

# North East Water **Water Plan**

2013-14 to 2017-18



NORTH EAST WATER



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North East Water was constituted on 1 July 1997 by Government Order, following application under section 100(2) of the *Water Act 1989* by the Ovens Region Water Authority and the Kiewa Murray Water Authority. The Authority became a Corporation on 1 July 2007.

North East Water’s statutory functions, powers and duties are constituted under the *Water Act 1989* and relevant By-Laws. These functions include the collection, storage, treatment and delivery of water, the collection and treatment of sewage and trade waste, and water recycling.

North East Water provides services to an estimated population of 117,000 people in 37 towns in North East Victoria. The region covers approximately 20,000 square kilometres, and is bound by Corryong in the north-east, Yarrawonga in the north-west, Benalla in the south-west and Dartmouth in the south-east.

Our customers include large industry, residential, commercial and rural customers. Major industrial customers operate in the larger towns of Wodonga and Wangaratta, as well as in Wahgunyah, Benalla and Myrtleford. Approximately 90% of our customers are residential.

Infrastructure management is critical to achieving our business objectives. Our activities centre on ensuring we deliver the required customer service levels, but also take in broader concepts such as security, business continuity, land stewardship and the preservation of biodiversity. This commitment currently sees an active investment in the provision of wastewater services to the communities of Tungamah, Glenrowan, Oxley and Milawa.

North East Water operates 36 water treatment plants (including eleven dosing stations) and 18 wastewater treatment facilities throughout the region. In addition, reclaimed water is supplied to 23 sites in the region, including community benefit applications and North East Water operated farms. We manage our infrastructure to achieve agreed performance standards, including those identified in relevant legislation and compliance codes, and the Corporation’s Customer Charter.



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# 1 EXECUTIVE SUMMARY

North East Water's *Water Plan* for the five-year period 2013 to 2018 represents the prudent allocation of resources required to meet the needs of our communities and stakeholders during this period.

Our *Strategic Intent* has guided the development of the *Water Plan* and provides a clear vision to the organisation and our customers.

This plan has been developed with significant input from our customers, in particular the contributions of our *Water Plan* Reference Group. Such interactions are essential in building a collective confidence that the Corporation's strategies will meet community expectations. We appreciate and thank the members of the group for their generous contributions and we look forward to maintaining an ongoing collaborative relationship.

The primary purpose of the *Water Plan* is to:

- clearly articulate the outcomes the Corporation proposes to achieve during the period of the *Water Plan* with respect to meeting future demands and complying with its obligations
- explain how the Corporation proposes to achieve those outcomes
- specify the revenue requirements to achieve those outcomes, and
- propose prices for the services the Corporation provides.

In summary, the key aspects of this plan are:

- Our commitments to the service standards we aspire to provide our customers. We are committed to maintaining our strong history of high performance across our water and sewerage services throughout this regulatory period.
- We will continue to invest in the renewal and upgrade of our infrastructure with a forecast capital investment of up to \$75 million over the five-year period. The key drivers of the capital investment program include a commitment to meeting drinking water standards and reducing the environmental impacts of our operations. The program also includes significant commitments to improving health and environmental outcomes in a number of small communities within the region that we do not currently service.
- During the current regulatory period revenue risk has emerged as a significant risk for North East Water. We achieved our forecast levels of sales volumes for the first two years of the current *Water Plan* period, but have not achieved the volumes forecast for years 3 and 4, and are not forecasting to achieve that determined for year 5 of the final determination. Whilst the Corporation has been able to absorb the impacts across the current water plan period, the Board of North East Water has responded by developing mitigation strategies, through a midpoint review, for the *Water Plan* 3 period.
- The revenue required to sustainably provide our agreed levels of service and the capital investments is currently resulting in average annual increases of 2.27% in 'real dollar' terms for our customers.
- The demand forecasts currently predict average residential consumption to rise from 175kL to 193kL over the five year period. Further analysis will be undertaken through to the final water plan submission to refine these forecasts.
- Population and residential connection forecasts have primarily been based on the Victorian Government's *Victoria in Future* (VIF) 2008 population forecasts, with consideration also given to local knowledge, growth trends and other relevant information. This will see an average annual growth rate of 1.27% applied to our customer base.

- North East Water’s pricing strategy represents the Corporation’s vision for the pricing of its regulated services. We committed to the price reform implemented over Water Plan 2 that placed greater emphasis on volumetric charges and a reduced reliance on fixed charges. This tariff strategy will continue into Water Plan 3.

We are confident that the combination of some of the highest service standards in the sector and competitive, empowering tariff design will meet our communities’ expectations through the next regulatory period.

**Understand ‘real dollars’**

The Water Plan presents the financial data in ‘real dollars’; this means that the figures presented do not include the effects of inflation. This represents the estimated revenue and expenditure of the Corporation expressed as at 1 January 2013.

The result of presenting figures in real dollars is that when the Water Plan shows prices or expenditure in 2018, the price customers will actually experience in 2018 will be this amount *plus* inflation as measured by the Consumer Price Index (CPI).

## 2 OUTCOMES OF WATER PLAN 2 (2008-09 TO 2012-13)

### 2.1 SERVICE STANDARDS

The Corporation's commitment to meeting high service levels underpins the outcomes we provide to our customers. This section summarises our historical performance against these standards. Internally these standards serve as an agreed benchmark for us to provide the highest level of service to our customers, and ensure that their satisfaction is our priority.

The following tables compare the outcomes that we agreed to meet over the second regulatory period with those actually delivered for the first four financial years.

This level of performance sees North East Water rank highly in comparison to its peers across the Victorian Water Industry for most indicators.

**Table 1 – Service Standards - Water**

Water	Standard	2008-09	2009-10	2010-11	2011-12
Unplanned water supply interruptions (per 100km)	<b>13.7</b>	12.2	12.5	11.3	14.8
Average time taken to attend bursts and leaks (priority 1) (minutes)	<b>50</b>	23	23	25	15
Average time taken to attend bursts and leaks (priority 2) (minutes)	<b>120</b>	24	19	28	16.3
Average time taken to attend bursts and leaks (priority 3) (minutes)	<b>1 440</b>	30	24	24	22.6
Unplanned water supply interruptions restored within 5 hours (per cent)	<b>98</b>	96	98	99	98
Planned water supply interruptions restored within 5 hours (per cent)	<b>98</b>	100	97	96	100
Average unplanned customer minutes off water supply (minutes)	<b>7.7</b>	7.69	6.25	5.39	22.66
Average planned customer minutes off water supply (minutes)	<b>10</b>	1	4	3	5.33
Average unplanned frequency of water supply interruptions (number)	<b>0.1</b>	0.09	0.07	0.07	0.1
Average planned frequency of water supply interruptions (number)	<b>0.1</b>	0.01	0.03	0.03	0.041
Average duration of unplanned water supply interruptions (minutes)	<b>110</b>	88	90	81	199
Average duration of planned water supply interruptions (minutes)	<b>125</b>	75	103	96	129
Number of customers experiencing more than 2 unplanned water supply interruptions in the year (number)	<b>300</b>	252	510	439	1,202
Unaccounted for water (per cent)	<b>15</b>	8	9	11	9

**Table 2 – Service Standards - Sewerage**

Sewerage	Standard	2008-09	2009-10	2010-11	2011-12
Sewerage blockages (per 100km)	9	12	12	11	9.12
Average time to attend sewer spills and blockages (minutes)	30	25	21	24	26.5
Average time to rectify a sewer blockage (minutes)	160	133	120	129	139
Spills contained within 5 hours (per cent)	99	100	100	100	100
Customers receiving more than 2 sewer blockages in the year (number)	30	0	0	0	0

**Table 3 – Service Standards – Customer Service**

Customer Service	Standard	2008-09	2009-10	2010-11	2011-12
Complaints to EWOV (per 1 000 customers)	0.4	0.2	0.4	0.1	0.04
Telephone calls answered within 30 seconds (per cent)	95	92.0	95.0	95.8	96.2

These tables highlight that North East Water is consistently meeting the majority of its service standard targets with the exception of the following:

#### *AVERAGE UNPLANNED TIME OFF WATER SUPPLY*

The 2011-12 result was influenced by the failure of a main supply valve in the Myrtleford reticulation system lead to loss of supply to a large section of the town. Further investigations showed that the valve had been incorrectly installed 22 years prior. This failure resulted in a higher figure for average unplanned time off water and average frequency of unplanned interruptions. Remedial work has been undertaken to reduce the likelihood of this event occurring again.

#### *NUMBER OF CUSTOMERS EXPERIENCING MORE THAN 2 UNPLANNED WATER SUPPLY INTERRUPTIONS IN THE YEAR*

This result was influenced by several main breaks, at different points within the main, resulting in a number of customers receiving multiple interruptions in smaller communities such as Mt Beauty and Rutherglen. These results have since influenced the ongoing mains replacement program.

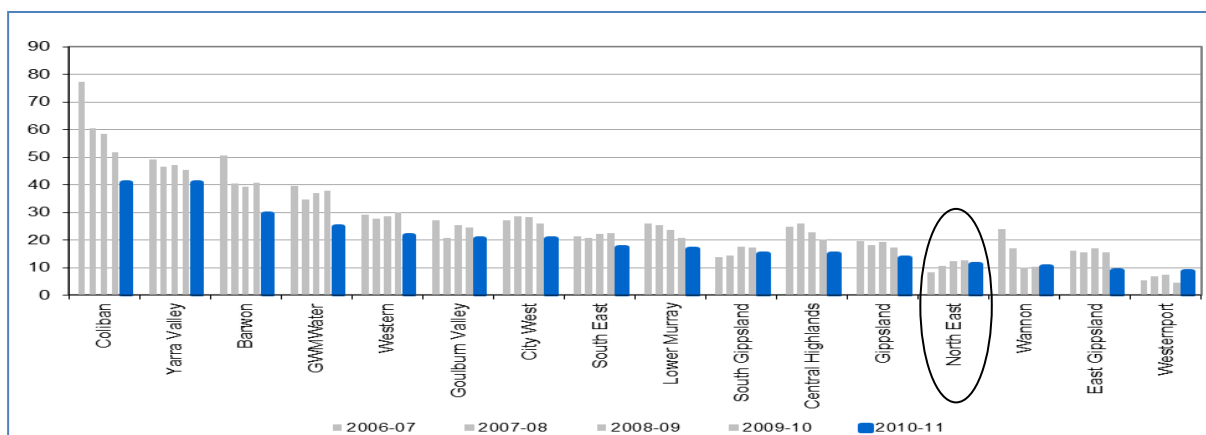
#### *SEWER BLOCKAGES (PER 100KMS)*

Extended drought followed by the more recent wet period has challenged the performance of sewer networks through tree root infiltration and large hydraulic loads associated with stormwater infiltration. This has resulted in more blockages and an increase in this measure.

Sewer Blockages continue to be an issue of non-compliance for us and is the focus for continuous improvement within our Operations group. However, of note are our levels of service when compared to other corporations, with blockage rates per 100 kilometres of sewer main being recorded as the third lowest in the sector. This is an important consideration when engaging communities on the cost of maintaining or improving these standards.

The following figure has been taken from the ESC *Performance Report* for 2010-11

**Figure 1 – Sewer Blockages (per 100 kilometres of sewer main)**



## 2.2 DELIVERY OF KEY CAPITAL PROJECTS

North East Water continues to progress the delivery of its capital investment commitments for *Water Plan 2*. Of note is the number of additional projects that are being delivered to customers and how these need to be balanced with the original capital program. With the support of the regulator and stakeholders, we have modified our capital delivery program for the current *Water Plan* period without reducing the total investment and, importantly, continuing to deliver the key customer focused project commitments.

**Table 4 – Capital program revisions and additions**

	<b>\$ '000</b>
Original <i>Water Plan 2</i> Capital Program	118,098
Revised Capital Program	129,062
<b>Variance</b>	<b>10,964</b>
<b>Represented by:</b>	
Additional/Revised Projects	22,590
Other minor alterations	586
Projects C/Forward from Water Plan 1	6,710
Revised Project Estimates	10,839
Proposed Deferrals to Water Plan 3	(29,761)
<b>Variance</b>	<b>10,964</b>

The work informing *Water Plan 2* was completed in 2006-07, and the document lodged with the Essential Services Commission (ESC) in early 2008. Since the development of the *Water Plan* we have seen a number of key changes to our operating environment that have influenced the need to respond to new challenges, as discussed below.

### SMALL TOWNS

North East Water is committed to exploring innovative low-cost solutions for small-town communities to address public health and environmental considerations. This has resulted in our commitment to provide wastewater services to the communities of Glenrowan, Tungamah, Milawa and Oxley. The investment across these four towns is an estimated \$14.5 million.



### *DROUGHT AND ITS IMPACTS ON WATER SECURITY & QUALITY*

The sustained dry period that dominated this regulatory period caused many water security and quality impacts across the region that were not foreseen when preparing *Water Plan 2*. While this has caused many operational challenges, the need to invest in new infrastructure to appropriately manage these risks has been required to continue to meet the needs of our customers. Four new projects were included for delivery within this *Water Plan* period at an estimated value of \$7.8 million. These projects included the provision of water services to Eskdale, water quality and reliability upgrades for Whitfield and Springhurst, and the provision of drinking water from Yarrawonga to Bundalong.

### *ENVIRONMENTAL UPGRADES*

During this *Water Plan* period the Environment Protection Authority (EPA) changed its approach to wastewater discharges by requiring Ecological Risk Assessments (ERAs) to be undertaken to determine the impacts of the discharges on the environment and to identify any beneficial uses. This approach is an improvement on the previous approach of compliance to an environmental policy without regard to local conditions, which often resulted in an outcome prescribing a high capital and operational cost facility that provided marginal benefits to the environment or beneficial uses.

The ERA process requires the collection of 12 to 18 months of discharge and groundwater/ stream flow data to allow a scientific assessment of the environmental impacts. We are now getting the outputs of the data and analysis, which highlight that the impacts from our existing treatment facilities in Bright and Beechworth are very low. On this basis, proceeding with costly upgrades is considered premature until agreement on future discharge limits and processes is achieved between North East Water and the EPA.

In addition to the above, we have been working with the EPA and Department of Sustainability and Environment (DSE) on upgrading the Wangaratta trade waste facility. Impacts to receiving waters from the current facility pose an unacceptable risk to the environment and other uses of this waterway. As a result a new project has been included for delivery during the 2008-13 *Water Plan* period with an estimated value of \$3.8 million.

### *PROJECT DELIVERABILITY*

The complexity of some projects, particularly the Bright off-river storage, has caused considerable delays. Even after finalising the site selection and detailed designs on this project, issues associated with site selection complicate the delivery of this project.

### *OPPORTUNITIES FOR DEFERRAL*

The Corporation undertook a risk based review of priorities in close consultation with regulatory stakeholders ensuring that they acknowledged the appropriateness of the re-prioritisation of certain projects. Whilst a number of projects have been highlighted for deferral, the Corporation continues to do the pre-construction preparation for many of these works to enable their rapid delivery should their priority change.

## 2.3 ACHIEVEMENT OF REVENUE REQUIREMENT

During the current regulatory period revenue risk has emerged as a significant risk for North East Water. We achieved our forecast levels of sales volumes for the first two years of the current *Water Plan* period, but have not achieved the volumes forecast for years 3 and 4, and are not forecasting to achieve those determined for year 5 of the determination, as outlined in Table 5, below.

In determining *Water Plan 2* demand forecasts, the ESC made the following assumptions:

- That demand would be consistent with that submitted by North East Water for years 1 to 3, and
- That demand in years 4 and 5 (2011-12 and 2012-13) would ‘bounce back’ to 80% of historical levels.

The combination of price reform, customer behavioural change and abnormal summer weather patterns (for 2010-11 and 2011-12) has seen total sales volumes drop dramatically, significantly constraining our ability to recover our revenue requirement. The following table outlines actual and forecast sales against the *Water Plan 2* determination and indicates the volumetric revenue impacts.

**Table 5 – Sales revenue –ESC Determination compared to Actual**

	ESC Determination MLs	Actual	Annual Variance MLs	Annual Variance \$million
<b>2008-09</b>	11,816	14,129	2,313	\$2.61
<b>2009-10</b>	11,833	13,956	2,123	\$3.25
<b>2010-11</b>	13,410	10,594	(2,816)	(\$5.69)
<b>2011-12</b>	14,956	11,530	(3,426)	(\$7.53)
<b>2012-13</b>	15,346	11,706*	(3,640)	(\$8.37)
<b>Total</b>	<b>67,361</b>	<b>61,915</b>	<b>(5,446)</b>	<b>(\$15.73)</b>

\* Forecast consistent with Corporate Plan 2012-13.

