

## Part 12

### Utilities

#### Introduction

The Utilities portfolio comprises the six State-owned electricity and water utilities, providing homes and businesses with access to safe, reliable and efficient services. The portfolio maintains the capacity and reliability of its assets, and invests in infrastructure and new and emerging technologies to support the State. It plays a central role in the economic development of the State and in improving the living standards of the community.

The portfolio is contributing to the achievement of the following Our Priorities and associated targets:

- A Strong Economy
  - creating jobs; and
- Regional Prosperity
  - delivering strong regional economies.

#### Summary of Recurrent and Asset Investment Expenditure

Agency	2018-19 Estimated Actual \$'000	2019-20 Budget Estimate \$'000
Synergy		
– Asset Investment Program .....	48,945	40,725
Western Power		
– Asset Investment Program .....	716,520	849,714
Horizon Power		
– Asset Investment Program .....	96,865	61,651
Water Corporation		
– Asset Investment Program .....	706,132	699,986
Bunbury Water Corporation		
– Asset Investment Program .....	7,852	13,342
Busselton Water Corporation		
– Asset Investment Program .....	5,790	2,855

## Ministerial Responsibilities

Minister	Agency	Services
Minister for Mines and Petroleum; Energy; Industrial Relations	Synergy	n/a
	Western Power	n/a
	Horizon Power	n/a
Minister for Water; Fisheries; Forestry; Innovation and ICT; Science	Water Corporation	n/a
	Bunbury Water Corporation	n/a
	Busselton Water Corporation	n/a

# Synergy

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### Asset Investment Program

1. In 2019-20, Synergy will spend \$40.7 million on its Asset Investment Program, which is largely required to maintain the existing generation asset base. This investment in Synergy's existing generation asset base supports economic growth and jobs in the regions, where a significant portion of the asset base is located.

#### Generation

2. 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 \$39.5 million in 2019-20. Major investments include:
  - 2.1. \$10.8 million for various projects to support safety, efficiency and environmental targets at Muja Power Station, which includes developing new water supply sources for coal-fired generators and electrical switchboard upgrades;
  - 2.2. \$7.9 million for works to improve gas turbine reliability and security of supply. Major items include:
    - 2.2.1. \$5.9 million for the Cockburn Gas Turbine, mainly for the purchase and installation of parts required for the planned maintenance and upgrade of fire protection systems; and
    - 2.2.2. \$2 million for the Pinjar Gas Turbines, including the upgrade of Pinjar Gas Turbine Stage C exhausts;
  - 2.3. \$6.1 million for 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 ongoing expenditure associated with maintaining the safe and reliable operation of the plant;
  - 2.4. \$11.7 million for various projects at Kwinana Power Station. Major works include 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; and
  - 2.5. \$3 million for various smaller projects to deliver effective operations and management of Synergy's generation portfolio, including control system upgrades and the renewal of the Perron Quarry bore water supply pipeline.

#### Corporate

3. A total of \$1.2 million in 2019-20 has been allocated for the replacement and/or upgrade of information and communications technology (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 30-6-19 \$'000	2018-19 Estimated Expenditure \$'000	2019-20 Budget Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Corporate							
Business Systems Replacement .....	57,188	42,514	3,632	1,145	4,364	5,020	4,145
Property, Plant and Equipment.....	2,667	2,001	221	100	322	100	144
Generation							
Cockburn Gas Turbine.....	46,099	22,548	505	5,900	8,131	6,250	3,270
Collie Power Station .....	46,082	27,855	4,953	6,148	4,087	4,245	3,747
Kwinana Power Station.....	44,052	27,578	16,041	11,658	3,816	1,000	-
Muja C and D Power Station .....	145,523	102,183	15,758	10,774	10,854	10,700	11,012
Other Generation Infrastructure Projects .....	72,505	56,767	5,875	3,000	81	3,600	9,057
Pinjar Gas Turbine.....	22,739	13,876	450	2,000	2,000	3,000	1,863
Retail - System Enhancements .....	47,672	26,765	1,510	-	7,245	6,200	7,462
<b>NEW WORKS</b>							
Retail - Advanced Metering Infrastructure/AA4 .....	10,100	-	-	-	4,700	5,400	-
<b>Total Cost of Asset Investment Program .....</b>	<b>494,627</b>	<b>322,087</b>	<b>48,945</b>	<b>40,725</b>	<b>45,600</b>	<b>45,515</b>	<b>40,700</b>
<b>FUNDED BY</b>							
Internal Funds and Balances.....			48,945	40,725	45,600	45,515	40,700
<b>Total Funding.....</b>			<b>48,945</b>	<b>40,725</b>	<b>45,600</b>	<b>45,515</b>	<b>40,700</b>

