



Mary Valley Water Supply Scheme

Annual Network Service Plan

2016-17

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1. Introduction

This Network Service Plan (NSP) is a key component of Seqwater's consultation with its customers and is intended to provide useful and helpful information.

Seqwater invites comments and suggestions on the content of this NSP. All submissions will be published on the Seqwater website along with Seqwater's responses. Customers may provide feedback via email or post at the following addresses:

Email: irrigators@seqwater.com.au

Post: NSP Comments
Seqwater
PO Box 16146
City East QLD 4002

2. Scheme Details

2.1 Scheme background and context

The Mary Valley Water Supply Scheme was established to support irrigation in the sugar, dairy and horticulture sectors following construction of Borumba Dam in 1963. Water is released from Borumba Dam to supplement flows in the Mary River. The Pie Creek system is supplemented by channels and pipes distributing water diverted from the Mary River.

The Scheme is regulated under the Mary Basin Resource Operations Plan (ROP) issued in September 2011.

The water year runs from 1 July to 30 June.

The Scheme consists of two tariff groups, "Mary Valley" and "Pie Creek".

2.2 Infrastructure details

The table below sets out the bulk water assets, owned and operated by Seqwater, that comprise the scheme.

Table 1: Bulk water assets

| Dams/ off-stream storages | Weirs | Other bulk water assets |
|---|--|--|
| <ul style="list-style-type: none"> • Borumba Dam | <ul style="list-style-type: none"> • Imbil Weir | <ul style="list-style-type: none"> • Pie Creek Pump Station • Gauging stations • Measuring weirs • Channels • Pipelines • Water meters |

Source: Seqwater (2016)

2.3 Customers and water entitlements serviced

The following table sets out the distribution of water allocations amongst classes of customers.

Table 2: Ownership of water allocations

| Customer type | Number of customers | Medium priority (ML) | High priority (ML) |
|--------------------------------|---------------------|----------------------|--------------------|
| Mary Valley irrigators | 245 | 17,628 | - |
| Pie Creek irrigators | 51 | 735 | - |
| Gympie Regional Council | 1 | - | 3,524 |
| Seqwater (amenities) | - | - | 120 |
| Seqwater (distribution losses) | - | 426 | 60 |
| Seqwater | - | 3,000 | - |
| Seqwater (urban supply) | 1 | - | 6,500 |
| Industrial | 2 | 40 | 60 |
| Totals | 266 | 21,829 | 10,264 |

Source: Mary Basin ROP; Seqwater (2016)

2.4 Water availability and use

2.4.1 Water availability

The announced allocation determines the percentage of nominal water allocation volume that is available in each water year.

The following table sets out the announced allocations for both medium priority and high priority water allocations for the current year plus the historical position for the previous ten years.

Table 3: Announced allocations history

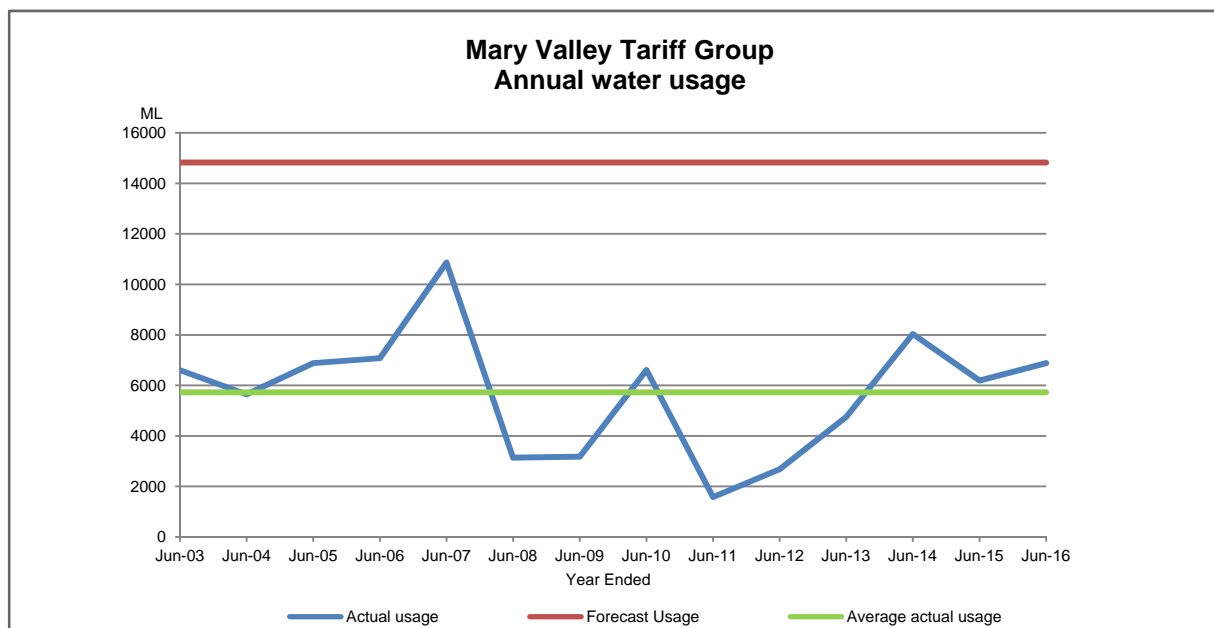
| Year | MP % | HP % |
|---------|--------|------|
| 2006-07 | 82-100 | 100 |
| 2007-08 | 14-100 | 100 |
| 2008-09 | 100 | 100 |
| 2009-10 | 100 | 100 |
| 2010-11 | 100 | 100 |
| 2011-12 | 100 | 100 |
| 2012-13 | 100 | 100 |
| 2013-14 | 100 | 100 |
| 2014-15 | 100 | 100 |
| 2015-16 | 100 | 100 |
| 2016-17 | 100 | 100 |

