

## 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. <sup>1</sup>

#### Summary of Recurrent and Asset Investment Expenditure

Agency	2019-20 Actual <sup>(a)</sup> \$'000	2020-21 Budget Estimate \$'000
Synergy		
– Asset Investment Program .....	68,163	57,673
Western Power		
– Asset Investment Program .....	831,507	892,154
Horizon Power		
– Asset Investment Program .....	71,710	183,204
Water Corporation		
– Asset Investment Program .....	634,569	694,219
Bunbury Water Corporation		
– Asset Investment Program .....	12,120	15,858
Busselton Water Corporation		
– Asset Investment Program .....	2,535	2,886

(a) Based on preliminary annual report data for 2019-20. Some aggregates may be adjusted for annual report information finalised after agency Budget Statements were prepared.

<sup>1</sup> The emergence of the COVID-19 pandemic has resulted in the deferral of the *Our Priorities* program, which was reported in the 2019-20 Budget Statements.

## 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

## Part 12 Utilities

### Asset Investment Program

1. In 2020-21, Synergy will spend \$57.7 million on its Asset Investment Program, with new works to support communities through investment in renewable energy technology as part of the WA Recovery Plan, and continued investment to maintain the existing generation asset base. These investments support economic growth and jobs in the regions, where a significant portion of the existing generation 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 \$27.8 million in 2020-21. Major investments include:
  - 2.1. \$12.8 million for various projects at Collie Power Station. Major works include the installation of a steam bypass system to enable the plant to reliably operate at reduced outputs and the replacement of ageing infrastructure;
  - 2.2. \$8.2 million for various projects to support safety, efficiency and environmental targets at Muja Power Station;
  - 2.3. \$4.5 million for works to improve gas turbine reliability and security of supply, with ageing unit rotors to be replaced at the Cockburn and Pinjar Gas Turbines; and
  - 2.4. \$0.8 million for the continuation of compliance works for rehabilitation and relocation of shared services at Kwinana Power Station in order to support other generation infrastructure located at the Kwinana site following the retirement of the power station.

### Corporate

3. A total of \$4.3 million in 2020-21 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.
4. Additionally, \$7.9 million in 2020-21 has been committed to various infrastructure and system upgrades to ensure readiness for the Wholesale Electricity Market (WEM) reforms which will be implemented by October 2022.

### Retail

5. Synergy will invest \$4 million in 2020-21 for Advanced Metering Infrastructure involving the activation of advanced meters and associated infrastructure upgrades.
6. A total of \$8.7 million has been allocated for investment in retail systems, enhancing existing capabilities and replacement of systems that reach end of life over the forward estimates period.

### WA Recovery Plan

7. In 2020-21, Synergy will undertake investment in new renewable energy technology in Perth and the regions, including:
  - 7.1. \$3.5 million for the Community Energy Exchange pilot project to transform selected schools into smart, green virtual power plants by installing rooftop solar panel systems and commercial batteries; and
  - 7.2. \$0.7 million for the Renewable Energy for Social Housing smart energy project, which will benefit the community by installing solar panels on social housing to provide those customers, who would otherwise not be able to easily access renewable technology, the opportunity to unlock solar benefits.