## 2.4 OPERATIONS AND ADMINISTRATIVE EXPENDITURE ALIGNMENT

North East Water’s expenditure is tracking consistent with the ESC’s determination for *Water Plan 2*. The only variations relate to the need to balance supply and demand through the water scarcity periods with additional temporary water purchases on the Murray system, and the need to allocate additional human resources to the delivery of the expanded capital investment program committed to throughout *Water Plan 2*.

These results should give our customers confidence that the expenditure base at the commencement of the third regulatory period reflects a very prudent level of expenditure to deliver our services.

The following two tables track the alignment with *Water Plan 2* for operational and administration expenditure.

**Table 6 – Water Plan 2 operational expenditure – ESC determination compared to actual**

<b>Operations Expenditure</b>	<b>Water Plan 2 Determination \$million</b>	<b>Actual \$million</b>
2008-09	14.52	14.62
2009-10	15.42	15.69
2010-11	16.02	17.13
2011-12	16.95	17.05
2012-13	18.11	18.19*
<b>Total</b>	<b>81.02</b>	<b>82.68</b>

\* Forecast consistent with Corporate Plan 2012-13.

**Table 7 – Water Plan 2 administration expenditure – ESC determination compared to actual**

<b>Administration Expenditure</b>	<b>Water Plan 2 Determination \$million</b>	<b>Actual \$million</b>
2008-09	14.14	15.15
2009-10	13.72	13.60
2010-11	14.11	14.16
2011-12	14.87	15.76
2012-13	14.95	16.46*
<b>Total</b>	<b>71.79</b>	<b>75.13</b>

\* Forecast consistent with Corporate Plan 2012-13.

The administrative expenditure variances in the financial years 2011-12 and 2012-13 include additional resources required to ensure the delivery of both our Water Plan 2 capital investment commitments and the additional projects that have emerged across the five year period. These additional projects include the implementation of a new water supply for Eskdale and new small town sewerage schemes at Tungamah, Glenrowan, Milawa and Oxley.

Included in the 2011-12 administration and operational actual is the Vision Super Defined Benefits unfunded liability of \$1.96 million.

### 3 STRATEGIC INTENT

#### 3.1 OUR BUSINESS STRATEGY AND OBJECTIVES

In 2011 North East Water introduced the *Strategic Intent 2018*; a significant review of our strategic direction to guide our future business operations and actions for our staff.

The *Strategic Intent 2018* anticipates the changes from the world of today, our future customers’ needs, wants and expectations and the success factors required for meeting these expectations. It is designed around the three key themes of *Customers and Community*, *Infrastructure and Business Solutions*, and *People*.

Our current portfolio of strategic initiatives includes the following six key projects:

- **Customer and Community Communications** – Providing customers and communities with choice in how they interact with us.
- **Adapting to a Changing Climate** – Assisting the Corporation to adapt to an uncertain, increasingly variable climate.
- **One Resource** – Promoting future water solutions that are fit-for-purpose.
- **Asset Performance** – Using an asset performance lens to inform decisions.
- **Business Sustainability** – Strengthening our viability to enable improved levels of service for our current and future customers.
- **Achieving Through People** – Building our organisation through a highly skilled and motivated team.

Importantly, the *Strategic Intent 2018* has informed the development of *Water Plan 3* and is the statement of design through which policies, processes and practices of the Corporation are developed.

An overview of the *Strategic Intent 2018* is provided below:

**Figure 2 – North East Water Strategic Intent 2018**



## 4 PROPOSED SERVICE OUTCOMES

### 4.1 SERVICE STANDARDS

Underpinning our expenditure requirements are the service standards and identified outcomes that this *Water Plan* commits North East Water to delivering over the regulatory period.

We take pride in having service standards that achieve a high level of customer satisfaction and simultaneously meet regulatory requirements. Customer opinion is a critical driver of the service standards we strive to achieve. This section of the *Water Plan* outlines the service standard targets that the Corporation aspires to achieve over the third regulatory period, as developed in consultation with customers.

Customers' input to our service standards is particularly important, as any incremental improvement in services will likely result in a higher customer bill. Thus customer consultation allows us to identify service improvements for which customers are willing to pay. This prevents expenditure on costly service improvements that customers do not value or are not willing to pay for.

#### 4.1.1 ESC EXPECTATION

The ESC will assess whether service standards and targets:

- comply with the definitions outlined in the Commission's performance reporting frameworks
- are consistent with available historic information on actual performance
- reflect past and proposed expenditure programs
- reflect customer preferences and willingness to pay, and
- include price and customer bill impacts

#### 4.1.2 RESULTS OF CUSTOMER CONSULTATION ON SERVICE STANDARDS

The *Water Plan 3* Reference Group provided the following feedback on topics of interest:

##### *REVIEW OF THE ESC PERFORMANCE REPORT 2010-11*

Members discussed this benchmark report highlighting that it shows that North East Water is performing at a high level against the required service standards when compared with other water corporations across Victoria. It was highlighted that this was a useful tool when examining the proposed service standards for *Water Plan 3*. Members expressed their satisfaction that the current levels of service North East Water provides are of the desired standard and that the best customer outcome would be for the Corporation to maintain current levels as efficiently as possible.

##### *COST OF ACHIEVING THE SET SERVICE STANDARDS*

The Reference Group expressed their concern with the cost of complying with the agreed service standards and supported the Corporation's strategic focus on asset performance.

The group discussed and subsequently supported the proposed changes as shown in Table 8, page 12.

#### 4.1.3 PROPOSED SERVICE STANDARDS IN RELATION TO CURRENT LEVELS

The following table outlines service standards proposed for the next regulatory period, showing the current standard (from the second regulatory period) and our five-year average performance (2006-07 to 2011-12) against this target.

In recognition of our current performance the Corporation does not propose to drive any further service standard increases. The *Water Plan 3* service standard targets consider the five-year actual average

performance (2006-07 to 2011-12) and the Corporation's performance relative to the industry average performance.

**Table 8 – Proposed service standards**

<b>Service Standard</b>	<b>Water Plan 2 Target</b>	<b>5 Year Average</b>	<b>Proposed Water Plan 3 Target</b>
<b>Water</b>			
Unplanned water supply interruptions (per 100km)	13.7	<b>10.8</b>	14
Average time taken to attend bursts and leaks (priority 1) (minutes)	50	<b>19</b>	23
Average time taken to attend bursts and leaks (priority 2) (minutes)	120	<b>23</b>	23
Average time taken to attend bursts and leaks (priority 3) (minutes)	1 440	<b>60</b>	60
Unplanned water supply interruptions restored within 5 hours (per cent)	98	<b>97</b>	98
Planned water supply interruptions restored within 5 hours (per cent)	98	<b>98</b>	100
Average unplanned customer minutes off water supply (minutes)	7.7	<b>6.2</b>	6.2
Average planned customer minutes off water supply (minutes)	10	<b>3</b>	4
Average unplanned frequency of water supply interruptions (number)	0.1	<b>0.1</b>	0.1
Average planned frequency of water supply interruptions (number)	0.1	<b>0.03</b>	0.1
Average duration of unplanned water supply interruptions (minutes)	110	<b>95</b>	95
Average duration of planned water supply interruptions (minutes)	125	<b>94</b>	95
Number of customers experiencing more than 2 unplanned water supply interruptions in the year (number)	300	<b>374</b>	375
Unaccounted for water (per cent)	15	<b>11</b>	11
<b>Wastewater</b>			
Sewerage blockages (per 100km)	9	<b>10.9</b>	12
Average time to attend sewer spills and blockages (minutes)	30	<b>24</b>	24
Average time to rectify a sewer blockage (minutes)	160	<b>142</b>	140
Spills contained within 5 hours (per cent)	99	<b>100</b>	100
Customers receiving more than 2 sewer blockages in the year (number)	30	<b>24</b>	30
<b>Customer Service</b>			
Complaints to EWOV (per 1 000 customers)	0.4	<b>0.2</b>	0.4
Telephone calls answered within 30 seconds (per cent)	95	<b>94</b>	95

## 4.2 GUARANTEED SERVICE LEVELS (GSLs)

The underlying objective of GSLs is to provide an incentive for businesses to address the incidence of inferior service performance for the worst affected customers, not to compensate those customers for poor performance.

### 4.2.1 ESC EXPECTATION

The ESC expects that all businesses should propose a GSL scheme to ensure all urban water businesses have an incentive to meet service standards for all customers. Businesses are expected to propose a set of GSLs and a GSL payment or rebate that reflects the most important aspects of service delivery as identified by customers.

The Commission will not mandate a core set of GSLs, with the exception of the hardship related provision.

### 4.2.2 RESULTS OF CUSTOMER CONSULTATION ON GSLs

The *Water Plan 3* Reference Group considered the merits of GSLs and overall did not support the introduction of additional GSLs. Some of the comments included:

- GSLs provide a mechanism for monitoring customer service in a monopoly environment.
- GSLs should not be used as a financial incentive for North East Water to improve; this reflects badly on the Corporation, which should already be focused on customer service and improvement.
- GSLs may dilute the impact of poor service to customers. A GSL may give a Corporation a way of minimising impost, which is not commensurate with the impact on the customer, therefore leaving the customer dissatisfied.
- Some members suggested that GSLs would be a good, open way for the Corporation to be accountable. Members also suggested that GSLs would be easy to communicate/market as a customer service tool. Members noted that the current individual approach may be a better way to respond to customers but is more difficult to communicate.
- Members supported the Hardship GSL as an important tool in addressing customers experiencing financial hardship.

### 4.2.3 PROPOSED GSLs

North East Water has considered all views put forward with regard to expanding the number and types of GSLs offered. Consideration was given to:

- the clear support to continue to offer the mandated Hardship GSL
- the high level of standard in North East Water's current services
- the need to continue to offer timely and adequate support to individual customers affected by service-related issues
- feedback on GSL payments potentially giving financial consideration to unaffected customers, and
- when a service level becomes unacceptable to the customer.

This consideration has resulted in the following GSLs being proposed:

**Table 9 – Proposed Guaranteed Service Levels**

Service Level Obligation	Level of Service	Current Rebate for Breach (\$)
Unplanned water interruption within any 12 month period	No more than 5	50
Sewage spills in a house contained within 1 hour of notification	All	1000
Restricting the water supply of, or taking legal action against, a residential customer prior to taking reasonable endeavours to contact the customer and provide information about help that is available if the customer is experiencing difficulties paying	Zero	300

## 4.3 REGULATORY & GOVERNMENT OBLIGATIONS

North East Water must meet a wide range of regulatory obligations in delivering its services. The following section outlines the key drivers that influence our service standards from a regulatory perspective.

### 4.3.1 STATEMENT OF OBLIGATIONS ('SOO')

North East Water's Statement of Obligations details the State Government's requirements in regard to governance, standards, community service obligations, customer and community consultation, and payment for the provision of water and sewerage services.

A key requirement of the SoO is to ensure that the risks associated with North East Water's business are routinely and systematically addressed to reduce potential losses and maximise potential opportunities.

The Board is responsible and accountable for the actions of the Corporation. It is obliged to ensure that the organisation has taken responsible and reasonable measures to identify, control and finance risks to the Corporation. The ability to assess risk accurately, formulate effective policy and monitor compliance is an essential function of good corporate governance.

North East Water's Risk Management Framework formally documents the Corporation's commitment to risk management, the risk profile structure and the strategy for implementing and maintaining an effective risk management program.

The SoO has not translated into any new, material investment requirements for the Water Plan 3 period.

### 4.3.2 COMMITMENT TO ENVIRONMENTAL SUSTAINABILITY

We acknowledge that our core business presents inherent risks that need to be proactively managed to reduce any significant environmental impacts. The uncertainty and extremes associated with a changing climate will also pose new risks to our operations that may result in the failure of infrastructure and environmental damage. The Corporation is committed to minimising its environmental impact and is strongly influenced in its environmental goals by the EPA Corporate Licence and through continuous improvement processes embedded in our Environmental Management System (EMS).

A broad range of capital projects has been identified to address environmental risks. This includes sewer spill mitigation (\$2m), upgrading four wastewater treatment facilities (\$4.8m), expanding reclaimed water infrastructure (\$4m), and upgrading waste management at two water treatment facilities (\$1.2).

In 2010-11 we established a pilot project to investigate the future sustainable management of integrated water resources in the urban environment. The *One Resource* project considers water resources from across the water cycle, including surface and groundwater, rainfall, stormwater and reclaimed wastewater. The *One Resource* approach has been used in the strategic assessment of future water service delivery opportunities as part of the *Water Supply Demand Strategy* revised in 2012.



#### 4.3.3 COMMITMENT TO SAFE DRINKING WATER SUPPLIES

Providing safe, high-quality water to our customers is one of the Corporation's primary objectives, and our *Drinking Water Quality Management System* (DWQMS) is fundamental to achieving this objective. A *Safe Drinking Water Act* regulatory audit of North East Water's *Drinking Water Quality Management Plan* against the requirements of the *Safe Drinking Water Act 2003* and *Safe Drinking Water Regulations 2005* was carried out in February 2012. The audit demonstrated that we have achieved a satisfactory level of compliance to the requirements of our *Drinking Water Quality Risk Management Plan*.

We will also continue tracking water quality improvements and technical solutions to minimise any impacts of floods and algal blooms to deliver safe drinking water to our customers. North East Water has committed \$6.1million to upgrade 10 water treatment facilities and distribution networks to ensure customers receive safe drinking water and comply with more stringent water quality requirements. We will develop and implement training plans to build our water treatment plant capabilities to meet the new requirements under the Department of Health's framework for water treatment operator competencies.

#### 4.3.4 COMMITMENT TO SMALL TOWNS

2012-13 will see the commencement of the construction of sewerage infrastructure to service the townships of Tungamah, Oxley, Milawa and Glenrowan that will reduce environmental and public health risks associated with these unsewered areas. This is consistent with the Victorian Government initiative *Country Towns Water Supply and Sewerage Program*.

In establishing our Water Plan 2 commitments North East Water and the ESC agreed to exclude any small town investment proposals acknowledging that the Commission requires a high level of confidence to ensure that customers are not potentially paying for a project that may not be delivered, or the timing may be significantly delayed.

The investment across these four towns is an estimated \$14.5 million and has been included in the Regulatory Asset Base and therefore forms part of the revenue requirement calculation for Water Plan 3.

## 5 CUSTOMER CONSULTATION

North East Water engages with its Customers and Community through a range of communication methods. For specific capital projects we will, as appropriate, continue to establish reference groups to assist in delivery, and will remain committed to conducting community information sessions at critical stages of each project's development.

### 5.1 CONSULTATION PLAN

Consultation and engagement with the community and stakeholders continues to play a key role in gaining community input necessary to support the Corporation's direction and services.

The Water Plan consultation process aims to increase awareness of the Corporation's planned activities and gain feedback and input on specific projects and proposals. The ultimate aim of this process is to generate and obtain community support for the *Water Plan*, including service outcomes.

With this goal in mind, we will continue to:

- keep the community and customers informed of the services and planned activities as part of the *Water Plan*
- listen to and acknowledge the issues and concerns raised by our stakeholders, including those of the *Water Plan 3* Reference Group, and
- provide feedback to these groups on how their input influenced the *Water Plan*.

North East Water undertakes varying forms of consultation to engage our customers. We have consulted with our customers on matters relevant to the *Water Plan* through the following activities:

- Water Plan 3 Reference Group
- Annual customer satisfaction surveys (approximately 1,100 customers are contacted via phone in relation to a wide range of services conducted by the Corporation)
- Individual consultation with major customers
- Local government presentations and technical forums
- General community forums
- Community-based committees, and
- Public advertisements / invitations to respond and comment.

Each of these activities represented a different opportunity to obtain customer feedback on our services and planned activities.

### 5.2 WATER PLAN 3 REFERENCE GROUP

As an important part of planning, and to ensure we can respond to our communities, the North East Water Board appointed the *Water Plan 3* Reference Group in February 2011.