Source: Seqwater (2016)

2.4.2 Water use

Figure 1 below shows the actual water usage per year from 2002-03 to 2014-15 for the Mary Valley tariff group. Also included is the usage assumption for the current approved price path for 2013-17 which is 14,823 ML or 85% of the nominal WAE. The current usage assumption has been extrapolated to prior years for comparison purposes only. The previous 2006-11 irrigation price path (extended to 31 December 2013) adopted a usage forecast of 7,011 ML or 40% of the nominal water allocation volumes.

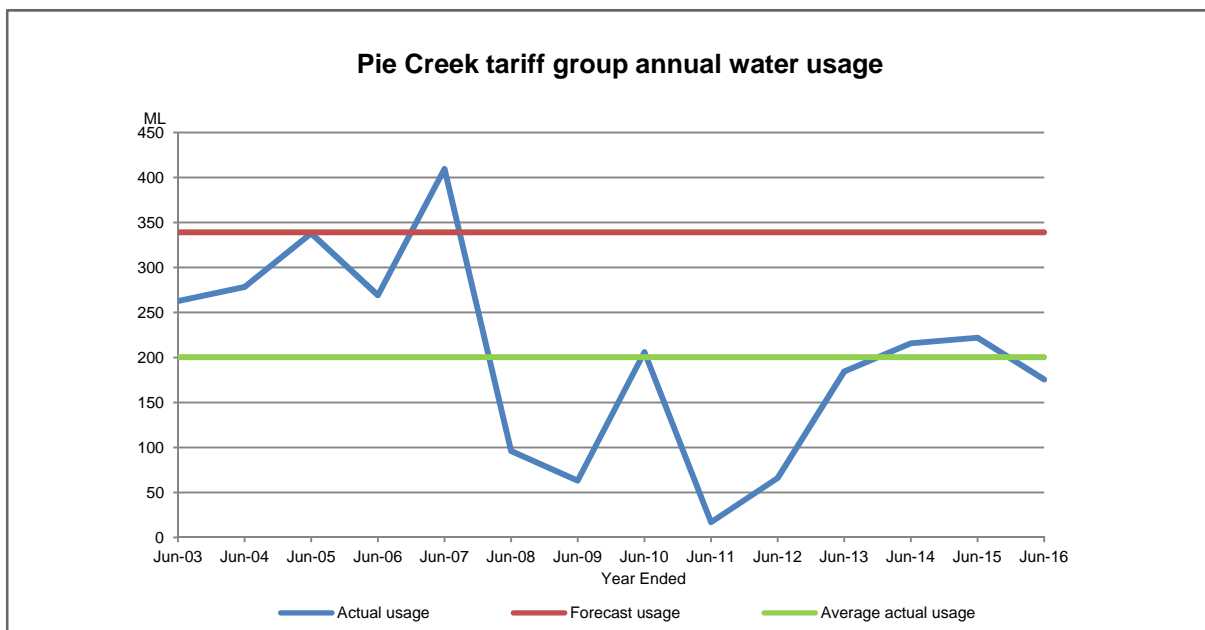
Figure 1: Mary Valley tariff group water usage for years ending 30 June 2003 to 30 June 2016



