliver the desired Levels of Service. Contingency operations plans (emergency response plans) should be developed where the impact of failure is significant. The existing inspection and maintenance procedures are appropriate, however the utilisation of improved technology need to be investigated.

Asset condition surveys required include inspection for main breaks in the sewerage system and CCTV spot check inspection of sewer lines in the reticulation system. The Asset Register should be updated as an integral part of this recording process.

There are various documentation requirements for sewerage operations. Operating rules and procedures for both normal condition and breakdown contingencies need to be established. These should include system performance requirements and constraints, and cross reference to specific plant operations manuals (Water Directorate). Council recognises that a monitoring telemetry/ SCADA system leads to best operating efficiency and improves resource utilisation.

Further operations planning requirements for the Council are:

- Completion of documenting system operating rules and performance requirements for all subsystems and facilities;
- Improving the Assets Management System to enable identification of conditions of assets from assets register and maintenance reports; and
- Compliance with Work Health and Safety (WHS) requirements.

Existing operational systems, processes and procedures routinely deliver services that comply with levels of service and regulatory requirements.

Rapid changes in the operating environment in terms of customer expectations, improved environmental outcomes, resource conservation, higher regulatory standards etc. will require commensurate improvements in operations.

Main operational issues include the following:

- Asset condition audit and monitoring program – CCTV program
- Monitoring of operational performance
- Review and documenting of operating procedures for the STP and the effluent reuse scheme
- Weed control around STP site
- Sewer mains cleaning / root cutting
- Conducting a review of energy usage
- Conducting and implementing recommendations of a Safety Audit and complying with WHS regulations (last completed in 2009)

Council has developed a WHS Policy outlining the roles and responsibilities of all employees within the Council. As part of Council's ongoing commitment to Work Health and Safety requirements, all staff have been familiarised with the latest amendments to the WHS Act, Local Government Act 1993 and the Protection of the Environment (Operations) Act 1997.

Work health and safety hazards in sewerage operations include:

- Bacterial contamination
- Falling off structures
- Moving heavy mechanical parts
- Chemical exposure and handling
- Injuries due to sharps
- Electrical injuries
- Confined spaces

As part of Council's ongoing commitment to Work Health and Safety requirements, all staff have been trained in the relevant amendments to the WHS Act 2011, Local Government Act 1993 and the Protection of the Environment (Operations) Act 1997. The following table summarises Council's WHS performance during last 3 years.

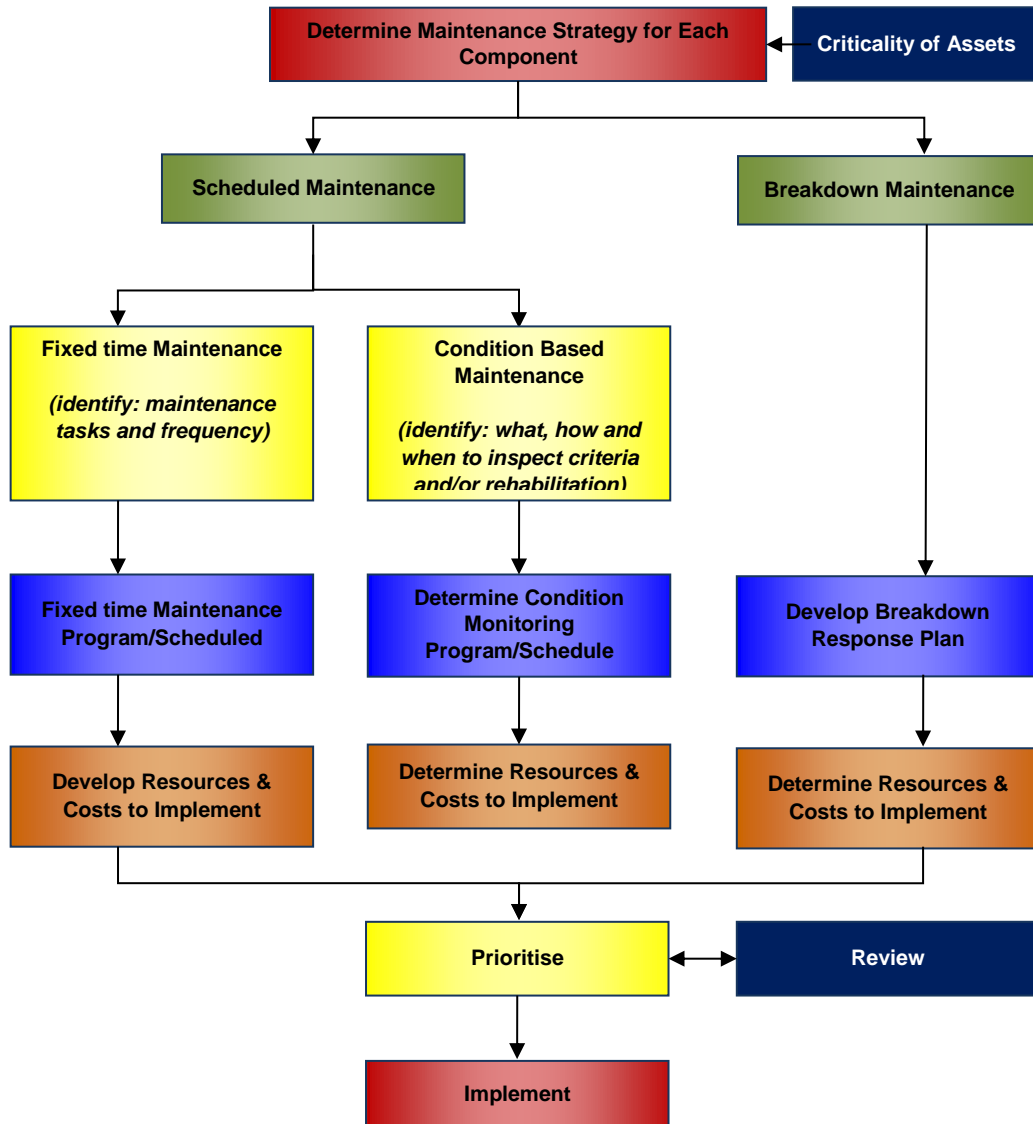
**Table 10-1: WHS Performance**

Performance Indicator	2010/2011	2011/2012	2012/2013
Lost time due to injury (hours)	Nil	Nil	Nil
No. of Workers compensation claims	Nil	Nil	Nil

## 10.2 Maintenance Plan

The Maintenance Plan is to ensure that the Operations Plan's outputs, reliability and availability of the sub-systems, facilities and components are achieved in the most cost effective manner. The most important factor is identification of the risk to system performance from failure of each asset. This leads to a minimum performance standard for each asset.

Figure 12 – Maintenance Flowchart



Records should be kept of maintenance and operations requirements. The aim is to:

- Reduce delays or periods of reduced service;
- Determine the limit of acceptable substandard operation; and
- Determine the cost effective breakeven point.

The most cost effective strategy for each asset (either by class or individually depending on the asset) should be identified as either:

- Scheduled maintenance - fixed time or condition based;
- Reactive maintenance - failure based

The thrust of the Government's total asset management guidelines is to make the best use of existing assets by implementing systematic maintenance and rehabilitation plans. It could therefore be that increased maintenance costs will result from a critical review of the maintenance area. This in turn would be expected to be more than compensated for by a reduction in the need for capital works.

A complete assessment of the system is needed for the development of sound strategies to ensure the Levels of Service are not jeopardised by failure to address maintenance problems. A maintenance plan is needed to incorporate appropriate maintenance schedules and procedures. This should include references to specific plant maintenance manuals.

The Maintenance Plan has to consider the following information and issues on the existing system:

- Review and update the Maintenance manuals and the Maintenance Plan;
- Criticality analysis of systems to identify components of high risk and refine the maintenance strategy;
- Need for refresher training of key staff in dealing with mission critical functions;
- Maintenance has largely been on a fail and fix regime with no computer based maintenance management system. Asset audits – power, fire, M&E, spares, general condition audits etc. are necessary.

The expansion of some programs will require resources and it is possible that current activities such as grounds maintenance could be outsourced to release resources.

**Table 10-2: Objectives & Actions – Operations and Maintenance**

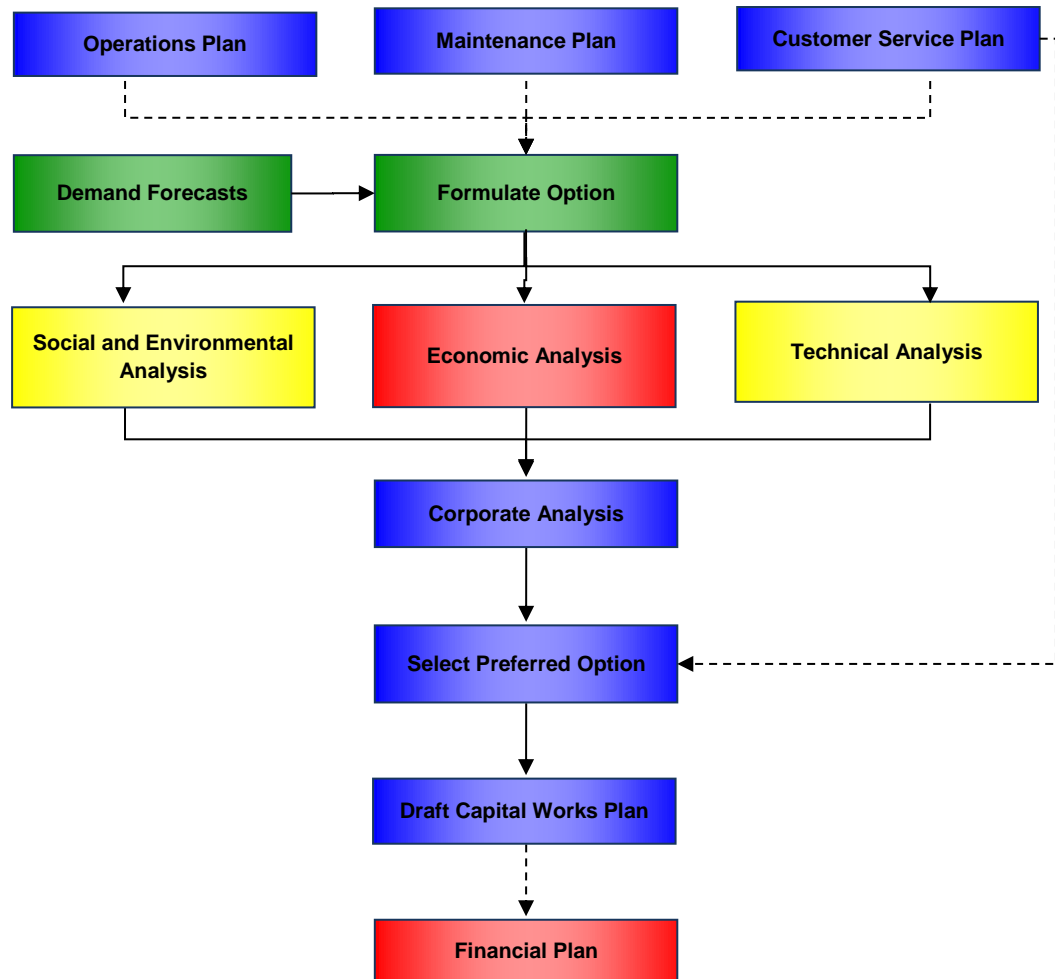
<b>Objective</b>					
Operate and maintain assets to provide agreed levels of service at minimum life cycle costs					
<b>Performance Target</b>					
Prepare an Operations and Maintenance Plans by June 2015					
<b>Strategies</b>					
Continually improve operation and maintenance procedures and Reduce operational risks					
Action	Start	End	Responsible	Cost (\$'000)	
				Implement	Ongoing
Prepare, implement and review sewerage asset management plans based on condition assessments of all assets and compliant with the Best Practice guidelines	June 2014	Jan 2015	IM	5	
Undertake maintenance cost analysis	Jan 2014 (Annually)	Ongoing	IM/ OM/ MFS		NAE
Maintain an up to date Asset Management System	July 2014	June 2016 (ongoing)	IM/ SSS	20	
Asset revaluation	July 2016	5 yearly	IM/ MFS		20 every 5 years
Prepare Operations Plan - Operations analysis - Updating procedures and practices manuals - Operating Rules	July 2014	June 2015	OM/ SSS	NAE	
Prepare a Maintenance Plan - Predictive maintenance for critical assets - Scheduled maintenance for less critical assets - Breakdown maintenance strategy	July 2014	June 2015	OM/ SSS	NAE	
Review and update operation and maintenance manuals	July 2015 (Annually)	Ongoing	OM/ SSS		NAE
Prepare Business Continuity Plan	July 2014	June 2015	RO/ OM	NAE	
Review and update PIRMP	Jan 2016	Aug 2016	RO/ OM	NAE	
Develop and maintain sewer reticulation model	July 2017	Ongoing	OM	25	3
Review and manage operational procedures for quality assurance and WHS risk management	Dec 2013	Ongoing	RO/OM	2	NAE
Undertake mains cleaning/ root cutting/ foaming program	As required	Ongoing	OM		NAE
Review and update system schematics and maintain engineering records	As required	Ongoing	OM		



## 10.3 Capital Works Plan

The capital works plan should make an assessment of scheduled work for growth, non-growth, and rehabilitation works over a 30-year period.