The *Water Plan 3* Reference Group provided the primary engagement vehicle for the development of the *Water Plan*. This group was set up specifically to consult on this *Water Plan*; it comprises members representing various towns and interest groups within the region, including:

- industry (major water users)
- natural resource management

- health
- local government
- technical specialists
- community-based groups, and
- Members of the North East Water Board (including Reference Group Chair).

The *Water Plan 3* Reference Group, in providing advice to the Board of North East Water on customer and community views, continues to:

- enhance North East Water’s decision making process by discussing options with customers, local community members and local stakeholders
- provide a mechanism by which North East Water can receive feedback on customer, local community and local stakeholder issues and possible solutions, and
- allow members to gain an understanding of North East Water’s regulatory framework, planning process, regional priorities and the context for the Corporation’s fees and charges.

Through consultation with the *Water Plan 3* Reference Group, we will receive feedback from consumers on the specific projects and proposals included in the *Water Plan*. From our increased shared understanding we aim to generate and demonstrate community support for the *Water Plan*.

In June 2012, the members of the Water Plan 3 Reference Group were invited to participate in an evaluation survey to help us continue to improve our engagement processes. The survey was about the activities and outcomes achieved over the past 12 months. The key results of this survey were;

- That 100% of the Reference Group members felt that the group had achieved its object of providing the Board of North East Water with customer and community views on issues that are important in the formation of the Water Plan
- That all Reference Group members were Satisfied with the following aspects of their engagement;
  - That the Reference Group had enhanced North East Water’s decision making process by discussing options which impact customers, communities and local stakeholders.
  - That North East Water has responded appropriately to the feedback provided by the Reference Group regarding customer, local community and local stakeholder issues and possible solutions.
  - That individually they had been able to gain an understanding of North East Water’s regulatory Framework, planning process, regional priorities and the context for the Corporation’s fees and charges.
  - That individual input and views have been included and considered as part of the Reference Group's work.

The following summarises components of the *Water Plan 3* Reference Group’s feedback on the Water Plan.

#### *CAPITAL EXPENDITURE*

North East Water detailed the proposed approach to developing the capital expenditure program for *Water Plan 3*. Reference Group members sought clarification of the risk-based approach to capital planning and provided support for the process for developing the capital program.

### SERVICE STANDARDS

The Corporation proposed a range of service standards based on historical performance and industry averages. The Reference Group discussed North East Water’s recent performance against the current ESC performance targets, noting that the proposed targets maintain the existing high levels of service to customers. The reference group confirmed that they felt the service standard targets provided were appropriate.

### GUARANTEED SERVICE LEVELS

Reference group members considered the suite of proposed Guaranteed Service Levels and expressed their concern with compensating customers who were unaffected by unplanned service outages. The group agreed that most customers would view GSLs as a burden and extra cost to their bills. We acknowledged the group’s input and determined to propose a suite of three GSLs that reflect North East Water’s customer service performance.

### TARIFF STRATEGY

Reference group members expressed their support for the continuation of the tariff strategy focusing on water volumetric pricing. They felt that customers should continue to have greater control over their total accounts. However the group acknowledged the need for the Corporation to balance variable revenue tariffs with the risk of not recovering the revenue requirement. The group also supported the ongoing need to balance cost reflective price signals with the affordability of services through levels of cross-subsidy.

### THE FORM OF PRICE CONTROL

The Corporation informed the group of its intention to adopt explicit price controls, rather than tariff baskets or revenue caps. The group supported this initiative, as it will provide greater certainty in future pricing of services to customers over other methods.

### CUSTOMER GROWTH ASSUMPTIONS

North East Water provided details of the proposed customer growth assumptions for *Water Plan 3* based on the Corporation’s review of its *Water Supply Demand Strategy*. Reference group members discussed the need to continue to address growth and development and overall members supported proposed growth forecasts for *Water Plan 3*.

## 5.3 LOCAL GOVERNMENT TECHNICAL FORUMS

As local government is a key partner in our regional development and planning, North East Water engaged with local councils during the development of this important strategic document. We hosted two forums to enable councils to provide feedback to us regarding planning for capital development throughout North East Victoria for the next five years and beyond. All seven local government partners were represented:

- City of Wodonga
- Benalla Rural City
- Rural City of Wangaratta
- Moira Shire
- Alpine Shire
- Towong Shire
- Indigo Shire

The following summarises components of the Local Government Technical Group’s feedback on the *Water Plan*.

### CAPITAL EXPENDITURE

North East Water detailed the proposed approach to developing the capital expenditure program for *Water Plan 3*. Representatives highlighted the impact of a proposed reduced capital program for small town

investments but recognised the importance of reducing cost impacts to customers. Representatives supported our proposed capital expenditure program.

#### CUSTOMER GROWTH ASSUMPTIONS

We provided details of the proposed customer growth assumptions for *Water Plan 3*, based on our review of the *Water Supply Demand Strategy*. Representatives noted that based on the data provided the assumptions were in line with their forecasts.

#### GROWTH-BASED INVESTMENTS

We sought feedback from representatives regarding the proposed approach to growth-based investments, noting that we would continue to respond to required network extensions where they are prudent, and would look to recover any required investment in subsequent *Water Plan* periods. Representatives supported this approach and acknowledged that this would enable a collaborative and responsive approach to growth.

## 5.4 DRAFT WATER PLAN CONSULTATION

To support the submission of feedback to the Draft Water Plan North East Water distributed copies of the plan with an invitation to submit comments and feedback or seek further information to all seven Councils, along with stakeholders who had attended the Wodonga Chamber of Commerce Business Breakfast, hosted by the Corporation in April 2012, and to the Corporation's major industrial customers. The draft Water Plan was also available on the Corporation's website, from its release on 31 May 2012.

North East Water implemented a range of consultation activities upon release of the draft *Water Plan* to enable customers and communities to provide feedback and input to this important strategic document. Activities included:

- Regional *Water Plan* open forums were conducted at Wodonga, Wangaratta, Benalla, Yarrawonga and Myrtleford
- Draft *Water Plan* online forum – the draft *Water Plan* was available for comment and feedback on North East Water's website
- Major industry consultation meetings were held with interested customers
- Local government presentations/meetings with interested local municipalities
- Local interest group presentations were offered
- Calls for submission to the draft *Water Plan* were advertise extensively for written submissions, and
- Ongoing consultation with the *Water Plan 3* Reference Group.

### 5.4.1 REGION FORUMS FEEDBACK RECEIVED

North East Water received the customer and community feedback, from the five sessions conducted, on the following themes;

- Community engagement & consultation – the customer was wanting a greater understanding of North East Water's approach to engagement and consultation with particular emphasis on coverage across the region
- Land acquisition for buffers around wastewater treatment plants – Specific question relating to Benalla and the potential future expansion of the wastewater treatment and reuse footprint

- Positive feedback on the proposed removal of cistern charges and the water quality within the Benalla township
- Affordability for pensioners and single income families – Specifically relating to the hardship provisions North East Water has in place to identify customers in need
- Educational resources and awareness programs – Specifically relating to expanding our educational programs to cater for secondary school level students
- Bulk water entitlements and managed aquifer recharge associated with the management of our services in the Alpine region of North East Water.

Overall the sessions provided the opportunity for all customers and community to interact with North East Water staff and did not present any strong opposition to our overall Water Plan draft submission.

#### 5.4.2 FORMAL CUSTOMER SUBMISSIONS RECEIVED

North East Water received only one written submission, which was sent via email. This submission was from a Benalla resident and the key issues outlined in the submission were:

- The nominal annual increase in the average annual charge of 2.3% plus CPI (say 2.5%) over 5 years equates to a dollar increase of 26.4% over 5 years. This is a high burden for pensioners and self funded retirees to absorb.
- Agreement with the efforts proposed in removing cross subsidies, as some towns, such as Benalla, prior to amalgamation had most of their infrastructure in place and do not require high levels of capital expenditure in the immediate future.

In addition the submission raised a number of questions regarding the draft Water Plan including:

- Revenue risk of emphasising volumetric charges will arise due to variable seasonal conditions in a given year. Have any methods of smoothing this out been examined, such as a rolling 5 year volumetric average, in an effort to minimise this risk?
- What does ongoing need to balance cost reflective signals with the affordability of services through levels of cross subsidy mean? As it appears to be in conflict with an earlier statement of progressively removing cross subsidies.
- Can you give an example of your intent to use explicit price controls so I can understand what this means?
- Have dates been set for public meetings in each area to obtain feedback and input?
- Can you provide details of how the return on RAB amount is arrived at and what components are included?

North East Water provided a response to this submission on 28 June 2012.

#### 5.4.3 FORMAL REGULATOR FEEDBACK RECEIVED

The Department of Health reviewed the draft Water Plan and outlined its support for the proposed drinking water quality improvement projects for Beechworth, Bright, Eskdale, Goorambat, Harrierville, Mt Beauty, Moyhu, Oxley, Wahgunyah, Walwa, Wangaratta and Wodonga water treatment plants. The Department of Health highlighted that these projects will address existing water quality risk through the construction of additional treatment barriers.

## 6 REVENUE REQUIREMENT

### 6.1 OVERVIEW OF REVENUE REQUIREMENT

The Commission assesses and sets the Corporation’s prices by establishing the service standards and outcomes that a business proposes to deliver, and then assessing the revenue required to deliver services in a manner that meets customer needs, environmental, water quality and other requirements.

The Corporation is challenged to balance the incentive to operate efficiently and reduce costs, while undertaking necessary activities to deliver services to customers. Whilst substantial investments are required to meet regulatory standards and service growing communities, the Corporation is confident that our prices will continue to remain competitive across the State.

The revenue requirement is increasingly being influenced by capital expenditure projects. These projects directly influence the revenue requirement by increasing the Regulatory Asset Base (RAB). The RAB determines two components of the revenue requirement, being the return on RAB and the depreciation of RAB. In addition to these direct capital costs the operational expenditure required to operate the new plants is the largest driver of the real increases in operating costs.

The mechanisms for setting the Corporation’s prices can be summarised as follows.

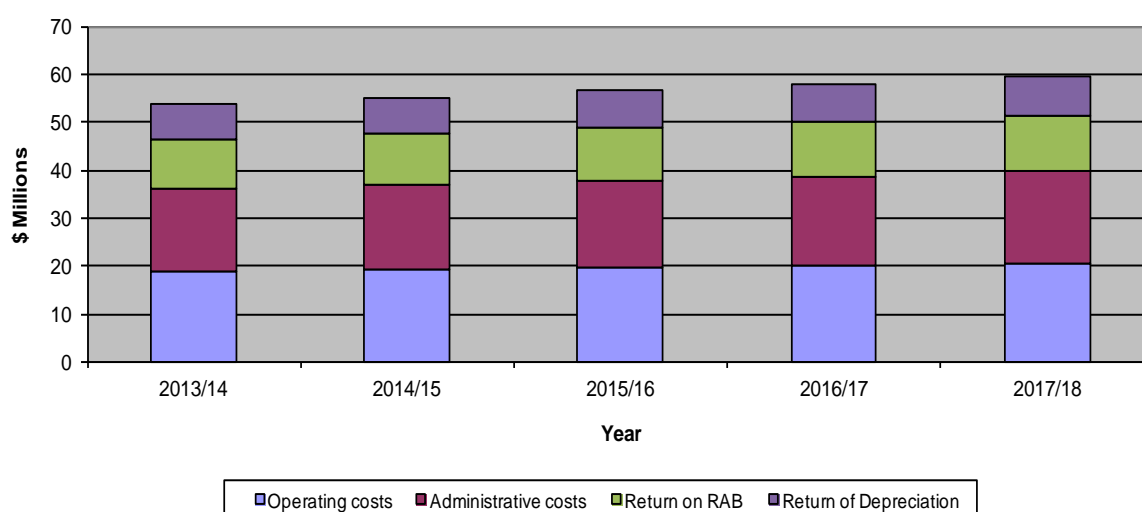
The first step involves establishing the service standards and outcomes that a business proposes to deliver over the regulatory period.

Having established the outcomes to be delivered, the ESC assesses the inputs required to deliver the service standards and outcomes.

The second step is to use the ‘building block’ approach to determine the Corporation’s revenue requirement over the regulatory period. This involves building up a business’s revenue from key components that reflect:

- operating and administrative expenditure
- a return on and of the regulatory asset value updated each year, and

**Figure 3 – Forecast revenue requirement**



Revenue Requirement Component	2013-14 \$million	2014-15 \$million	2015-16 \$million	2016-17 \$million	2017-18 \$million
Operating Costs	18.64	19.10	19.58	20.07	20.58
Administration Costs	17.34	17.74	18.14	18.57	19.01
Return on RAB	10.36	10.97	11.37	11.61	11.99
Return of Depreciation	7.11	7.53	7.80	7.97	8.23
<b>Total Revenue Requirement</b>	<b>53.46</b>	<b>55.33</b>	<b>56.89</b>	<b>58.22</b>	<b>59.82</b>

The diagram and table above summarises our estimated revenue requirement, outlining the four components used to determine the requirement, of note is the increasing proportion of the total revenue requirement associated with our capital investment program via the return on and of the regulatory asset base.

#### *RETURN ON RAB*

Under the provisions of the *Water Industry Regulatory Order (WIRO)* businesses may recover the costs of financing existing and new investments through earning a return on the value of the RAB. North East Water has applied the indicative Weighted Average Cost of Capital of 5.1% as advised by the ESC.

#### *RETURN OF DEPRECIATION*

Regulatory depreciation is calculated using the straight line method. The rate of depreciation is the average depreciation rate calculated for accounting depreciation.

The third and final step in setting prices is to allocate the required revenue across the tariff structures, based on forecast customer numbers and forecast levels of demand for water. The outputs of these calculations are the fixed and variable tariffs for the five-year period.

The financial modeling that underpins this draft water plan indicates that the capital investment program, of up to \$75 million over the five years, can be delivered through internal cash from operations of \$68 million with the remaining \$7 million being funded by additional new borrowings.

## 6.2 REGULATORY ASSET BASE (RAB)

The RAB represents a register of assets used in providing the regulated services and is used to calculate the return on investment that North East Water includes in the revenue requirement.

Debt is incurred to cover the shortfall between cash generated from operations and the capital investment program.

The value of the initial RAB (at 1 July 2004) was set by the Minister for Water, Environment and Climate Change at a value of \$80 million. Since this date the RAB has been adjusted annually in the following manner:



**Table 10 – Regulatory asset base**

	2013-14 \$million	2014-15 \$million	2015-16 \$million	2016-17 \$million	2017-18 \$million
<b>Opening RAB</b>	<b>203.2</b>	<b>215.1</b>	<b>222.9</b>	<b>227.6</b>	<b>235.2</b>
Plus – Capital Expenditure	16.14	16.38	13.61	16.57	12.29
Less Regulatory Depreciation	7.11	7.53	7.80	7.97	8.23
Less Contributions	1.05	1.05	1.05	1.05	1.05
<b>Closing RAB</b>	<b>215.12</b>	<b>222.92</b>	<b>227.68</b>	<b>235.23</b>	<b>238.23</b>

This model of regulation prescribes that all capital investments will generate a financial return, and hence flow through to customers' tariffs.

## 6.3 OPERATING AND ADMINISTRATIVE EXPENDITURE

The Corporation's ongoing commitment to delivering value to its customers underpins the forecasts to constrain business as usual operating expenditure in real terms.

As the business grows in both physical size and complexity there are constant cost pressures that must be carefully managed; further opportunities for new efficiencies become increasingly difficult to realise.

The expenditure forecasts for the five years of the *Water Plan 3* period have been prepared on the basis of remaining consistent, in real terms, with the Corporate Budget 2012-13, with the exception of the Environmental Contribution (increasing to \$2.1 million in 2013-14), employee costs (4% above CPI) and electricity (5% above CPI).

### 6.3.1 OVERVIEW OF OPERATING AND ADMINISTRATIVE EXPENDITURE

The following table outlines the operating and administrative expenditure forecasts for the *Water Plan 3* period (2013-14 to 2017-18) against the *Corporate Plan* for 2012-13.