# Western Power

## Part 12 Utilities

### Asset Investment Program

1. Western Power builds, maintains and operates the electricity network in the southwest of Western Australia. Electricity plays an essential role in developing the State's economy and improving the living standards of the community. Western Power's focus is to provide customers with access to a safe, reliable and efficient supply of electricity. Western Power will invest \$849.7 million in 2019-20 and a further \$2.4 billion across the forward estimates period.
2. Western Power's Asset Investment Program (AIP) is underpinned by its Asset Management Framework (the Framework), designed to meet the requirements of Western Power's licence obligations, good industry practice and relevant Australian standards. The Framework uses a risk-based approach coupled with a zone-based delivery to maximise the reduction in network risks for a 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.

### New Access Arrangement

3. Western Power's 2017-22 Access Arrangement (AA4) proposal was submitted to the Economic Regulation Authority (ERA) on 2 October 2017. The AA4 proposal reflected Western Power's strategy to maintain overall safety of the network, meet agreed levels of reliability and deliver an efficient and sustainable financial position.
4. The AA4 submission built 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.
5. As part of the AA4 process, the ERA reviewed whether there is a demonstrable need for investment proposed by Western Power and that the investment is efficient. The ERA's final determination on the AA4 submission was issued on 28 February 2019, and the AA4 prices and policies will commence on 1 July 2019.
6. The AIP forecast aligns with the ERA's Final Decision, with additional funding for the Advanced Metering Infrastructure (AMI) project, partially offset by some re-profiling of expenditure into 2022-23.

### Advanced Metering Infrastructure

7. Western Power's AMI project provides for the installation of advanced 'communications-enabled' meters and the equipment required to collect the data they record.
8. The Government has approved an additional \$61.5 million for Western Power's AMI project from 2018-19 to 2021-22, bringing Western Power's total investment in metering to \$251 million over the period.
9. As these meters are rolled out, AMI will provide a wide range of benefits such as improving public safety, cost-saving benefits, providing greater information to customers allowing retailers to offer more innovative products and greater adoption of renewable energy, and better management of the network through the collection of additional network data.

### Safety

10. The safety of the community and its staff is Western Power's most important priority. Investment in safety accounts for 33% of the forecast capital expenditure budget over the period 2019-20 to 2022-23. Western Power will commit \$262.5 million in 2019-20 to continue important safety programs including:
  - 10.1. \$235.2 million in 2019-20 to replace more than 2,100 km of the highest risk overhead conductors and replacing or reinforcing around 125,000 wooden power poles; and
  - 10.2. \$14 million on bushfire management programs, focusing on mitigating safety risks in the most fire-prone areas.

11. Western Power's asset safety objective for AA4 is to maintain the overall safety of the network with actual safety performance not deteriorating below recent historical levels. Safety performance is heavily influenced by external factors (such as adverse weather) and therefore the aim is to manage the factors that are within Western Power's control, such as ensuring the network assets are in good condition. Western Power has adopted a risk-based approach to asset replacement and renewal, targeting the poorest condition assets and identifying the treatments that achieve the greatest risk reduction per dollar invested.