Source: Seqwater (2016)

Figure 2 below shows the actual water usage per year from 2002-03 to 2014-16 for the Pie Creek tariff group. Also included is the usage assumption for the current approved price path for 2013-17 which is 339 ML or 41% of the nominal WAE. The current usage assumption has been extrapolated to prior years for comparison purposes only. The previous 2006-11 irrigation price path (extended to 31 December 2013) adopted a usage forecast of 292 ML or 35% of the nominal WAE.

Figure 2: Pie Creek tariff group water usage for years ending 30 June 2003 to 30 June 2016

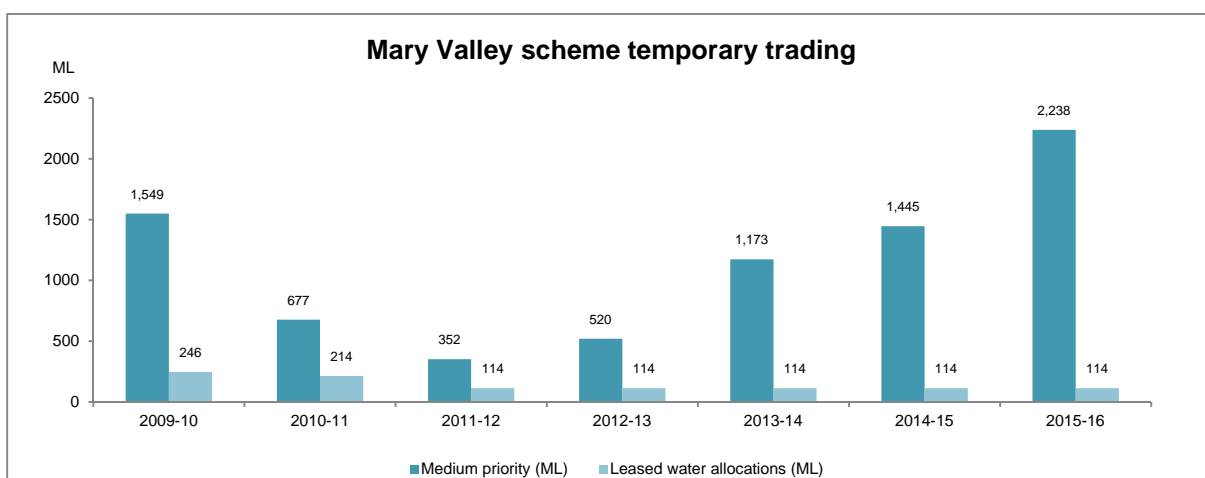


Source: Seqwater (2016)

2.5 Water trading

Figure 3 sets out the volumes of temporary transfers and leases by year from 1 July 2009.

Figure 3: Temporary trading 2009-16



Source: Seqwater (2016)

2.6 Irrigation Customer Consultation

Seqwater is committed to customer engagement as required under its Statement of Obligations. Customer engagement includes customer forums and web-based information.

On 7 June 2016, Seqwater held a scheme consultation forum for the Mary Valley WSS. The 2015-16 renewals and the future renewals programs were discussed along with other scheme matters. The meeting summary has been published on the Mary Valley WSS web page on Seqwater's website.

The next consultation forum is expected to be held in May/June 2016 unless matters arise that require consultation prior to that date. Seqwater will be holding customer consultation forums at least annually for the purpose of consulting on the NSP and customer service standards as well as other Scheme issues that may arise from time to time. Attendance at customer consultation forums is open to all irrigation customers of the Scheme and other stakeholders.

All customer or stakeholder submissions in relation to the NSP will be published on Seqwater's website along with Seqwater's responses and decisions.

2.7 Customer service standards

The service standards are published on the Mary Valley WSS page on Seqwater's website.

3. Financial Performance

3.1 Tariffs

The tariffs recommended to the government by the Queensland Competition Authority (QCA) for the scheme and approved under the *Rural Water Pricing Direction Notice (No 1) 2013* are set out in the following table.