Figure 13 – Capital Works Flowchart



The Capital Works Plan is of crucial importance because sewerage infrastructure is capital intensive and the construction and renewal of facilities can have a significant impact on Council's overall finances.

In the process of preparing the Capital Works Plan, the following points have been considered:

- The development of sewerage schemes is a long-term investment, and must be integrated with Council planning policies.
- The capital works strategy needs to be regularly updated to take account of changing conditions.
- Consideration of the costs and benefits of alternative options.
- Acceptance by the community of the development proposals and costs.

A summary of the 30-year capital expenditure program is shown in Section 12. On the forward budget for the sewerage scheme, the following specific capital works are addressed:

- Augment and upgrade Blayney STP to meet sensitive waters standards
- Sewerage scheme for Carcoar, Mandurama and Lyndhurst
- Aeration Tank - Variable Speed Drives
- Lining/ Replacement of sewer mains
- Manhole rehabilitation program
- Telemetry upgrade

Further work is required to develop the capital works projections however the level of cost based on the current short term program and estimates for renewals in line with depreciation, provide an acceptable order of costs for the purposes of this Plan.

**Table 10-3: Objectives & Actions – Capital Works**

<b>Objective</b>					
Ensure systems have adequate capacity to meet current and future levels of service at minimum life cycle costs					
<b>Performance Target</b>					
Funded projects carried out on time and to budget in accordance with capital works program					
<b>Strategies</b>					
Develop and implement a 30-year capital works plan					
<b>Action</b>	<b>Start</b>	<b>End</b>	<b>Responsible</b>	<b>Cost (\$'000)</b>	
				<b>Implement</b>	<b>Ongoing</b>
Develop a long-term (30-years) capital works plan - For improved levels of service - For growth - For renewal/ replacement	Started	Dec 2013	DIS/ IM	Refer to Capital Works Plan	
Implement a long-term capital works plan	As planned		OM		

# 11 Workforce Plan

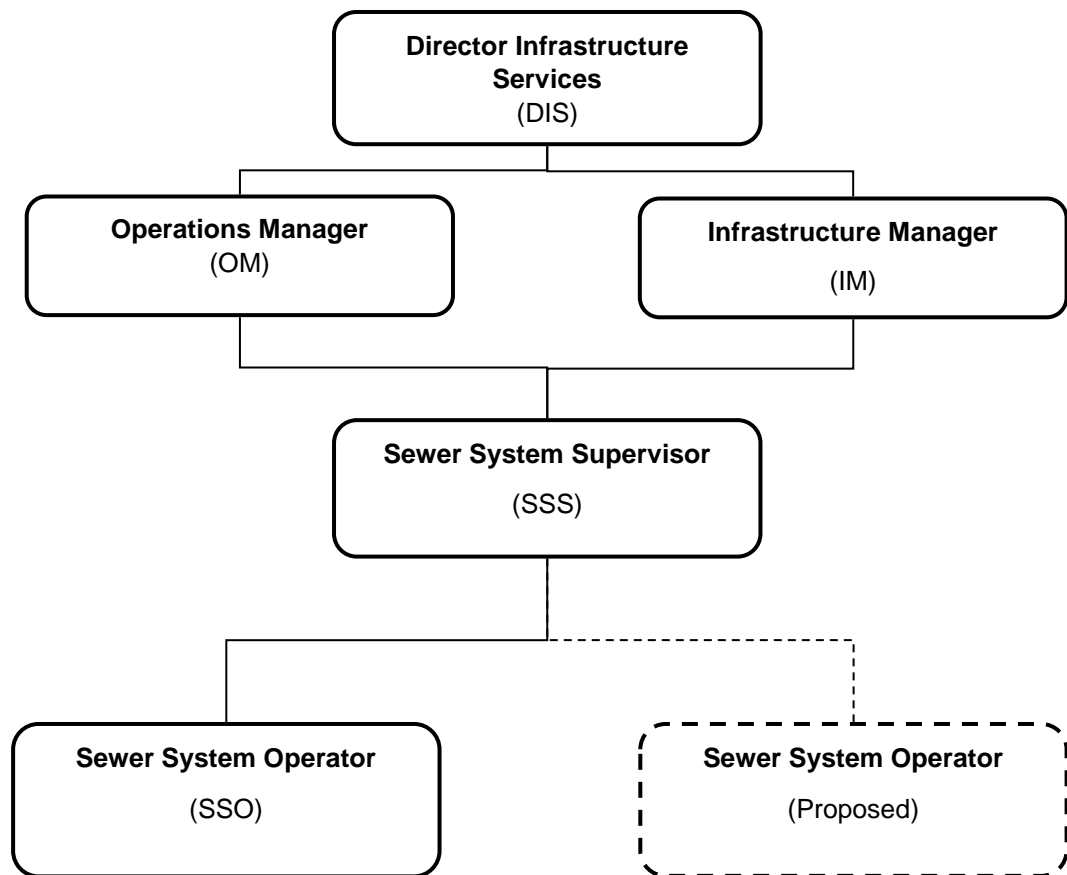
The aim of the Workforce Plan is to ensure that Council has the appropriate staff numbers with the necessary skills to meet current and future requirements. If these are in order, Council's Levels of Service can be met.

As part of the Work Force Plan, Council will ensure the following:

- Operators are familiar with all current practices including WHS requirements;
- Up to date training program is in place for all staff (in particular training the treatment plant operators);
- There is succession planning for senior technical staff;
- Reviewing of job appraisal and jobs award scheme; and
- Additional resources including Trainee/ Apprentice for servicing new schemes as required.

Council's current Infrastructure Services Sections consists of 5 staff, who together operate and maintain the sewerage scheme. The organisational structure of Council's sewerage section is shown on the following page.

**Figure 14 – Blayney Shire Council Organisational Structure – Wastewater Services**



**Table 11-1: Objectives & Actions – Human Resources**

<b>Objective</b>					
Have a proactive, productive and skilled staff with appropriate areas of expertise					
<b>Performance Target</b>					
Review and update Work Force Strategy every 4 years					
<b>Strategies</b>					
Maintain and implement a Work Force Strategy					
Action	Start	End	Responsible	Cost	
				Implement	Ongoing
Review WHS methodology and documentation	Annually	Ongoing	DIS/ RO		NAE
Implement Corporate Work Force Strategy		Ongoing	HRM		NAE
Prepare, implement and review staff training plan	Annually	Ongoing	HRM/ OM		5
Carry out staff appraisals & performance assessments	Annually	Ongoing	HRM/ OM		NAE
Recruit new staff			HRM/ OM		
- Sewer Service Operator	July 2014	Ongoing		80	80
- Environmental Health Officer (Part-funded)	Dec 2013	Ongoing		35	35

## 12 Financial Plan

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### 12.1 Overview of Financial Planning

The purpose of the Financial Plan is to enable Council to determine the revenues needed to meet the Levels of Service over the long term and effectively manage the cash flow.

Legislation requires separate accounting for sewerage services and the elimination of cross subsidies from Council's General Fund or other areas. Any cross subsidy deemed necessary by Council should be explicitly noted.

Council's commitment to provide the Levels of Service described in this document requires collection of revenues of the order shown in the detailed tables and graphs in Appendix G. Estimates of the cost of activities in the action plan have been modelled using the NSW Financial Model (FINMOD) issued by the NSW Office of Water (NOW) and represent the best projection of future costs possible at this time. Actual billings will depend on the levels of developer charges and pricing structure adopted.

Generally, recurrent operating costs should be covered by the annual sewerage charges.

Capital funds are drawn from the following four sources:

- Developer charges;
- Government grants;
- Annual sewerage charges / cash; and
- Borrowing.

In accordance with the NOW Financial Planning Guidelines, Council will develop its long-term financial models and establish a steady price path. The financial model forecasts will be used in setting up the tariff structure in accordance with the NOW August 2007 Best Practice Management Guidelines.

Council's objectives and actions with respect to financial planning are outlined in the table below.

**Table 12-1: Objectives & Actions – Financial Planning**

<b>Objective</b>					
Maintain a long-term financial plan to provide full cost recovery for scheme operation and asset replacement at an affordable level of cost to customers					
<b>Performance Target</b>					
Sewerage long-term financial plan in place by March 2014					
<b>Strategies</b>					
Establish long-term, stable sewerage price path through financial planning					
<b>Action</b>	<b>Start</b>	<b>End</b>	<b>Responsible</b>	<b>Cost</b>	
				<b>Implement</b>	<b>Ongoing</b>
Review operations and maintenance expenditure	Annually	Ongoing	OM		NAE
Review capital works programs	Annually	Ongoing	OM		NAE
Review developer charges every five years	5 yearly	Ongoing	DPES/ DIS	Refer to Pricing objective	
Review annual charges annually	Annually	Ongoing	MFS		NAE
Update Financial Plan annually	Annually	Ongoing	MFS		NAE

## 12.2 Financial Planning Process

The objective of financial planning is to develop full cost recovery models based on life cycle management. It models appropriate funding strategies for the preferred service planning option and projects a price path for residential charges against which to assess affordability in the long term.

By taking a long-term view, financial peaks and troughs can be smoothed to provide the basis for a consistent charging policy and to highlight any current impact of future actions. The new NSW Financial Planning Model (FINMOD Version 4.0), issued by the NSW Office of Water (NOW) in November 2003, has been used for this modelling. A 30-year planning horizon has been adopted as recommended in the NOW Best Practice Guidelines. It is assumed that any government grants will be available as expected by the Council.

In establishing the financial plan a number of scenarios are explored in order to determine the best funding strategy for sewerage. A minimum level of available cash is modelled to reflect risk of variable annual revenues to ensure the robustness of the price path for at least 4 years.

AAS27 reporting for the financial statements requires that all funds be declared as assets under cash and investments in the statement of financial position. Also, assets are valued on the basis of current replacement cost and depreciated according to their remaining lives compared with their expected lives.

All capital works estimates in the text are quoted in real (2013/14) dollars unless specified otherwise. The output data is quoted in real and inflated dollars.

When assessing affordability, note that a \$1 charge now will be equivalent to \$1.80 in 20 years' time, assuming a 3% annual inflation rate.

A summary of the input data and results are included in the following pages. Detailed financial input data and output financial projections are available in the Appendices.

## 12.3 The Financial Model

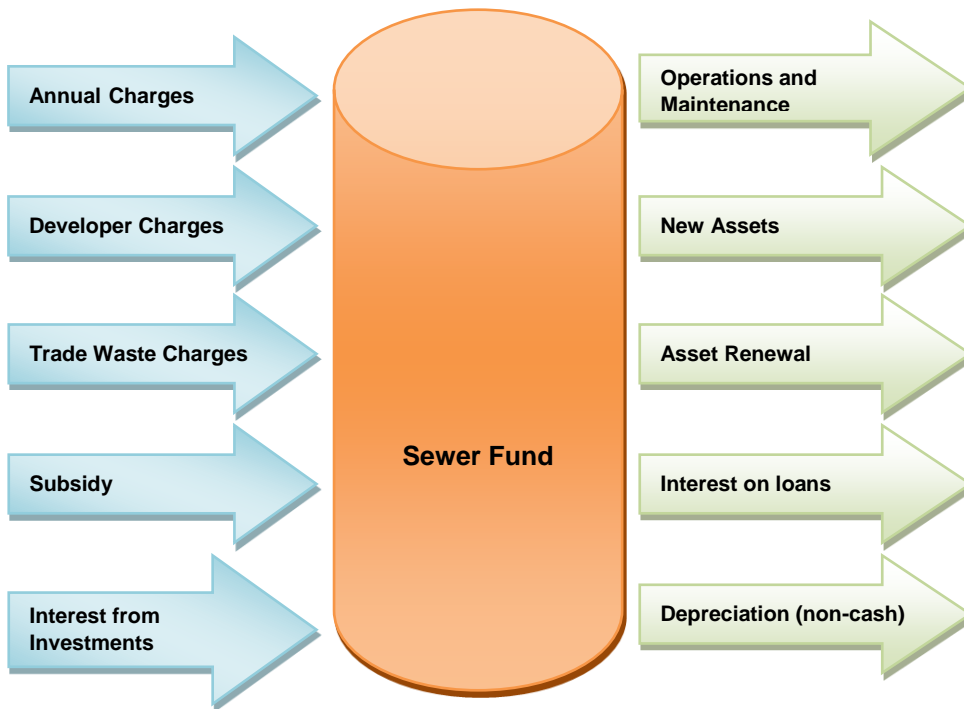
### 12.3.1 Inputs to the Financial Model

The financial model forecasts income streams to match projected expenditure. The diagram on the right illustrates the main elements, which affect the financial plan.