**Table 11 – Operating and administrative expenditure**

Component	2012-13 \$million	2013-14 \$million	2014-15 \$million	2015-16 \$million	2016-17 \$million	2017-18 \$million
<b>Direct Expenses</b>						
Employees	5.38	5.60	5.82	6.06	6.30	6.55
Water Operations	5.25	5.25	5.25	5.25	5.25	5.25
Wastewater Operations	2.21	2.21	2.21	2.21	2.21	2.21
Electricity	2.59	2.72	2.86	3.00	3.15	3.31
Contracts	2.31	2.31	2.31	2.31	2.31	2.31
Reuse	0.42	0.42	0.42	0.42	0.42	0.42
Flows from Capital Expenditure	0	0.10	0.20	0.30	0.40	0.50
<b>Sub Total</b>	<b>18.20</b>	<b>18.65</b>	<b>19.11</b>	<b>19.58</b>	<b>20.06</b>	<b>20.58</b>
<b>Administration</b>						
Employees	9.43	9.81	10.20	10.61	11.04	11.48
Other	5.44	5.44	5.44	5.44	5.44	5.44
Environmental Contribution	1.58	2.08	2.08	2.08	2.08	2.08
<b>Sub Total</b>	<b>16.45</b>	<b>17.33</b>	<b>17.72</b>	<b>18.13</b>	<b>18.56</b>	<b>19.00</b>
<b>Total Expenditure</b>	<b>34.65</b>	<b>35.98</b>	<b>36.83</b>	<b>37.71</b>	<b>38.63</b>	<b>39.58</b>

**KEY DRIVERS OF OPERATING EXPENDITURE**

Business as usual operating expenditure is expected to remain relatively constant. The real increases in operating expenditure are expected to occur as a result of electricity, the increased costs of delivering the capital program, employee costs and forecast increases in the environmental contribution payment to the State Government.

We are expecting that electricity costs will increase significantly during the next *Water Plan* period following the introduction of the Federal Government's carbon pricing scheme from 1 July 2012.

Retail price indices expressed in real terms relative to 2012 (in accordance with the Water Services Association of Australia Energy Price Forecasts 2012 to 2032) indicate an increase of 20% in 2013, increasing to 43% by 2017 for the five-year period. Prices have been forecast to generally trend upwards by 5% plus CPI from year 2 for the rest of the *Water Plan* period.

**NEW OBLIGATIONS**

North East Water is committed to operational expenditure efficiencies and to this extent are proposing that only recurrent expenditure resulting from capital investments will be included as new obligations for the *Water Plan* 3 period.

**Table 12 – Annual new obligations**

	<b>2013-14</b> <b>\$million</b>	<b>2014-15</b> <b>\$million</b>	<b>2015-16</b> <b>\$million</b>	<b>2016-17</b> <b>\$million</b>	<b>2017-18</b> <b>\$million</b>
Flows from Capital Expenditure	0.10	0.20	0.30	0.40	0.50
<b>Accumulative</b>	<b>0.10</b>	<b>0.30</b>	<b>0.60</b>	<b>1.00</b>	<b>1.50</b>

The following table details the real increase in operating expenditure, as a result of capital investments (new obligations).

**Table 13 – New obligations – Five year cumulative**

<b>New Obligation</b>	<b>Commencement</b>	<b>\$million</b>
Dartmouth – Water Treatment Upgrade	2013-14	0.180
Eskdale – New Water Treatment Plant (New service)	2013-14	0.195
Whitfield – Water Treatment Upgrade	2013-14	0.205
Tungamah – Wastewater Treatment System (New service)	2014-15	0.270
Glenrowan – Wastewater Treatment System (New service)	2014-15	0.270
Oxley – Wastewater Treatment System (New service)	2014-15	0.190
Milawa – Wastewater Treatment System (New service)	2014-15	0.190
<b>Total Accumulated Obligations over the 5 Year Plan</b>		<b>1.500</b>

## 6.4 CAPITAL EXPENDITURE

North East Water's capital expenditure program outlines capital investments proposed for the next *Water Plan* period. Capital investment will allow North East Water to generate benefits for its customers and the broader community, maintain its service standards to customers and reduce risks to the Corporation and broader community, such as meeting compliance with regulatory requirements.

**Table 14 – Capital expenditure**

	<b>2013-14</b> <b>\$million</b>	<b>2014-15</b> <b>\$million</b>	<b>2015-16</b> <b>\$million</b>	<b>2016-17</b> <b>\$million</b>	<b>2017-18</b> <b>\$million</b>	<b>Total</b> <b>\$million</b>
<b>Capital Expenditure</b>	16.14	16.38	13.61	16.57	12.30	<b>75.00</b>

### 6.4.1 APPROACH TO SETTING THE CAPITAL EXPENDITURE PROGRAM

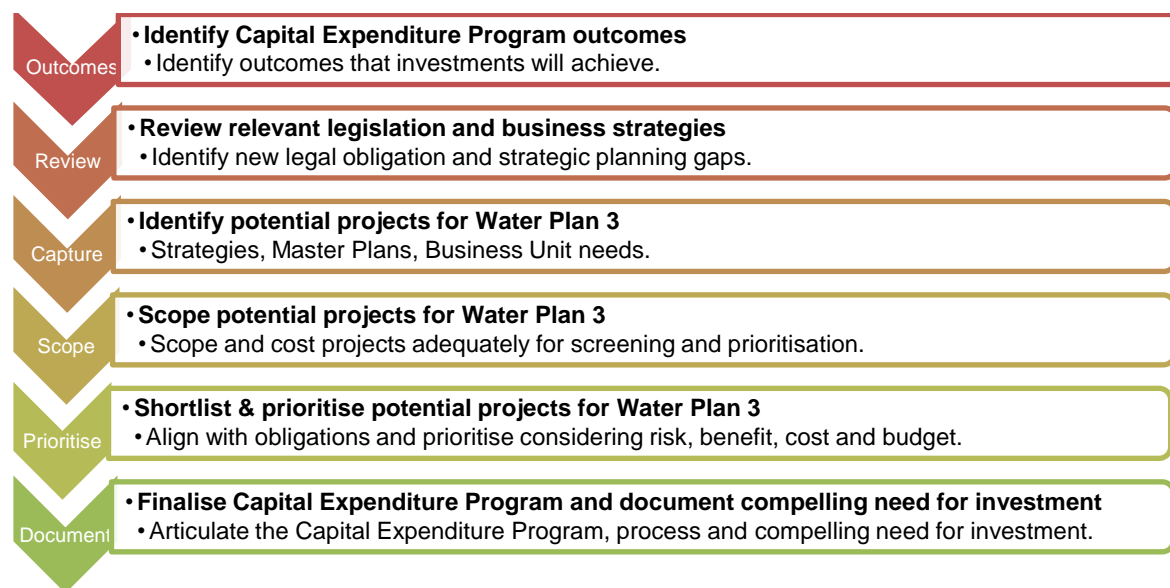
The process to develop Water Plan 3 Capital Expenditure Program has been threefold.

1. A review of relevant legislation to understand current obligations that will affect the business and subsequently the preparation of Capital Expenditure Program.
2. Identification of potential capital projects for inclusion in Capital Expenditure Program. Potential projects have been sourced from strategies, forward development plans and needs identified by individual business units.

3. Preliminary scoping of potential capital projects to allow adequate screening and prioritising. Project scoping includes articulating project need and outcome sought, output identified to achieve outcome, quantifying the risk reduction/benefit that will be achieved an urgency of the project.

Potential capital works projects have been prioritised based on their risk reduction/benefit and capital cost to demonstrate the value of the investment. The risk reduction magnitude achieved by capital investment in projects has been assessed in accordance with North East Water’s risk management framework. Risk is determined by risk likelihood of and consequence, and to ensure the risk reduction magnitude achieved by potential projects was consistent and relative across the board, the risk assessment of potential projects was reviewed by a North East Water project team.

**Figure 4: Capital Expenditure Development – Outline of Approach**

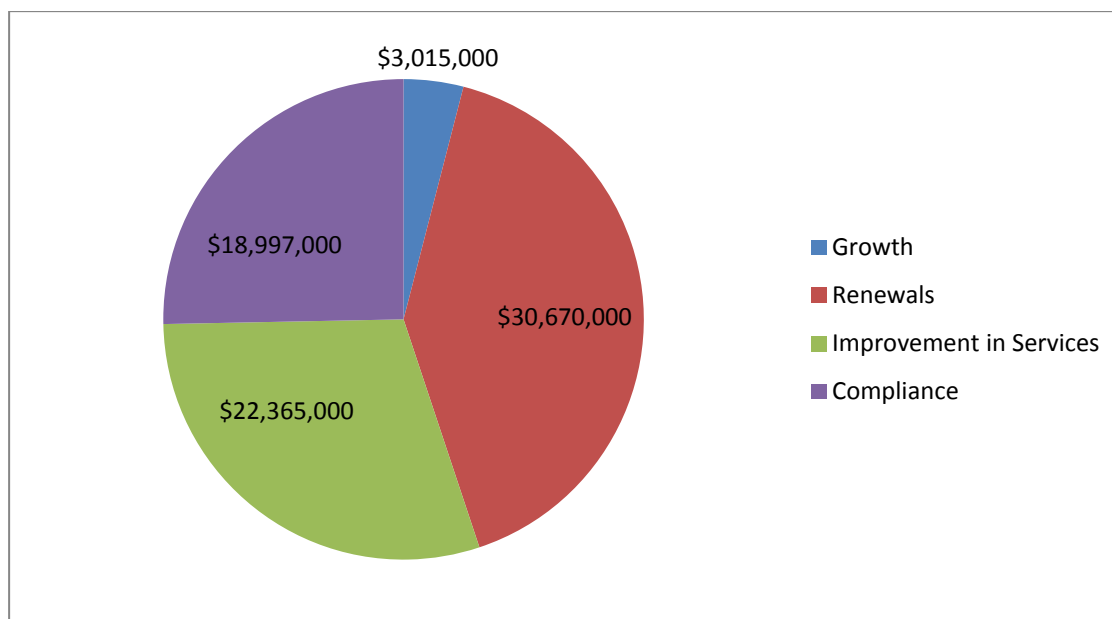


The program has been categorized, consistent with the four drivers for investment identified by the ESC in *Water Plan 3*. They are:

- growth
- renewals
- improvement in services
- compliance

Based on the initial cost estimates, the capital distribution of proposed projects across the four project outcomes is shown in Figure 5, below. This chart shows potential projects are dominated by projects delivering renewals, improvement in services and compliance outcomes.

**Figure 5 - Capital distribution of draft Water Plan 3 program across outcomes**



#### 6.4.2 ESC EXPECTATION

For the third regulatory period, the ESC expects capital expenditure to return to historic levels. Proposals for further supply augmentation projects would require a very strong justification, and would almost certainly need to be based on factors other than security of supply risk in the near term.

The ESC will assess whether each business’s proposed capital expenditure forecast would efficiently meet obligations imposed by Government (including technical regulators) and customers’ service expectations.

#### 6.4.3 RESULTS OF CUSTOMER CONSULTATION ON CAPITAL EXPENDITURE

##### WATER PLAN 3 REFERENCE GROUP

Group members were involved in the process of developing the capital expenditure program over a number of meetings. Our presentations focused on the risk-based approach we used to develop the program for *Water Plan 3* and we also sought feedback from the group on the preliminary capital program scenarios.

It was highlighted that almost 90 potential capital projects were identified for consideration in the *Water Plan 3* Capital Program, equating to a capital requirement of approximately \$130 million over the five years. The presentations also looked closely at shortlisting and prioritising potential projects, considering customer value, operational compliance and cost.

Overall the reference group members expressed their comfort with the approach to developing the *Water Plan 3* capital expenditure scenarios and ultimately supported the total capital investment of \$75 million over five years as being appropriate.

##### LOCAL GOVERNMENT TECHNICAL FORUM

We also presented our project prioritisation approach to local government representatives, who endorsed the model and the expenditure scenarios prepared.

The representatives provided feedback that growth, and growth based investments, are based on many factors outside councils’ control, such as the development-based economy. It was pointed out that therefore North East Water needed to be able to respond to the needs as they arise. We proposed an approach to catering for growth that involved implementing the extensions as they arose and then including the investment in the

following *Water Plan* (2018-23) to enable this flexibility. The representatives agreed that this would be an appropriate approach.

#### 6.4.4 OVERVIEW OF CAPITAL EXPENDITURE – CUSTOMER VALUE

An overview of the compelling need and customer/community benefits of investing in the draft *Water Plan* capital program is outlined below.

##### GROWTH:

- North East Water remains committed to addressing public health and environmental risks in communities in the region that do not currently have reticulated potable water or sewerage, with an investment of \$2.3 million to achieve priority outcomes.
- North East Water is committed to providing capacity to accommodate growth across the region. Due to the uncertainty regarding the magnitude and location of required network extensions (eg. trunk mains), we will make capital expenditure in essential investments and then recoup them in the subsequent *Water Plan 4*, rather than committing to yet to be identified service network extension across the region.

##### RENEWALS:

- North East Water will continue to provide reliable water and wastewater services to its customers across the region with ongoing investment of \$28.6 million over the five years to renew its highest risk assets, such as replacing water mains and aboveground assets, rehabilitating sewers and renewing plant and equipment.
- North East Water's facilities can increasingly be operated remotely via our SCADA system. Renewing unreliable components in the SCADA system (\$1.2 million) will enable us to continue to provide secure, reliable and cost effective services.

##### IMPROVEMENT IN SERVICES:

- Investing in more efficient aeration technology (\$0.6 million) at North East Water's largest wastewater treatment facility (West Wodonga) and infrastructure to maximise returns from reclaimed water products (\$0.1 million) will assist in constraining prices.
- Additional operational efficiencies that will ultimately benefit customers, include upgrading the Wangaratta wastewater treatment facility (stage 1 - \$1.7 million), consolidating the regional headquarters and Wodonga depot (\$0.3 million) and upgrading sludge management at the Beechworth water treatment facility (\$0.3 million).
- Key to maintaining our high levels of service across our region will be a number of technology-based investments, including the implementation of an asset management system (\$1.1 million), replacing and upgrading IT infrastructure (\$0.8 million), embracing new and emerging technology (\$0.8 million), integrating corporate systems (\$0.6 million) and preparing to upgrade the customer billing system (\$0.1 million) in early *Water Plan 4*.
- Approximately \$0.3 million is required to augment Wangaratta's supplementary groundwater supply that will ensure the water supply for Wangaratta and Glenrowan customers is secure.
- Customer and community interaction remains paramount for North East Water. We will invest \$0.5 million in technology to enhance and modernise customer access to North East Water services and key information, offering greater flexibility for customers to communicate with us.

**COMPLIANCE:**

- North East Water customers will benefit from more stringent water quality requirements from the Department of Health, which requires an investment of \$6.1 million to upgrade 10 water treatment facilities and distribution networks to ensure we meet regulatory standards for safe drinking water.
- An investment of \$1.8 million is required across the region as part of an ongoing program of dam safety risk reduction works to improve the safety of downstream communities.
- Mitigating sewer spills across the region (\$2.0 million), upgrading wastewater treatment facilities in Baranduda, Beechworth, Bright and Myrtleford (\$4.8 million), and expanding reclaimed water infrastructure at Yackandandah (\$4.0 million) will reduce the amenity and environmental risks to the respective communities.
- Communities in Wodonga and Bellbridge will benefit from waste management upgrades (\$1.2 million) to their respective water treatment facilities.
- Investing in works (\$0.7 million) in Yarrawonga and across the region will ensure North East Water’s workplace remains safe and services are maintained to our customers.