Table 4: Water prices 2013-17 (Nominal \$/ML)

| Tariff Group | Tariff | 2013-14 (\$) | 2014-15 (\$) | 2015-16 (\$) | 2016-17 (\$) |
|------------------------|----------------------------|-----------------|-----------------|-----------------|-----------------|
| Mary Valley | Fixed (Part A) | 20.81 | 23.38 | 26.07 | 27.40 |
| | Variable (Part B) | 8.30 | 8.51 | 8.72 | 8.94 |
| Pie Creek | Fixed (Part C) | 14.01 | 14.36 | 14.72 | 16.57 |
| | Variable (Part D) | 70.66 | 72.43 | 74.24 | 76.09 |
| Pie Creek (bundled) | Fixed (Part A + Part C) | 34.82 | 37.75 | 40.79 | 43.96 |
| | Variable (Part B + Part D) | 78.96 | 80.94 | 82.96 | 85.03 |
| Pie Creek | Termination fee | 154.11 | 157.96 | 161.92 | 182.27 |

Source: QCA Final Report, Seqwater Irrigation Price Review 2013-17 (April 2013)

3.2 Operating expenditure

Forecast operating costs set as a target by the QCA for the 2013-17 regulatory period are set out in the tables below. These costs include both fixed and variable operating costs.

Table 5: Mary Valley tariff group forecast operating costs for 2013-17

| Operating cost item | 2013-14 (\$) | 2014-15 (\$) | 2015-16 (\$) | 2016-17 (\$) |
|------------------------------|------------------|------------------|------------------|------------------|
| Direct operations | 450,207 | 457,712 | 465,251 | 472,821 |
| Repairs and maintenance | 197,969 | 202,752 | 207,602 | 212,514 |
| Dam safety | - | - | 24,425 | - |
| Rates | - | - | - | - |
| Consultation costs | 7,175 | 7,354 | 7,538 | 7,727 |
| Non-direct costs | 467,159 | 475,134 | 483,171 | 491,265 |
| Total operating costs | 1,122,510 | 1,142,952 | 1,187,987 | 1,184,327 |

Source: QCA Final Report, Seqwater Irrigation Price Review 2013-17 (April 2013)

Table 6: Pie Creek tariff group forecast operating costs for 2013-17

| Operating cost item | 2013-14 (\$) | 2014-15 (\$) | 2015-16 (\$) | 2016-17 (\$) |
|------------------------------|-----------------|-----------------|-----------------|-----------------|
| Direct operations | 91,476 | 93,494 | 95,540 | 97,614 |
| Repairs and maintenance | 72,733 | 74,490 | 76,271 | 78,076 |
| Non-direct costs | 84,172 | 85,484 | 86,798 | 88,115 |
| Total operating costs | 248,381 | 253,468 | 258,609 | 263,805 |

Source: QCA Final Report, Seqwater Irrigation Price Review 2013-17 (April 2013)

The following tables set out Seqwater's detailed actual expenditure compared to the QCA's target budget for 2015-16 and the detailed QCA budget for 2016-17. Explanations of material variations are set out below each table.

Table 7: Mary Valley tariff group operating expenditure for 2015-16 and budget 2016-17 (\$Nominal)

| Expenditure Item | 2015-16 | | 2016-17 |
|-------------------------------------|--------------------|----------------|--------------------|
| | QCA Budget (\$) | Actual (\$) | QCA Budget (\$) |
| Direct operating costs | | | |
| Labour | 238,391 | 168,719 (1) | 243,093 |
| Electricity | 28,655 | 11,413 | 29,372 |
| Other | 198,205 | 182,669 | 200,356 |
| Repairs and maintenance | 207,602 | 63,186 (2) | 212,514 |
| Dam safety | 24,425 | - | - |
| Rates | - | 7,908 (3) | - |
| Consultation costs | 7,538 | - (4) | 7,727 |
| Total direct operating costs | 704,816 | 433,895 | 693,062 |

Table 7: Mary Valley tariff group operating expenditure for 2015-16 and budget 2016-17 (\$Nominal) (*continued*)

| Expenditure Item | 2015-16 | | 2016-17 |
|-----------------------------------|--------------------|----------------|--------------------|
| | QCA Budget (\$) | Actual (\$) | QCA Budget (\$) |
| Non-direct operating costs | | | |
| Operations | 323,695 | 287,777 (5) | 328,328 |
| Non-infrastructure | 32,621 | 28,913 (5) | 32,911 |
| Insurance | 126,855 | 69,312 (6) | 130,026 |
| Total non-direct costs | 483,171 | 386,002 | 491,265 |
| Total operating costs | 1,187,987 | 819,897 | 1,184,327 |