### **Service**

12. Service covers investment to ensure regulatory compliance, system reliability, asset replacement, metering, business support, information and communications technology (ICT) and building and site management (termed corporate real estate). Western Power will invest \$321.5 million on service-related projects in 2019-20. Key investments include:
  - 12.1. business support and ICT (\$80.2 million) - including the supporting infrastructure for advanced meters;
  - 12.2. corporate real estate (\$65 million) - to undertake upgrades and essential works within our property and depots;
  - 12.3. metering (\$39 million) - including the installation of advanced meters;
  - 12.4. regulatory compliance (\$41.2 million) - with upgrades to substation security and improvements to network reliability; and
  - 12.5. reliability driven asset replacement (\$96.1 million) - to reduce the risks of plant asset failure and ensuring service and operability are maintained.
13. Western Power's service incentive framework for the AA4 period will consolidate the improvements made over the past five years and maintain overall performance at the levels achieved at the end of the AA3 period.
14. Some parts of the network experience poorer service than others, particularly at the edge of the grid, and Western Power will target investment to improve performance in those areas.

### **Growth**

15. Growth capital expenditure (both transmission and distribution) is typically one of the largest areas of investment for an energy network business. Western Power is committed to connecting customers and investing in infrastructure to support the State's economy, with \$216.2 million allocated for customer-driven works in 2019-20.
16. While growth across the South West Interconnected System as a whole has slowed, there are parts of the network such as Mandurah, Bunbury, and Busselton where growth is above average and localised investment in capacity is required. Western Power is focusing much of its growth-related investment in these areas, while augmenting the broader network to ensure the 1.1 million customers connected to it, and the approximately 96,000 new customers expected to connect over the next five years have reliable electricity supply.
17. Growth capital expenditure also includes projects driven by individual customers, which tend to be driven by economic conditions and traditionally represent a significant portion of the works program. Customer-driven capital expenditure includes all work associated with connecting customer loads or generators, and relocation of assets. Projects range from small residential connections (pole to pillar), through to network extensions to cater for large industrial customers.

### **State Underground Power Program**

18. Under the current round of the State Underground Power Program (round six), Western Power, in partnership with the State Government and local councils, is improving customer experiences through investment in Western Australia's suburbs. Seventeen areas/suburbs in Perth will receive underground power. Around 18,000 properties will benefit from underground power in this round, with works expected to be completed by the end of the AA4 period. 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

19. 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 technology) will be considered where they are more cost-effective or more aligned to customer requirements.
20. 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. For example, building on the successful trial of six Stand-alone Power Systems (SPS) in the Great Southern in 2016 where customers were saved from over 90 hours of outages in their second year, Western Power recently awarded three contracts to supply 57 units for its SPS Round 1 roll-out. Two contracts were awarded to local renewable energy companies - Perth-based Hybrid Systems and BayWA. These companies will supply the modular and scalable units, ranging from less than 5 kilowatt hour (kWh) to supply electric fences and dam pumps, to 50 kWh for large-scale agricultural businesses. Once installed and commissioned, the ongoing servicing and operation of the SPS units, which combine solar and battery technology with a backup generator, will be provided by the vendors for a two year period.

