

## Part 12

### Utilities

#### Summary of Portfolio Appropriations <sup>(a)</sup>

Agency	2017-18 Budget \$'000	2017-18 Estimated Actual '000	2018-19 Budget Estimate '000
Synergy.....	-	-	-
Western Power .....	-	-	-
Horizon Power .....	-	-	-
Water Corporation .....	-	-	-
Bunbury Water Corporation.....	-	-	-
Busselton Water Corporation.....	-	-	-
<b>GRAND TOTAL</b>			
<b>Total .....</b>	-	-	-

(a) The Budget Statements for the agencies listed in the Utilities portfolio provide details of Asset Investment Programs. Consolidated Account appropriations for these agencies are administered by the Department of Treasury and outlined in the Treasury division of the Budget Statements.



# Synergy

## Part 12 Utilities

### Asset Investment Program

In 2018-19 and over the forward estimates period, Synergy will spend \$162.7 million on its Asset Investment Program, which is largely required to maintain the existing generation asset base.

#### Generation

Synergy's generation portfolio is comprised of coal, gas, liquid fuel and renewable energy assets. Expenditure to maintain the capacity and reliability of these assets amounts to a total of \$132.8 million in 2018-19 and over the forward estimates period.

Major investments include:

- \$48.1 million for various projects to support safety, reliability, efficiency and environmental targets at Muja Stages C and D Power Station, which include:
  - \$16.6 million towards developing new water supply sources necessary for the coal-fired generators given that mine dewater continues to diminish;
  - \$6.3 million towards upgrade and replacement of sootblower piping and boiler drain piping critical to continuing operation of the plant;
  - \$6 million on the refurbishment of the Stage C Turbine and replacement of associated components;
  - \$4.2 million on an upgrade to electrical switchboards for Stages C and D;
  - \$3.2 million on sustaining works for raising the fly ash dam wall; and
  - \$11.8 million on various other projects including but not limited to replacement of economiser elements, cylinder diaphragm, and battery and transformer upgrades;
- \$32.5 million for various projects at Kwinana Power Station. Major works include:
  - \$24.6 million on the continuation of compliance works for rehabilitation and relocation of shared services in order to support other generation infrastructure located at the Kwinana site following the retirement of the Kwinana Power Station;
  - \$1.4 million on civil and remediation works to cooling water systems; and
  - \$6.4 million on other projects including Kwinana electrochlorination plant replacement and ash dam relining;
- \$28.2 million for works to improve gas turbine reliability and security of supply. Major items include:
  - \$20.8 million on the Cockburn Gas Turbine, mainly for the purchase and installation of parts required for planned maintenance and upgrade of fire protection systems; and
  - \$7.4 million for the Pinjar Gas Turbines, including the procurement and installation of a turbine rotor for Unit 10, upgrade of Pinjar Gas Turbine Stage C and upgrade of the Cockburn Gas Turbine fire protection system;
- \$19.4 million for the Collie Power Station, mainly for condenser re-tubing, cooling tower refurbishment, construction of fly ash dam cells, replacement and/or upgrade of gas outlet ducts, sootblower systems, battery banks, pump casing and various other ongoing expenditure associated with maintaining the continued safe and reliable operation of the plant; and
- \$4.6 million for various smaller projects to deliver effective operations and management of Synergy's generation portfolio, of which a key project is the \$1.5 million renewal of the Perron Quarry bore water supply pipeline.

## Retail

A total of \$15 million in 2018-19 and over the forward estimates period for capability and systems enhancement works has been allocated to various information and communications technology (ICT) projects to support the development of new products and services and maintain the current customer relationship management system, to appropriately manage and better serve Synergy's more than one million customers.