**Table 15 – Capital investment by town**

<b>Township/Customers served</b>	<b>Capital Investment</b>
<b>All (region-wide)</b>	\$40,856,500
Water distribution - Compliance with the Safe Drinking Water Act	\$500,000
Sewer Spill Mitigation - Compliance with Environment Protection Act	\$2,000,000
OHS Improvements - Compliance with Occupational Health and Safety Act	\$250,000
Water and wastewater system improvements - Compliance with Safe Drinking Water Act and Environment Protection Act	\$550,000
Distribution improvements - Reliable services	\$500,000
Enhanced customer communications - Customer interaction	\$500,000
Corporate systems Integration - Business improvement	\$575,000
Asset management system - Business improvement	\$1,092,500
Customer billing system renewal and upgrade - Business improvement	\$110,000
Water above ground assets replacements - Reliable services	\$3,781,000
Water mains replacements - Reliable services	\$9,300,000
Sewer above ground assets replacements - Reliable services	\$5,608,000
Sewer mains rehabilitation - Reliable services	\$6,900,000
IT infrastructure replacements - Business improvement	\$800,000
SCADA security - Business improvement	\$250,000
SCADA system upgrades & replacements - Business improvement	\$1,200,000
Servicing unserved communities - Social and environmental benefits	\$2,300,000
Region-wide facilities security upgrade - Business improvement	\$800,000
Major and minor plant renewals - Reliable services	\$3,000,000

<b>Township/Customers served</b>	<b>Capital Investment</b>
Embracing new and emerging technologies - Business improvement	\$840,000
<b>Baranduda</b>	\$660,000
Baranduda wastewater treatment - Compliance with Environment Protection Act	\$660,000
<b>Beechworth</b>	<b>\$2,635,000</b>
Beechworth water treatment - Optimise coagulation -Compliance with Safe Drinking Water Act	\$500,000
Beechworth wastewater treatment - Compliance with Environment Protection Act	\$1,860,000
Beechworth water treatment - Sludge management upgrade - Business improvement	\$275,000
<b>Bellbridge</b>	\$45,000
Bellbridge water treatment - Waste management - Compliance with Environment Protection Act	\$45,000
<b>Benalla</b>	\$730,000
McCall Say dam safety - Compliance with Water Industry Act	\$730,000
<b>Bright</b>	<b>\$15,540,000</b>
Bakers Gully (upper and lower) dam safety - Compliance with Water Industry Act	\$420,000
Bright wastewater treatment - Compliance with Environment Protection Act	\$1,150,000
Bright off-stream storage - Secure supply	\$6,820,000
Bright water treatment plant - Reliable services	\$4,785,000
Bright clear water storage expansion and temporary water treatment plant - Reliable services	\$2,365,000
<b>Dartmouth</b>	<b>\$200,000</b>
Tabor dam safety - Compliance with Water Industry Act	\$200,000
<b>Eskdale, Moyhu &amp; Walwa</b>	<b>\$425,500</b>
Water treatment at Eskdale, Moyhu & Walwa - Multiple barriers - Compliance with the Safe Drinking Water Act	\$425,500
<b>Goorambat</b>	<b>\$315,000</b>
Goorambat water treatment - Multiple barriers - Compliance with the Safe Drinking Water Act	\$315,000
<b>Harrietville</b>	<b>\$600,000</b>
Harrietville water treatment - Multiple barriers - Compliance with the Safe Drinking Water Act	\$600,000
<b>Mt Beauty</b>	<b>\$125,000</b>
Mt Beauty water distribution - Compliance with the Safe Drinking Water Act	\$125,000
<b>Myrtleford</b>	<b>\$1,250,000</b>
Nil Gully Basin dam safety - Compliance with Water Industry Act	\$100,000
Myrtleford wastewater treatment - Compliance with Environment Protection Act	\$1,150,000
<b>Oxley</b>	<b>\$690,000</b>
Oxley water treatment - Multiple barriers - Compliance with the Safe Drinking Water Act	\$690,000

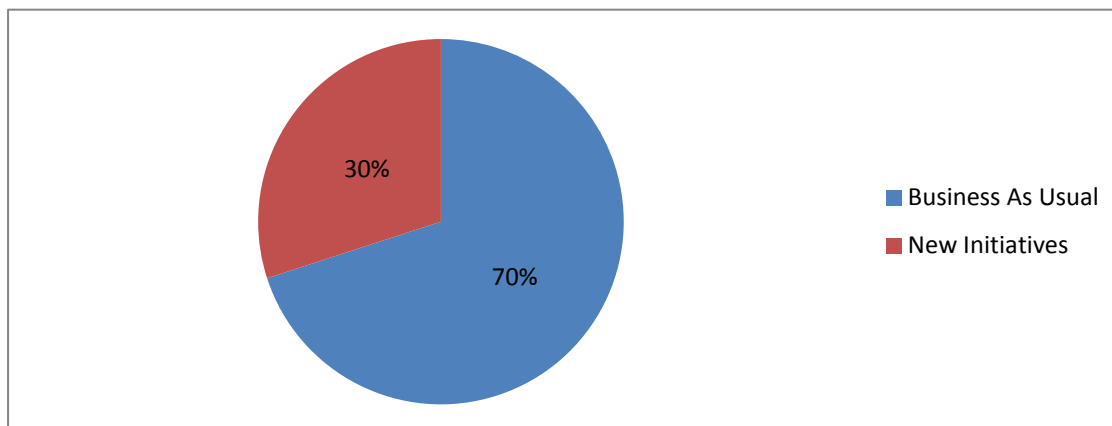


<b>Township/Customers served</b>	<b>Capital Investment</b>
<b>Rutherglen &amp; Wahgunyah</b>	<b>\$1,150,000</b>
Wahgunyah water treatment - Multiple barriers - Compliance with the Safe Drinking Water Act	\$1,150,000
<b>Tawonga</b>	<b>\$110,000</b>
Tawonga Basin dam safety - Compliance with Water Industry Act	\$110,000
<b>Wangaratta</b>	<b>\$3,171,000</b>
Wangaratta wastewater treatment - Stage 1 upgrade - Business improvement	\$1,650,000
Infrastructure to maximise reclaimed water returns - Business improvement	\$121,000
Wangaratta water treatment - Multiple barriers - Compliance with the Safe Drinking Water Act	\$550,000
Wangaratta groundwater treatment - Compliance with the Safe Drinking Water Act	\$550,000
Wangaratta groundwater - Secure supply	\$300,000
<b>Wodonga</b>	<b>\$2,222,500</b>
Wodonga wastewater treatment - Improved aeration efficiency - Business improvement	\$577,500
Regional headquarters and Wodonga depot consolidation - Business improvement	\$330,000
Wodonga water treatment - Pre-alkalinity - Compliance with the Safe Drinking Water Act	\$165,000
Wodonga water treatment - Waste management upgrade - Compliance with Environment Protection Act	\$1,150,000
<b>Yackandandah</b>	<b>\$4,245,000</b>
Commissioners Creek dam safety - Compliance with Water Industry Act	\$220,000
Yackandandah reclaimed water management - Compliance with Environment Protection Act	\$4,025,000
<b>Yarrowonga water supply</b>	<b>\$402,500</b>
Yarrowonga water treatment - Chemical storage - Compliance with the Occupational Health and Safety Act	\$402,500
<b>Total Capital Investment over the five year period</b>	<b>\$75,000,000</b>

#### 6.4.5 NEW INITIATIVES

New initiatives are defined as capital projects relating to new or changed obligations or new or changed service initiatives that will take effect after 30 June 2013.

**Figure 6 – Capital Expenditure – Business as usual versus new initiatives**



**Table 16 – New Initiatives Summary**

<b>Description</b>	<b>Capital Investment</b>
Wastewater treatment compliance	\$4,600,000
Water Treatment compliance	\$6,600,000
Reclaimed water management compliance	\$3,500,000
Dam safety compliance	\$1,700,000
Operating system improvements	\$4,100,000
Sewer spill mitigation	\$1,800,000
<b>Total New Initiatives</b>	<b>\$22,300,000</b>

#### 6.4.6 MIDPOINT REVIEW STRATEGIES

As outlined in Section 2.2, revenue recovery has emerged as a significant risk to the financial sustainability of North East Water during the current regulatory period. We achieved our forecast levels of sales volumes for the first two years of the current Water Plan period, but have not achieved the volumes forecast for year 3, and are not forecasting to achieve those determined for years 4 and 5 of the final determination.

The combination of price reform, customer behavioural change and abnormal summer weather patterns (for 2010-11 and 2011-12) has seen total sales volumes drop dramatically, significantly constraining our ability to recover our revenue requirement.

Whilst the Corporation has been able to absorb the impacts across the current water plan period, the Board of North East Water has responded by developing mitigation strategies for the Water Plan 3 period.

The ESC’s guidance on developing Water Plan 3 reinforced the need for businesses to have an appropriate framework for managing risks over the long-term, as well as ensuring that if certain events do arise then the business has the processes and plans to deal with it in an efficient manner.

To this extent the Board has endorsed the following;

- That our Regulatory submission reflects a Capital Investment Program of up to \$75 million.

- That the Corporation develops a strategy to mitigate demand volatility, within the Water Plan 3 regulatory period, to protect our cash position. Using a midpoint review, one of the following risk mitigation strategies could be enacted:
  - If our recovery of revenue requirement is being achieved, then deliver the full \$75 million Capital Investment Program.
  - If a material shortfall in operating revenue is being realised, then revise our capital investment (for years 4 and 5), to a minimum base of \$66.5 million.
  - If operating revenue is being materially exceeded, then consider price path reductions (in years four and five).

**Note:** Detailed ten year financial projections have been included in Section 9.

## 7 DEMAND

Demand forecasts are critical in calculating the price that North East Water proposes to charge customers for water. This section outlines the methodology used to prepare our demand forecasts.

### 7.1 OVERVIEW OF DEMAND FORECASTS

We have undertaken a complex process of analysing information from a number of sources to determine demand forecasts for the *Water Plan* period. These forecasts have:

- thoroughly analysed the key supply and demand factors influencing our services
- used predictions on the most current internal historical data, as well as a number of external studies conducted by Government and other water corporations, and
- taken into account developing social, economic and environmental factors influencing the services that we provide.

The outcomes from this process are:

- Residential water volumetric demand rising across the five year period by 10%
- Commercial water volumetric demand remaining constant based on our historical data trend
- Industrial water volumetric demand rising annually by 10% based on our historical data trend
- Major trade waste continuing with the historical trend of on-site efficiency and therefore reducing consumption marginally year on year.

As a result of this process we anticipate the following levels of demand over the *Water Plan* period:

**Table 17 - Water Volumes – All towns and customers (kilolitres)**

	2013-14	2014-15	2015-16	2016-17	2017-18
Residential	7,526,484	7,816,207	8,122,485	8,431,323	8,747,323
Commercial	2,218,424	2,218,424	2,218,424	2,218,424	2,218,424
Industrial	231,664	260,829	289,993	319,158	348,323
Major trade waste	1,429,076	1,399,910	1,370,746	1,341,581	1,312,416
<b>Total (kL)</b>	<b>11,405,648</b>	<b>11,695,370</b>	<b>12,001,648</b>	<b>12,310,486</b>	<b>12,626,486</b>

The Corporation's total demand has been presented in the residential, commercial, industrial and major trade waste customer groups. Major trade waste customers attract a separate water tariff designed for industrial consumers.

Acknowledging the considerable uncertainty, as we prepare for Water Plan 3, we are continuing to conduct further demand modelling. We are currently participating in a customer behaviour modelling exercise with the ESC which considers both qualitative and quantitative factors that influence consumer decision making, including social, economic, environmental and political factors. As an output of this further analysis we anticipate demand forecasts may require revision during the period to the final price determination.

#### *WATER PLAN 3 REFERENCE GROUP*

Group Reference Group members discussed the proposed approach to use a +10% forecast for demand over the 5 year Water Plan period noting that they would have assumed a more conservative approach would have been applicable. Management confirmed that the gradual forecast from current demand levels through to a

+10% scenario over five years and the proposed mitigation strategies such as the midpoint review will help to balance the potential volatility of demand and that predictions will continue to be refined during the consultation period. Members agreed that these strategies would be appropriate.

## 7.2 AVERAGE RESIDENTIAL DEMAND

Forecasts for customer demand reflect the current trend of per-property reductions in water but anticipate a slight increase in average residential consumption as we return to more historical summer climatic conditions.

Below-average temperature and above-average rainfall across the summer periods of 2010-11 and 2011-12 have affected our ability to analyse changing customer behaviour against volumetric price reform in an unrestricted and normalised climatic scenario.

**Table 18 – Average residential demand**

	2013-14	2014-15	2015-16	2016-17	2017-18
Average residential demand (kL)	175	179	184	188	192

## 7.3 CUSTOMER GROWTH

Population and connection growth rates are designed to reflect the trends established in the *Victoria In the Future* (VIF) population predictions for North East Victoria. The general trend of declining occupancy ratios and reduced average household consumption has also been incorporated in the projections.

Population and residential connection forecasts have primarily been based on the Victorian Government's *Victoria in Future* (VIF) 2008 population forecasts, with consideration also given to local knowledge, growth trends and other relevant information. This forecasting process has been applied to each of 37 towns within North East Water's region and when aggregated, this has resulted in the Corporation's average growth rates outlined in Table 19, below.

**Table 19 – Average annual growth**

	2013-14	2014-15	2015-16	2016-17	2017-18
Average annual growth	1.38%	1.18%	1.29%	1.24%	1.24%

Applying the forecast growth rates to our customer numbers results in the following segmented totals used to calculate fixed charge revenue.

**Table 20 – Forecast customer growth**

Customers	2013-14	2014-15	2015-16	2016-17	2017-18
Residential	42,954	43,511	44,134	44,743	45,361
Commercial	4,484	4,484	4,484	4,484	4,484
Industrial	494	494	494	494	494
<b>Total</b>	<b>47,922</b>	<b>48,489</b>	<b>49,112</b>	<b>49,721</b>	<b>50,339</b>

### 7.3.1 ESC EXPECTATION

The ESC expects *Water Plans* to explain the models used to derive estimates of population/customer growth. Businesses should draw on *Victoria in the Future* forecasts, Australian Bureau of Statistics data, local government forecasts and other information as required.

### 7.3.2 RESULTS OF CUSTOMER CONSULTATION ON CUSTOMER GROWTH

North East Water has consulted directly with its *Water Plan 3* Reference Group and held a series of local government technical forums.

#### WATER PLAN 3 REFERENCE GROUP

Group members noted that while the average overall growth figures seemed reasonable, North East Water would need to be mindful of spikes in specific areas and the timing of this growth. The group also reviewed the feedback from the local government technical forums and acknowledged the positive feedback.

The Corporation has the capacity to address individual development areas, but it was noted that the growth figures aim to set an average. It was also noted that as part of developing the *Water Supply Demand Strategy*, it is important to set realistic forecasts so that growth does not overtake a system’s capacity to deliver services.

#### LOCAL GOVERNMENT TECHNICAL FORUM

North East Water sought confirmation from attendees regarding the population forecasting used for the draft *Water Supply Demand Strategy* and proposed for use in the *Water Plan*.

Attendees responded that the growth forecasts were accurate and in line with their forecasts, but noted that population growth is different to connections growth, as typically there are fewer people in more houses.

## 7.4 MAJOR CUSTOMER WATER AND WASTEWATER FORECASTS

North East Water holds individual agreements with 23 major customers who discharge high-strength industrial waste to our various wastewater treatment facilities.

These forecasts in Table 21, below, have been developed based on our historical data and in consultation with our major trade waste customers. Each of these customers provided estimates of future water usage.

This draft document will be used to further consult with our major industrial customers to incorporate any refinements into our final submission.

**Table 21 – Major customer water and wastewater forecasts**

	2013-14	2014-15	2015-16	2016-17	2017-18
Water Volume (kL)	1,429,076	1,399,910	1,370,746	1,341,581	1,312,416
Waste Volume (kL)	869,282	846,850	853,228	859,788	862,618
COD*	2,367,485	2,300,253	2,335,022	2,371,319	2,381,868
SS*	611,999	590,867	597,606	604,656	604,956
TKN*	133,452	128,428	129,282	130,203	130,133
Total P*	28,808	27,678	27,856	28,044	28,048
TDS*	1,349,201	1,313,240	1,332,618	1,352,681	1,360,218
Sodium	185,074	179,695	181,663	183,724	184,071

Legend:

COD – Chemical Oxygen Demand

SS – Suspended Solids

TKN – Total Kjeldahl Nitrogen

Total P – Total Phosphorous

TDS – Total Dissolved Solids

## 8 PRICES

North East Water’s pricing represents the Corporation’s vision for the pricing of its regulated services. It has been developed to communicate our commitment to the following:

- Gradual implementation of cost-reflective pricing through the reduction in levels of cross-subsidy
- Balancing the Corporation’s revenue risk with the need to provide customers with price incentives to conserve water
- Transparent reporting of cross-subsidies where their removal would have significant negative social implications
- Ensuring communities are fully informed about the costs of providing a new service, and
- Providing appropriate cost signals to customers.

We committed to the price reform implemented over *Water Plan 2* that placed greater emphasis on volumetric charges and a reduced reliance on fixed charges. This tariff strategy will continue into *Water Plan 3*.

North East Water is proposing to smooth the price impacts on customers over the five year period. This will see the following real price increases applied consistently to all components of our tariff structures.