## Support for renewable energy investment

21. Western Power has developed and implemented the Generator Interim Access (GIA) solution, in consultation with the Australian Energy Market Operator and the Public Utilities Office (Treasury).
22. The GIA solution will assist connections to the State's main electricity grid that would have been unviable under the current unconstrained network access arrangement. The solution will allow access to around 900 megawatts (MW) of new renewable energy capacity with eight connection offers being made to generators, including several large-scale projects exceeding 100 MW of capacity.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-19 \$'000	2018-19 Estimated Expenditure \$'000	2019-20 Budget Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Government Initiative - State Underground Power Program .....	265,730	128,942	36,474	37,305	30,526	34,388	34,569
Growth							
Distribution							
Capacity Expansion .....	405,474	205,547	7,826	52,155	43,641	47,510	56,620
Customer Access .....	1,611,288	1,035,295	123,229	133,583	143,283	147,729	151,397
Transmission							
Capacity Expansion .....	148,352	120,848	14,813	14,087	5,984	2,626	4,806
Customer Driven .....	242,547	177,832	57,296	16,410	18,288	19,174	10,842
Other Asset Investment - Motor Vehicle Fleet and Mobile Plant .....	60,842	14,910	14,910	9,750	7,934	14,141	14,107
Safety							
Bushfire Mitigation .....	103,944	69,900	3,073	14,042	5,989	5,945	8,068
Conductor Management .....	809,720	518,719	47,163	62,841	69,101	79,462	79,597
Connection Management .....	217,162	161,769	4,971	13,288	13,975	13,562	14,568
Pole Management .....	2,121,671	1,434,649	153,799	172,365	175,166	168,409	171,082
Security							
Thermal Management .....	3,186	3,002	634	184	-	-	-
Voltage and Fault Level Management .....	6,319	4,147	157	2,172	-	-	-
Service							
Business Support and ICT .....	656,158	421,100	112,089	80,167	66,749	46,318	41,824
Corporate Real Estate .....	245,706	122,271	30,248	65,009	21,848	15,782	20,796
Metering .....	304,767	135,201	29,241	38,984	42,174	43,805	44,603
Regulatory Compliance .....	278,436	116,468	6,827	41,240	36,346	38,555	45,827
Reliability Driven Asset Replacement .....	829,321	422,132	73,770	96,132	90,377	107,790	112,890
<b>Total Cost of Asset Investment Program .....</b>	<b>8,310,623</b>	<b>5,092,732</b>	<b>716,520</b>	<b>849,714</b>	<b>771,381</b>	<b>785,196</b>	<b>811,596</b>
<b>FUNDED BY</b>							
Borrowings .....			222,401	290,516	219,414	179,219	245,558
Internal Funds and Balances .....			494,119	559,198	551,967	605,977	566,038
<b>Total Funding .....</b>			<b>716,520</b>	<b>849,714</b>	<b>771,381</b>	<b>785,196</b>	<b>811,596</b>

# Horizon Power

## Part 12 Utilities

### Asset Investment Program

1. Horizon Power will invest \$61.6 million during 2019-20 and a further \$145.2 million across the forward estimates period. This investment in regional Australia will continue to focus on providing safe and reliable electricity supply to regional customers and supporting jobs in regional areas.

### Asset Management Plan

#### *A Liveable Environment*

2. Horizon Power is forecast to invest \$38.4 million in 2019-20 and a further \$123.1 million over the forward estimates period 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 Power

3. Horizon Power will invest \$2.8 million in 2019-20 to deliver power infrastructure to meet forecast demand in Onslow. This includes customer installed small-scale domestic and commercial rooftop photovoltaic 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.

### Remote Communities Photovoltaics

#### *Regional Prosperity*

4. Horizon Power will invest \$11.6 million in 2019-20 to fund the installation of modular centralised solar and energy storage in remote Aboriginal communities known as Aboriginal Remote Community Power Supply Program towns currently powered by expensive fuel sources such as diesel.
5. The introduction of cheaper, alternative methods of installation due to a reduction of the civil and structural works required has now made these investments commercial. Furthermore, there will be significant emission reductions, decreased risk of service interruptions and increased potential for community partnerships.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-19 \$'000	2018-19 Estimated Expenditure \$'000	2019-20 Budget Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Asset Management Plan							
Asset Replacement.....	139,164	76,740	14,542	14,851	15,400	15,771	16,402
Capacity.....	24,767	12,234	2,920	2,982	3,092	3,166	3,293
Knowledge and Technology Investment.....	47,292	24,793	5,242	5,353	5,551	5,684	5,911
Mobile Plant and Operational Fleet.....	42,500	27,091	3,849	3,637	3,794	3,899	4,079
Property Management.....	32,628	17,667	3,486	3,559	3,691	3,780	3,931
Regulatory Compliance.....	33,309	31,888	331	338	351	359	373
Reliability.....	41,311	34,092	1,681	1,717	1,781	1,824	1,897
Safety.....	142,233	117,168	5,839	5,963	6,184	6,332	6,586
Customer Funded Works - Other Customer Driven Works.....	169,110	138,213	8,466	8,835	9,046	9,263	3,753
Major Projects - Onslow Power Infrastructure Project - Power Station Upgrade.....	105,293	102,487	45,269	2,806	-	-	-
<b>COMPLETED WORKS</b>							
Major Projects							
Pilbara Power Project.....	25,361	25,361	46	-	-	-	-
Pilbara Underground Power Project.....	214,350	214,350	5,194	-	-	-	-
<b>NEW WORKS</b>							
Remote Communities Photovoltaics.....	11,610	-	-	11,610	-	-	-
<b>Total Cost of Asset Investment Program.....</b>	<b>1,028,928</b>	<b>822,084</b>	<b>96,865</b>	<b>61,651</b>	<b>48,890</b>	<b>50,078</b>	<b>46,225</b>
<b>FUNDED BY</b>							
Borrowings.....			19,111	1,950	20,950	21,933	23,072
Internal Funds and Balances.....			27,291	54,537	27,575	28,145	23,153
Other.....			50,463	5,164	365	-	-
<b>Total Funding.....</b>			<b>96,865</b>	<b>61,651</b>	<b>48,890</b>	<b>50,078</b>	<b>46,225</b>