## Corporate

A total of \$14.9 million in 2018-19 and over the forward estimates period has been allocated for the replacement and/or upgrade of ICT infrastructure associated with finance and human resources systems, as well as ongoing ICT capital expenditure requirements such as the replacement of end of life devices.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-18 \$'000	2017-18 Estimated Expenditure \$'000	2018-19 Budget Estimate \$'000	2019-20 Forward Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Corporate							
Business Systems Replacement .....	40,483	26,322	6,995	3,632	1,145	4,364	5,020
Property Plant and Equipment .....	2,521	1,780	610	221	98	322	100
Generation							
Cockburn Gas Turbine .....	42,589	21,803	3,113	505	5,900	8,131	6,250
Collie Power Station .....	40,204	20,771	3,420	6,393	4,708	4,087	4,245
Kwinana Power Station .....	48,986	16,469	8,450	24,601	3,100	3,816	1,000
Muja C and D Power Station .....	134,402	86,316	11,500	15,758	10,774	10,854	10,700
Other Generation Infrastructure Projects .....	58,911	54,355	5,252	875	-	81	3,600
Pinjar Gas Turbine .....	22,389	14,939	4,600	450	2,000	2,000	3,000
Retail - System Enhancements .....	41,030	26,075	6,625	1,510	-	7,245	6,200
<b>Total Cost of Asset Investment Program .....</b>	<b>431,515</b>	<b>268,830</b>	<b>50,565</b>	<b>53,945</b>	<b>27,725</b>	<b>40,900</b>	<b>40,115</b>
<b>FUNDED BY</b>							
Internal Funds and Balances .....			50,565	53,945	27,725	40,900	40,115
<b>Total Funding .....</b>			<b>50,565</b>	<b>53,945</b>	<b>27,725</b>	<b>40,900</b>	<b>40,115</b>

# Western Power

## Part 12 Utilities

### Asset Investment Program

Western Power builds, maintains and operates the electricity network in the southwest of Western Australia. Electricity plays an essential role in the economic development of the State and in improving the living standards of the community. Western Power's focus is to provide customers with access to safe, reliable and efficient supply of electricity.

Western Power's Asset Investment Program (AIP) is underpinned by its Asset Management Framework, designed to meet the requirements of Western Power's license obligations, good industry practice and relevant Australian standards. The framework uses a risk-based approach coupled with zone-based delivery to maximise the reduction in network risks for any given level of expenditure. Assets are given risk scores, based on likelihood and consequence of individual asset failure, which are used to prioritise asset replacements. In addition to zone-based delivery, work is also delivered through targeting discrete high risk assets or standalone programs.

### New Access Arrangement

Western Power's 2018-2022 fourth access arrangement (AA4) proposal was submitted to the Economic Regulation Authority (ERA) on 2 October 2017. The AA4 proposal reflects Western Power's strategy to maintain overall safety of the network, meet agreed levels of reliability and deliver an efficient and sustainable financial position.

The AA4 submission builds on Western Power's strong performance throughout the third regulatory period. This was enhanced by the commencement of Western Power's Business Transformation Program in 2015, which identified opportunities for improved performance. This included a focus on improving Western Power's asset management strategies, technological capability and operational productivity while maintaining safety and reliability levels.

As part of the AA4 process, the ERA will review whether there is a demonstrable need for the investment proposed by Western Power and whether the investment is efficient. The ERA's determination on the AA4 submission is expected in May 2018 at the earliest. The *Electricity Networks Access Code 2005* (the Access Code) allows extensions to decision dates, shifting the potential further final decision date to March 2019.

Western Power's AIP forecast aligns with its AA4 submission, except for the impact of capitalisation of operating leases. In anticipation of upcoming changes in the relevant accounting standard, the AA4 submission reflects the capitalisation of operating leases, whilst the AIP reflects the treatment of operating leases in accordance with the current standards.