The financial modelling undertaken in this plan aims to:

- optimise the long term funding strategy,
- meet the demands of the capital works program and other life cycle costs of the system assets,
- ensure a minimum level of cash liquidity, and
- provide a forecast of the typical residential annual charges over the long term.

**Figure 15 – Elements of the Financial Model**



Input data for the model is sourced from three main areas:

- AAS27 special schedules for past financial performance of the sewerage fund
- Estimates for uncontrollable variables e.g. interest rates, growth, inflation
- Projected capital works, and operations and management expenses

All other criteria being met, the financial plan seeks, after an initial adjustment, to model, in real dollars, the lowest steady level of charging possible. Actual bills will depend on Council's pricing structure but this is indicative of the affordability of the services and shows the performance requirements for long-term stability.

A number of variables and assumptions have to be entered into the model and these are first agreed to by Council. They include:

### **Opening Balances**

Council's special accounting schedules are used to establish opening balances and baseline costs for the model. Financial statements for the last two years are compared to try to eliminate 'one off' occurrences from being incorporated as part of a normal trend.

### **Developer Charges**

Council is planning to review and adopt a revised level of developer charges in accordance with NOW Best Practice Management Guidelines from January 2014 onwards. For modelling purpose, average revenue of \$33K/year to sewer fund through Section 64 developer charges has been considered.

### **Growth Projections**

A customer service growth rate of 0.6% p.a. and has been adopted for the financial projections.



## **Inflation**

Average long-term inflation has been assumed as 3.0% per annum.

## **Interest Rates**

A borrowing rate of 6.5% p.a. and an investment rate of 5.5% p.a. were used in this analysis

## **Annual Revenue Splits**

For sewerage services, residential charges currently account for 78.2% of the sewerage revenue through annual charges. Remaining 21.8% revenue is contributed by non-residential customers.

The same level of revenue split has been used for all the forecast years.

## **Performance Measures**

Council's minimum service criteria will have an impact on the level of charges required e.g. minimum cash level is generally assumed to be between 10-20% of annual revenues (excluding restricted revenues). For the financial model, \$250K (2013/14\$) for sewer fund has been considered as minimum cash level.

## **Expected Lives of Assets**

The default average life of system assets is based on the weighted average of long-lived structures and shorter-lived mechanical plant. The average life of sewerage assets is currently estimated to be approximately 60 years. The life of assets controls the depreciation, which is a non-cash expense. It directly affects the need for future asset renewal works planned, which is part of the capital works program.

## **Grants and Subsidy for Capital Works**

The State Government provides financial assistance to local government sewerage schemes through the Country Towns Water Supply and Sewerage Program. Councils can apply for funding of up to 50% of Improved Level of Service (ILOS) capital works. These days allocation of grant funds works on a priority scoring carried out by NSW Office of Water.

Financial model for sewer fund considered that 50% subsidy will be available for the proposed sewerage schemes for the villages of Carcoar, Mandurama and Lyndhurst as identified in the 30-year capital works program.

## **Ongoing Recurrent Costs: Management, Operations and Maintenance**

By default, the model increases historical operation and maintenance expenses on a pro rata basis with respect to growth. This has been overridden where Council provided revised estimates i.e. where the action plan requires new initiatives or where new works require additional operating resources.

The capital works plan and projected operations and management expenses also form a significant component of the inputs. These are shown in the section 'Projected Cost Schedules'.

## **Assumptions and Limitations**

The projections of the financial plans are based on past financial performance. Allowance is made for new initiatives, future rate forecasts, and maintenance of sustainable levels of service as identified in the strategic planning process.

The depreciation is shown in the operating statement but this is not a cash item. The financial planning model manages the cash flow but keeps a running tally of cumulative depreciation so that Council can appreciate the potential future liability for maintaining the value in the system and levels of service. By planning ahead and making optimum use of existing assets, a more cost-effective and efficient service should result.

Typical annual residential charge is used as the performance measure representing overall revenue requirements from residential customers. This should not be confused with pricing. Pricing, i.e. distribution of the charges according to consumption or special customer groups, is the subject of a separate revenue planning exercise.

The financial model is not a substitute for normal budgeting (that is, short-term financial planning). The model assumes that all expenses and income occur at the beginning of the year and is therefore not appropriate to track cash flow throughout the year. It is important, however, that the budgeting process is carried out within the framework of the long-term financial plan.

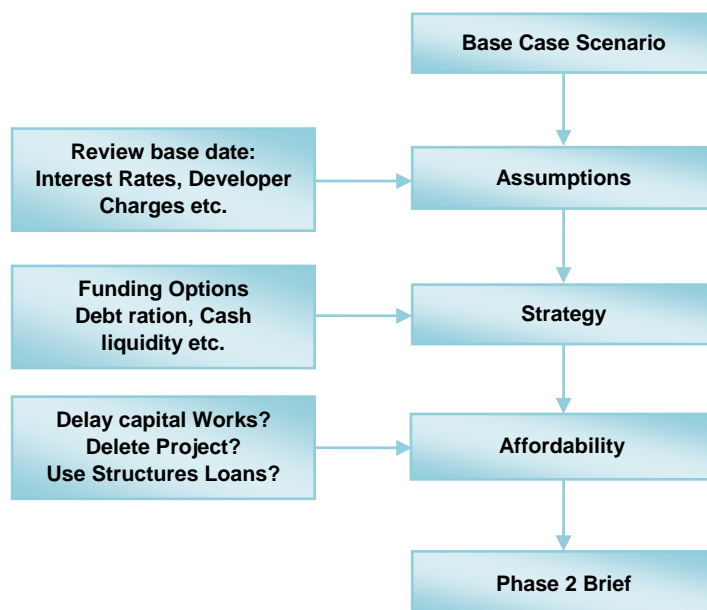
The Capital Works Plan provides a guide for estimation of long-term operation and maintenance costs. It is accepted that the level of confidence in these projections reduces with time but it is important to identify as many future commitments and liabilities as possible.

### **12.3.2 The Modelling Process**

#### **12.3.3 Phase 1 – Initial Runs**

The objective of Phase 1 development is to present a first cut model of options for future service provision. Comparison of outcomes enables Council to make decisions as to the preferred model and the most beneficial and practical funding solution for the proposed asset management programs.

**Figure 16 – Phase 1 Review of the Financial Model**



## Funding

In considering funding for future options there are three basic options:

- Fund all capital works from revenues.
- Borrow to fund all capital works.
- Fund capital works from a mix of borrowing and revenue

To establish the lowest level of steady rate of typical residential bills in real terms a combination of cash management and borrowing will usually be required. The model outputs demonstrate the required financial management required to keep the plan “on track”.

Where capital works costs are low and cash levels are high it may be possible to avoid borrowing but this may also suggest that current charges are too high. Longer period loans spread the cost of works over a longer period, eliminating early peaks in annual charges. Often there may be no choice except to borrow for major projects because collecting sufficient cash in advance is impracticable and would require an unacceptably high level of charges. In the Phase 1 runs of the model, the default loan period used was twenty years.

### 12.3.4 Phase 2 – Preferred Model and Sensitivity

After consideration of Phase 1 issues preferred modelling options for sewer fund has been adopted.

While the preferred model reflects the expected performance of the systems, it does not give any indication of the sensitivity of the proposed solution to the basic assumptions used, for example if the conditions prove significantly different in practice, there will be no information about the implications of the difference.

Sensitivity analysis has been carried out if it is perceived that a model variable may change significantly in the future. The value of a sensitivity analysis is that it shows:

- The sensitivity of the results to assumptions (uncontrollable variables); and
- The impact of changing controllable variables.

The guidelines suggest that a number of sensitivities be carried out to test the robustness of the plan. In regard to controllable variables, such as type of loan structure, level of developer charges etc. the model enables Council to make decisions to establish the right management policies.

It is important to demonstrate the impact of the “no subsidy” scenario, which shows the potential benefits of government assistance. Council’s expectations for receiving subsidy are included in the final preferred model as being the most realistic future scenario.

With uncontrollable variables, Council is at the mercy of change. The downside risk of an increase in interest rates, or declining growth rates, or rise in energy costs, may be considerable.

### 12.3.5 On-going Review

Over time, changes in model variables can have a significant impact on the model’s accuracy and this has implications for Council’s forward planning. To maintain currency the model is to be revisited annually.

### 12.3.6 Model Inputs

#### Projected Costs

Projected capital costs are split into three categories (Table 12-2) and the projected recurrent costs include management, operation and maintenance costs as shown in (Table 12-3).

**Table 12-2: Categories of Projected Capital Works**

Category	Description
Growth Works	Works required to increase the capacity of facilities e.g. to service new subdivisions.
Improved Level of Service Works (backlog works)	Works to provide better public health and environmental standards, better service, higher reliability, or an extension of services to un-served existing development. Works in this category may be eligible for Government grants.
Asset Renewal Works	Renewal/replacement of existing assets, which have aged and reached the end of their useful life.

**Table 12-3: Categories of Projected Recurrent Costs**

Category	Description
Management	Reflects true overheads associated with providing this service. Any cross subsidies with General Fund should be eliminated or explicitly disclosed in the Annual Accounts.
Operations and Maintenance	It is assumed that the current level of costs shown in the Financial Statements reflects a realistic level of expenditure for the current schemes. The projections assume costs increased in proportion to the growth.
Model Cost Overrides	Additional costs are included where specific activities have been identified in future years. This includes new initiatives plus additional costs associated with new Capital Works.

The expected capital and recurrent cost expenditures are presented in Appendix E. A summary of capital works program including subsidies/grants, if any, is presented in Table 12-4. Projections are in real (2013/14) dollars.

Historical and additional input data used for financial forecasts are shown in Appendix F.

**Table 12-4: 30-year Capital Works Program**

2013/14 \$ (000)	Growth and Minor Works	Improved Levels of Service	Asset Renewals	Total Capital Works	Expected Subsidy	Cost to Council
2013/14	0	78	153	231	0	231
2014/15	0	150	590	740	0	740
2015/16	0	350	398	748	0	748
2016/17	0	0	405	405	0	405
2017/18	0	0	300	300	0	300
2018/19	0	50	350	400	0	400
2019/20	0	200	30	230	100	130
2020/21	0	5,000	10	5,010	2,500	2,510
2021/22	0	4,000	28	4,028	2,000	2,028
2022/23	0	0	100	100	0	100
2023/24	0	0	20	20	0	20
2024/25	0	0	40	40	0	40
2025/26	0	0	0	0	0	0
2026/27	0	0	170	170	0	170
2027/28	0	0	28	28	0	28
2028/29	0	0	20	20	0	20
2029/30	0	0	50	50	0	50
2030/31	90	60	20	170	0	170
2031/32	2,100	1,400	0	3,500	0	3,500
2032/33	1,800	1,200	20	3,020	0	3,020
2033/34	0	0	58	58	0	58
2034/35	0	0	30	30	0	30
2035/36	0	0	10	10	0	10
2036/37	0	0	105	105	0	105
2037/38	0	0	120	120	0	120
2038/39	0	0	0	0	0	0
2039/40	0	0	83	83	0	83
2040/41	0	0	0	0	0	0
2041/42	0	0	65	65	0	65
2042/43	0	0	20	20	0	20
<b>Total</b>	<b>3,990</b>	<b>12,488</b>	<b>3,223</b>	<b>19,701</b>	<b>4,600</b>	<b>15,101</b>