# Water Corporation

## Part 12 Utilities

### Asset Investment Program

1. In 2019-20, \$700 million has been committed to capital investment projects across the State. These projects will improve the Corporation's services and continue to ensure its customers have access to reliable, high quality water and wastewater services.

#### Expenditure in the Regions

2. Regional Western Australia will continue to benefit from the development and upgrading of water and wastewater infrastructure, with \$230.4 million committed in 2019-20 to a number of projects across the regions.
3. A total of \$134.9 million has been committed in 2019-20 on around 140 water projects, including:
  - 3.1. \$9.5 million on water quality improvements in the Murchison region, including installation of water treatment facilities in Cue, Meekatharra, Mount Magnet and Sandstone to improve the water quality in each town; and
  - 3.2. \$0.5 million towards building a new 3 million litre water storage tank in Collie. The project has an estimated total value of \$9.4 million.
4. A total of \$62.4 million will be spent in 2019-20 on around 80 wastewater projects, including:
  - 4.1. \$4.9 million to continue upgrading the Margaret River Wastewater Treatment Plant. The upgrade will double the wastewater treatment capacity to 3 million litres per day; and
  - 4.2. \$0.2 million towards upgrading the Brunswick Wastewater Treatment Plant. The upgrade will improve the treatment of wastewater and efficient operation of the plant. The project has an estimated total value of \$5.4 million.
5. Additionally, \$3.7 million has been committed for the Essential and Municipal Services Upgrade Program for Aboriginal communities in Mowanjum, Bayulu and Bidyadanga.