### Safety - Our Most Important Priority

The safety of the community and its staff is Western Power's most important priority, as there is an inherent safety risk associated with all electricity networks. In recognition of this, Western Power will commit \$232.5 million in 2018-19 to continue important safety programs including:

- pole management which includes \$163 million on:
  - replacement and reinforcement of wood poles, recognising the potential public safety and property risks associated with pole failures; and
  - replacement of wood pole cross arms to mitigate consequences of cross arm failure, including the ignition of pole top fires; and
- expenditure on conductor management, connection management and bushfire mitigation projects amounting to \$49.1 million, \$8.9 million and \$11.5 million respectively. Conductors pose high public safety risk, as an incident where a wire is down has the potential to cause a fatality, electric shock and/or fire. This program will undertake priority maintenance, repair and replacement of aged and/or deteriorated overhead conductors and underground cables in order to address risk.

## Service

Service projects cover regulatory compliance, reliability, asset replacement, metering, business support, information and communications technology (ICT), and building and site management (termed corporate real estate). Western Power is planning to invest \$365.2 million on service-related projects in 2018-19. Key investments include:

- business support and ICT (\$122.1 million) - in addition to providing support to the organisation, this investment aims to achieve Western Power's ICT strategy. This will be enabled through automating ICT processes, introducing meter management billing systems, upgrading the distribution and transmission network management systems and the enterprise resource planning system, introducing a customer management system, as well as an asset management and network planning system;
- corporate real estate (\$54.4 million) - under the depot modernisation program, depots will be relocated, decommissioned or redesigned and refitted to reduce health and safety risks and operating costs, as well as to provide sufficient accommodation to meet future operational requirements;
- metering (\$32.4 million) - Western Power will provide new and replacement metering services, including the installation and replacement of over 301,000 meters during the four year period ending 30 June 2022;
- regulatory compliance (\$36.7 million) - Western Power will replace pole top switches and distribution transformers to maintain power quality compliance, address transformer compliance at five sites, improve substation safety security, remove asbestos and replace transmission battery banks; and
- reliability and asset replacement (\$119.7 million) – this covers the replacement and reinforcement of existing distribution and transmission network assets to reduce public safety and reliability risks associated with asset failure.

## Growth

Under the Access Code, Western Power is required to use all reasonable endeavours to provide access to customers and fund network augmentations where they meet specified investment criteria.

Western Power is committed to connecting customers and investing in infrastructure to support the State, with \$230.4 million allocated for customer-driven works in 2018-19.

Western Power is planning to invest \$69.5 million in capacity expansion to facilitate customers connecting to the transmission and distribution networks in 2018-19. These plans have been optimised to address both asset and growth drivers to ensure the most efficient solutions are proposed and developed for customers.

Distribution customer-driven works typically reflect a large number of small projects to facilitate customer requests for connection to the network. Western Power is forecasting to spend \$137.2 million in 2018-19 for meeting customer requests for new or modified distribution connections, network expansions, subdivisions and distribution line relocations. Transmission customer-driven works of \$23.7 million in 2018-19 will comprise line relocations, undergrounding and connections of loads and generators.

Previously, funding for customer-driven works resided in Western Power Provisions, separate to Western Power Networks. The amalgamation of Networks and Provisions is intended to achieve administrative efficiencies. Access to funding for customer-driven works remains in line with the approved capital expenditure funding mechanism or, if required, by submitting business cases to the State Government.

## Enhancing the Customer Experience

Under the current round of the State Underground Power Program (round six), Western Power, in partnership with the State Government and participating local governments, will seek to improve customer experiences through investment in our suburbs. A total of 17 areas/suburbs, or 18,000 properties, in Perth will receive underground power in this round, with works expected to be completed by the end of 2021. The projects selected in round six are: Floreat West, Floreat North, Floreat East, Kardinya South, Alfred Cove East, Melville North, South Perth, Collier, Manning, Victoria Park West, Victoria Park East, Carlisle North, Trigg, Menora, Maylands Central, South Lake East and Shelley West.

## Future Network

Western Power is developing scenarios of potential network configurations based on different customer needs. Alternative solutions to traditional network approaches (including distributed energy resources and other emerging technologies) will be considered where they are more cost-effective or better aligned to customer requirements.