**Table 22 – Average annual price path for 2013-14 to 2017-18**

	2013-14	2014-15	2015-16	2016-17	2017-18
Average Annual Price Increase	2.27%	2.27%	2.27%	2.27%	2.27%

### 8.1 TARIFF STRUCTURES

Tariff structure reform is a key part of ensuring water businesses can continue to sustainably supply essential services. Tariff structures must:

- provide water users with the appropriate incentives to conserve water
- avoid unnecessary complexity in design, providing water users with a simple signal about the value of the resource, and
- provide the water business with sufficient revenue certainty during periods of drought.

### 8.2 PRICING PRINCIPLES FOR WATER VOLUMETRIC TARIFF

Our pricing policy prescribes that:

- a single water volumetric tariff will continue and be applicable to all Corporation customers except those very large industrial customers who also maintain a major trade waste agreement and are charged a separate volumetric tariff relating to their discharges
- the tariff mix of fixed and variable revenue will remain, across the regulatory period, at 65% variable to 35% fixed, and
- the water volumetric tariff reform continues to acknowledge that the recovery of costs from water and wastewater services are not individually linked to each tariff.

The following table outlines the proposed water volumetric price path for this regulatory period.

**Table 23 – Volumetric price path for 2013-14 to 2017-18**

	2013-14	2014-15	2015-16	2016-17	2017-18
Water Volumetric Tariff	\$ 2.3829	\$ 2.4370	\$ 2.4923	\$ 2.5489	\$ 2.6067
Water Volumetric Tariff – Major Customers	\$ 0.9511	\$ 0.9727	\$ 0.9948	\$ 1.0174	\$ 1.0405

### 8.3 PRICING PRINCIPLES FOR WATER FIXED SERVICE TARIFF

In setting the water fixed service tariffs for *Water Plan 2* the Corporation considered the opportunity to differentiate pricing in smaller systems to improve the cost-reflective price signals. As this option would have diluted the effect of shifting the ratio of fixed and volumetric charges to improve the conservation signal in the tariff structures, this approach was deferred for consideration in *Water Plan 3*.

We are committed to this long-term tariff principle as part of the commitment to cost-reflective pricing. This is reflected in the following table.

**Table 24 – Long-term cost recovery tariff loading (water)**

Town	Cost Recovery Tariff Loading (Long-term)
Wangaratta, Yarrawonga, Benalla, Wodonga, Baranduda, Kiewa, Tangambalanga	Base Level Tariff
Bright, Rutherglen, Wahgunyah, Beechworth, Myrtleford, Porepunkah	Base Level Tariff plus 20%
Barnawartha, Bundalong, Mt Beauty, Tawonga, Tawonga South, Chiltern, Tallangatta, Corryong, Yackandandah, Devenish, Oxley, Moyhu, Tungamah, Harrietville, Glenrowan, Springhurst, Dartmouth, St James, Goorambat, Whitfield, Walwa, Bellbridge	Base Level Tariff plus 40%

To reduce the customer impacts of this transition we will take a step towards implementing this tariff principle in *Water Plan 3* by adopting the following.

**Table 25 – Water Plan 3 cost recovery tariff loading (water)**

Town	Cost Recovery Tariff Loading (Water Plan 3)
Wangaratta, Yarrawonga, Benalla, Wodonga, Baranduda, Kiewa, Tangambalanga	Base Level Tariff
Bright, Rutherglen, Wahgunyah, Beechworth, Myrtleford, Porepunkah	Base Level Tariff plus 10%
Barnawartha, Bundalong, Mt Beauty, Tawonga, Tawonga South, Chiltern, Tallangatta, Corryong, Yackandandah, Devenish, Oxley, Moyhu, Tungamah, Harrietville, Glenrowan, Springhurst, Dartmouth, St James, Goorambat, Whitfield, Walwa, Bellbridge	Base Level Tariff plus 20%



The following table outlines the forecast 20mm connection fixed water service tariff price path for this regulatory period. As a further transitional arrangement, these tariffs achieve the target cost recovery loadings across the five-year period.

**Table 26 – Fixed tariff price path 2013-18 (water)**

20mm Connection	2013-14	2014-15	2015-16	2016-17	2017-18
Base Level Tariff	\$ 199.40	\$ 203.93	\$ 208.55	\$ 213.29	\$ 218.13
Base Level Tariff plus 10%	\$ 203.39	\$ 212.08	\$ 221.07	\$ 230.35	\$ 239.94
Base Level Tariff plus 20%	\$ 207.37	\$ 220.24	\$ 233.58	\$ 247.41	\$ 261.76

The water fixed service tariffs for the complete range of meter size connections are included in section 8.13 Tariff Schedule.

## 8.4 PRICING PRINCIPLES FOR WASTEWATER FIXED SERVICE TARIFF

In setting the wastewater fixed service tariffs the Corporation is committed to:

- Simplifying the wastewater fixed tariff structures by reducing the number of cost recovery categories from six to three, as follows:

**Table 27 - Long-term cost recovery tariff loading (wastewater)**

Town	Cost Recovery Tariff Loading (Water Plan 3)
Benalla, Baranduda, Wangaratta, Wodonga, Yarrawonga	Base Level Tariff
Beechworth, Bundalong, Bright, Chiltern, Myrtleford, Porepunkah, Rutherglen, Wahgunyah	Base Level Tariff plus 20%
Bellbridge, Corryong, Dartmouth, Mt Beauty, Tawonga, Tawonga South, Tallangatta, Yackandandah	Base Level Tariff plus 40%

The following table outlines the forecast wastewater fixed service tariffs price path for this regulatory period. As a transitional arrangement, these tariffs achieve the desired cost recovery loadings across the five-year period.

**Table 28 – Fixed tariff price path 2013-18 (wastewater)**

	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Benalla, Baranduda, Wangaratta, Wodonga, Yarrawonga</b>	\$ 228.82	\$ 234.01	\$ 239.33	\$ 244.76	\$ 250.31
<b>Beechworth, Bright, Myrtleford, Porepunkah, Rutherglen, Wahgunyah</b>	\$ 274.58	\$ 280.82	\$ 287.19	\$ 293.71	\$ 300.38
<b>Mt Beauty, Tawonga, Tawonga South</b>	\$ 284.88	\$ 301.27	\$ 317.66	\$ 334.05	\$ 350.44
<b>Chiltern</b>	\$ 292.76	\$ 294.67	\$ 296.57	\$ 298.47	\$ 300.38
<b>Tallangatta, Yackandandah, Corryong</b>	\$ 302.78	\$ 314.69	\$ 326.61	\$ 338.52	\$ 350.44
<b>Bellbridge</b>	\$ 320.34	\$ 327.61	\$ 335.05	\$ 342.65	\$ 350.44
<b>Dartmouth</b>	\$ 338.57	\$ 341.54	\$ 344.50	\$ 347.47	\$ 350.44
<b>Bundalong</b>	\$ 369.24	\$ 352.03	\$ 334.81	\$ 317.59	\$ 300.38
<b>Barnawartha</b>	\$ 379.26	\$ 372.05	\$ 364.85	\$ 357.64	\$ 350.44
<b>Milawa, Oxley, Glenrowan, Tungamah</b>	\$-	\$558.08	\$570.75	\$583.70	\$596.95

Note: The Corporation has forecast the removal of Cistern Charges from the commencement of Water Plan 3 based on customer engagement on our tariff design.

## 8.5 PRICING PRINCIPLES FOR TRADE WASTE CHARGES

North East Water currently has two categories of trade waste customers:

- Minor (takeaway shop, service station, etc), and
- Major (abattoirs, pet food manufacturing, timber processing, etc).

Minor customers receive a fixed charge for each device on their site and major customers pay volume and load-based fees for all trade waste discharged from their site.

### *NEW INDUSTRY TRADE WASTE CODE*

At the end of September 2011 the ESC issued a *Trade Waste Customer Service Code*. The code commenced on 1 January 2012 and required that water corporations develop and issue a *Trade Waste Customer Charter*. Both the code and charter stipulate that North East Water informs customers about the services it performs and the respective rights and responsibility of North East Water and customers in relation to trade waste.

A requirement of the new code is that North East Water has a defined classification process to rate a customer based on the risk their discharge poses to our sewerage system. This classification process can use any of the following:

- customer location relative to treatment plant
- volume of trade waste discharged
- nature of the customer's business activity
- nature and quality of the customer's trade waste
- compliance performance history for that customer, where available
- any risk to personal health and safety

- any risk to the sewerage system (transport or treatment)
- any risk to the quality of recycled water or biosolids from the sewerage system, and
- any risk to the environment.

All trade waste customers will be classified into one of three categories:

**1. Deemed Customers**

This category is a requirement of the code and relates to businesses that discharge small quantities of trade waste to the sewer (i.e. aquariums, dry cleaners, funeral parlours). These businesses do not need to apply for consent to discharge to sewer and there are no special fees associated.

**2. Commercial Customers (Minor)**

These comprise the majority of our existing minor trade waste customers. However, a new risk formula will be applied to these customers, which places them into one of three categories. Each category will have a set annual fee and is based on:

- the amount of trade waste they discharge to sewer (estimated from water meter)
- load of organics discharge (estimated), and
- level of pre-treatment and management in place at the site, including set pump-out frequency.

**3. Industrial Customers (Major)**

These customers cannot meet our standard discharge acceptance criteria without the need to install considerable pre-treatment.

North East Water is compliant with the requirements of this code with regard to our major trade waste customers, and is preparing to implement revised classification system to our historical minor tradewaste customers.

*MINOR TRADE WASTE CHARGES*

The following table outlines the proposed minor trade waste charges price path for this regulatory period.

**Table 29 – Minor trade waste price path 2013-14 to 2017-18**

	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
Annual Charge	\$ 139.24	\$ 142.40	\$ 145.63	\$ 148.94	\$ 152.32

**MAJOR TRADE WASTE CHARGES**

The following table outlines the proposed major trade waste charges price path for this regulatory period.

**Table 30 – Major trade waste price path 2013-14 to 2017-18**

Major Trade Waste Charges	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Trade Waste charges per unit (per kg)</b>					
Volume	\$ 1.33	\$ 1.36	\$ 1.39	\$ 1.42	\$ 1.45
Chemical Oxygen Demand	\$ 0.38	\$ 0.39	\$ 0.40	\$ 0.40	\$ 0.41
Suspended Solids	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Total Kjeldahl Nitrogen	\$ 1.24	\$ 1.27	\$ 1.29	\$ 1.32	\$ 1.35
Total Phosphorus	\$ 15.08	\$ 15.43	\$ 15.78	\$ 16.14	\$ 16.50
<b>Trade Waste charges when limit exceeded (per kg)</b>					
Total Dissolved Solids	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Oil and Grease	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Ammonia	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Sodium	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Total Oxidised Sulphur	\$ 0.72	\$ 0.73	\$ 0.75	\$ 0.77	\$ 0.78
pH	\$ 147.06	\$ 150.40	\$ 153.82	\$ 157.31	\$ 161.88

**8.6 REUSE PRICING PRINCIPLES**

The ESC, in its Water Plan 2 determination, confirmed the following principles for the sale of reclaimed water:

- Pricing must consider access to other substitutes (eg water from the environment) and customers willingness to pay
- Pricing must enable the recovery of the full cost of providing the service
- Pricing must include a variable component

North East Water is committed to maximising the value placed on reclaimed water. Consistent with the principles confirmed by the Commission, North East Water provides two fit-for-purpose reclaimed water products as described below:

**PREMIUM RECLAIMED WATER**

Premium Reclaimed Water is produced from extensive treatment, which allows a greater range of applications, such as industrial reuse and high quality irrigation water.

The price for Premium Reclaimed Water is 50% of the bulk water price.

**GENERAL RECLAIMED WATER**

General Reclaimed Water is suitable for use in irrigation in agriculture and low risk urban landscapes such as golf courses. The price for General Reclaimed Water is 30% of the bulk water price.

For those customers receiving water off-peak (during winter) the price charged will be \$50/ML.

### *TRANSITIONAL ARRANGEMENTS*

In applying these principles NEW acknowledges the diversity of systems that exist within the region and that in some instances transition agreements may need to be negotiated.

## **8.7 NEW SMALL TOWN PRICING PRINCIPLES**

The pricing for new towns requires a flexible approach that acknowledges the full cost of service delivery, and places the appropriate value on the social and environmental benefits involved in such projects.

The Corporation will implement pricing for these towns on a system-by-system basis, as part of the community's choice regarding service level options. A modified building block model is used to communicate the full cost recovery pricing. This information is then considered against the avoidable incremental operating costs, affordability considerations and the scale of environmental or public health gains. This acknowledges that in most cases the size of the system proposed, where there is insufficient economy of scale, would exclude it from proceeding on a purely commercial basis.

Each individual scheme will be assessed on its merits; the following pricing principles will apply unless this formula fails to recover at least the direct operating costs of any new scheme.

The minimum tariffs will be set to at least recover the direct operating costs of a new scheme and to derive a positive cash flow, inclusive of borrowing costs, within a 15-20 year timeframe.

### *WATER FIXED CHARGES*

Levied at a minimum of the higher standard annual charge plus 50% (e.g. \$207.37 plus 50% = \$311.05 per annum).

### *WATER VOLUMETRIC CHARGE*

Levied using the uniform tariff.

### *WASTEWATER FIXED CHARGES*

Levied at a minimum of the highest standard annual charge (recent new schemes) plus 50% (e.g. \$379.26 plus 50% = \$568.89 per annum).

### *VACANT LAND*

Levied at 50% of the applicable fixed charge.

All such new schemes will be reviewed after 10 years of operation to assess the financial performance of the scheme. The review will give consideration to the appropriateness of the removal of charges on vacant land, and opportunities to reduce the (premium applicable to) fixed charge. Subsequent reviews will form part of each regulatory submission.

## **8.8 NEW CUSTOMER CONTRIBUTIONS**

The ESC is currently consulting on New Customer Contributions (NCC) with the aim of moving to a new regime for regulating NCC from 1 July 2013, which gives water businesses the ability to negotiate a charge for providing infrastructure and other associated activities to connect new customers at specific locations. This is consistent with the statutory provisions of the Water Act 1989 (WA) and the Water Industry Act 1994 (WIA).

This is a significant shift from the current arrangements of state-wide scheduled charges and prescriptive definitions and cost recovery arrangements relating to reticulation assets and bring forwards. This change is brought about by acknowledging that the costs and complexities of connecting new customers vary by location and benefits accrue to both new and existing customers.

The proposed framework:

- (a) Moves from a prescriptive to a more flexible negotiate and arbitrate approach.
- (b) Moves the focus away from asset based pricing (focused on prescriptive categories and definitions of assets) to service capacity-based contributions.
- (c) Shifts from a simplistic uniform NCC charge to a more cost reflective NCC based on the net incremental connection costs.

The objective of the proposed framework is:

*‘To facilitate efficient and timely connection of new customers on a fair and reasonable basis, taking into account the benefit to the new customer relative to the benefits realised by other customers.’*

The proposed NCC framework will give water businesses and developers the flexibility to negotiate NCC charges on a case-by-case basis within a set of core pricing principles, or to employ standardised charges where these have been approved in a business’s water plan as being compliant with the pricing principles.

The proposed framework removes prescriptions on recoverable costs to allow innovation in connection solutions and facilitate meaningful trade-offs between capital intensive and operating intensive connection solutions. It also requires the benefits from incremental future revenue to be taken into account when setting NCC charges.

With the ESC still in the development phase of this proposal, North East Water has estimated revenue from NCC’s based on the approach in the current price determination.

## 8.9 IMPACT ANALYSIS (INDICATIVE)

The following three tables outline the annual account impacts for residential customers consuming an annual water volume of 175 kilolitres (demand is forecast constant to demonstrate the impact of price). The analysis has been conducted across the three water and wastewater fixed charge cost recovery loading categories.