## 12.4 Outcomes of Financial Modelling

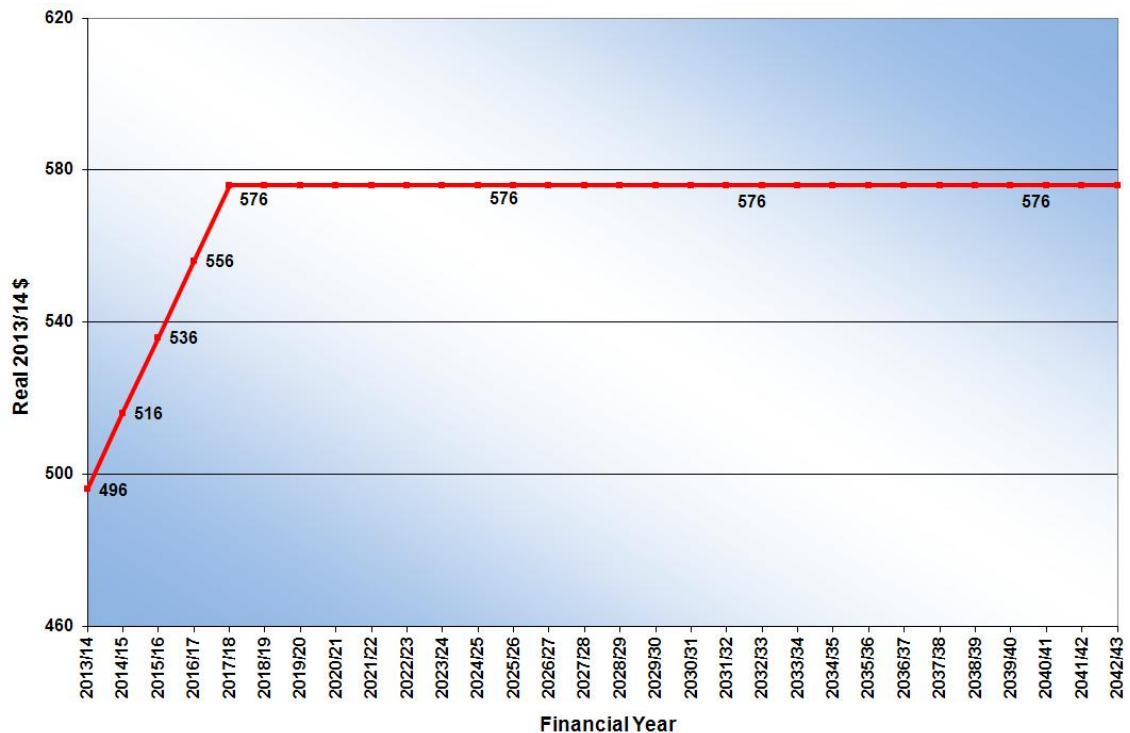
In line with current NOW guidelines, the financial plan identifies the lowest stable typical residential bill required with maximum utilisation of existing cash reserves. A number of scenarios have been analysed before Council adopting a 'preferred' price paths for the sewerage services. Modelling outcomes of the preferred scenarios and the sensitivity of the model forecasts for the financial parameters identified as important are presented in this section.

- Financial modelling has demonstrated that the typical residential sewerage bill for sewerage services, measured in 2013/14 dollars, has to be increased by \$20 per year for the next 4 years from the current TRB of \$496 p.a. to \$ 576 p.a. in 2017/18 as shown below: TRB for 2014/15 - \$516 p.a.
- TRB for 2015/16 - \$536 p.a.
- TRB for 2016/17 - \$556 p.a.
- TRB for 2017/18 - \$576 p.a.

From 2018/19 onwards, the TRB can be maintained at the same level for the remainder of the forecast period. It should be noted that the TRB projections are for Blayney customers and financial model considered that residential customers of Millthorpe will be paying 1.6 times the projected TRB for Blayney. The model also considered that the residential customers of the villages of Carcoar, Mandurama and Lyndhurst will also be charged 1.6 times the Blayney residential customers.

Note the forecast TRBs are to be adjusted annually for CPI/inflation and the financial model will be reviewed for updating the forecasts after 3 years in accordance with the NOW Best Practice Guidelines.

**Figure 17 – Typical Residential Sewerage Bill**

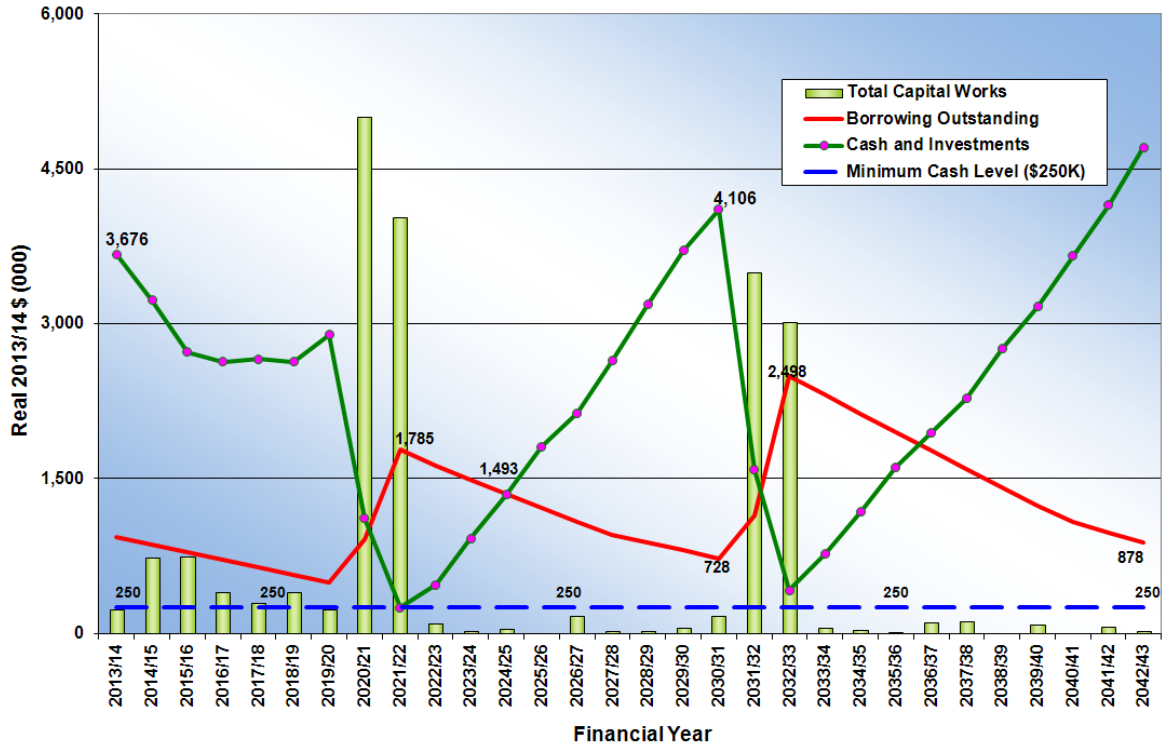


This level of typical residential charges for sewerage services is sufficient to maintain liquidity with a minimum of \$250K of cash in hand over the period.

Over the next 10 year period, all the planned capital works will be internally funded throughout the projection period except for a new borrowing of \$1.5 Million for the village sewerage schemes over a period of two years starting 2020/21. External borrowing will also be required for the Blayney STP augmentation and replacement works planned to start in 2031/32. The borrowing outstanding at the end of the 30-year forecast period will be \$878K but can be fully retired from available cash and investments if required.

The levels of cash and borrowing outstanding as the planned capital works program is implemented during the forecast period are depicted in the following figure.

**Figure 18 – Cash and Borrowing Projections - Sewerage**



A summary of projected financial results is presented in Table 12-5. Detailed financial projections of Council's 'preferred scenario' for the sewer fund are shown in Appendix G.

**Table 12-5: Projected Financial Results**

2013/14 (\$'000)	Revenue and Expenses			Capital Transactions		Financial Position					System Assets			Typical Residential Bills
	Total Revenue	Total Expenses	Operating Result (Before Grants)	Acquisition of Assets	Principal Loan Payments	Cash and Investments	Borrowings	Total Assets	Total Liabilities	Net Assets Committed	Current Replacement Cost	Less: Accumulated Depreciation	Written Down Current Cost	
2013/14	1,440	1,439	1	231	44	3,676	933	24,635	939	23,696	28,179	8,112	20,067	496
2014/15	1,484	1,513	(28)	741	46	3,227	860	24,428	866	23,562	28,329	8,002	20,327	516
2015/16	1,514	1,602	(89)	747	47	2,728	788	24,173	794	23,379	28,678	8,090	20,588	536
2016/17	1,551	1,591	(40)	405	49	2,630	716	23,979	721	23,258	28,679	8,170	20,508	556
2017/18	1,602	1,620	(18)	300	52	2,660	643	23,809	649	23,160	28,679	8,356	20,322	576
2018/19	1,607	1,579	28	400	54	2,632	570	23,680	575	23,105	28,728	8,492	20,236	576
2019/20	1,722	1,578	144	230	56	2,892	498	23,669	503	23,166	28,928	8,952	19,977	576
2020/21	4,083	1,737	2,346	5,009	72	1,116	911	26,334	916	25,418	33,928	9,515	24,413	576
2021/22	3,539	1,854	1,685	4,028	99	251	1,785	28,863	1,790	27,073	37,928	10,127	27,801	576
2022/23	1,776	1,839	(64)	100	103	472	1,629	28,666	1,635	27,031	37,928	10,666	27,261	576
2023/24	1,795	1,829	(33)	20	89	922	1,493	28,502	1,498	27,004	37,928	11,286	26,642	576
2024/25	1,823	1,847	(24)	40	93	1,344	1,356	28,330	1,361	26,969	37,928	11,885	26,043	576
2025/26	1,850	1,857	(6)	0	97	1,809	1,220	28,160	1,225	26,935	37,928	12,525	25,403	576
2026/27	1,873	1,825	48	170	104	2,137	1,081	28,025	1,085	26,940	37,928	12,995	24,933	576
2027/28	1,899	1,819	80	28	92	2,641	957	27,923	962	26,961	37,928	13,606	24,322	576
2028/29	1,926	1,838	88	20	49	3,187	880	27,857	884	26,973	37,928	14,225	23,703	576
2029/30	1,951	1,843	108	50	50	3,708	804	27,794	808	26,986	37,928	14,815	23,113	576
2030/31	1,973	1,853	120	170	53	4,106	728	27,725	732	26,993	38,078	15,436	22,642	576
2031/32	1,916	1,917	(1)	3,500	68	1,584	1,139	28,009	1,143	26,866	41,578	16,136	25,441	576
2032/33	1,880	2,087	(207)	3,020	108	419	2,498	29,119	2,502	26,617	44,577	16,866	27,711	576
2033/34	1,897	2,081	(184)	58	111	769	2,314	28,783	2,318	26,465	44,577	17,558	27,019	576
2034/35	1,920	2,059	(139)	30	115	1,177	2,131	28,478	2,135	26,343	44,577	18,277	26,300	576
2035/36	1,945	2,059	(115)	10	120	1,613	1,950	28,180	1,953	26,227	44,577	19,017	25,560	576
2036/37	1,963	2,067	(103)	105	124	1,949	1,769	27,877	1,773	26,104	44,577	19,662	24,915	576
2037/38	1,982	2,062	(80)	120	128	2,278	1,589	27,582	1,593	25,989	44,577	20,292	24,285	576
2038/39	2,005	2,039	(34)	0	132	2,759	1,411	27,320	1,414	25,906	44,576	21,041	23,535	576
2039/40	2,025	2,029	(4)	83	137	3,168	1,233	27,068	1,236	25,832	44,576	21,708	22,868	576
2040/41	2,046	2,061	(15)	0	117	3,658	1,080	26,814	1,083	25,731	44,576	22,458	22,118	576
2041/42	2,068	2,048	21	65	70	4,151	979	26,628	982	25,646	44,577	23,143	21,433	576
2042/43	2,090	2,031	59	20	72	4,710	878	26,463	881	25,582	44,577	23,874	20,703	576

**Sensitivity Analysis**

In accordance with the NOW Financial Guidelines, the following sensitivities have been modelled to determine the impact of various scenarios on typical residential bill for sewerage services.

**Table 12-6: Sensitivity Analysis Parameters**

Criteria	Preferred Case	Sensitivity
Assessment growth rate	0.6% p.a.	0.3% p.a.
Borrowing Interest Rate	6.5% p.a.	10.0% p.a.
Subsidy	50% for village schemes	No subsidy for village schemes

The results of sensitivity analysis are shown graphically in the following pages.