Analysis of these scenarios will supplement the insights gathered through Western Power's ongoing trials of new and emerging technologies. These trials also see Western Power invest in regional towns and include:

- Kalbarri microgrid contract - construction of this microgrid is expected to begin in November 2018. Set to be one of the most advanced microgrids in Australia, the Kalbarri microgrid includes a 4.5 megawatt hour battery system, combined with renewable energy supplied by the town and by Synergy, and will improve power reliability for the popular tourist town;
- Standalone Power System demonstration project across 60 locations - the project should provide remote and rural customers with efficient, safe and reliable power supply, while creating new jobs and skills for the energy sector and opportunities for Western Australian suppliers; and
- Bremer Bay microgrid project implementation - this innovative microgrid configuration allows for the start-up of power station supplies in the event of power interruption, ensuring more reliable power supply for residents and tourists in Bremer Bay.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-18 \$'000	2017-18 Estimated Expenditure \$'000	2018-19 Budget Estimate \$'000	2019-20 Forward Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Capitalised Borrowing Costs .....	62,984	59,807	695	765	784	804	824
Government Initiative - State Underground Power Program .....	218,796	100,322	14,678	53,235	35,411	9,234	20,594
<b>Growth</b>							
<b>Distribution</b>							
Capacity Expansion .....	368,814	210,571	39,885	43,649	36,092	35,863	42,638
Customer Access .....	1,468,061	930,731	139,968	137,168	127,194	134,424	138,543
<b>Transmission</b>							
Capacity Expansion .....	284,536	110,299	17,765	25,875	20,877	71,829	55,655
Customer Driven .....	237,784	138,437	39,455	23,717	24,039	25,406	26,184
<b>Safety</b>							
Bushfire Mitigation .....	94,716	64,414	378	11,464	11,620	3,555	3,663
Conductor Management .....	733,241	477,527	48,279	49,111	58,835	68,746	79,022
Connection Management .....	195,282	158,631	2,288	8,916	9,037	9,551	9,147
Pole Management .....	1,922,849	1,296,620	175,268	163,040	156,514	156,661	150,014
<b>Security</b>							
Thermal Management .....	15,551	3,046	1,455	598	485	773	10,649
Voltage and Fault Level Management .....	49,048	3,777	-	6,258	27,835	7,286	3,892
<b>Service</b>							
Business Support and ICT .....	744,160	322,111	88,519	122,071	116,190	97,169	86,619
Corporate Real Estate .....	249,966	102,483	32,393	54,369	68,602	13,302	11,210
Metering .....	262,944	108,054	19,288	32,396	38,145	41,338	43,011
Regulatory Compliance .....	239,309	103,129	16,377	36,684	36,867	30,519	32,110
Reliability Driven Asset Replacement .....	781,576	347,978	64,257	119,673	97,978	98,820	117,127
<b>COMPLETED WORKS</b>							
Other Asset Investment - Motor Vehicle Fleet and Mobile Plant .....	116,715	116,715	7,766	-	-	-	-
<b>Total Cost of Asset Investment Program .....</b>	<b>8,046,332</b>	<b>4,654,652</b>	<b>708,714</b>	<b>888,989</b>	<b>866,505</b>	<b>805,280</b>	<b>830,902</b>
<b>FUNDED BY</b>							
Borrowings .....			205,090	249,386	291,438	259,996	257,141
Internal Funds and Balances .....			503,624	639,603	575,067	545,284	573,761
<b>Total Funding .....</b>			<b>708,714</b>	<b>888,989</b>	<b>866,505</b>	<b>805,280</b>	<b>830,902</b>

# Horizon Power

## Part 12

## Utilities

### Asset Investment Program

The investment that the State Government makes to regional Western Australia through Horizon Power contributes towards statutory and regulatory obligations and maintains the adequacy and quality of electricity supply to regional customers. Horizon Power will invest \$99.5 million during 2018-19 and a further \$160.5 million across the forward estimates period.

