



# Mary Valley Water Supply Scheme

## Annual Network Service Plan

**2017-18**

Published: September 2017



## Document Control

Reviewer				Approved for issue			
Date	Name	Position	Signature	Date	Name	Position	Signature
29/09/2017	Mark Askins	A/M, RIG		29/09/2017	Ross Muir	GM WSSP	
Preparer							
Date	Name	Position	Signature				
29/09/2017	Colin Nicolson	PCC					

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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](mailto: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.

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**Table 1:** Bulk water assets

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

Source: Seqwater (2017)

## 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	184	17,598	-
Pie Creek irrigators	50	765	-
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
<b>Totals</b>	<b>266</b>	<b>21,829</b>	<b>10,264</b>

Source: Mary Basin ROP; Seqwater (2017)

## 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.

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**Table 3:** Announced allocations history

Year	MP %	HP %
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
2017-18	82	100

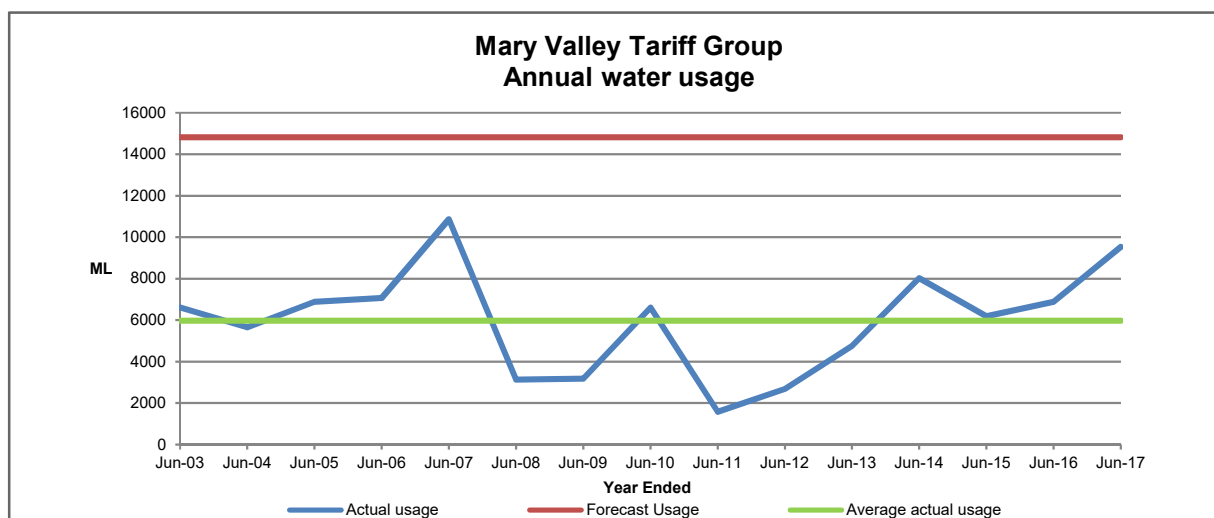
Source: Seqwater (2017)

## 2.4.2 Water use

Figure 1 below shows the actual water usage per year from 2002-03 to 2016-17 for the Mary Valley tariff group.

Also shown is the usage assumption adopted by the Queensland Competition Authority (QCA) for the 2013-17 price path (extended to 2019) which is 14,823 ML or 85% of the nominal volume. 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 2017