	Estimated Total Cost \$'000	Actual Expenditure to 30-6-20 \$'000	2019-20 <sup>(a)</sup> Expenditure \$'000	2020-21 Budget Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000	2023-24 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
Corporate							
Business Systems Replacement .....	73,229	50,161	7,647	4,324	4,692	6,730	7,322
Property, Plant and Equipment .....	13,733	4,933	2,932	800	3,000	3,000	2,000
WEM Market Readiness .....	12,390	264	264	7,880	3,453	730	63
Generation							
Cockburn Gas Turbine .....	57,762	28,870	6,322	1,648	13,272	7,100	6,872
Collie Power Station .....	86,578	49,801	21,946	12,813	8,665	7,450	7,849
Kwinana Power Station .....	42,444	41,649	14,071	760	35	-	-
Muja C and D Power Station .....	130,092	106,502	4,319	8,210	4,331	5,000	6,049
Other Generation Infrastructure Projects .....	68,522	62,561	3,538	1,450	1,500	1,500	1,511
Pinjar Gas Turbine .....	23,086	14,270	394	2,900	2,000	2,000	1,916
Retail							
Advanced Metering Infrastructure/Access Arrangement 4 .....	5,872	1,877	1,877	3,995	-	-	-
System Enhancements .....	62,899	31,078	4,313	8,700	8,020	7,920	7,181
<b>COMPLETED WORKS</b>							
Generation - Other COVID-19 - Risk Mitigation Measures .....	540	540	540	-	-	-	-
<b>NEW WORKS</b>							
<b>COVID-19 WA Recovery Plan</b>							
Retail							
Community Energy Exchange .....	4,000	-	-	3,480	520	-	-
Renewable Energy for Social Housing .....	4,713	-	-	713	1,513	1,600	887
<b>Total Cost of Asset Investment Program .....</b>	<b>585,860</b>	<b>392,506</b>	<b>68,163</b>	<b>57,673</b>	<b>51,001</b>	<b>43,030</b>	<b>41,650</b>
<b>FUNDED BY</b>							
Internal Funds and Balances .....			68,163	57,673	51,001	43,030	41,650
<b>Total Funding .....</b>			<b>68,163</b>	<b>57,673</b>	<b>51,001</b>	<b>43,030</b>	<b>41,650</b>

(a) Based on preliminary annual report data for 2019-20. Some aggregates may be adjusted for annual report information finalised after agency Budget Statements were prepared.

## WA Recovery Plan - Other Initiatives

- This expenditure is in addition to the following WA Recovery Plan initiatives that Synergy is playing a central role in:
  - delivering COVID-19 support and stimulus measures, including the Small Business and Charity Tariff Offset and one-off doubling of the Western Australian Government Energy Assistance Payment. These initiatives were funded by a \$311.5 million increase to Synergy's operating subsidy in 2019-20; and
  - the employment of additional case managers from 2020-21 onwards to support customers experiencing hardship as a result of COVID-19 resulting in an increase in Synergy's expenditure of \$1.7 million per annum from 2020-21.
- Synergy will apply the lower residential electricity price paths announced in this Budget with a net debt impact of \$156.2 million.

# 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 \$892 million in 2020-21 and a further \$2.5 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 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.

### State Underground Power Program

3. 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 2022. 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.

### Growth

4. Growth capital expenditure (both transmission and distribution) is historically 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 \$221 million allocated for customer-driven and capacity expansion works in 2020-21.
5. While growth across the South West Interconnected System 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.
6. 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.

### Safety

7. Western Power's asset safety objective for its current regulatory period 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.

8. The safety of the community and its staff is Western Power's highest priority. Western Power will commit \$242 million in 2020-21 to continue important safety programs including:
  - 8.1. \$202 million in 2020-21 to replace more than 929 km of the highest risk overhead conductors and replacing or reinforcing around 27,000 wooden power poles; and
  - 8.2. \$10 million on bushfire management programs, focusing on mitigating safety risks in the most fire-prone areas.
9. Western Power's safety program includes investment in alternative technological solutions in place of traditional network replacement, where its network reaches end-of-life. This includes replacing overhead network assets with underground power or, ultimately, removing network assets altogether where electricity can be supplied cost-effectively via a standalone solution, with safety and improved electricity supply reliability benefits. Key investments include:
  - 9.1. Grid Transformation - \$34 million across 2020-21 and 2021-22 for the Network Renewal Undergrounding Program Pilot to replace the distribution overhead network with a new underground system in four pilot locations where assets are coming to the end of their service life, including Scarborough, Hilton, Eden Hill and St James. This program will initially benefit around 3,000 customers and provide new ways for Local Government Authorities and residents to access affordable underground power that will improve their power reliability, streetscapes and property values; and
  - 9.2. Emerging Technology - following amendments to the *Electricity Industry Act 2004* in April 2020, Western Power can now install standalone power systems in place of traditional network investment and decommission existing network assets. Western Power expects to finalise a procurement process for delivery of 100 systems in 2020-21 as part of Round 2. Western Power will also finalise commissioning of all 52 systems deployed under Round 1 by the end of 2020.