#### Asset Management Plan

Horizon Power is forecast to invest \$38.2 million in 2018-19 and a further \$120.9 million over the forward estimates to mitigate extreme and high risks associated with energy assets. This investment contributes towards ensuring regulatory compliance, reliability and capacity of all of Horizon Power's systems to support the safety, development and enhancement of communities throughout regional Western Australia.

#### Onslow Distributed Energy Resource Project

Horizon Power will spend \$50.8 million in 2018-19 and across the forward estimates to deliver power infrastructure to meet forecast demand in Onslow. This includes the construction of a gas/diesel fuelled power station and required network extensions. The power station will be modular and expandable along with the network, having the ability to accommodate energy contributions from distributed energy sources such as solar farms with battery storage technologies as well as from customer installed small scale domestic and commercial rooftop photo-voltaic and battery storage systems.

This will be largely supported by a grant from the Department of Jobs, Tourism, Science and Innovation, in turn funded by payments from Chevron Australia, as part of the Ashburton North (Wheatstone Project) State Development Agreement.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-18 \$'000	2017-18 Estimated Expenditure \$'000	2018-19 Budget Estimate \$'000	2019-20 Forward Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Asset Management Plan							
Asset Replacement.....	130,412	69,848	14,043	14,542	14,851	15,400	15,771
Capacity.....	23,560	11,400	2,820	2,920	2,982	3,092	3,166
Knowledge and Technology Investment.....	40,575	18,745	4,821	5,242	5,353	5,551	5,684
Mobile Plant and Operational Fleet.....	41,275	23,996	3,136	4,149	4,237	4,394	4,499
Property Management.....	28,994	14,478	3,645	3,486	3,559	3,691	3,780
Regulatory Compliance.....	31,939	30,560	320	331	338	351	359
Reliability.....	36,469	29,466	1,624	1,681	1,717	1,781	1,824
Safety.....	129,809	105,491	5,639	5,839	5,963	6,184	6,332
Customer Funded Works - Other Customer Driven Works.....	178,851	129,568	11,112	12,420	13,463	11,746	11,654
Major Projects							
Onslow Power Infrastructure Project - Power Station Upgrade.....	105,293	54,535	37,228	47,952	2,806	-	-
Perth Office Accommodation Project.....	3,875	3,000	3,000	875	-	-	-
Pilbara Power Project.....	26,087	26,041	4,315	46	-	-	-
<b>COMPLETED WORKS</b>							
Major Projects							
Advanced Metering Infrastructure.....	34,135	34,135	198	-	-	-	-
Electricity Infrastructure Upgrade for Onslow Salt.....	3,924	3,924	3,924	-	-	-	-
Onslow Power Station Network Connection.....	7,470	7,470	4,292	-	-	-	-
Pilbara Underground Power Project.....	216,755	216,755	21,527	-	-	-	-
Transmission Connection to Roy Hill's Port Hedland Port Facilities.....	24,911	24,911	21,579	-	-	-	-
<b>Total Cost of Asset Investment Program.....</b>	<b>1,064,334</b>	<b>804,323</b>	<b>143,223</b>	<b>99,483</b>	<b>55,269</b>	<b>52,190</b>	<b>53,069</b>
<b>FUNDED BY</b>							
Borrowings.....			71,540	39,111	39,000	40,950	41,933
Internal Funds and Balances.....			23,755	10,673	11,105	10,875	11,136
Other.....			37,928	49,699	5,164	365	-
Drawdowns from Royalties for Regions Fund.....			10,000	-	-	-	-
<b>Total Funding.....</b>			<b>143,223</b>	<b>99,483</b>	<b>55,269</b>	<b>52,190</b>	<b>53,069</b>

# Water Corporation

## Part 12 Utilities

### Asset Investment Program

The Corporation will invest \$2.8 billion across the forward estimates period, including \$738.3 million in 2018-19, to improve its services and continue to ensure its customers have access to reliable and high quality water and wastewater services.