Figure 19 – Sensitivity of Typical Residential Bills

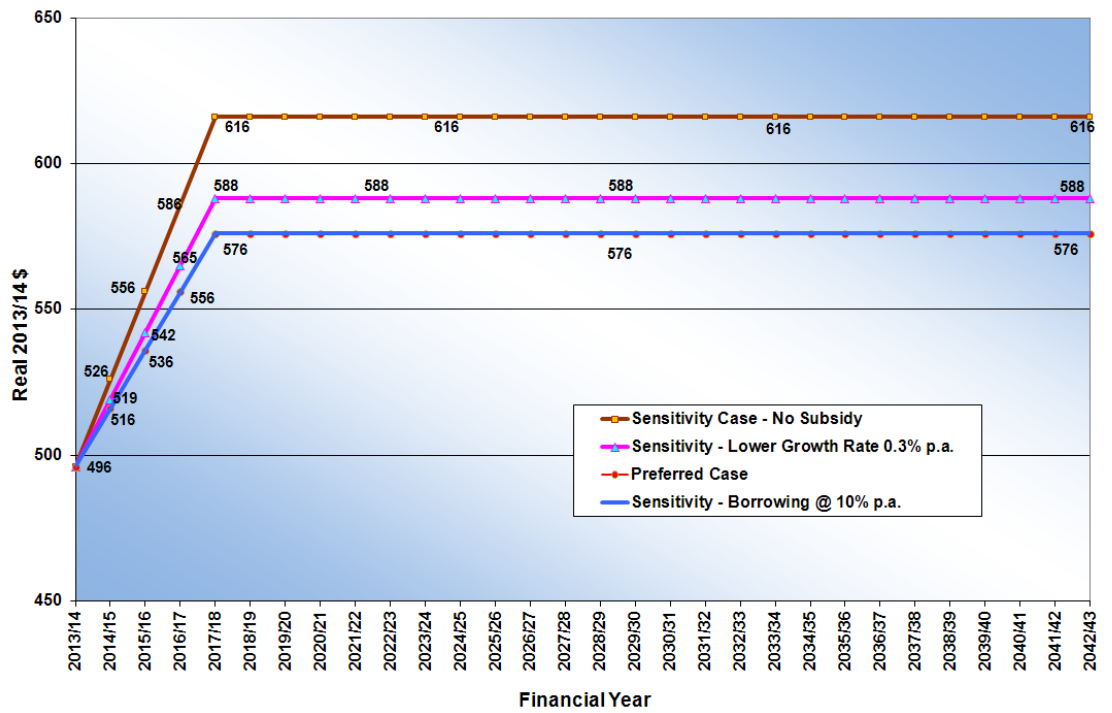
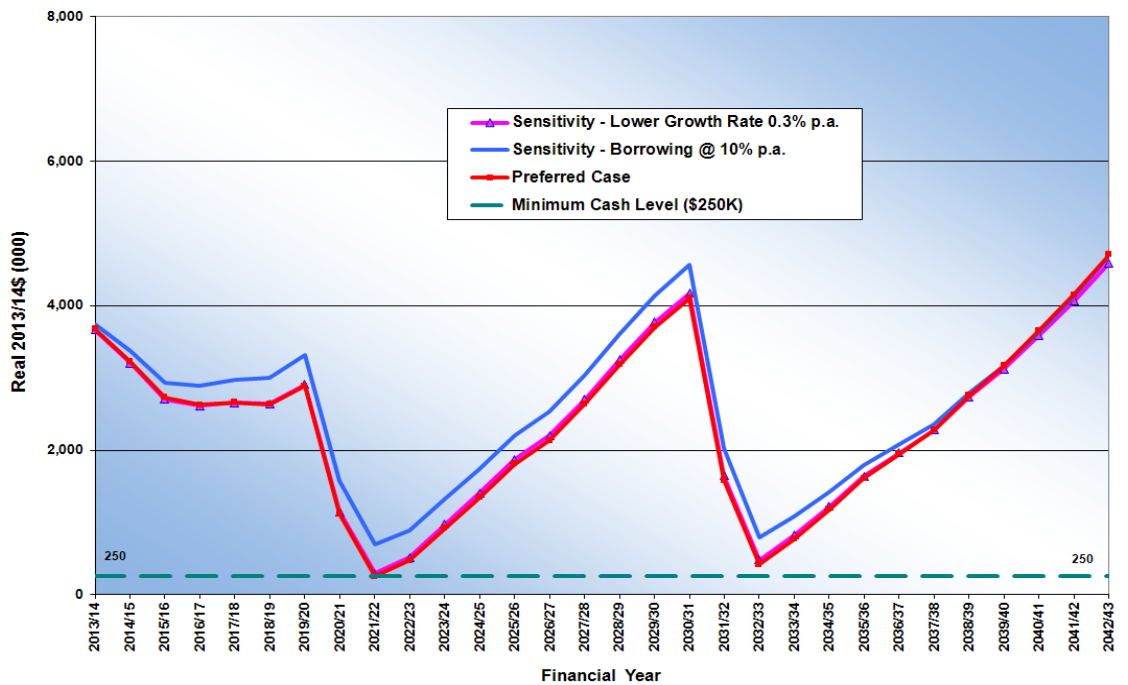
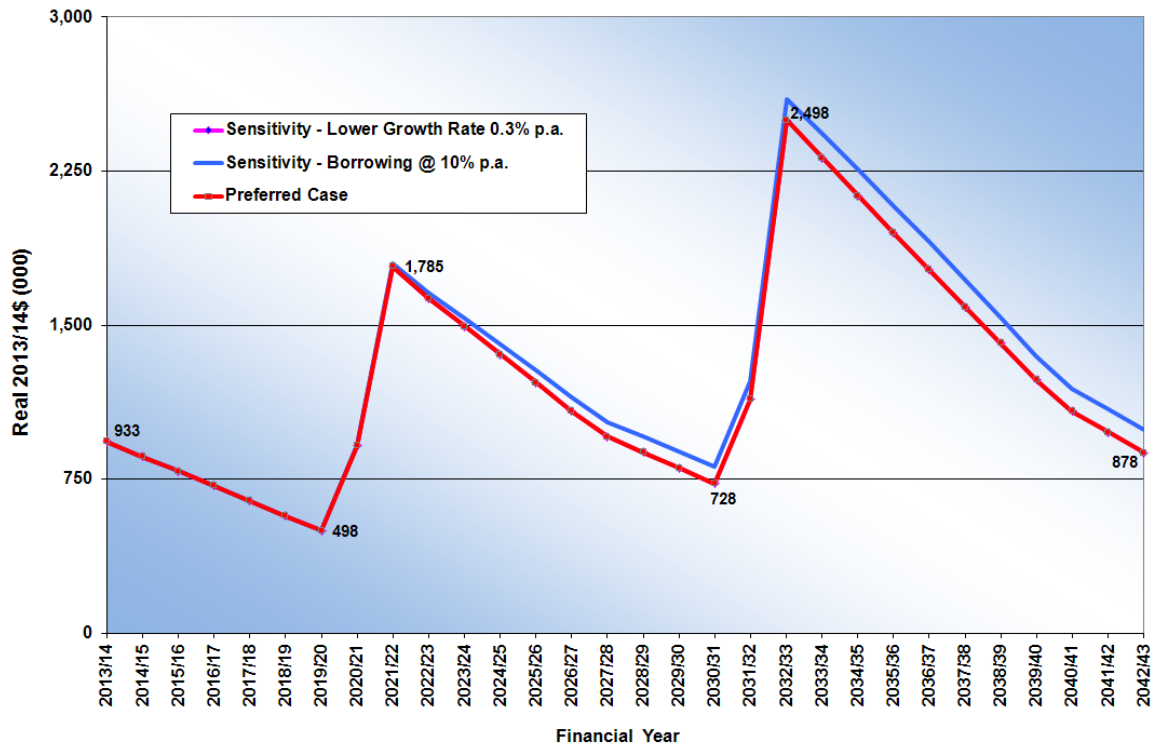


Figure 20 – Sensitivity of Cash Levels



**Figure 21 – Sensitivity of Borrowing**



Sensitivity analysis indicates that the typical residential sewerage bills will not be affected by higher borrowing interest rates of up to 10% p.a..

Lower assessment (customer) growth rate (0.3% p.a. instead of estimated 0.6% p.a.) will have a slight impact in the order of \$12 higher than the projected TRB for the preferred scenario.

The impact of unavailability of the expected level of subsidy of 50% for the proposed village sewerage schemes will be an increase in TRB of \$30 per year instead of \$20 per year as projected for the preferred scenario.

It is noted that the levels of impact on TRBs indicated by the sensitivity analysis are in terms of Blayney residential customer charges. Increases to Millthorpe customer charges will be 1.6 times of the TRB changes presented above.

## 13 References

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National Water Commission 2012, *2012-13 National Performance Framework: urban performance reporting indicators and definitions handbook (online copy)*, National Water Commission, Commonwealth of Australia, Canberra.

NRMCC 2011, *Australian Drinking Water Guidelines Paper 6 National Water Quality Management Strategy*, National Health and Medical Research Council, National Resource Management Ministerial Council, Commonwealth of Australia, Canberra.

NSW Department of Water and Energy 2007, *Guidelines for Best-Practice Management of Water Supply and Sewerage*, NSW Department of Water and Energy, NSW

NSW Planning and Infrastructure 2013, *New South Wales State and Local Government Area Population Projections: 2013 preliminary revision*, Demography Unit, NSW Planning and Infrastructure, Sydney.



## Appendices

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# **Appendix A    Inputs for Reporting under IPR Framework**

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The main requirements of the Local Government Integrated Planning and Reporting Framework 2010 for the 10-year Community Strategic Plan, 4-year Delivery Program, Annual Operational Plan and Annual Report are summarised below. Inputs for sewerage services for inclusion in each of these reports are also presented alongside the summaries.

## A.1 Community Strategic Plan

The requirements for the Community Strategic Plan in the IPR framework include:

- To be revised at least every 10 years.
- Give due regard to the State Plan and other relevant state and regional plans.
- Include a community vision statement.

The planning process is generally used to:

- Identify main priorities and aspirations for the future.
- Enable community input on the identification of social, environmental, economic and civic leadership issues.
- Establish strategic objectives and proposed strategies to achieve those objectives that address issues identified above.
- Establish expected levels of service.

### Input to Community Strategic Plan

For sustainable sewerage services the Strategic Business Plan (SBP) for Sewerage will be reviewed and implemented in accordance with the NSW Government's Best Practice Management of Water Supply and Sewerage Guidelines, August 2007.

Major sewerage capital works identified in the current Strategic Business Plan for completion over the next 10 years are shown in the Table below. The justifications for why these works have been planned also are presented in the Table below.

Proposed Capital Work	Year	Justification
Lining/ Replacement of sewer mains	2013 - 2019	Renewal and refurbishment of ageing assets
Manhole rehabilitation program	2014 - 2019	Improved levels of sewerage service and STP performance
Telemetry upgrade	2014/15	Improved scheme operation for better performance
Millthorpe transfer main augmentation	2014 - 2016	Refurbishment of ageing assets
Sewerage schemes for Carcoar, Mandurama and Lyndhurst	2018 - 2022	Extension of service to backlog areas and public health improvement



## A.2 Resourcing Strategy

Sets out what Council will do over the next 10 years to address the community's main priorities in the Community Strategic Plan. Council determines its Resourcing strategy from the following:

- Total Asset Management Planning;
- Work Force Planning; and
- Long-term Financial Planning.

### Input to Resourcing Strategy

“The SBP for Sewerage is the Council’s resourcing strategy for sewerage services in which the strategies for Asset Management Planning (AMP), Work Force Planning (WFP) and the Long-term Financial Planning are presented in detail”.

Note regarding the AMP and WFP, the SBP details the current status and key outcomes and detailed reference is from the individual planning documents

## A.3 Delivery Program

- Directly addresses the objectives and strategies of the Community Strategic Plan.
- Identifies principal activities council will undertake.
- Identifies principal activities be undertaken within available resources.
- Provides financial estimates for the 4 year period.
- Considers priorities and expected level of service in the Community Strategic Plan.

### Input to Delivery Program

“The SBP for Sewerage (Sections 8 to 11) is the Council’s delivery program for sewerage services where in the objectives, strategies, activities planned for the next 4 - 5 years including the costs, start and end dates and responsible officer are presented in detail. The financial estimates for the next 4 year period are presented as part of the 30-year financial projections of the Long-term Financial Plan”.

## A.4 Operational Plan and Annual Report

- Operational Plan outlines the activities to be undertaken for the year as part of the Delivery Program and is prepared as a sub-plan of the Delivery Program
- Operational Plan includes Statement of Revenue Policy – fees and charges, pricing methodology, proposed borrowings, and detailed budget for activities to be undertaken in the year.
- Annual Report is a report to the community which outlines council's achievements in implementing the Delivery Program as planned in the Operational Plan.
- Annual Report outlines the effectiveness of the principal activities undertaken in achieving the objectives in the Community Strategic Plan.

### Input to Operational Plan

“The SBP for Sewerage (Sections 8 to 11) is the Council’s operational plan for sewerage services in which all the planned activities for delivery program are presented in detail”.