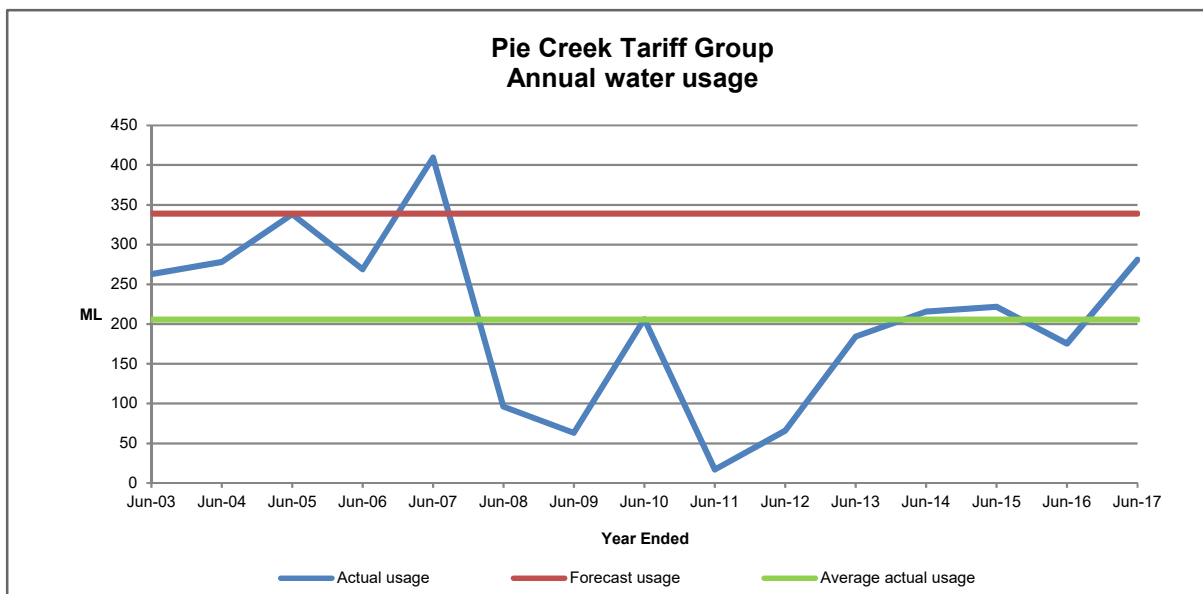


Source: Seqwater (2017)

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Figure 2 below shows the actual water usage per year from 2002-03 to 2016-17 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 2017

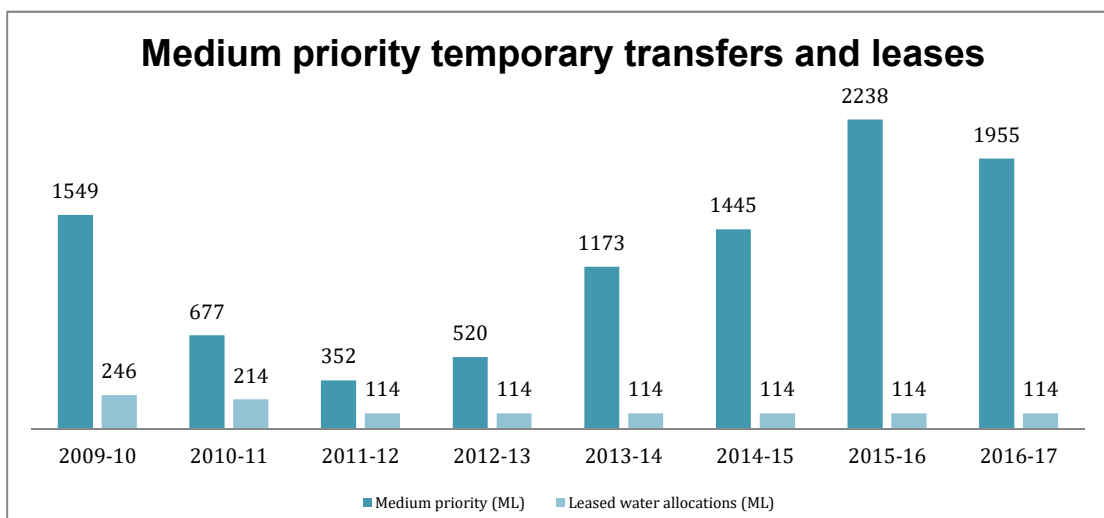


Source: Seqwater (2017)

## 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 2009-17



Source: Seqwater (2017)

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## 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 19 June 2017, Seqwater held a scheme consultation forum for the Mary Valley WSS. The 2016-17 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 2018 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.