#### Expenditure in the Regions

Regional Western Australia will continue to benefit from the development and upgrading of water and wastewater infrastructure, with \$186 million being committed to a number of projects across regional Western Australia in 2018-19.

In 2018-19, a total of \$111.4 million has been committed to water projects, including:

- \$6.2 million to connect a distribution main to the Nanson Road Water Tank which, once completed, will assist in securing the water supply to the north of Geraldton and to meet future growth; and
- \$4.8 million to upgrade the Cunderdin pump station to improve operational reliability and pumping capacity to meet growth.

A total of \$65.8 million will be spent in 2018-19 on wastewater projects, including \$12.4 million to upgrade the Margaret River Wastewater Treatment Plant. The upgrade will double the wastewater treatment capacity to 3 million litres per day.

#### Expenditure in the Metropolitan Area

A total of \$408.4 million has been committed in 2018-19 to projects across the metropolitan area that ensure an ongoing supply of drinking water and the development of adequate facilities for the collection and treatment of the community's wastewater.

In 2018-19, \$242.4 million has been committed to water network and supply projects, including:

- \$131.9 million to continue expanding the Groundwater Replenishment Scheme. This investment will provide greater certainty for Perth's Integrated Water Supply Scheme, as it continues to be impacted by the effects of climate change. Once completed, the expansion will double the capacity of the Groundwater Replenishment Scheme from 14 billion litres each year to 28 billion litres each year; and
- \$25.1 million to continue the Pipes for Perth program, which involves essential work to replace Perth's older water reticulation and distribution mains, some of which are over 100 years old.

Other features of the metropolitan program include \$158.7 million in 2018-19 on wastewater treatment projects in both the northern and southern corridors, including:

- \$26.4 million to upgrade the Woodman Point Wastewater Treatment Plant to service areas south of the Swan River and north of Kwinana. The upgrade will increase the capacity of the plant from 120 million litres per day to 180 million litres per day to cater for growth in these catchments;
- \$9.4 million to provide an energy recovery system for the Beenyup Wastewater Treatment Plant. This project uses biogas, a by-product of the treatment process, to generate electricity for use in the plant, reducing both greenhouse gas emissions and energy costs; and
- \$1.6 million to commence an upgrade to the Barrambie Way wastewater pump station and pressure main to cater for growth in Ellenbrook.