## **Appendix B    Legislation Affecting Sewerage Services**

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## B.1 Legislative Framework

Blayney Shire Council delivers reticulated sewerage services to the Blayney and Millthorpe communities under the authority of the Local Government Act, 1993. Council has embraced the principles underlying this Act as being of benefit to the community it serves. Community consultation and involvement in decision-making has been increased in line with the Act in the last few years.

Several other Acts also affect Council's scheme. These generally fall into three main categories as follows:

Act	General Implications for Council
<b>PRICING</b>	
Local Government Act 1993 Esp. Sections 64 and 428	<ul style="list-style-type: none"> <li>- Determining developer charges:               <ul style="list-style-type: none"> <li>o provide a source of funding for infrastructure required for new urban development</li> <li>o provide signals regarding costs of urban development and encourage less costly forms</li> </ul> </li> <li>- Need to be more accountable.</li> <li>- Need for better asset management.</li> </ul>
Environmental Planning and Assessment Act 1979	<ul style="list-style-type: none"> <li>- Determining developer charges.</li> <li>- Requirement for LEP and DCPs</li> <li>- Council control of service approvals.</li> </ul>
Local Government Regulation 2005 (Savings and Transitional)  Independent Pricing and Regulatory Tribunal Act 1992	<ul style="list-style-type: none"> <li>- Determining developer charges.</li> <li>- Gives powers to the Independent Pricing and Regulatory Tribunal to inquire into and regulate prices.</li> <li>- IPART has developed a set of consistent pricing principles to be adopted by local government authorities.</li> <li>- Guidelines for 'user pays' charging system in the water and wastewater industry.</li> </ul>
Water Industry Competition Act 2006	<ul style="list-style-type: none"> <li>- Establishment of third-party access regime for water and sewerage infrastructure to encourage competition</li> <li>- Authorisation of IPART to regulate licensed private network operators to ensure services are delivered in a safe and reliable manner</li> </ul>
<b>ENVIRONMENTAL PROTECTION</b>	
Protection of the Environment Operations Act 1997	<ul style="list-style-type: none"> <li>- Regulating pollution activities and issue of licenses as well as the monitoring of and reporting on waste output.</li> <li>- Council is required to be "duly diligent" in undertaking the scheme operations</li> </ul>
Soil Conservation Act 1938	<ul style="list-style-type: none"> <li>- Conserves soil resources and farm water resources and the mitigation of erosion and land degradation.</li> <li>- Preservation of watercourse environments</li> </ul>
Environmental Planning and Assessment Act 1979	<ul style="list-style-type: none"> <li>- Encourages the proper management of natural and man-made resources, the orderly use of land, the provision of services and protection of the environment.</li> </ul>
Catchment Management Act 1989	<ul style="list-style-type: none"> <li>- Promotes the coordination of activities within catchment areas. Council believes this Act has implications for the</li> </ul>

Act	General Implications for Council
	management of river water quality and quantity. - Requirement for ongoing management plan. - Requirement of Capital Works Plan under Sydney Catchment Authority Regulations.
<b>HEALTH AND SAFETY</b>	
Public Health Act 2010	- Prevention of the spread of disease. - Effluent disposal methods.
Work Health and Safety Act 2011 (and Regulations 2011)	- Council's responsibility to ensure health, safety and welfare of employees and others at places of work. - Likely be cost implications - Impacts all operations. - Note public safety – insurance.

### Local Government Act 1993

The main purpose of the Local Government Act 1993 is to provide the legal framework for an effective, efficient, environmentally responsible, and open system of Local Government in NSW.

The Act is, in the main, administered by the Minister for Local Government, but the Minister for Water has significant powers under the Act for water, sewerage and drainage.

The Act confers service functions on Councils. These include the provision, management and operation of water supply and sewerage works and facilities. The Act provides Councils with broad power to carry out their functions, and a "Council may do all such things as are supplemented or incidental to, or consequential on, the exercise of its functions" (section 23 of the Act).

Some particular parts of the Act relating to water supply and sewerage are:

- Section 64 - developer charges (Under this section of the new Act, a Council may use the relevant provisions of the Water Management Act 2000 to obtain water supply and sewerage developer charges. The provisions of Section 94 of the Environmental Planning and Assessment Act are no longer available to Councils for obtaining water supply and sewerage developer contributions.);
- Section 68 - Council approval of plumbing works;
- Sections 634-651 - water supply, sewerage and drainage offences; and
- Water, Sewerage and Drainage Regulation which cover matters from the "old" ordinance 4.5 and 4.6.

The role of the Minister for Water in regard to water supply, sewerage and drainage is covered in Sections 56-66. The Minister's role is generally along the lines of Part XIV of the 1919 Act, and it includes matters such as construction of works, hand over and vesting of work, approval of dams and treatment works, directions to Councils concerning dams and treatment works, action during emergencies, and the appointment of an administrator.

The NSW Office of Water provides section 60 approvals to council proposals to construct a dam, water or sewage treatment works and for effluent and bio-solids reuse.

The NSW Office of Water carries out section 61 inspections of LWU dams and water and sewage treatment works.

The NSW Office of Water provides concurrence to Council liquid trade waste approvals under section 90(2) of the Act.

Councils issue approval to applications to discharge trade waste to their sewerage system under section 68 of the Local Government Act. Conditions of approval are imposed under clause 32 of the Local Government Regulation 2005.

## **Environmental Planning and Assessment Act 1979**

The Environmental Planning and Assessment (EP&A) Act was enacted in 1979, and amended by the Environmental Planning and Assessment (Amendment) Act (1985). The Act is the principal planning instrument in NSW, and it specifies the environmental considerations required in all development activities. It also governs the procedures of all proposals that have an effect on the environment. Its objectives are to encourage the proper management of natural and man-made resources, the orderly use of land, the provision of services, and the protection of the environment.

The Act is administered by the Minister for Planning.

The Act requires that all proposals, activities, and functions which are investigated, designed, planned, constructed, and operated by Councils should be studied during all stages for their environmental impact on the basis of scale, location, and performance.

Environmental studies are to be undertaken concurrently with the technical or planning investigations. The findings of environmental studies should be reported initially in Reviews of Environmental Factors (REF), which indicate the need for further studies, their extent and depth, and the degree of public or other involvement required. The REF can often be used for consents or approvals. A Council can give consents for a development as prescribed in Local Environmental Plans (LEP) when the Council are the consent authorities (Part IV of the EP&A Act).

An Environmental Impact Statement (EIS) is a comprehensive report compiled from extensive studies. An EIS is required for:

- designated developments (Part IV of the EP&A Act);
- projects which affect the environment significantly (Part V of the EP&A Act); and
- when designated by a State Environmental Planning Policy or in an LEP.

## **Catchment Management Act 1989**

The objectives of this Act are:

- To coordinate policies, programs and activities as they relate to total catchment management;
- To achieve active community participation in natural resource management;
- To identify and rectify natural resource degradation;
- To promote the sustainable use of natural resources; and
- To provide stable and productive soil, high quality water and protective and productive soil and vegetation cover within each of the State's water catchments.

The Act is administered by the Minister for Land and Water Conservation.

## **Soil Conservation Act 1938**

The objective of the Soil Conservation Act is the conservation of soil resources and farm water resources and the mitigation of erosion and land degradation.

The Act is administered by the Minister for Land and Water Conservation.

Under Section 21C of the Act, a Council is required to protect land along prescribed streams and to prevent any destruction of trees and soil erosion on protected land. The

same section of the Act specifies the rules for any person or occupier or any protected land from ringbarking, cutting down, felling, poisoning of, or otherwise destroying, vegetation or trees.

Section 21D of the Act requires that the land owner or occupier must obtain an authority before damaging or destroying trees between the banks or within 20 metres of banks of a prescribed stream. Public Works is responsible for preparing inspection reports for sites downstream of the tidal limit.

Section 22 of the Act outlines requirements for preservation of proclaimed works and catchment areas.

## **Public Health Act 2010**

The Public Health Act 2010 replaced the Public Health Act 1991. The main objectives of the Public Health Act 2010 are:

- to promote, protect and improve public health;
- to control the risks to public health;
- to promote the control of infectious diseases; and
- to prevent the spread of infectious diseases.

The Act recognises the role of local government in protecting public health. Under the Act, a local government authority has the responsibility to take appropriate measures to ensure compliance with the requirements of this Act in relation to public swimming pools and spa pools, regulated systems and premises on which skin penetration procedures are carried out. A local government authority has the responsibility of appointing authorised officers to enable it to exercise its functions under this Act and ensuring that its authorised officers duly exercise their functions under this Act.

Part 3 Division 1 of the Act includes the provisions in respect to safety measures for drinking water.

The Minister for Health has the power to take actions and to issue directions, as the Minister considers necessary:

- to restrict or prevent the use of unsafe water, potable or otherwise, that is likely to be a risk to public health; and
- to bring unsafe water to such a condition that it is no longer unsafe water.

The Director General has the power to direct a supplier of drinking water to carry out testing and produce information in relation to the treatment and quality of drinking water.

The Chief Health Officer has the responsibility for determining the necessity for a boil water advice and additional information or correction or re-traction of such advice, by a supplier of drinking water for the drinking water it supplies. The Chief Health Officer may also prepare advice concerning public health risks or boil water advice, and provide the advice to the drinking water supplier.

According to the Clause 25 of the Act a supplier of drinking water must establish and adhere to a quality assurance program that complies with the requirements prescribe by the regulations. The regulations are yet to be enacted.

## **Independent Pricing and Regulatory Tribunal Act 1992**

The Independent Pricing and Regulatory Tribunal Act establishes the Independent Pricing and Regulatory Tribunal and enables the Tribunal to determine and advise on prices and pricing policy for government monopoly services. A government monopoly service is a service supplied by a government agency (which may include a local

government council) and declared by the regulations, or the Minister, to be a government monopoly service.

The Tribunal conducts investigations and makes reports to the Minister on the determination of the maximum price and on a periodic review of pricing policies for services applied by these agencies specified in Schedule 1 to the Act. Schedule 1 presently includes Sydney Water Corporation, Hunter Water Corporation, Water Supply Authorities, including Gosford City Council, Wyong Shire Council, State Water (Fish River Water Supply) and Essential Energy (Broken Hill).

The Tribunal may also conduct investigations and make reports for any government monopoly service, at the request of the Minister, whether or not it is supplied by a government agency specified in Schedule 1.

## **Work Health and Safety Act 2011**

This revised Act details Council's responsibilities to ensure health, safety and welfare of employees and others at places of work. All of the scheme's operational activities are impacted on by this Act. This act is administered by the Work Cover Authority.

## **Protection of the Environment (Operations) Act 1997**

This Act came into effect in July 1998 and consolidated existing legislation to eradicate the duplication of powers and overlapping use of resources. The Act brought together what used to be five separate pieces of legislation:

- Clean Air Act 1961;
- Clean Waters Act 1970;
- Pollution Control Act 1970;
- Noise Control Act 1975; and
- Environmental Offences and Penalties Act 1989.

The POEO Act introduces a holistic approach to protecting the environment, changing from pollution control legislation to environment protection legislation.

The Act enables the NSW Government to set out explicit protection of the environment policies (PEPs) involving environmental standards, goals, protocols and guidelines.

Key features of the Act are as follows:

- Single licensing arrangement relating to air pollution, water pollution, noise pollution and waste management;
- EPA issues licences and is the regulatory authority for scheduled activities specified in Schedule 1 of the Act;
- Local councils are the regulatory authorities for non-scheduled activities except activities undertaken by a public authorities;
- EPA can issue licences to regulate water pollution from a non-scheduled activity therefore becomes the regulating authority;
- Environment protection notices that can be issued by appropriate regulatory authorities;
- The Act includes an offence regime and may involve heavy penalties and or gaol.
- The Act includes civil enforcement provisions for third parties.

The Act is administered by Office of Environment and Heritage.

The POEO Act is a powerful tool for regulation of sewerage and trade waste by local water utilities and facilitating compliance with the utility's conditions of approval for liquid trade waste discharges to the sewerage system.



Councils may issue a penalty notice under section 222 of the Act to a discharger who fails to obtain an approval to discharge trade waste to the council's sewerage system or who fails to comply with the conditions of the council's approval. In addition, section 123 of the Act may be used to sue a discharger causing major damage to the council's sewerage system or to the environment

The legislation also incorporates major regulatory provisions of the Waste Minimisation and Management Act.

### **Water Industry Competition Act 2006**

The objectives of the Act and supporting regulations are to encourage competition in the water industry and to foster innovative recycling projects and dynamic efficiency in the provision of water and wastewater services.