#### Expenditure in the Metropolitan Area

6. A total of \$338.6 million has been committed in 2019-20 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.
7. In 2019-20, \$182.7 million has been committed to water network and supply projects including \$58.9 million towards 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. On completion, the expansion will double the capacity of the Scheme from 14 to 28 billion litres per year.
8. Other features of the metropolitan program include \$138.1 million in 2019-20 on wastewater treatment projects in both the northern and southern corridors, including:
  - 8.1. \$7.3 million on upgrading the Woodman Point Wastewater Treatment Plant to service areas south of the 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; and
  - 8.2. \$1.9 million on upgrades at the Ellenbrook Barrambie Way wastewater pump station and pressure main to cater for growth in the area.
9. Additionally, \$0.5 million has been committed to address drainage and land matters at the Roselea Estate in Stirling to meet the Government's election commitment.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-19 \$'000	2018-19 Estimated Expenditure \$'000	2019-20 Budget Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Capital Support Costs .....	138,044	26,095	26,095	27,453	27,623	28,162	28,711
Election Commitment - Essential and Municipal Services Upgrade Program .....	22,190	7,683	7,683	3,710	5,219	2,631	2,947
Irrigation and Drainage							
Country Drainage Capacity.....	23,119	2,377	2,377	13,619	1,821	501	4,801
Country Drainage Renewals .....	35,120	6,518	6,518	6,412	11,714	4,240	6,236
Election Commitment - Roselea Estate Drainage Upgrade .....	1,500	500	500	500	500	-	-
Irrigation.....	38,163	7,549	7,549	9,386	2,013	11,467	7,748
Metropolitan Drainage Capacity .....	21,212	4,393	4,393	13,602	1,692	1,074	451
Metropolitan Drainage Renewals.....	13,657	2,881	2,881	3,726	3,037	2,005	2,008
Service							
Business Support.....	312,958	39,948	39,948	64,312	66,215	68,681	73,802
Corporate Real Estate .....	91,717	22,925	22,925	17,150	17,125	17,246	17,271
Operational Information and Control.....	121,664	25,037	25,037	22,036	21,010	26,771	26,810
Wastewater Program							
Country Wastewater							
Margaret River Wastewater Treatment Plant Upgrade .....	20,430	15,406	13,262	4,904	120	-	-
Network Capacity .....	86,239	20,322	20,322	21,081	12,192	19,032	13,612
Network Renewals .....	34,406	8,495	8,495	8,410	6,827	5,622	5,052
Treatment Capacity.....	100,793	19,692	19,692	23,233	21,504	19,949	16,415
Treatment Renewals.....	14,677	1,669	1,669	4,813	3,301	2,849	2,045
Metropolitan Wastewater							
Ellenbrook Barrambie Way Pressure Main .....	38,275	962	212	1,896	9,703	20,043	5,671
Network Capacity .....	311,137	62,664	62,664	59,044	74,232	65,727	49,470
Network Renewals .....	110,789	25,374	25,374	26,438	20,344	16,464	22,169
Treatment Capacity.....	224,051	18,602	18,602	30,793	61,158	48,198	65,300
Treatment Renewals .....	79,277	9,103	9,103	12,596	14,574	20,939	22,065
Woodman Point Wastewater Treatment Plant Upgrade (to 180 Megalitres/Day) .....	140,971	132,463	37,402	7,332	1,176	-	-
Water Programs							
Country Water							
Murchison Towns Water Treatment .....	16,998	4,471	4,471	9,522	3,005	-	-
Network Capacity.....	102,139	24,806	24,806	17,668	22,736	20,642	16,287
Network Renewals .....	198,454	26,968	26,968	30,701	32,075	40,792	67,918
Supply Capacity .....	318,246	42,509	42,509	68,000	89,085	87,748	30,904
Supply Renewals .....	39,658	7,883	7,883	8,982	7,844	8,704	6,245
Metropolitan Water							
Groundwater Replenishment Scheme Stage 2 .....	294,816	223,787	116,011	58,943	12,086	-	-
Network Capacity .....	224,185	36,555	36,555	43,598	41,820	40,802	61,410
Network Renewals .....	147,631	40,485	40,485	29,629	24,726	21,689	31,102
Supply Capacity .....	179,005	27,903	27,903	29,788	39,480	36,860	44,974
Supply Renewals .....	111,787	15,838	15,838	20,709	23,362	18,080	33,798
<b>Total Cost of Asset Investment Program .....</b>	<b>3,613,308</b>	<b>911,863</b>	<b>706,132</b>	<b>699,986</b>	<b>679,319</b>	<b>656,918</b>	<b>665,222</b>
<b>FUNDED BY</b>							
Borrowings .....			70,000	110,000	65,000	35,000	30,000
Internal Funds and Balances.....			636,132	589,986	614,319	621,918	635,222
<b>Total Funding.....</b>			<b>706,132</b>	<b>699,986</b>	<b>679,319</b>	<b>656,918</b>	<b>665,222</b>

# Bunbury Water Corporation

## Part 12

## Utilities

### Asset Investment Program

1. Bunbury Water Corporation's (Aqwest) Asset Investment Program totals \$23.6 million across the forward estimates period. Aqwest will continue to deliver the infrastructure required to meet the water supply needs of the City of Bunbury and enhance the prosperity of the region.
2. The \$13.3 million investment in 2019-20 includes:
  - 2.1. \$8.9 million to complete the Glen Iris Water Treatment Plant. This project moves water abstraction and treatment away from the current low-quality coastal area to ensure Aqwest can provide for future supply requirements;
  - 2.2. \$2.5 million to refurbish and maintain existing reservoir and water treatment plant infrastructure; and
  - 2.3. \$1.2 million to replace ageing water mains.