**Table 31 - Base level tariffs for water and wastewater**

Component	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Water Fixed Charge</b>	\$ 194.97	\$ 199.40	\$ 203.93	\$ 208.55	\$ 213.29	\$ 218.13
<b>Water Volumetric Charge</b>	\$ 407.75	\$ 417.00	\$ 426.47	\$ 436.15	\$ 446.05	\$ 456.17
<b>Wastewater Fixed Charge</b>	\$ 223.74	\$ 228.82	\$ 234.01	\$ 239.33	\$ 244.76	\$ 250.31
<b>Total Annual Bill</b>	<b>\$ 826.46</b>	<b>\$ 845.22</b>	<b>\$ 864.41</b>	<b>\$ 884.03</b>	<b>\$ 904.10</b>	<b>\$ 924.61</b>
<b>Total Annual Increase</b>		\$ 18.76	\$ 19.19	\$ 19.62	\$ 20.07	\$ 20.51
<b>% Annual Increase</b>		2.27%	2.27%	2.27%	2.27%	2.27%

**Table 32 - Base level tariffs plus 10% water and 20% wastewater**

Component	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Water Fixed Charge</b>	\$ 194.97	\$ 203.39	\$ 212.08	\$ 221.07	\$ 230.35	\$ 239.94
<b>Water Volumetric Charge</b>	\$ 407.75	\$ 417.00	\$ 426.47	\$ 436.15	\$ 446.05	\$ 456.17
<b>Wastewater Fixed Charge</b>	\$ 268.49	\$ 274.58	\$ 280.82	\$ 287.19	\$ 293.71	\$ 300.38
<b>Total Annual Bill</b>	<b>\$ 871.21</b>	<b>\$ 894.97</b>	<b>\$ 919.37</b>	<b>\$ 944.41</b>	<b>\$ 970.11</b>	<b>\$ 996.49</b>
<b>Total Annual Increase</b>		\$ 23.76	\$ 24.40	\$ 25.04	\$ 25.70	\$ 26.38
<b>% Annual Increase</b>		2.72%	2.72%	2.72%	2.72%	2.72%

**Table 33 - Base level tariffs plus 20% water and 40% wastewater**

Component	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Water Fixed Charge</b>	\$ 194.97	\$ 207.37	\$ 220.24	\$ 233.58	\$ 247.41	\$ 261.76
<b>Water Volumetric Charge</b>	\$ 407.75	\$ 417.00	\$ 426.47	\$ 436.15	\$ 446.05	\$ 456.17
<b>Wastewater Fixed Charge</b>	\$ 290.86	\$ 302.78	\$ 314.69	\$ 326.61	\$ 338.52	\$ 350.44
<b>Total Annual Bill</b>	<b>\$ 893.58</b>	<b>\$ 927.15</b>	<b>\$ 961.40</b>	<b>\$ 996.34</b>	<b>\$1,031.98</b>	<b>\$1,068.37</b>
<b>Total Annual Increase</b>		\$ 33.57	\$ 34.25	\$ 34.94	\$ 35.64	\$ 36.39
<b>% Annual Increase</b>		3.76%	3.69%	3.63%	3.57%	3.53%

The following three tables outline the annual account impacts for residential customers, receiving a single water service, consuming an annual water volume of 175 kilolitres (demand is forecast constant to demonstrate the impact of price).

**Table 34 - Base level tariffs for water**

Component	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Water Fixed Charge</b>	\$ 194.97	\$ 199.40	\$ 203.93	\$ 208.55	\$ 213.29	\$ 218.13
<b>Water Volumetric Charge</b>	\$ 407.75	\$ 417.00	\$ 426.47	\$ 436.15	\$ 446.05	\$ 456.17
<b>Total Annual Bill</b>	<b>\$ 602.72</b>	<b>\$ 616.40</b>	<b>\$ 630.40</b>	<b>\$ 644.70</b>	<b>\$ 659.34</b>	<b>\$ 674.30</b>
<b>Total Annual Increase</b>		\$ 13.68	\$ 14.00	\$ 14.30	\$ 14.64	\$ 14.96
<b>% Annual Increase</b>		2.27%	2.27%	2.27%	2.27%	2.27%

**Table 35 - Base level tariffs plus 10% water**

Component	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Water Fixed Charge</b>	\$ 194.97	\$ 203.39	\$ 212.08	\$ 221.07	\$ 230.35	\$ 239.94
<b>Water Volumetric Charge</b>	\$ 407.75	\$ 417.00	\$ 426.47	\$ 436.15	\$ 446.05	\$ 456.17
<b>Total Annual Bill</b>	<b>\$ 602.72</b>	<b>\$ 620.39</b>	<b>\$ 638.55</b>	<b>\$ 657.22</b>	<b>\$ 676.40</b>	<b>\$ 696.11</b>
<b>Total Annual Increase</b>		\$ 17.67	\$ 18.16	\$ 18.67	\$ 19.18	\$ 19.71
<b>% Annual Increase</b>		2.93%	2.93%	2.92%	2.92%	2.91%

**Table 36 - Base level tariffs plus 20% water**

Component	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Water Fixed Charge</b>	\$ 194.97	\$ 207.37	\$ 220.24	\$ 233.58	\$ 247.41	\$ 261.76
<b>Water Volumetric Charge</b>	\$ 407.75	\$ 417.00	\$ 426.47	\$ 436.15	\$ 446.05	\$ 456.17
<b>Total Annual Bill</b>	<b>\$ 602.72</b>	<b>\$ 624.37</b>	<b>\$ 646.71</b>	<b>\$ 669.73</b>	<b>\$ 693.46</b>	<b>\$ 717.93</b>
<b>Total Annual Increase</b>		\$ 21.65	\$ 22.34	\$ 23.02	\$ 23.73	\$ 24.47
<b>% Annual Increase</b>		3.59%	3.58%	3.56%	3.54%	3.53%

North East Water proposes to apply the real average price increases consistently across all tariffs and charges with the exception of miscellaneous charges increasing by the applicable CPI only.

## 8.10 MISCELLANEOUS CHARGES

Miscellaneous charges cover a wide spectrum of services including water tapping fees, new house connections, and receipt of trucked waste from septic tanks into our wastewater treatment plants.

North East Water's Board supported the ESC's approach to regulating these charges by determining the 11 fees and charges that contribute 80% of miscellaneous revenue. It was then recommended that all other charges should be based on cost recovery principles. Please refer to the core miscellaneous fees and charges outlined in section 8.13 Tariff Schedule.

## 8.11 FORM OF PRICE CONTROL

The Corporation supports the use of explicit price controls, through a price cap, for the regulation of pricing. This approach minimises the extent to which actual prices can vary from forecast prices.

While this approach has a slightly higher risk profile, the benefits of increased community confidence, through price certainty, and the incentives it provides for efficiency internally, outweigh the risk.

## 8.12 ADJUSTING PRICES

The Corporation values the certainty of a five-year price determination, acknowledging the confidence it creates for communities and investors. Notwithstanding this, there could be events, currently unknown, that require adjustment to the pricing determination.



## 8.13 TARIFF SCHEDULE

The following table outlines the complete schedule of North East Water regulated tariffs and charges.

**Table 37 – Regulated tariffs and charged for 2013-18**

Tariff	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Water - Volumetric Charges (per kL)</b>					
Water Usage - All	\$ 2.3829	\$ 2.4370	\$ 2.4923	\$ 2.5489	\$ 2.6067
Water Usage - Major Customers	\$ 0.9511	\$ 0.9727	\$ 0.9948	\$ 1.0174	\$ 1.0405
<b>Water – fixed service charges (per annum)</b>					
Wangaratta, Yarrawonga, Benalla, Wodonga, Baranduda, Kiewa, Tangambalanga					
20mm connection	\$ 199.40	\$ 203.93	\$ 208.55	\$ 213.29	\$ 218.13
25mm connection	\$ 311.61	\$ 318.68	\$ 325.92	\$ 333.32	\$ 340.88
32mm connection	\$ 510.56	\$ 522.15	\$ 534.00	\$ 546.12	\$ 558.52
40mm connection	\$ 797.81	\$ 815.92	\$ 834.44	\$ 853.38	\$ 872.75
50mm connection	\$ 1,246.55	\$ 1,274.84	\$ 1,303.78	\$ 1,333.38	\$ 1,363.65
80mm connection	\$ 3,192.28	\$ 3,263.72	\$ 3,337.81	\$ 3,413.58	\$ 3,491.06
100mm connection	\$ 4,987.37	\$ 5,099.56	\$ 5,215.32	\$ 5,333.71	\$ 5,454.78
150mm connection	\$ 11,219.38	\$ 11,474.06	\$ 11,734.52	\$ 12,000.89	\$ 12,273.31
200mm connection	\$ 19,945.63	\$ 20,398.40	\$ 20,861.44	\$ 21,335.00	\$ 21,819.30
250mm connection	\$ 31,165.06	\$ 31,872.50	\$ 32,596.01	\$ 33,335.94	\$ 34,092.67
300mm connection	\$ 44,877.70	\$ 45,896.43	\$ 46,938.28	\$ 48,003.78	\$ 49,093.46
<b>Water – fixed service charges (per annum)</b>					
Bright, Rutherglen, Wahgunyah, Beechworth, Myrtleford, Porepunkah					
20mm connection	\$ 203.39	\$ 212.08	\$ 221.07	\$ 230.35	\$ 239.94
25mm connection	\$ 317.84	\$ 331.43	\$ 345.47	\$ 359.98	\$ 374.97
32mm connection	\$ 520.77	\$ 543.03	\$ 566.04	\$ 589.81	\$ 614.37
40mm connection	\$ 813.76	\$ 848.55	\$ 884.50	\$ 921.65	\$ 960.03
50mm connection	\$ 1,271.48	\$ 1,325.84	\$ 1,382.01	\$ 1,440.05	\$ 1,500.01
80mm connection	\$ 3,255.10	\$ 3,394.27	\$ 3,538.08	\$ 3,686.66	\$ 3,840.17
100mm connection	\$ 5,086.10	\$ 5,303.54	\$ 5,528.24	\$ 5,760.41	\$ 6,000.26
150mm connection	\$ 11,443.77	\$ 11,933.02	\$ 12,438.59	\$ 12,960.97	\$ 13,500.65
200mm connection	\$ 20,344.54	\$ 21,214.33	\$ 22,113.13	\$ 23,041.80	\$ 24,001.23
250mm connection	\$ 31,788.36	\$ 33,147.40	\$ 34,551.77	\$ 36,002.82	\$ 37,501.93

<b>Tariff</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
300mm connection	\$ 45,775.26	\$ 47,760.29	\$ 49,754.57	\$ 51,844.08	\$ 54,002.81
<b>Water – fixed service charges (per annum)</b>					
Barnawartha, Bundalong, Mt Beauty, Tawonga, Tawonga South, Chiltern, Tallangatta, Corryong, Yackandandah, Devenish, Oxley, Moyhu, Tungamah, Harrietville, Glenrowan, Springhurst, Dartmouth, St James, Goorambat, Whitfield, Walwa, Bellbridge					
20mm connection	\$ 207.37	\$ 220.24	\$ 233.58	\$ 247.41	\$ 261.76
25mm connection	\$ 324.07	\$ 344.18	\$ 365.03	\$ 386.65	\$ 409.06
32mm connection	\$ 530.98	\$ 563.92	\$ 598.08	\$ 633.50	\$ 670.22
40mm connection	\$ 829.72	\$ 881.19	\$ 934.57	\$ 989.92	\$ 1,047.30
50mm connection	\$ 1,296.41	\$ 1,376.83	\$ 1,460.24	\$ 1,546.72	\$ 1,636.37
80mm connection	\$ 3,318.93	\$ 3,524.82	\$ 3,738.34	\$ 3,959.75	\$ 4,189.28
100mm connection	\$ 5,185.83	\$ 5,507.53	\$ 5,841.16	\$ 6,187.10	\$ 6,545.74
150mm connection	\$ 11,668.15	\$ 12,391.98	\$ 13,142.66	\$ 13,921.04	\$ 14,727.98
200mm connection	\$ 20,743.46	\$ 22,030.27	\$ 23,364.81	\$ 24,748.60	\$ 26,183.16
250mm connection	\$ 32,411.66	\$ 34,422.31	\$ 36,507.53	\$ 38,669.69	\$ 40,911.20
300mm connection	\$ 46,672.81	\$ 49,568.14	\$ 52,570.87	\$ 55,684.38	\$ 58,912.15
<b>Wastewater fixed service charges (per annum)</b>					
Benalla, Baranduda, Wangaratta, Wodonga, Yarrawonga	\$ 228.82	\$ 234.01	\$ 239.33	\$ 244.76	\$ 250.31
Beechworth, Bright, Myrtleford, Porepunkah, Rutherglen, Wahgunyah	\$ 274.58	\$ 280.82	\$ 287.19	\$ 293.71	\$ 300.38
Mt Beauty Tawonga, Tawonga South	\$ 284.88	\$ 301.27	\$ 317.66	\$ 334.05	\$ 350.44
Chiltern	\$ 292.76	\$ 294.67	\$ 296.57	\$ 298.47	\$ 300.38
Tallangatta, Yackandandah, Corryong	\$ 302.78	\$ 314.69	\$ 326.61	\$ 338.52	\$ 350.44
Bellbridge	\$ 320.34	\$ 327.61	\$ 335.05	\$ 342.65	\$ 350.44
Dartmouth	\$ 338.57	\$ 341.54	\$ 344.50	\$ 347.47	\$ 350.44
Bundalong	\$ 369.24	\$ 352.03	\$ 334.81	\$ 317.59	\$ 300.38
Barnawartha	\$ 379.26	\$ 372.05	\$ 364.85	\$ 357.64	\$ 350.44
Milawa, Oxley, Glenrowan, Tungamah	\$ -	\$ 558.08	\$ 570.75	\$ 583.70	\$ 596.95
<b>Trade Waste charges per unit (per kg)</b>					

<b>Tariff</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
Volume	\$ 1.33	\$ 1.36	\$ 1.39	\$ 1.42	\$ 1.45
Chemical Oxygen Demand	\$ 0.38	\$ 0.39	\$ 0.40	\$ 0.40	\$ 0.41
Suspended Solids	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Total Kjeldahl Nitrogen	\$ 1.24	\$ 1.27	\$ 1.29	\$ 1.32	\$ 1.35
Total Phosphorus	\$ 15.08	\$ 15.43	\$ 15.78	\$ 16.14	\$ 16.50
<b>Trade Waste charges used to calculate the penalty</b>					
Total Dissolved Solids	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Oil and Grease	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Ammonia	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Sodium	\$ 0.10	\$ 0.10	\$ 0.11	\$ 0.11	\$ 0.11
Total Oxidised Sulphur	\$ 0.72	\$ 0.73	\$ 0.75	\$ 0.77	\$ 0.78
pH	\$ 147.06	\$ 150.40	\$ 153.82	\$ 157.31	\$ 161.88
<b>New Customer contributions – water (per lot)</b>					
To be determined					
<b>New Customer contributions – wastewater (per lot)</b>					
To be determined					
<b>Core Miscellaneous fees and charges</b>					
Information statements	\$ 55.70	\$ 55.70	\$ 55.70	\$ 55.70	\$ 55.70
Special meter readings – tenants	\$ 27.85	\$ 27.85	\$ 27.85	\$ 27.85	\$ 27.85
Septic disposal charge (per kL)	\$ 27.85	\$ 27.85	\$ 27.85	\$ 27.85	\$ 27.85
Septic disposal charge – portable	\$ 22.10	\$ 22.10	\$ 22.10	\$ 22.10	\$ 22.10
Wastewater connection – standard residential	\$ 176.10	\$ 176.10	\$ 176.10	\$ 176.10	\$ 176.10
Wastewater connection – other	\$ 231.10	\$ 231.10	\$ 231.10	\$ 231.10	\$ 231.10
Wastewater connection alterations	\$ 153.90	\$ 153.90	\$ 153.90	\$ 153.90	\$ 153.90

## 9 FINANCIAL PROJECTIONS – 10 YEARS

Consistent with the expectations of the ESC, North East Water has prepared financial statements to support its Water Plan submission that include forward projections for 10 years. The forecasts for the period 2018-19 to 2022-23, representing the Water Plan 4 period, are indicative at time of preparing this submission and will require validation as we commence preparations for the next water planning period.