In 2016-17 Seqwater met all of its service targets. The performance report was published on the Mary Valley WSS page on Seqwater's website.

# 3. Financial Performance

## 3.1 Tariffs

In June, 2017, Seqwater's responsible Ministers issued the *Seqwater Rural Water Pricing Direction Notice (No. 1) 2017* which extends the 2013-17 irrigation water price path by two years to 2019. The Direction Notice was published in the Queensland Government Gazette on 9 June 2017.

**Table 4:** Water prices 2017-19 (Nominal \$/ML)

Tariff Group	Tariff	2017-18 (\$)	2018-19 (\$)
Mary Valley	Fixed (Part A)	28.09	28.79
	Variable (Part B)	9.16	9.39
Pie Creek	Fixed (Part A)	28.09	26.31
	Variable (Part B)	9.16	9.39
	Fixed (Part C)	19.19	24.41
	Variable (Part D)	78.00	79.95

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**Table 4:** Water prices 2017-19 (Nominal \$/ML) (*continued*)

Tariff Group	Tariff	2017-18 (\$)	2018-19 (\$)
Pie Creek (bundled)	Fixed (Part A + Part C)	47.28	50.72
	Variable (Part B + Part D)	87.16	89.34
Pie Creek	Termination fee	211.09	268.51

Source: Seqwater (2017)

## 3.2 Operating expenditure

The forecast operating costs set as a target by the QCA for the 2013-17 regulatory period have been extended for the additional two years of the price path and are set out in the tables below. The 2017-18 forecast costs were calculated by applying the QCA's escalation rates to the QCA's 2016-17 forecast operating costs. The 2018-19 forecast operating costs were calculated by applying the QCA's escalation rates to the 2017-18 forecast costs. Some base costs have changed since the cost estimates were initially compiled for the QCA review in 2012. In these cases, Seqwater has amended the 2016-17 forecast base costs before applying the QCA's escalation rates. Any adjustments have been explained by way of notes in tables 7 and 8 below. These costs include both fixed and variable operating costs.

**Table 5:** Mary Valley tariff group forecast operating costs for 2017-19 (\$Nominal)

Operating cost item	2017-18 (\$)	2018-19 (\$)
Direct operations	458,411	473,060
Repairs and maintenance	221,015	229,855
Dam safety	–	–
Rates	8,517	8,730
Consultation costs	7,920	8,118
Non-direct costs	505,353	519,848
<b>Total operating costs</b>	<b>1,201,216</b>	<b>1,239,611</b>

Source: Seqwater (2017)

**Table 6:** Pie Creek tariff group forecast operating costs for 2017-19 (\$Nominal)

Operating cost item	2017-18 (\$)	2018-19 (\$)
Direct operations	115,595	119,357
Repairs and maintenance	81,199	84,447
Rates	3,484	3,571
Non-direct costs	90,704	93,371
<b>Total operating costs</b>	<b>290,982</b>	<b>300,746</b>

Source: Seqwater (2017)

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The following tables set out Seqwater's detailed actual expenditure compared to the QCA's target budget for 2016-17 and the detailed QCA budget for 2017-18. Explanations of material variations are set out below each table.

**Table 7:** Mary Valley tariff group operating expenditure for 2016-17 and budget 2017-18 (\$Nominal)

Operating cost item	2016-17		2017-18
	QCA Budget (\$)	Actual (\$)	QCA Budget (extended) (\$)
<b>Direct operating costs</b>			
Labour	243,093	173,970 (1)	251,845
Electricity	29,372	484	800
Other	200,356	156,042	205,766
Repairs and maintenance	212,514	84,783 (2)	221,015
Dam safety	–	–	–
Rates	–	17,026 (3)	8,517 (6)
Consultation costs	7,727	– (4)	7,920
<b>Total direct operating costs</b>	<b>693,062</b>	<b>432,305</b>	<b>695,863</b>
<b>Non-direct operating costs (indicative)</b>			
Operations	328,328	295,674	338,342
Non-infrastructure	32,911	26,014	33,734
Insurance	130,026	57,925 (5)	133,277
<b>Total non-direct costs</b>	<b>491,265</b>	<b>379,613</b>	<b>505,353</b>
<b>Total operating costs</b>	<b>1,184,327</b>	<b>811,918</b>	<b>1,201,216</b>