## Security

10. Security covers investment in thermal management, and voltage and fault level management. This is important for the purposes of mitigating thermal overloads and addressing under fault rated equipment, voltage instability and relieving voltage constraints in the transmission network.
11. The integration of Distributed Energy Resource (DER) technologies, such as solar photovoltaic (PV) systems into the traditional electricity network represents both an opportunity and challenge for Western Power. To support the continued rise of DER and delivery of safe, reliable and efficient electricity, Western Power has prioritised \$28.5 million across 2020-21 and 2021-22 for solutions to address voltage and system security risks on the network.

## 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). This investment includes Western Power's advanced metering infrastructure program, including advanced meters and radio mesh telecommunications devices. The deployment includes communications infrastructure to monitor two-way flows on the electricity network, which is likely to increase as demand for solar PVs and electric vehicles continues to grow. Western Power will invest \$345 million on service-related projects in 2020-21. Key investments include:
  - 12.1. business support and ICT (\$94 million) - including investment in additional Supervisory Control and Data Acquisition (SCADA) and communications to address network risk;
  - 12.2. corporate real estate (\$71 million) - to undertake upgrades and essential works within Western Power's property and depots including \$12 million for the Pinjarra depot;
  - 12.3. metering (\$43 million) - including the installation of advanced meters;
  - 12.4. regulatory compliance (\$32 million) - with upgrades to substation security and improvements to network reliability; and
  - 12.5. reliability driven asset replacement (\$105 million) - to reduce the risks of plant asset failure and ensuring service and operability are maintained.

**WA Recovery Plan**

13. Western Power is working with Government to deliver key projects such as transforming the East Perth Power Station site into a vibrant waterfront community. An additional \$16.1 million over 2020-21 to 2022-23 has been allocated to the project through the WA Recovery Plan.
14. Service Connection Condition Monitoring - through the WA Recovery Plan, \$34 million over 2020-21 and 2021-22 has been allocated to the Service Connection Condition Monitoring project (reliant on the Advanced Metering Infrastructure program referenced under Service) for 180,000 meters to be retrofitted to become advanced meters, boosting the number expected to be operational on the network to close to half a million by June 2022. Advanced meters will provide Western Power with improved visibility of power flows on the network, with improved safety outcomes. If a home has an advanced meter installed, Western Power will receive an alert if there are unusual patterns in the electricity flows, which can indicate a possible fault on the service connection to a customer's property.

	Estimated Total Cost \$'000	Actual Expenditure to 30-6-20 \$'000	2019-20 <sup>(a)</sup> Expenditure \$'000	2020-21 Budget Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000	2023-24 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
<b>COVID-19 WA Recovery Plan</b>							
Growth - East Perth Power Station <sup>(b)</sup> .....	16,900	400	400	900	12,300	3,300	-
<b>Other Works in Progress</b>							
Government Initiative - State Underground Power Program.....	331,774	154,967	28,309	56,378	39,401	40,514	40,514
Growth							
Distribution							
Capacity Expansion.....	319,949	214,967	9,910	40,518	14,479	24,992	24,993
Customer Access.....	1,707,067	1,129,867	102,287	137,257	143,936	148,003	148,004
Transmission							
Capacity Expansion.....	154,491	136,703	16,782	3,490	2,720	5,789	5,789
Customer Driven.....	390,531	288,703	114,458	38,637	20,064	21,564	21,563
Other Asset Investment - Motor Vehicle Fleet and							
Mobile Plant.....	80,579	30,268	16,292	17,512	16,885	7,979	7,935
Safety							
Bushfire Mitigation.....	99,575	71,715	2,007	9,796	12,414	2,825	2,825
Conductor Management.....	772,693	548,736	32,970	52,630	58,317	56,505	56,505
Connection Management.....	209,650	165,312	3,854	12,124	12,933	9,640	9,641
Emerging Technology.....	13,895	13,894	10,827	-	-	-	-
Pole Management.....	2,135,661	1,594,583	169,563	149,314	136,907	127,431	127,424
Security							
Thermal Management.....	45,972	3,055	93	4,566	12,686	12,832	12,833
Voltage and Fault Level Management.....	39,986	11,222	7,085	5,522	5,746	8,748	8,748
Service							
Business Support and ICT.....	918,871	536,092	122,010	94,197	72,660	110,981	104,941
Corporate Real Estate.....	328,128	168,724	48,347	70,965	61,277	13,587	13,575
Metering.....	362,909	169,213	35,843	43,302	47,762	48,283	54,349
Regulatory Compliance.....	262,356	134,910	18,869	31,769	33,193	31,242	31,242
Reliability Driven Asset Replacement.....	868,623	509,114	91,601	104,697	79,430	87,691	87,691
<b>NEW WORKS</b>							
<b>COVID-19 WA Recovery Plan</b>							
Safety - Service Connection Condition Monitoring.....	33,920	-	-	16,580	17,340	-	-
<b>Other New Works</b>							
Safety - Grid Transformation.....	134,000	-	-	2,000	32,000	50,000	50,000
<b>Total Cost of Asset Investment Program.....</b>	<b>9,227,530</b>	<b>5,882,445</b>	<b>831,507</b>	<b>892,154</b>	<b>832,450</b>	<b>811,906</b>	<b>808,572</b>
<b>FUNDED BY</b>							
Borrowings.....			134,428	503,193	173,073	229,485	194,326
Internal Funds and Balances.....			697,079	388,961	659,377	582,421	614,246
<b>Total Funding.....</b>			<b>831,507</b>	<b>892,154</b>	<b>832,450</b>	<b>811,906</b>	<b>808,572</b>