Additionally, \$500,000 will be spent in 2018-19 to commence addressing drainage and land matters at the Roselea Estate in Stirling to meet the Government's 2017 election commitment.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-18 \$'000	2017-18 Estimated Expenditure \$'000	2018-19 Budget Estimate \$'000	2019-20 Forward Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Capitalised Interest and Support Allocated to Capital							
Capital Support Costs.....	157,443	51,728	25,669	26,095	26,254	26,423	26,943
Capitalised Borrowings Costs.....	104,408	28,463	15,026	21,830	28,742	12,531	12,842
Irrigation and Drainage							
Country Drainage Capacity.....	25,118	6,618	4,574	2,377	15,149	207	767
Country Drainage Renewals.....	38,560	19,526	10,234	6,518	11,536	980	-
Irrigation.....	77,001	5,510	4,125	7,549	12,303	6,289	45,350
Metropolitan Drainage Capacity .....	37,215	7,206	4,079	4,393	7,037	8,040	10,539
Metropolitan Drainage Renewals.....	8,567	3,428	2,806	2,881	1,603	165	490
Service							
Business Support .....	313,382	131,149	81,558	39,948	26,658	42,414	73,213
Corporate Real Estate .....	177,011	91,149	64,328	22,925	23,587	15,706	23,644
Operational Information and Control.....	96,807	23,581	13,521	25,037	24,674	15,146	8,369
Wastewater Program							
Country Wastewater							
Margaret River Wastewater Treatment Plant Upgrade.....	20,429	2,161	2,161	12,386	5,864	18	-
Network Capacity.....	75,181	34,460	16,828	21,263	5,835	3,805	9,818
Network Renewals .....	37,225	16,172	6,958	8,888	7,647	2,194	2,324
Treatment Capacity.....	221,009	65,699	38,769	21,479	46,667	24,022	63,142
Treatment Renewals.....	14,852	1,362	759	1,746	2,421	2,963	6,360
Metropolitan Wastewater							
Beenyup Wastewater Treatment Plant Energy							
Recovery .....	19,297	8,967	5,298	9,371	959	-	-
Bullsbrook Pump Station Diversion to Ellenbrook.....	18,055	515	515	839	928	8,146	7,627
Ellenbrook Barrambie Way Pressure Main .....	48,400	349	349	1,579	12,804	33,071	597
Woodman Point Wastewater Treatment Plant Upgrade.....	140,971	90,555	62,925	26,400	16,011	8,005	-
Network Capacity.....	378,917	96,041	48,542	64,198	53,972	89,602	75,104
Network Renewals .....	136,809	59,439	32,625	26,548	19,609	9,771	21,442
Treatment Capacity.....	126,798	13,624	12,715	20,255	39,470	28,970	24,479
Treatment Renewals.....	75,293	17,571	8,049	9,524	6,404	19,572	22,222
Water Programs							
Country Water							
Merredin Storage Tank .....	19,328	430	430	365	15,796	2,737	-
Network Capacity.....	135,345	62,491	31,692	25,954	23,979	11,638	11,283
Network Renewals .....	290,225	122,854	48,623	28,216	45,787	49,958	43,410
Supply Capacity .....	481,450	135,050	82,559	48,583	132,298	111,472	54,047
Supply Renewals .....	61,397	39,822	27,980	8,248	4,896	4,395	4,036
Metropolitan Water							
Groundwater Replenishment Scheme Stage 2.....	273,594	101,719	80,225	131,873	40,002	-	-
Network Capacity.....	238,203	88,241	30,306	38,247	56,267	20,400	35,048
Network Renewals .....	251,345	120,982	52,304	42,359	38,089	24,652	25,263
Supply Capacity.....	95,091	33,406	16,861	13,333	20,456	13,684	14,212
Supply Renewals .....	103,582	45,393	19,106	16,572	17,710	12,078	11,829
<b>NEW WORKS</b>							
Irrigation and Drainage - Election Commitment							
Roselea Estate Drainage Upgrade .....	1,500	-	-	500	500	500	-
<b>Total Cost of Asset Investment Program .....</b>	<b>4,299,808</b>	<b>1,525,661</b>	<b>852,499</b>	<b>738,279</b>	<b>791,914</b>	<b>609,554</b>	<b>634,400</b>
<b>FUNDED BY</b>							
Borrowings .....			310,000	50,000	155,000	-	10,000
Internal Funds and Balances.....			542,499	688,279	636,914	609,554	624,400
<b>Total Funding.....</b>			<b>852,499</b>	<b>738,279</b>	<b>791,914</b>	<b>609,554</b>	<b>634,400</b>

# Bunbury Water Corporation

## Part 12 Utilities

### Asset Investment Program

Bunbury Water Corporation's (Aqwest) Asset Investment Program totals \$26.8 million across the forward estimates period, and is a continuance of Aqwest's long-term plan to deliver quality community services by developing and maintaining infrastructure to meet the water supply needs of the City of Bunbury.

The \$15.8 million investment in the region in 2018-19 includes:

- \$13 million to construct the Glen Iris Water Treatment Plant in Bunbury. This project seeks to address future supply requirements for the City of Bunbury, and moves water abstraction and treatment away from the current low quality coastal area;
- \$0.8 million to replace ageing water mains; and
- \$1.4 million to refurbish and maintain existing reservoir and water treatment plant infrastructure.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-18 \$'000	2017-18 Estimated Expenditure \$'000	2018-19 Budget Estimate \$'000	2019-20 Forward Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Works - Treatment Plants - Glen Iris Water Treatment Plant ....	15,000	2,000	2,000	13,000	-	-	-
<b>COMPLETED WORKS</b>							
Fleet, Information and Communications Technology (ICT) and Other .....	1,061	1,061	405	-	-	-	-
<b>Works</b>							
Mains .....	2,473	2,473	891	-	-	-	-
Reservoirs .....	747	747	635	-	-	-	-
Treatment Plants .....	1,411	1,411	1,250	-	-	-	-
<b>NEW WORKS</b>							
Fleet, ICT and Other .....	1,654	-	-	478	427	370	379
<b>Works</b>							
Mains .....	3,563	-	-	830	958	880	895
Reservoirs .....	3,642	-	-	792	400	270	2,180
Services .....	381	-	-	92	94	96	99
Treatment Plants .....	4,577	-	-	641	1,548	1,914	474
<b>Total Cost of Asset Investment Program .....</b>	<b>34,509</b>	<b>7,692</b>	<b>5,181</b>	<b>15,833</b>	<b>3,427</b>	<b>3,530</b>	<b>4,027</b>
<b>FUNDED BY</b>							
Borrowings .....			-	10,000	-	-	1,885
Internal Funds and Balances .....			5,181	5,833	3,427	3,530	2,142
<b>Total Funding .....</b>			<b>5,181</b>	<b>15,833</b>	<b>3,427</b>	<b>3,530</b>	<b>4,027</b>

# Busselton Water Corporation

## Part 12 Utilities

### Asset Investment Program

The Corporation's Asset Investment Program (AIP) is shaping our State by investing in the Busselton region, with \$3.7 million allocated in 2018-19 and \$12.4 million in total to 2021-22.

Across the forward estimates period the AIP will deliver quality community services, including:

- \$4.4 million for planned asset replacement and upgrades to infrastructure at various water treatment plants;
- \$0.9 million to commence equipping a new bore to meet increased demand, with timing linked to a revised aquifer management strategy;
- \$0.9 million to demolish and replace filters at one of the water treatment plants; and
- \$0.6 million on new trunk mains to meet growth and improve network performance.

The AIP ensures existing infrastructure is maintained and new infrastructure is provided to maintain water supplies and sustain growth.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-18 \$'000	2017-18 Estimated Expenditure \$'000	2018-19 Budget Estimate \$'000	2019-20 Forward Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000
<b>COMPLETED WORKS</b>							
Building, Land and Land Improvements - 2017-18 Program....	185	185	185	-	-	-	-
Busselton Margaret River Regional Airport Mains and Pump Station .....	1,165	1,165	1,165	-	-	-	-
New Connections and Meters - 2017-18 Program .....	433	433	433	-	-	-	-
New Mains and Services - 2017-18 Program .....	656	656	656	-	-	-	-
Office Equipment - 2017-18 Program .....	143	143	143	-	-	-	-
Plant, Mobile and Other Purchases - 2017-18 Program .....	74	74	74	-	-	-	-
Treatment Plants - 2017-18 Program .....	1,603	1,603	1,603	-	-	-	-
<b>NEW WORKS</b>							
Building, Land and Land Improvements .....	927	-	-	40	310	496	81
New Connections and Meters .....	2,222	-	-	532	720	485	485
New Mains and Services .....	2,101	-	-	354	654	527	566
Office Equipment .....	400	-	-	100	100	100	100
Plant, Mobile and Other Purchases .....	616	-	-	286	172	37	121
Treatment Plants .....	6,093	-	-	2,404	906	1,245	1,538
<b>Total Cost of Asset Investment Program .....</b>	<b>16,618</b>	<b>4,259</b>	<b>4,259</b>	<b>3,716</b>	<b>2,862</b>	<b>2,890</b>	<b>2,891</b>
<b>FUNDED BY</b>							
Internal Funds and Balances .....			4,259	3,716	2,862	2,890	2,891
<b>Total Funding .....</b>			<b>4,259</b>	<b>3,716</b>	<b>2,862</b>	<b>2,890</b>	<b>2,891</b>