	Estimated Total Cost \$'000	Estimated Expenditure to 30-6-19 \$'000	2018-19 Estimated Expenditure \$'000	2019-20 Budget Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Treatment Plants - Glen Iris Water Treatment Plant.....	14,980	6,054	4,386	8,926	-	-	-
<b>COMPLETED WORKS</b>							
Fleet, Information and Communications Technology (ICT) and Other - 2018-19 Program.....	473	473	473	-	-	-	-
Mains - 2018-19 Program.....	778	778	778	-	-	-	-
Reservoirs - 2018-19 Program.....	660	660	660	-	-	-	-
Services - 2018-19 Program.....	124	124	124	-	-	-	-
Treatment Plants - 2018-19 Program.....	1,431	1,431	1,431	-	-	-	-
<b>NEW WORKS</b>							
Fleet, ICT and Other.....	1,711	-	-	661	325	362	363
Mains.....	4,103	-	-	1,160	1,064	856	1,023
Reservoirs.....	4,200	-	-	800	600	2,300	500
Services.....	516	-	-	125	128	130	133
Treatment Plants.....	4,125	-	-	1,670	930	832	693
<b>Total Cost of Asset Investment Program.....</b>	<b>33,101</b>	<b>9,520</b>	<b>7,852</b>	<b>13,342</b>	<b>3,047</b>	<b>4,480</b>	<b>2,712</b>
<b>FUNDED BY</b>							
Borrowings.....			4,386	8,926	-	-	-
Internal Funds and Balances.....			3,466	4,416	3,047	4,480	2,712
<b>Total Funding.....</b>			<b>7,852</b>	<b>13,342</b>	<b>3,047</b>	<b>4,480</b>	<b>2,712</b>

# Busselton Water Corporation

## Part 12 Utilities

### Asset Investment Program

1. The Corporation's Asset Investment Program (AIP) includes \$2.9 million allocated in 2019-20 and a total of \$13 million across the forward estimates period. This investment will enable the Corporation to continue to support a strong regional economy.
2. Key projects across the forward estimates period include:
  - 2.1. \$6.2 million for planned asset replacement and upgrades at a number of water treatment plants;
  - 2.2. \$1.3 million to upgrade operational building facilities, to function within a more sustainable environment; and
  - 2.3. \$1.2 million on filter replacements and remote monitoring, to operate services more efficiently.
3. 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 30-6-19 \$'000	2018-19 Estimated Expenditure \$'000	2019-20 Budget Estimate \$'000	2020-21 Forward Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000
<b>COMPLETED WORKS</b>							
Building, Land and Land Improvements - 2018-19 Program.....	75	75	75	-	-	-	-
Busselton Margaret River Regional Airport							
Pump Station - 2018-19 Program .....	484	484	484	-	-	-	-
Special Project - Airport Upgrade .....	329	329	329	-	-	-	-
New Connections and Meters - 2018-19 Program .....	532	532	532	-	-	-	-
New Mains and Services - 2018-19 Program .....	773	773	773	-	-	-	-
Office Equipment - 2018-19 Program .....	100	100	100	-	-	-	-
Plant, Mobile and Other Purchases - 2018-19 Program.....	322	322	322	-	-	-	-
Treatment Plants - 2018-19 Program .....	3,175	3,175	3,175	-	-	-	-
<b>NEW WORKS</b>							
Building, Land and Land Improvements .....	1,265	-	-	438	396	251	180
New Connections and Meters .....	2,146	-	-	492	454	467	733
New Mains and Services .....	2,016	-	-	544	392	385	695
Office Equipment.....	880	-	-	215	218	222	225
Plant, Mobile and Other Purchases.....	569	-	-	172	57	105	235
Treatment Plants .....	6,153	-	-	994	1,369	1,458	2,332
<b>Total Cost of Asset Investment Program .....</b>	<b>18,819</b>	<b>5,790</b>	<b>5,790</b>	<b>2,855</b>	<b>2,886</b>	<b>2,888</b>	<b>4,400</b>
<b>FUNDED BY</b>							
Internal Funds and Balances.....			5,790	2,855	2,886	2,888	4,400
<b>Total Funding.....</b>			<b>5,790</b>	<b>2,855</b>	<b>2,886</b>	<b>2,888</b>	<b>4,400</b>