(a) Based on preliminary annual report data for 2019-20. Some aggregates may be adjusted for annual report information finalised after agency Budget Statements were prepared.

(b) Under the WA Recovery Plan, an additional \$16.1 million is being spent to further the outcomes of the existing East Perth Power Station project.

## **WA Recovery Plan - Other Initiatives**

1. In addition to the WA Recovery Plan projects included in the Asset Investment Program, Western Power will spend an additional \$1.5 million over 2020-21 and 2021-22 in operating expenditure on the Service Connection Condition Monitoring project.
2. Western Power has also engaged with customers and the community to explore ways to support the Western Australian economy through the pandemic. Support measures include:
  - 2.1. rent relief to eligible tenants for 6 months, totalling \$120,000 in support; and
  - 2.2. continued commitment to progressing underground power programs, in partnership with local government authorities.



# Horizon Power

## Part 12 Utilities

### Asset Investment Program

1. Horizon Power will invest \$183.2 million in 2020-21 and a further \$123.5 million across the forward estimates period. This investment in regional Western Australia will continue to focus on providing safe and reliable electricity supply to regional customers and supporting jobs in regional areas.

### Asset Management Plan

2. Horizon Power is forecast to invest \$70.8 million in 2020-21 and a further \$97.2 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.
3. The forecast 2020-21 investment includes several projects that were initially budgeted over the forward estimates period. These projects have been brought forward to increase regional spend and create a range of local supplier, contractor and trades opportunities.

### New Projects

#### *Distributed Energy Buy-back Scheme (DEBS) Infrastructure Upgrade*

4. The new renewable export tariff, DEBS, will support the continued installation of solar photovoltaics (PV) by customers through efficient price signals and allows electricity to be exported from new battery systems, electric vehicles and renewable energy systems.
5. The Scheme encourages households to make the most of solar resources by using or storing electricity produced during the middle of the day. The Scheme will also provide greater flexibility for distributed energy resources and more value to the grid as these technologies mature. System implementation costs for Horizon Power are estimated at \$600,000 in 2020-21.

#### *Mid West Pipeline*

6. The Mid West Pipeline is owned equally by Horizon Power and AP Pipelines (WA) Pty under an unincorporated joint venture. Horizon Power will invest \$1 million in 2020-21 (its share of the capital expenditure) to connect the pipeline to Clean Energy Fuels Australia Pty Ltd's liquefied natural gas production plant in Mount Magnet to supply nearby gold mining customers.