Increasing competition in the metropolitan water market and water recycling are key actions in the NSW Government's Metropolitan Water Plan and State Plan.

The Act provides for the matters such as:

- the establishment of a new licensing regime for private sector providers of reticulated drinking water, recycled water and sewerage services;
- the establishment of a third-party access regime for water and sewerage infrastructure;
- provisions for a licensed network operator to construct or remove water industry infrastructure; and
- provisions to authorise IPART to undertake regulatory functions in certain parts of the Act.

Key aspects of General Regulation include:

- ensuring new entrants and the public water utilities face similar obligations, where like services are provided;
- strict licensing rules to ensure that drinking water meets Australian standards, that recycled water is 'fit for purpose' and that all services are delivered in a safe, reliable manner with minimal environmental impacts; and
- provisions to prevent retailers from disconnecting small customers for non-payment of debt and to require the implementation of NSW Government social policies, such as pensioner rebates.

## B.2 Other Government Initiatives

Initiative	Purpose
Efficient Operation	The Department of Local Government is concerned that councils generally are well managed.
Efficient Resource Use	The Federal Industry Commission Report on the Australian Water Industry is concerned to ensure efficient use of resources - natural, physical and financial. Its 1992 Report's recommendations were wide-ranging and covered matters such as pricing reforms and structural reforms (e.g. amalgamation of authorities).
Competition Policy	<p>In 1995 the Council of Australian Governments (COAG) ratified the National Competition Policy. Of particular significance to the water and sewerage functions of Council is the application of competitive neutrality to operations. The purpose of this is to have councils <i>“operate under similar competitive pressures to those experienced by the private sector”</i>.</p> <p>The NSW Government has embraced these principles and set in motion a number of policies to increase the efficiency and the competitiveness of this type of business area. (Refer to the <a href="#">NSW Government Policy Statement on the Application of National Competition Policy to Local Government</a>).</p>
Asset Management	The NSW Government, which has ultimate responsibility for water and sewerage in the State, is concerned to ensure that the \$7 billion asset base in water supply and sewerage schemes of country towns under the care of Local Governments is well managed.
Financial Assistance	<p>The NSW Government has been providing grants for the development and improvement of water supply and sewerage schemes in country areas, under the Country Towns Water, Sewerage and Drainage Program, which is now administered by the NSW Office of Water.</p> <p>The Minister responsible for water has made changes to the subsidy provisions. The main changes are the requirement to implement best industry management practices and the withdrawal of subsidies for growth related capital works. These changes are outlined in the publication <a href="#">Country Towns Water Supply and Sewerage Program: Technical and Financial Assistance</a> available to Councils.</p>
Best Practice Management	<p>The NSW Government encourages best practice for all LWUs. The purpose of best practice management is:</p> <ul style="list-style-type: none"> <li>- To encourage the effective and efficient delivery of water supply and sewerage services; and</li> <li>- To promote sustainable water conservation practices and water demand management throughout NSW.</li> </ul> <p>From 1 July 2004, compliance with the six best practice criteria is mandatory for payment of a dividend from the surplus of an LWU's water supply and sewerage businesses and future financial assistance under the Country Towns Water Supply &amp; Sewerage program.</p>

## **Appendix C Stakeholder Review**

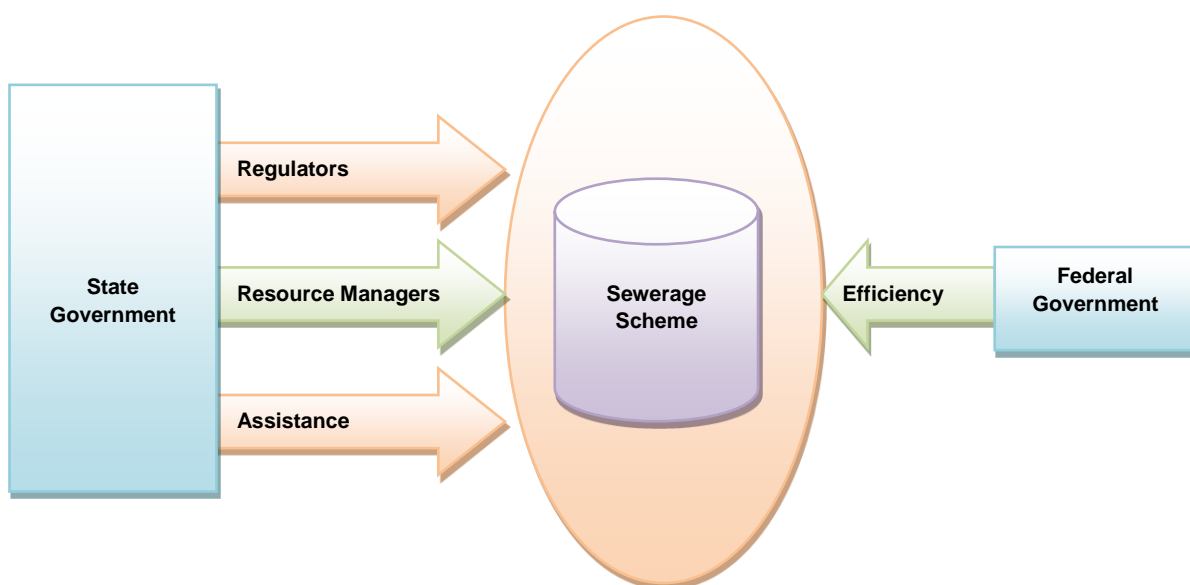
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## C.1 Identification of Stakeholders

Stakeholders are individuals and organisations with an interest and/or equity in the sewerage services provided by Council. Stakeholders may have different expectations, and the extent to which Council meets, or is perceived to meet, these expectations may vary.

### Institutional Stakeholders

A large number of government departments and agencies have interest in, and impact on, the management of the sewerage scheme, as shown in the chart below.



### Local Government

The sewerage undertaking is an integral part of Council's operation. Council has the ultimate responsibility for the development, operations, maintenance and performance of the scheme.

### State Government

The State Government has a significant impact on the sewerage scheme. Various government agencies fill a role in one or more of the following areas.

#### Regulators

These are the agencies that are largely responsible for administering the various acts listed in the preceding section. Of particular significance to the sewerage scheme are the Independent Pricing and Regulatory Tribunal (IPART), which is urging councils to adopt the pricing principles outlined in Pricing Principles for Local Water Authorities, and the Environment Protection Authority (EPA) who regulates environmental protection, issues licenses to discharge effluent and administers the various pollution control acts. Council discharges effluent from sewage treatment plants under license from the EPA.

## **Resource Managers**

These are the agencies responsible for managing the State's resources, such as water resources, forestry and land.

## **Assistance**

The State Government has been providing financial and administrative assistance for improvements of water supply and sewerage schemes through the Country Towns Water Supply and Sewerage Program. Under the newly introduced guidelines, assistance is generally available for servicing backlog areas and improving standards, but not for augmentation works required to accommodate growth. This program is administered by the NSW Office of Water.

Other assistance is in the form of services, such as the professional services provided by the NSW Public Works.

## **Federal Government**

The Federal Government has no direct bearing on the sewerage scheme. Indirectly, the Federal Government is taking the initiative on reforming the way services are delivered to the community by Government agencies in order to improve efficiency.

# **C.2 Stakeholder Analysis**

Stakeholders are individuals and organisations with an interest and/or equity in the sewerage services provided by the Council. Stakeholders may have different expectations, and the extent to which Council meets, or is perceived to meet, these expectations may vary.

The Table next page lists the major stakeholders and their general level of satisfaction with the sewerage operations as perceived by the participants of the Strategic Planning Workshop and the comments of Council regarding the standing of their operations.

Low scores or perception gaps between Council and Stakeholders suggest the need for improvement in service standards and or communication.

Stakeholder	How to judge success?	How does Council rate its service? 1 – Poor 10 - Excellent	How do stakeholders rate the service 1 – Poor 10 - Excellent
<b>GENERAL USERS</b>			
Property Owners/ Ratepayers/ Residents (including pensioners)	<ul style="list-style-type: none"> <li>• Value for money</li> <li>• Guaranteed levels of service</li> <li>• Public health standards met and maintained</li> <li>• Guaranteed service</li> <li>• Reasonable cost</li> </ul>	8.5	9
Commercial and Industrial customers	<ul style="list-style-type: none"> <li>• Quality services</li> <li>• Guaranteed service</li> <li>• Reasonable cost</li> </ul>	8.5	7 Mainly due to the implementation of a TW policy
<b>OTHER USERS</b>			
Downstream water users	<ul style="list-style-type: none"> <li>• Clean water</li> <li>• No future interference with their operations</li> </ul>	9.5	9.3
Environmental groups	<ul style="list-style-type: none"> <li>• Environmental responsibility</li> <li>• Minimisation of wastage</li> <li>• Treated effluent quality</li> <li>• Environmental sustainability</li> </ul>	9	8
Tourists	<ul style="list-style-type: none"> <li>• Quality and quantity of service</li> <li>• Aesthetics</li> </ul>	8	8.3
<b>COUNCIL</b>			
Councillors	<ul style="list-style-type: none"> <li>• No complaints</li> <li>• Good public profile</li> <li>• Compliance</li> <li>• Business continuity</li> <li>• Price</li> </ul>	9	8
Council Employees	<ul style="list-style-type: none"> <li>• Recognition for work</li> <li>• Safe workplace</li> <li>• Competency/training</li> <li>• Pride in workplace/ schemes</li> <li>• Support and security</li> </ul>	9	8.7
Engineering Services - W &S Section	<ul style="list-style-type: none"> <li>• Efficient service</li> <li>• Chargeable service</li> <li>• Working relationship</li> <li>• Timeliness</li> <li>• Innovation and technology</li> <li>• Informed advice</li> </ul>	8	8.3

Stakeholder	How to judge success?	How does Council rate its service? 1 – Poor 10 - Excellent	How do stakeholders rate the service 1 – Poor 10 - Excellent
<b>GOVERNMENT</b>			
DLG	<ul style="list-style-type: none"> <li>• Accountability</li> <li>• Financial stability</li> </ul>	9.5	8.5
NOW	<ul style="list-style-type: none"> <li>• Efficient operations</li> <li>• Performance</li> <li>• Best practice management</li> </ul>	9.5	8
OEH /EPA	<ul style="list-style-type: none"> <li>• Environmental requirements</li> <li>• Effluent and bio-solids disposal</li> <li>• Catchment management</li> </ul>	9	8
Others (Dept. of Health, Work Cover, CENTROC, Central West CMA)	<ul style="list-style-type: none"> <li>• Receiving water quality</li> <li>• Effluent and bio-solids disposal</li> <li>• Septic tanks</li> <li>• Catchment management</li> <li>• OHS</li> </ul>	7.5	8





## **Appendix D   Performance Indicators (TBL Report)**

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SEWERAGE SYSTEM - Blayney Council has 1 sewage treatment works providing advanced secondary treatment. The system comprises 7,000 EP treatment capacity (Intermittent Extended Aeration (Activated Sludge)), 7 pumping stations (1 ML/d), 23 km of rising mains and 53 km of gravity trunk mains and reticulation. 77% of effluent was recycled.

PERFORMANCE - Residential growth for 2011-12 was 3.3% which is higher than the statewide median. Blayney Shire Council achieved 100% implementation of Best-Practice requirements. The 2012-13 typical residential bill was \$479 which was less than the statewide median of \$600 (Indicator 12). The economic real rate of return was 0.4% which was less than the statewide median (Indicator 46). The operating cost per property (OMA) was \$317 which was less than the statewide median of \$410 (Indicator 50). Sewage odour complaints were less than the statewide median of 0.5 (Indicator 21). Blayney Council reported no public health incidents. Council complied with the requirements of the environmental regulator for effluent discharge. The current replacement cost of system assets was \$27M (\$14,100 per assessment), cash and investments were \$3M, debt was \$1M and revenue was \$1.1M (excluding capital works grants).