Source: Seqwater (2016); QCA Final Report, Seqwater Irrigation Price Review 2013-17 (April 2013)

Notes:

- (1) Operational labour costs were less than budget mainly because a proportion of staff time was costed to the metering program as part of the renewals program for the scheme.
- (2) Repairs and maintenance costs were less than budget because no major maintenance projects were required to be undertaken during the year and because of ongoing efforts to reduce these costs overall.
- (3) Rates were previously accounted for in indirect costs.
- (4) Consultation costs are included in non-direct operations and are not accounted for separately.
- (5) Implementation of a more regionally focussed structure resulted in a greater share of indirect costs.
- (6) Seqwater negotiated lower insurance premiums in 2015-16 resulting in savings in insurance costs for the Scheme.

Table 8: Pie Creek tariff group operating expenditure for 2015-16 and operating budget 2016-17 (\$Nominal)

| Expenditure Item | 2015-16 | | 2016-17 |
|-------------------------------------|--------------------|----------------|--------------------|
| | QCA Budget (\$) | Actual (\$) | QCA Budget (\$) |
| Direct operating costs | | | |
| Labour | 56,244 | 37,188 (1) | 57,354 |
| Electricity | 25,680 | 10,244 (2) | 26,322 |
| Other | 13,616 | 7,739 | 13,938 |
| Repairs and maintenance | 76,271 | 41,653 (3) | 78,076 |
| Rates | - | 3,109 (4) | - |
| Total direct operating costs | 171,811 | 99,933 | 175,690 |
| Non-direct operating costs | | | |
| Operations | 69,314 | 66,279 | 70,306 |
| Non-infrastructure | 6,985 | 6,659 | 7,047 |
| Insurance | 10,499 | 9,503 (5) | 10,762 |
| Total non-direct costs | 86,798 | 82,441 | 88,115 |
| Total operating costs | 258,609 | 182,374 | 263,805 |

Source: Seqwater (2016); QCA Final Report, Seqwater Irrigation Price Review 2013-17 (April 2013)

Notes:

- (1) Labour costs were lower than budget because improved work planning and fewer system leakages and other failures reduced the amount of time staff were required to attend the scheme (see note 3 below). Also, a proportion of staff time was costed to the metering program as part of the renewals program for the scheme.
- (2) Electricity costs were less than budget because of reduced demand for water.
- (3) Repairs and maintenance costs were less than budget because no major maintenance projects were required to be undertaken during the year and because of ongoing efforts to reduce these costs overall.
- (4) Rates were previously accounted for in indirect costs.
- (5) Seqwater negotiated lower insurance premiums in 2015-16 resulting in savings in insurance costs for the Scheme.

3.3 Renewals

3.3.1 Asset Restoration Reserve

The balance of the renewal annuity funds are recorded in the Asset Restoration Reserve (ARR). Seqwater has reported the ARR for 2015-16 in Table 9 below for Mary Valley tariff group and in Table 10 below for the Pie Creek tariff group.

Table 9: Mary Valley Tariff Group Asset Restoration Reserve

| Asset Restoration Reserve | 2015-16 (\$) |
|------------------------------|-----------------|
| Opening Balance 1 July 2015 | -3,576,950 |
| Revenue – irrigation | 120,445 |
| Revenue - other | 229,248 |
| Expenditure for year | -107,281 |
| Interest for year | -221,413 |
| Closing Balance 30 June 2016 | -3,555,951 |

Source: Seqwater (2016)

* The interest rate is based on the Queensland Competition Authority's recommended weighted average cost of capital (WACC) of 6.2% post-tax nominal. Seqwater has adopted the equivalent pre-tax nominal WACC rate of 6.64%. Interest has been applied to the balance at 30 June 2016.

Table 10: Pie Creek Tariff Group Asset Restoration Reserve

| Asset Restoration Reserve | 2015-16 (\$) |
|-------------------------------|-----------------|
| Opening Balance 1 July 2015 | 123,150 |
| Adjustment to opening balance | -179 |
| Revenue – irrigation | 70,857 |
| Expenditure for year | -16,262 |
| Interest for year | 11,790 |
| Closing Balance 30 June 2016 | 189,356 |

Source: Seqwater (2016); QCA Final Report, Seqwater Irrigation Price Review 2013-17 (April 2013)

* The interest rate is based on the Queensland Competition Authority's recommended weighted average cost of capital (WACC) of 6.2% post-tax nominal. Seqwater has adopted the equivalent pre-tax nominal WACC rate of 6.64%. Interest has been applied to the balance at 30 June 2016 and an adjustment applied to prior years.