#### *Feasibility Studies for the Regularisation of 13 Ngaanyatjarra Lands Aboriginal Communities*

7. Horizon Power will spend \$725,000 in 2020-21 to undertake feasibility studies for the regularisation of 13 Ngaanyatjarra Lands Aboriginal communities. The feasibility studies will produce a plan for the 13 Aboriginal communities to upgrade to utility standard electricity services, including clean, lower cost solar-diesel hybrid generation; safe, utility-owned and operated distribution networks; the use of prepayment billing and smart phone application.

### WA Recovery Plan

#### *Standalone Power Systems (SPS)*

8. The next generation of advanced SPS are being specifically designed for Horizon Power. SPS units are being provided to selected rural customers and are offering more reliable electricity without the need to be connected to the overhead electricity network.
9. As part of the WA Recovery Plan, an investment of \$9.9 million will be made over 2020-21 and 2021-22 to support the deployment of 50 SPS across regional Western Australia. This includes four systems to be installed in the Kimberley, seven systems in the Gascoyne/Mid West, and 39 systems across the Goldfields-Esperance region.

*Remote Communities Embedded Networks*

10. As part of the WA Recovery Plan, \$3.8 million over 2020-21 and 2021-22 has been allocated to regularise the electricity network of 13 small Aboriginal communities across the Kimberley, Gascoyne/Mid West and Esperance regions.
11. Regularisation will transfer ownership and responsibility for the networks, which are currently largely unmanaged, to Horizon Power. This will ensure Aboriginal communities receive the same level of safe, reliable electricity service as customers in nearby towns. Several construction and ongoing jobs, including Aboriginal employment opportunities, will be created.

*Energy Storage in Regional Towns*

12. Horizon Power is to install \$30.8 million worth of battery energy storage systems in nine regional towns in 2020-21. This will help alleviate current limitations on rooftop solar installations and enable more customers in the regions to invest in renewable energy, lower their energy bills and decarbonise Horizon Power's service area.

*Solar, Energy Storage and LED Streetlights for Derby Hospital and the Shire of Derby*

13. Capital expenditure of \$4.8 million will be invested in 2020-21 for renewable energy solutions in the Shire of Derby and Derby Hospital. New rooftop solar systems will be installed across the Shire of Derby's portfolio of buildings and the Shire's conventional streetlights will be replaced with smart Light Emitting Diode (LED) streetlights.
14. Horizon Power will also work with Derby Hospital to co-design and install a large-scale solar PV and battery solution. This will significantly reduce the Hospital's annual power costs and enable more funds to be redirected into frontline services to the community.

*Broome Customer Experience Centre*

15. Horizon Power will spend \$1.2 million in 2020-21 to relocate its customer call centre from Melbourne to Broome. This will provide customers with the opportunity to engage with energy experts in a face-to-face fashion, discover new energy choices, cost savings solutions, and access interactive digital platforms to build their energy knowledge.

*Denham Hydrogen Project*

16. Horizon Power will invest \$4.7 million in the Denham Hydrogen Demonstration Plant project, which will commence in 2020-21, allowing Horizon Power to test whether hydrogen can be used to meaningfully displace the use of diesel.
17. As part of the WA Recovery Plan, Horizon Power has been allocated part of the project funding to proactively initiate testing and gain the technical understanding for integrating this technology into electricity networks and small microgrid applications.

*Esperance Power Project*

18. In January 2020, the State Government announced a 20-year Power Purchase Agreement for Esperance awarded to Western Australian-based business Contract Power Australia, commencing March 2022. Horizon Power will spend \$15.5 million over 2020-21 to 2021-22 for new network connection assets to connect new power facilities to the local Esperance network.
19. Esperance's future power solution will include a newly constructed, highly efficient gas power station, a battery energy storage system, two new wind turbines and central solar farm. It will reduce carbon emissions by almost 50% compared to the existing power supply arrangements and generate up to 46% of Esperance's electricity annually through a new renewables hub.

*Hardship Response Infrastructure Upgrades*

20. Horizon Power will invest \$740,000 in 2020-21 to assist customers to manage hardship. The initiative includes the development of a prepayment metering platform and enhancement of the Horizon Power App to assist customers to avoid or manage their way out of hardship.