## IMPLEMENTATION OF REQUIREMENTS OF BEST-PRACTICE MANAGEMENT FRAMEWORK

(1) Complete current strategic business plan & financial plan	YES	(2e) Pricing - DSP with commercial developer charges	Yes
(2) (2a) Pricing - Full Cost Recovery without significant cross subsidies	Yes	(2f) Pricing - Liquid trade waste approvals & policy	Yes
(2b) Pricing - Appropriate Residential Charges	Yes	(3) Complete performance reporting (by 15 September)	YES
(2c) Pricing - Appropriate Non-Residential Charges	Yes	(4) Integrated water cycle management strategy	YESE
(2d) Pricing - Appropriate Trade Waste Fees and Charges	Yes	IMPLEMENTATION OF ALL REQUIREMENTS	100%

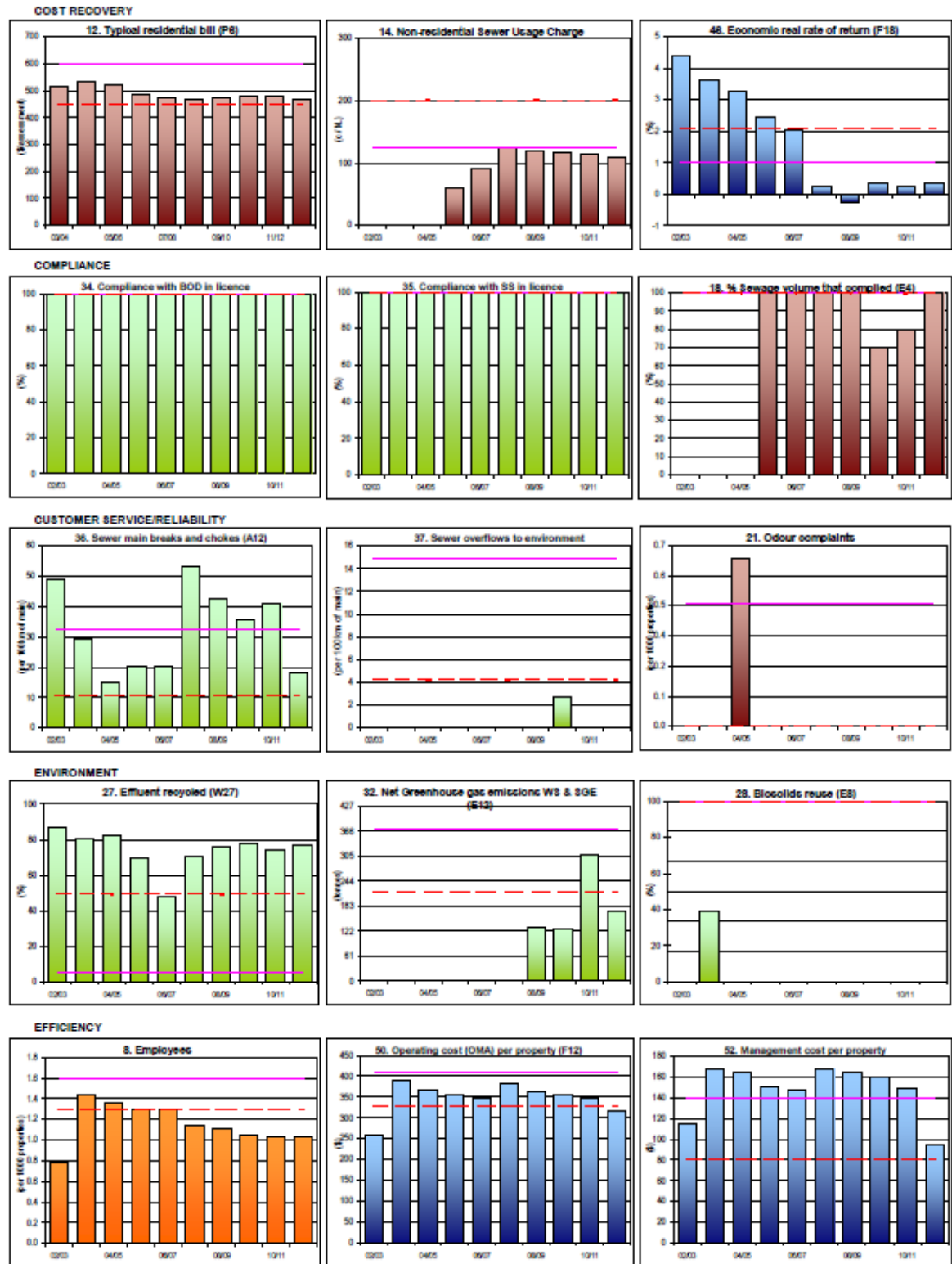
## TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

NM	No.	LWU	RANKING		MEDIAN					
			200 to 1,500 LWUs	All LWUs	Statewide	National				
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7				
UTILITY	CHARACTERISTICS	C5 1	Population served: 3,800							
		C8 2	Number of connected properties: 1,950							
		C5 3	Number of residential connected properties: 1,880							
			Number of assessments: 1,900							
			4 New residences connected to sewerage (%)	3.3	1	1	0.8			
		A6 5	Properties served per kilometre of main	26			40	42		
		W18 6	Volume of sewage collected (ML)	359			5,400	8,850		
			7 Renewals expenditure (% of current replacement cost of system assets)	0.0	3	4	0.3			
	8 Employees per 1000 properties	1.0	1	1	1.6					
SOCIAL	CHARGES ABILS	F4	Description of residential tariff structure: access charge/prop; Independent of land value							
		F4.1 11a	Residential access charge for 2011-12 (\$/assessment)	\$ 2011-12 465	3	3	570	637		
		11	Residential access charge for 2012-13 (\$/assessment)	\$ 2012-13 479	3	3	598			
		F4 12a	Typical residential bill for 2011-12 (\$/assessment)	\$ 2011-12 465	3	3	574	696		
		12	Typical residential bill for 2012-13 (\$/assessment)	\$ 2012-13 479	3	3	600			
		13	Typical developer charge for 2012-13 (\$/equivalent tenement)	\$ 2012-13 3,180	1	3	4,500			
		14	Non-residential sewer usage charge (c/kL)	c/kL 110	3	4	125			
		F8 15	Revenue per property - Sge (\$)	\$ 550	3	4	713	791		
		16	Urban properties without reticulated sewerage service (%)	29.7	6	6	3.8			
		E3 17	Percent of sewage treated to a tertiary level (%)				94	92		
		E4 18	Percent of sewage volume treated that was compliant (%)	100	1	1	100	89		
		E5 19	Number of sewage treatment works compliant at all times	1 of 1						
		ENVIRONMENTAL	NATURAL RESOURCE MANAGEMENT	21	Odour complaints per 1000 properties	per 1,000 prop 0.0	1	1	0.5	
				C11 22	Service complaints - sewerage per 1000 properties	per 1,000 prop 7	2	2	11	1
				C16 23a	Average sewerage interruption (minutes)	min 60	1	1	102	116
25	Total days lost (%)			% 0.0	1	1	2.0			
W10 26	Volume of sewage collected per property (kL)			kL 184	2	1	250	238		
W26 26a	Total recycled water supplied (ML)			ML 280	1	2	450	1382		
W27 27	Recycled water (% of effluent recycled)			% 77	1	1	5	14		
E8 28	Biosolids reuse (%)			%			100	100		
30	Energy consumption - sewerage (kWh/ML)			kWh 777	6	4	790			
31	Renewable energy consumption (% of total energy consumption)			%			0			
ENVIRONMENTAL	ENVIRONMENTAL PERFORMANCE	E12 32	Net greenhouse gas emissions - WS & Sge (net tonnes CO2 equivalents per 1000 properties)	170	1	1	370	380		
		33	90 <sup>th</sup> Percentile licence limits for effluent discharge: BOD 30 mg/L; SS 30 mg/L; Total N 15 mg/L; Total P 1 mg/L							
		34	Compliance with BOD in licence (%)	% 100	1	1	100			
		35	Compliance with SS in licence (%)	% 100	1	1	100			
		A14 36	Sewer main breaks and chokes (per 100 km of main)	per 100km main 18	2	2	33	21		
		37a	Sewer overflows (per 100 km of main)	per 100km main 0	1	1	15			
		E13 37b	Sewer overflows reported to environmental regulator (per 100km of main)	per 100km main 0.0	1	1	0.3	0.4		
		39	Non rec & trade waste % of total sge volume	% 8	4	6	17			
		43	Revenue from non-residential plus trade waste charges (% of total revenue)	% 8	6	6	17			
		44	Revenue from trade waste charges (% of total revenue)	%			2.4			
ECONOMIC	FINANCE	F18 46	Economic real rate of return - Sge (%)	% 0.4	2	3	1.0	1.8		
		46a	Return on assets - Sge (%)	% 1.0	2	2	0.5			
		48a	Loan payment per property - Sge (\$)	\$ 59	1	2	87			
		F24 48b	Net profit after tax - WS & Sge (\$'000)	\$'000 130	2	3	73	2691		
		49	Operating cost (OMA) per 100 km of main (\$'000)	\$'000 820	3	2	1,570			
		F12 50	Operating cost (OMA) per property (\$) (Note 8)	\$ 317	3	2	410	388		
		51	Operating cost (OMA) per kilolitre (cents)	c/kL 172	4	3	152			
		52	Management cost per property (\$)	\$ 95	3	2	140			
		53	Treatment cost per property (\$)	\$ 155	4	4	137			
		54	Pumping cost per property (\$)	\$ 25	2	2	70			
ECONOMIC	EFFICIENCY	55	Energy cost per property (\$)	\$ 34	3	3	36			
		56	Sewer main cost per property (\$)	\$ 40	3	3	45			
		F29 57	Capital Expenditure per property - Sewerage (\$)	\$			244	298		

## NOTES:

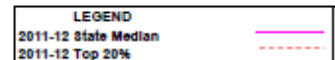
- Col 2 rankings are on a % of LWUs basis - best reveals performance compared to similar sized LWUs (ie. Col 1 is compared with LWUs with 200 to 1,500).
- Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all LWUs (ie. Col 1 is compared with all LWUs). - see attachment.
- Col 4 (Statewide Median) is on a % of connected properties basis- best reveals statewide performance (gives due weight to larger LWUs & reduces effect of smaller)
- Col 5 (National Median) is the median value for the 66 utilities reporting sewerage performance in the National Performance Report 2011-12 ([www.nwc.gov.au](http://www.nwc.gov.au)).
- LWUs are required to annually review key projections & actions in their Strategic Business Plan and annually update their financial plan. The SBP should be updated after 4 years.
- Non-residential access charge - \$479, proportional to square of size of service connection. Sewer usage charge - 110 c/kL.
- Non-residential and trade waste volume was 8% of total sewage collected.
- Non-residential revenue was 8% of revenue from access, usage & trade waste charges, indicating fair pricing of services between the residential and non-residential sectors.
- Compliance with Total N in Licence was 100%. Compliance with Total P in Licence was 100%.
- Operating cost (OMA)/property was \$317. Components were: management (\$95), operation and maintenance (\$187), energy (\$34) & effluent/biosolids (\$1).

(Results shown for 10 years together with 2011/12 Statewide Median and Top 20%)



NOTES:

- Costs are in Jan 2012\$ except for graph 12, which is in Jan 2013\$.





# **Appendix E      Projected Cost Schedules**

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# E.1 30-year Capital Works Program

BLAYNEY COUNCIL - STRATEGIC ACTION PLANNING																																									
SEWER - 30-Year Capital Works Program																																									
CAPITAL WORKS IN 2013\$('000)																																									
Current Year 2013/14																																									
					0	1	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						
					SUBSIDY	ILOS	GROWTH	RENEW	Total	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	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		
<b>New Works - ILOS / Backlog (Subsidised Schemes)</b>																																									
Blayney STP-Upgrade for sensitive waters standards						40%	60%		6650																		150	3500	3000												
Sewerage scheme - Carcoar, Mandurama and Lyndhurst					50%	100%			9250						50	200	5000	4000																							
Aeration Tank - Variable Speed Drives						50%			155	55	100																														
<b>Minor New Works</b>																																									
Discretionary Capital Works (switch board shelters etc.)								100%	10	5	5																														
Millthorpe Transfer Main Investigation and Augmentation						100%			450		100	350																													
Flow Gauging - STP						100%			50	50																															
<b>Renewals</b>																																									
Telemetry upgrade								100%	290		140				30				30						30					30											
Lining/ Replacement of sewer mains								100%	1100	100	200	200	200	200	200																										
Replacement of pumps in SPS (inc Millthorpe)								100%	395		20	20			30		10		100			10					20	20			30		10			100		25			
SPS improvements - Internal improvements								100%	50			50																													
Sludge Lagoon aerator and pump replacement								100%	140	20					20				20										20									20			
P&E replacement (CCTV Camera, Jetter, Loader, Ute etc.)								100%	540		75	28	65			28							130	28					28							65		28		65	
Electrical replacements								100%	120				40										40																		
Manhole rehabilitation program								100%	500		100	100	100	100	100																										
<b>GRAND TOTAL</b>									19700	230	740	748	405	300	400	230	5010	4028	100	20	40	0	170	28	20	50	170	3500	3020	58	30	10	105	120	0	83	0	65	20		





## **Appendix F    Financial Input Data**

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# **Appendix G      Detailed Financial Statements**

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