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

**Notes:**

- (1) Operational labour costs were less than budget because a staff member is now undertaking a wider range of duties outside of the scheme resulting in savings to 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) Two years worth of rates were received during 2016-17.
- (4) Consultation costs are included in non-direct operations and are not accounted for separately.
- (5) Seqwater negotiated lower insurance premiums in 2016-17 resulting in savings in insurance costs for the Scheme.
- (6) The QCA's forecast budget has been increased by \$8,517 for local authority rates not previously included.

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**Table 8:** Pie Creek tariff group operating expenditure for 2016-17 and operating budget 2017-18 (\$Nominal)

Operating cost item	2016-17		2017-18
	QCA Budget (\$)	Actual (\$)	QCA Budget (extended) (\$)
<b>Direct operating costs</b>			
Labour	57,354	67,221 (1)	59,418
Electricity	26,322	31,612 (2)	30,106
Other	13,938	26,118 (3)	26,071 (8)
Repairs and maintenance	78,076	57,832 (4)	81,199
Rates	–	14,318 (5)	3,484 (9)
<b>Total direct operating costs</b>	<b>175,690</b>	<b>197,101</b>	<b>200,278</b>
<b>Non-direct operating costs (indicative)</b>			
Operations	70,306	134,807 (6)	72,450
Non-infrastructure	7,047	11,860 (6)	7,223
Insurance	10,762	7,509 (7)	11,031
<b>Total non-direct costs</b>	<b>88,115</b>	<b>154,176</b>	<b>90,704</b>
<b>Total operating costs</b>	<b>263,805</b>	<b>351,277</b>	<b>290,982</b>

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

**Notes:**

- (1) Additional labour costs were incurred because staff spent more time on scheme operations than expected.
- (2) Higher demand for water resulted in higher electricity costs for pumping.
- (3) The Pie Creek share of vehicle and plant costs which were previously costed to the Mary Valley scheme are now being costed to Pie Creek.
- (4) Less repairs and maintenance work was required during the year.
- (5) Two years worth of rates were received during the year.
- (6) Higher corporate and indirect operating costs resulted in a higher indicative allocation of costs to the scheme.
- (7) Seqwater negotiated lower insurance premiums in 2016-17 resulting in savings in insurance costs for the Scheme.
- (8) The QCA's forecast budget has been increased by \$11,756 to include the costs of Seqwater's vehicles and mobile plant used in the management of the Scheme.
- (9) The QCA's forecast budget has been increased by \$3,484 to account for local authority rates not previously included.

## 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 2016-17 in Table 9 below for Mary Valley tariff group and in Table 10 below for the Pie Creek tariff group.

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**Table 9:** Mary Valley Tariff Group Asset Restoration Reserve

Asset Restoration Reserve	2016-17 (\$)
Opening Balance 1 July 2016	-3,683,559 (1)
Revenue – irrigation	161,459
Revenue - other	283,503
Expenditure for year	-462,060
Interest for year	-245,724
Closing Balance 30 June 2017	-3,946,380

Source: Seqwater (2017)

\* 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.

(1) A net adjustment of -\$127,608 was applied to the published 2015-16 closing balance of -\$3,555,951 to account for the flood repairs costs incurred in 2013-14 and 2014-15 that were not reimbursed under Seqwater's insurance policies amounting to a total of \$236,285 offset by adjustments to interest and revenue of \$108,678.