	Estimated Total Cost	Actual Expenditure to 30-6-20	2019-20 <sup>(a)</sup> Expenditure	2020-21 Budget Estimate	2021-22 Forward Estimate	2022-23 Forward Estimate	2023-24 Forward Estimate
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>WORKS IN PROGRESS</b>							
Asset Management Plan							
Asset Replacement.....	151,084	84,650	10,258	39,239	11,781	13,432	1,982
Capacity.....	28,247	15,403	1,968	3,092	3,166	3,293	3,293
Knowledge and Technology Investment.....	57,174	34,117	9,681	5,551	5,684	5,911	5,911
Mobile Plant and Operational Fleet.....	41,032	25,181	1,295	3,794	3,899	4,079	4,079
Property Management.....	36,803	21,470	2,757	7,216	3,780	406	3,931
Regulatory Compliance.....	35,274	33,818	1,684	351	359	373	373
Reliability.....	51,507	44,108	8,994	1,781	1,824	1,897	1,897
Safety.....	160,705	135,017	9,407	9,804	6,332	2,966	6,586
COVID-19 WA Recovery Plan - Standalone Power Systems <sup>(b)</sup> .....							
COVID-19 WA Recovery Plan - Standalone Power Systems <sup>(b)</sup> .....	13,502	3,582	3,582	4,882	5,038	-	-
Customer Funded Works - Other Customer Driven Works ....	164,573	138,758	2,961	9,046	9,263	3,753	3,753
Major Projects							
Karratha - Dampier Transmission Line Upgrade .....	22,520	6,887	6,887	15,615	18	-	-
Onslow Power Infrastructure Project - Power Station Upgrade .....	106,030	93,156	10,672	12,874	-	-	-
Remote Communities Photovoltaics.....	11,288	764	764	10,524	-	-	-
<b>NEW WORKS</b>							
<b>COVID-19 WA Recovery Plan</b>							
Broome Customer Experience Centre.....	1,151	-	-	1,151	-	-	-
Denham Hydrogen Project.....	4,700	-	-	4,700	-	-	-
Energy Storage in Regional Towns							
Broome.....	10,300	-	-	10,300	-	-	-
Carnarvon.....	5,800	-	-	5,800	-	-	-
Exmouth.....	7,800	-	-	7,800	-	-	-
Gascoyne Junction.....	600	-	-	600	-	-	-
Marble Bar.....	1,700	-	-	1,700	-	-	-
Menzies.....	600	-	-	600	-	-	-
Wiluna.....	1,700	-	-	1,700	-	-	-
Yalgoo.....	600	-	-	600	-	-	-
Yungngora.....	1,700	-	-	1,700	-	-	-
Esperance Power Project.....	16,334	800	800	13,042	2,492	-	-
Hardship Response Infrastructure Upgrades.....	740	-	-	740	-	-	-
Major Projects							
Distributed Energy Buy-back Scheme Infrastructure Upgrade.....	600	-	-	600	-	-	-
Feasibility Studies for the Regularisation of 13 Ngaanyatjarra Lands Aboriginal Communities.....	725	-	-	725	-	-	-
Mid West Pipeline.....	1,011	-	-	1,011	-	-	-
Remote Communities Embedded Networks.....	3,811	-	-	1,906	1,905	-	-
Solar, Energy Storage and LED Streetlights for Derby Hospital and the Shire of Derby.....	4,760	-	-	4,760	-	-	-
<b>Total Cost of Asset Investment Program .....</b>	<b>944,371</b>	<b>637,711</b>	<b>71,710</b>	<b>183,204</b>	<b>55,541</b>	<b>36,110</b>	<b>31,805</b>
<b>FUNDED BY</b>							
Borrowings.....			45,825	170,576	46,278	32,357	28,052
Capital Appropriation.....			25,885	9,046	9,263	3,753	3,753
Other Grants and Subsidies.....			-	1,400	-	-	-
<b>Total Funding.....</b>			<b>71,710</b>	<b>183,204</b>	<b>55,541</b>	<b>36,110</b>	<b>31,805</b>

(a) Based on preliminary annual report data for 2019-20. Some aggregates may be adjusted for annual report information finalised after agency Budget Statements were prepared.

(b) Under the WA Recovery Plan, an additional \$9.9 million is being spent to further the outcomes of the existing Standalone Power Systems project.