### Budgeted Operating Statement For the period ending 30 June 2023

Category	Account Group	Forecast 2012-13 '000	WP3 Projections					WP4 Projections						
			Budget 2013-14 '000	Budget 2014-15 '000	Budget 2015-16 '000	Budget 2016-17 '000	Budget 2017-18 '000	Budget 2018-19 '000	Budget 2019-20 '000	Budget 2020-21 '000	Budget 2021-22 '000	Budget 2022-23 '000		
<b>Income</b>														
<b>Water</b>														
	Fixed Charges	10,838	11,293	11,743	12,220	12,711	13,222	13,635	14,029	14,415	14,813	15,150		
	Volume Charges	24,328	25,182	26,502	27,909	29,373	30,908	31,553	32,210	32,884	33,555	34,087		
		35,166	36,475	38,245	40,129	42,084	44,130	45,188	46,239	47,299	48,368	49,237		
<b>Wastewater</b>														
	Fixed Charges	10,486	10,404	11,064	11,479	11,901	12,339	12,624	12,917	13,230	13,530	13,823		
	Tradewaste Charges	2,883	2,909	3,005	3,105	3,186	3,268	3,303	3,338	3,374	3,410	3,447		
	Re-use Revenue	450	426	426	426	426	426	426	426	426	426	426		
		13,819	13,739	14,495	15,010	15,513	16,033	16,353	16,681	17,030	17,366	17,696		
<b>Non Operating Revenue</b>														
	Developer Contributions - Cash	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055		
	Developer Contributions - Non Cash	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000		
	Other Income	950	950	950	950	950	950	950	950	950	950	950		
	Interest Income	6	9	19	15	9	5	17	13	9	8	18		
	Grants and Contributions	0	0	0	0	0	0	0	0	0	0	0		
	Profit/(Loss) on Assets Disposed	0	0	0	0	0	0	0	0	0	0	0		
		5,011	5,014	5,024	5,020	5,014	5,010	5,022	5,018	5,014	5,013	5,023		
	<b>Total Income</b>	<b>53,996</b>	<b>55,228</b>	<b>57,764</b>	<b>60,159</b>	<b>62,611</b>	<b>65,173</b>	<b>66,563</b>	<b>67,938</b>	<b>69,343</b>	<b>70,747</b>	<b>71,956</b>		
<b>Expenditure</b>														
<b>Operations</b>														
	Employee Expenses	5,389	5,605	5,829	6,062	6,304	6,557	6,819	7,092	7,375	7,670	7,977		
	Electricity	2,595	2,725	2,861	3,004	3,154	3,312	3,411	3,514	3,619	3,728	3,839		
	Service Contracts	2,315	2,315	2,315	2,315	2,315	2,315	2,315	2,315	2,315	2,315	2,315		
	Direct - Wastewater	2,215	2,215	2,215	2,215	2,215	2,215	2,215	2,215	2,215	2,215	2,215		
	Direct - Water	5,254	5,254	5,254	5,254	5,254	5,254	5,254	5,254	5,254	5,254	5,254		
	Re-Use	426	426	426	426	426	426	426	426	426	426	426		
	Flow on from Cap_Ex		100	200	300	400	500	623	791	1,011	1,221	1,487		
		18,194	18,640	19,100	19,576	20,068	20,579	21,063	21,607	22,215	22,829	23,513		
<b>Administration</b>														
	Employee Expenses	9,437	9,814	10,207	10,615	11,040	11,482	11,941	12,418	12,915	13,432	13,969		
	Environmental Contribution	1,580	2,083	2,083	2,083	2,083	2,083	2,951	2,951	2,951	2,951	2,951		
	Other Expenses	5,446	5,446	5,446	5,446	5,446	5,446	5,446	5,446	5,446	5,446	5,446		
		16,463	17,343	17,736	18,144	18,569	19,011	20,338	20,815	21,312	21,829	22,366		
<b>Financing</b>														
	Interest Expense	2,497	3,559	3,810	4,084	4,055	3,865	3,640	3,711	3,815	4,002	4,344		
	Financial Accommodation Levy	398	662	784	824	887	931	799	832	936	1,070	1,141		
	Dividend	0	0	0	0	0	0	0	0	0	0	0		
		2,895	4,221	4,594	4,908	4,942	4,796	4,439	4,543	4,751	5,072	5,485		
	<b>Total Expenditure</b>	<b>37,552</b>	<b>40,204</b>	<b>41,430</b>	<b>42,628</b>	<b>43,579</b>	<b>44,386</b>	<b>45,840</b>	<b>46,965</b>	<b>48,278</b>	<b>49,730</b>	<b>51,364</b>		
<b>Net Result before Depreciation</b>		<b>16,444</b>	<b>15,024</b>	<b>16,334</b>	<b>17,531</b>	<b>19,032</b>	<b>20,787</b>	<b>20,723</b>	<b>20,973</b>	<b>21,065</b>	<b>21,017</b>	<b>20,592</b>		
	Depreciation	21,765	22,508	23,075	23,612	24,098	24,541	25,480	26,096	26,765	27,502	28,201		
<b>Net Result before Income Tax</b>		<b>(5,321)</b>	<b>(7,484)</b>	<b>(6,741)</b>	<b>(6,081)</b>	<b>(5,066)</b>	<b>(3,754)</b>	<b>(4,757)</b>	<b>(5,123)</b>	<b>(5,700)</b>	<b>(6,485)</b>	<b>(7,609)</b>		
	Income Tax Expense/(Revenue)	(1,596)	(2,245)	(2,022)	(1,824)	(1,520)	(1,126)	(1,427)	(1,537)	(1,710)	(1,946)	(2,283)		
<b>Net Result</b>		<b>(3,725)</b>	<b>(5,239)</b>	<b>(4,719)</b>	<b>(4,257)</b>	<b>(3,546)</b>	<b>(2,628)</b>	<b>(3,330)</b>	<b>(3,586)</b>	<b>(3,990)</b>	<b>(4,540)</b>	<b>(5,326)</b>		

## Budgeted Balance Sheet

For the period ending 30 June 2023

Category	Account Group	Forecast 2012-13 '000	WP3 Projections					WP4 Projections				
			Budget 2013-14 '000	Budget 2014-15 '000	Budget 2015-16 '000	Budget 2016-17 '000	Budget 2017-18 '000	Budget 2018-19 '000	Budget 2019-20 '000	Budget 2020-21 '000	Budget 2021-22 '000	Budget 2022-23 '000
<b>Assets</b>												
<b>Current Assets</b>												
	Cash and Investments	291	642	490	307	167	560	418	310	269	591	261
	Debtors	4,996	4,996	4,996	4,996	4,996	4,996	4,996	4,996	4,996	4,996	4,996
	Accrued Income	4,868	4,868	4,868	4,868	4,868	4,868	4,868	4,868	4,868	4,868	4,868
	Livestock	457	457	457	457	457	457	457	457	457	457	457
	Inventory	141	141	141	141	141	141	141	141	141	141	141
	<b>Total Current Assets</b>	<b>10,753</b>	<b>11,104</b>	<b>10,952</b>	<b>10,769</b>	<b>10,629</b>	<b>11,022</b>	<b>10,880</b>	<b>10,772</b>	<b>10,731</b>	<b>11,053</b>	<b>10,723</b>
<b>Non Current Assets</b>												
	Receivables	27	14	0	0	0	0	0	0	0	0	0
	Land and Buildings	34,663	34,371	34,230	34,086	33,779	33,473	33,185	33,157	32,898	32,585	32,273
	Plant and Equipment	5,197	5,153	5,039	4,855	4,600	4,274	3,024	1,570	1,168	1,565	1,843
	Infrastructure Assets	654,309	655,344	651,453	645,019	641,776	633,930	630,478	631,547	629,448	631,459	624,114
	Intangible Assets	2,821	2,689	3,148	2,912	2,190	1,422	698				
	Work in Progress	10,963	10,963	10,963	10,963	10,963	10,963	10,963	10,963	10,963	10,963	10,963
	Deferred Tax Assets	37,660	37,660	37,660	37,660	37,660	37,660	37,660	37,660	37,660	37,660	37,660
	<b>Total Non Current Assets</b>	<b>745,640</b>	<b>746,194</b>	<b>742,493</b>	<b>735,495</b>	<b>730,968</b>	<b>721,722</b>	<b>716,008</b>	<b>714,897</b>	<b>712,137</b>	<b>714,232</b>	<b>706,853</b>
	<b>TOTAL ASSETS</b>	<b>756,393</b>	<b>757,298</b>	<b>753,445</b>	<b>746,264</b>	<b>741,597</b>	<b>732,744</b>	<b>726,888</b>	<b>725,669</b>	<b>722,868</b>	<b>725,285</b>	<b>717,576</b>
<b>Liabilities</b>												
<b>Current Liabilities</b>												
	Creditors	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194	1,194
	Accrued Expenses	1,322	1,322	1,322	1,322	1,322	1,322	1,322	1,322	1,322	1,322	1,322
	Lease Liability	167	167	167	167	167	167	167	167	167	167	167
	Borrowings - Current	5,500	9,500	12,000	10,500	7,500	11,000	12,500	14,500	11,000	17,500	13,500
	Employee Provisions	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176	1,176
	Retentions and Deposits	900	900	900	900	900	900	900	900	900	900	900
	<b>Total Current Liabilities</b>	<b>10,259</b>	<b>14,259</b>	<b>16,759</b>	<b>15,259</b>	<b>12,259</b>	<b>15,759</b>	<b>17,259</b>	<b>19,259</b>	<b>15,759</b>	<b>22,259</b>	<b>18,259</b>
<b>Non Current Liabilities</b>												
	Borrowings - Non Current	47,000	51,000	51,000	51,000	54,000	45,000	42,000	43,500	49,500	51,500	55,000
	Lease Liability	176	176	176	176	176	176	176	176	176	176	176
	Employee Provisions	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232	2,232
	Deferred Tax Liabilities	140,355	138,499	136,865	135,441	134,320	133,595	132,569	131,436	130,125	128,582	126,699
	Retentions and Deposits	84	84	84	84	84	84	84	84	84	84	84
	<b>Total Non Current Liabilities</b>	<b>189,847</b>	<b>191,991</b>	<b>190,357</b>	<b>188,933</b>	<b>190,812</b>	<b>181,087</b>	<b>177,061</b>	<b>177,428</b>	<b>182,117</b>	<b>182,574</b>	<b>184,191</b>
	<b>TOTAL LIABILITIES</b>	<b>200,106</b>	<b>206,250</b>	<b>207,116</b>	<b>204,192</b>	<b>203,071</b>	<b>196,846</b>	<b>194,320</b>	<b>196,687</b>	<b>197,876</b>	<b>204,833</b>	<b>202,450</b>
	<b>NET ASSETS</b>	<b>556,287</b>	<b>551,048</b>	<b>546,329</b>	<b>542,072</b>	<b>538,526</b>	<b>535,898</b>	<b>532,568</b>	<b>528,982</b>	<b>524,992</b>	<b>520,452</b>	<b>515,126</b>
<b>Equity</b>												
	Asset Revaluation Reserve	166,736	166,736	166,736	166,736	166,736	166,736	166,736	166,736	166,736	166,736	166,736
	Contributed Capital	261,156	261,156	261,156	261,156	261,156	261,156	261,156	261,156	261,156	261,156	261,156
	Retained Earnings	128,395	123,156	118,437	114,180	110,634	108,006	104,676	101,090	97,100	92,560	87,234
	<b>TOTAL EQUITY</b>	<b>556,287</b>	<b>551,048</b>	<b>546,329</b>	<b>542,072</b>	<b>538,526</b>	<b>535,898</b>	<b>532,568</b>	<b>528,982</b>	<b>524,992</b>	<b>520,452</b>	<b>515,126</b>

## Budgeted Cashflow Statement

For the period ending 30 June 2023

Category	Account Group	Forecast 2012-13 '000	WP 3 Projections					WP 4 Projections				
			Budget 2013-14 '000	Budget 2014-15 '000	Budget 2015-16 '000	Budget 2016-17 '000	Budget 2017-18 '000	Budget 2018-19 '000	Budget 2019-20 '000	Budget 2020-21 '000	Budget 2021-22 '000	Budget 2022-23 '000
<b>Cash from Operating Activities</b>												
	Receipts from Customers	49,935	51,165	53,691	56,088	58,547	61,115	62,493	63,873	65,279	66,685	67,882
	Customer Cash Contributions	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055
	Government Grants and Contributions	0	0	0	0	0	0	0	0	0	0	0
	Payments to Suppliers & Employees	(33,077)	(33,900)	(34,753)	(35,637)	(36,554)	(37,507)	(38,450)	(39,471)	(40,576)	(41,707)	(42,928)
	Payments to Government	(1,978)	(2,745)	(2,867)	(2,907)	(2,970)	(3,014)	(3,750)	(3,783)	(3,887)	(4,021)	(4,092)
	Interest Received	6	9	19	15	9	5	17	13	9	8	18
	Interest Paid	(2,497)	(3,559)	(3,810)	(4,084)	(4,055)	(3,865)	(3,640)	(3,711)	(3,815)	(4,002)	(4,344)
	<b>Net Cash Inflows from Operating Activities</b>	<b>13,444</b>	<b>12,025</b>	<b>13,335</b>	<b>14,530</b>	<b>16,032</b>	<b>17,789</b>	<b>17,725</b>	<b>17,976</b>	<b>18,065</b>	<b>18,018</b>	<b>17,591</b>
<b>Cash from Investing Activities</b>												
	Payments for Property, Plant & Equipment	(42,000)	(20,074)	(16,387)	(13,613)	(16,572)	(12,296)	(16,767)	(21,984)	(21,006)	(26,596)	(17,821)
	Proceeds from sale of non-current assets	500	500	500	500	500	500	500	500	500	500	500
	<b>Net Cash Inflows from Investing Activities</b>	<b>(41,500)</b>	<b>(19,574)</b>	<b>(15,887)</b>	<b>(13,113)</b>	<b>(16,072)</b>	<b>(11,796)</b>	<b>(16,267)</b>	<b>(21,484)</b>	<b>(20,506)</b>	<b>(26,096)</b>	<b>(17,321)</b>
<b>Cash from Financing Activities</b>												
	Proceeds from Borrowings	32,250	8,000	6,500	6,500	8,000	0	7,500	11,500	10,500	12,500	12,500
	Repayment of Borrowings	(4,000)	0	(4,000)	(8,000)	(8,000)	(5,500)	(9,000)	(8,000)	(8,000)	(4,000)	(13,000)
	Repayment of Finance Leases	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
	Government Capital Contributions	0	0	0	0	0	0	0	0	0	0	0
	<b>Net Cash Inflows from Financing Activities</b>	<b>28,150</b>	<b>7,900</b>	<b>2,400</b>	<b>(1,600)</b>	<b>(100)</b>	<b>(5,600)</b>	<b>(1,600)</b>	<b>3,400</b>	<b>2,400</b>	<b>8,400</b>	<b>(600)</b>
	<b>Net Increase/(Decrease) in Cash Held</b>	<b>94</b>	<b>351</b>	<b>(152)</b>	<b>(183)</b>	<b>(140)</b>	<b>393</b>	<b>(142)</b>	<b>(108)</b>	<b>(41)</b>	<b>322</b>	<b>(330)</b>
	<b>Cash at the Beginning of the Financial Year</b>	<b>197</b>	<b>291</b>	<b>642</b>	<b>490</b>	<b>307</b>	<b>167</b>	<b>560</b>	<b>418</b>	<b>310</b>	<b>269</b>	<b>591</b>
	<b>Cash at the End of the Financial Year</b>	<b>291</b>	<b>642</b>	<b>490</b>	<b>307</b>	<b>167</b>	<b>560</b>	<b>418</b>	<b>310</b>	<b>269</b>	<b>591</b>	<b>261</b>

## 10 GLOSSARY OF TERMS

<b>DHS</b>	Department of Human Services
<b>DSE</b>	Department of Sustainability and Environment
<b>DTF</b>	Department of Treasury and Finance
<b>EPA</b>	Environment Protection Authority
<b>ESC</b>	Essential Services Commission
<b>GSL</b>	Guaranteed Service Level
<b>kL</b>	Kilolitre – 1,000 litres
<b>ML</b>	Megalitres – 1,000,000 litres
<b>OHS</b>	Occupational Health and Safety
<b>RAB</b>	Regulatory Asset Base
<b><i>Strategic Intent</i></b>	North East Water’s statement of strategic direction including vision, mission and business objectives.
<b><i>Statement of Obligations</i></b>	A set of obligations imposed on North East Water by the Victorian Government relating to the performance of our functions and provision of services
<b><i>Water Plan 2</i></b>	North East Water’s pricing submission to the ESC for the years 2008-09 to 2012-13
<b><i>Water Plan 3</i></b>	North East Water’s pricing submission to the ESC for the years 2013-14 to 2017-18