3.3.2 Renewals expenditure

3.3.2.1 2015-16 renewals

The following table sets out the renewals projects that were undertaken, or scheduled to be undertaken, in 2015-16 in the Mary Valley tariff group.

Table 11: Mary Valley tariff group renewals projects 2015-16

| Asset | Project scope | Budget (\$'000) | Cost (\$'000) |
|-----------------------|---|-----------------|---------------|
| Customer water meters | Replace customer water meters carried over from 2014-15 | 26 | -13 (1) |
| | Replace 13 customer water meters in 2015-16 | 144 | 84 (2) |
| Borumba Dam | Replace boat ramp | - | 36 (3) |

Source: Seqwater (2016)

Notes:

- (1) Costs were over-accrued in 2014-15 resulting in a net credit in 2015-16.
- (2) More efficient fabrication and installation methods resulted in lower costs of replacing meter installations.
- (3) This project arose during the year. Consequently, no budget was set at the beginning of the year. The project will be completed in 2015-16.

Table 12: Pie Creek tariff group renewals projects 2015-16

| Asset | Project scope | Budget (\$'000) | Cost (\$'000) |
|-----------------------|--|-----------------|---------------|
| Pie Creek pump | Submersible pump overhaul | - | * |
| Customer water meters | Replace 3 customer water meters in 2015-16 | 27 | 16 (1) |

Source: Seqwater (2016)

* less than \$500

Notes:

- (1) More efficient fabrication and installation methods resulted in lower costs of replacing meter installations.

3.3.2.2 2016-17 forecast renewals

Forecast renewals expenditure for 2016-17 for the Mary Valley tariff group is provided in table 13 below. There are no renewals scheduled for 2016-17 for Pie Creek.

Table 13: Mary Valley tariff group renewals – 2016-17 (\$Nominal)

| Asset | Project description | Forecast (\$'000) |
|-------------|---------------------|-------------------|
| Borumba Dam | Replace boat ramp | 341 |

Source: Seqwater (2016)

3.3.2.3 Asset management plan

In June 2014, Seqwater finalised a ten year asset management plan for the Scheme's dam. An expanded thirty year asset management plan is expected to be finalised in 2016. For the purposes of this network service plan, renewals estimates for the period of the ten year asset management plan ending in June 2024 have been used to replace the estimates for the dam previously provided to the Queensland Competition Authority (QCA) in April, 2012 for its review of the 2013-17 irrigation prices. Renewals estimates from July 2024 to June 2037 previously provided to the QCA have been retained until the twenty year asset management plan has been finalised at which time all future renewals estimates will then be based on a rolling 20 year plan.

3.3.2.4 Material planning period renewals

Material renewals projects expected to be undertaken in the outer years of the renewals planning time frame (2017-37) for the Mary Valley tariff group and for the Pie Creek tariff group are set out in tables 14 and 15 below. No material renewals projects are currently planned for Pie Creek. A material renewal project is defined as one which accounts for 10% or more in present value terms of the total forecast renewals expenditure for the 20 year planning period. The 10% threshold for the Mary Valley tariff group is \$52,899 and for Pie Creek tariff group is \$66,930.

Table 14: Mary Valley tariff group major renewals projects 2017-37 (\$Nominal)

| Asset | Project description | Year | Forecast cost (\$'000) |
|-----------------------|--|---------|------------------------|
| Customer water meters | Replace customer water meters | 2017-37 | 604 |
| Borumba Dam | Cone Valve to be refurbished on Regulating Valve 1 and 2 | 2020-21 | 200 |

Source: Seqwater (2016)

Table 15: Pie Creek tariff group major renewals projects 2017-37 (\$Nominal)

| Asset | Project description | Year | Forecast cost (\$'000) |
|------------------------|--|---------|------------------------|
| Customer water meters | Replace customer water meters | 2017-37 | 111 |
| Pie Creek main channel | Replace 15 scour outlets | 2022-23 | 335 |
| | Replace 14 air valves in pipeline sections | 2022-23 | 150 |

Source: Seqwater (2016)