## **WA Recovery Plan - Other Initiatives**

1. In addition to the WA Recovery Plan projects included in the Asset Investment Program, Horizon Power will spend:
  - 1.1. \$1.8 million over the forward estimates for the Broome Customer Experience Centre; and
  - 1.2. \$0.5 million in 2020-21 on solar, energy storage and LED streetlights for Derby Hospital and Shire of Derby.
2. The following are additional WA Recovery Plan initiatives that Horizon Power is playing a central role in:
  - 2.1. delivering COVID-19 support and stimulus measures, including the Small Business and Charity Tariff Offset and the one-off doubling of the WA Government Energy Assistance Payment. These initiatives were funded by a \$15.9 million increase to Horizon Power's operating subsidy in 2019-20 and 2020-21; and
  - 2.2. the employment of additional case managers from 2020-21 onwards to support customers experiencing hardship as a result of COVID-19 resulting in an increase in Horizon Power's expenditure of \$0.2 million per annum from 2020-21.
3. Horizon Power will apply the lower residential electricity price paths announced in this Budget with a net debt impact of \$9.9 million.

# Water Corporation

## Part 12 Utilities

### Asset Investment Program

1. In 2020-21, \$708.5 million has been committed to asset 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 Metropolitan Area

2. A total of \$277.5 million has been committed in 2020-21 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.
3. In 2020-21, \$158.7 million has been committed to water network and supply projects, including \$10 million towards finalising the expansion of 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 increase the capacity of the Scheme to 28 billion litres per year. The project has an estimated total value of \$305.1 million.
4. Other features of the metropolitan program include \$97.1 million in 2020-21 on wastewater treatment projects in both the northern and southern corridors, including:
  - 4.1. \$5.6 million to upgrade 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. The project has an estimated total value of \$146.3 million; and
  - 4.2. \$6.7 million to upgrade the Woodman Point to Point Peron Treated Wastewater Main. The project will duplicate a section of the pipeline in the City of Rockingham and increase the capacity of the Transition Tower to accommodate inflow from the Point Peron Wastewater Treatment Plant. The project has an estimated total value of \$23.3 million.

### Expenditure in the Regions

5. Regional Western Australia will continue to benefit from the development and upgrading of water and wastewater infrastructure, with \$260.9 million committed in 2020-21 to a number of projects across the regions.
6. A total of \$186 million has been committed in 2020-21 on water projects, including:
  - 6.1. \$11.3 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. The project has an estimated total value of \$24.2 million;
  - 6.2. \$18.1 million towards building new water storage tanks in Merredin and Karratha. The projects include construction of new 20 to 42 million litre water storage tanks and associated pipework. The project has an estimated total value of \$39.9 million; and
  - 6.3. \$18.6 million on improvements to water supply for Denmark. The project will connect Denmark to the Lower Great Southern Water Supply Scheme and includes the construction of a 42 km connecting pipeline to provide security of supply in the changing climate. The project has an estimated total value of \$25 million.
7. A total of \$33.5 million will be spent in 2020-21 on wastewater projects, including:
  - 7.1. \$4.2 million to upgrade the Collie and Kemerton Wastewater Treatment Plants. The upgrade will improve the treatment of wastewater and efficient operation of the plant. The projects have an estimated total value of \$11.7 million; and
  - 7.2. \$2.1 million to upgrade the York Wastewater Treatment Plant. The project will increase the treatment and disposal capacity of the wastewater treatment plant. The project has an estimated total value of \$6.4 million.

8. Additionally, \$12 million has been committed in 2020-21 for the Essential and Municipal Services Upgrade Program for Aboriginal communities in Mowanjum, Bayulu and Bidyadanga.