**Table 10:** Pie Creek Tariff Group Asset Restoration Reserve

Asset Restoration Reserve	2016-17 (\$)
Opening Balance 1 July 2016	177,897 (1)
Revenue – irrigation	64,785
Expenditure for year	36
Interest for year	16,116
Closing Balance 30 June 2017	258,834

Source: Seqwater (2017)

\* 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.

(1) A net adjustment of -\$11,459 was applied to the published 2015-16 closing balance of \$189,356 to account for an over statement of revenue and interest.

## 3.3.2 Renewals expenditure

### 3.3.2.1 2016-17 renewals

The following table sets out the renewals projects that were undertaken, or scheduled to be undertaken, in 2016-17 in the Mary Valley tariff group.

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**Table 11:** Mary Valley tariff group renewals projects 2016-17

Asset	Project scope	Budget (\$'000)	Cost (\$'000)
Borumba Dam	Refurbish concrete joint seals	205	6 (1)
	Electrical safety switch compliance	–	19 (2)
	Replace boat ramp – stage 1	341	383 (3)
	Replace boat ramp – stage 2	–	53 (4)
Borumba Dam WTP	Electrical safety switch compliance	–	1 (2)

Source: Seqwater (2017)

**Notes:**

- (1) This project was deferred from 2013-14 until water levels fell resulting in significant cost savings against the original budget because the work site was not required to be de-watered.
- (2) Testing of electrical switches to ensure compliance with safety regulations.
- (3) Funding to the extent of \$55,000 was received from the Department of National Parks, Sport and Racing towards this project.
- (4) Preliminary work on stage 2 of the boat ramp commenced ahead of schedule.

**Table 12:** Pie Creek tariff group renewals projects 2016-17

Asset	Project scope	Budget (\$'000)	Cost (\$'000)
Pie Creek pump	Submersible pump overhaul	–	-1 (1)
Customer water meters	Electrical safety switch compliance	–	1 (2)

Source: Seqwater (2017)

**Notes:**

- (1) Adjustment of prior year's costs.
- (2) Testing of electrical switches to ensure compliance with safety regulations.

### 3.3.2.2 2017-18 forecast renewals

Forecast renewals expenditure for 2017-18 for the Mary Valley tariff group is provided in table 13 below. There are no renewals scheduled for 2017-18 for Pie Creek.

**Table 13:** Mary Valley tariff group renewals – 2017-18 (\$Nominal)

Asset	Project description	Forecast (\$'000)
Scheme	Replace customer flow meters	180

Source: Seqwater (2017)

### 3.3.2.3 Asset management plan

Seqwater has developed an Asset Portfolio Master Plan (APMP). The APMP is considered to be leading practice within the water industry. All of Seqwater's future capital expenditure is considered within the APMP framework. The long-term renewals program developed for the Scheme's assets by Seqwater's Asset Capability Team using the Asset Lifecycle Management Plan is included in the APMP.

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### 3.3.2.4 Material planning period renewals

During the extended price path, Seqwater will adopt a rolling 20 year planning horizon until a new planning time frame is settled for the upcoming price review. Material renewals projects that fall in the rolling renewals planning time frame, which is 2019-39 for this network service plan, are set out below. 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, in present value terms, for the Mary Valley tariff group is \$19,117 and for Pie Creek tariff group is \$180,968.

**Table 14:** Mary Valley tariff group major renewals projects 2019-39 (\$Nominal)

Asset	Project description	Year	Forecast (\$'000)
Borumba Dam	Replace portable hydraulic pump	2019-20	33
	Replace baulk at outlet works bulkhead gate	2025-26	25
	Replace fire extinguishers	2025-26	25

Source: Seqwater (2017)

**Table 15:** Pie Creek tariff group major renewals projects 2019-39 (\$Nominal)

Asset	Project description	Year	Forecast (\$'000)
Pie Creek Pump Station	Refurbish pump 1 assembly	2025-26	300
	Replace pump 1 motor	2025-26	500
	Replace pump 2 motor	2025-26	500

Source: Seqwater (2017)

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