**WA Recovery Plan**

9. The Western Australian Government has unveiled a multibillion-dollar recovery plan to drive economic, social recovery, and create local jobs. The WA Recovery Plan, via the Corporation, includes investment in major water and wastewater infrastructure upgrades to improve services across regional Western Australia. It will deliver short and long-term jobs supporting and strengthening existing industries, as well as laying the foundation for future jobs.
10. The Corporation will invest \$4.2 million in 2020-21 to deliver more reliable and improved water and wastewater services to remote Aboriginal communities. The communities that have been identified to participate in the program include Ardyaloon, Djarindjin, Lombadina and Beagle Bay. The project has an estimated total value of \$38.9 million.
11. The Corporation will invest \$0.5 million in 2020-21 to reinstate irrigation of public open space for the Shire of Broome. The project will deliver a new irrigation scheme for the Shire’s 43.5 hectares of green space. The project has an estimated total value of \$9.1 million.
12. The Corporation will invest \$0.2 million in 2020-21 for the construction of a lined evaporation pond and an infiltration pond at the Coral Bay Wastewater Treatment Plant. The project will increase the disposal capacity of the wastewater treatment plant to cater for the expansion of the Coral Bay Caravan Park. The project has an estimated total value of \$1.5 million.
13. Additionally, \$3 million has been committed in 2020-21 to meet the Government’s election commitment towards the METRONET pipe relocation at the Albany Highway, Kelvin and Olga Roads intersection.

	Estimated Total Cost \$'000	Actual Expenditure to 30-6-20 \$'000	2019-20 <sup>(a)</sup> Expenditure \$'000	2020-21 Budget Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000	2023-24 Forward Estimate \$'000
<b>WORKS IN PROGRESS</b>							
<b>Metropolitan</b>							
<b>Drainage</b>							
Capacity .....	70,410	13,527	9,451	14,946	3,894	3,964	4,079
Renewals .....	44,055	5,148	2,566	3,738	1,695	2,428	1,046
<b>Wastewater</b>							
Network Capacity .....	702,142	68,441	34,245	29,741	61,620	69,902	52,438
Network Renewals .....	274,500	52,661	29,704	27,051	17,392	14,389	13,007
Treatment Capacity .....	630,779	92,341	31,650	24,850	58,562	81,101	73,925
Treatment Renewals .....	178,162	20,522	10,797	15,440	7,301	7,609	19,290
<b>Water Network</b>							
Capacity .....	543,907	89,669	45,548	51,176	38,514	43,697	44,851
Renewals .....	376,287	86,324	47,646	43,258	39,119	17,578	34,008
<b>Water Supply</b>							
Capacity .....	606,906	207,406	72,057	41,458	51,159	32,563	34,320
Renewals .....	295,136	44,481	23,610	22,815	9,329	34,311	34,200
<b>Regional</b>							
<b>Election Commitment - Essential and Municipal</b>							
Services Upgrade Program .....	23,282	700	700	12,000	2,631	2,947	5,004
Drainage Capacity .....	61,323	2,857	1,582	21,878	5,077	557	954
Drainage Renewals .....	73,766	9,615	5,607	2,601	6,452	3,756	9,342
Irrigation .....	93,642	18,442	12,006	1,056	3,635	4,721	5,788
<b>Wastewater Network</b>							
Capacity .....	192,858	35,951	17,980	5,284	14,497	6,081	11,045
Renewals .....	158,969	22,387	15,563	9,214	9,847	14,411	13,110
<b>Wastewater Treatment</b>							
Capacity .....	327,630	47,665	21,637	15,810	37,056	24,192	22,907
Renewals .....	48,214	4,849	2,930	3,194	1,621	2,592	5,958
<b>Water Network</b>							
Capacity .....	273,125	37,997	18,002	25,095	25,084	17,770	17,179
Renewals .....	479,065	55,277	31,988	57,870	40,754	23,147	32,017
<b>Water Supply</b>							
Capacity .....	860,195	84,393	49,058	93,314	95,826	84,503	52,159
Renewals .....	98,398	10,251	4,470	8,640	2,480	4,187	12,840
<b>Service</b>							
Business Support Costs .....	903,471	143,862	82,399	90,801	78,949	84,424	85,435
Capital Support Costs .....	336,365	55,873	29,123	27,306	27,843	28,392	28,951
Corporate Real Estate .....	230,191	39,486	13,607	16,705	18,000	18,000	18,000
Operational Information and Control .....	294,600	42,441	20,643	21,078	27,081	27,000	27,000

	Estimated Total Cost \$'000	Actual Expenditure to 30-6-20 \$'000	2019-20 <sup>(a)</sup> Expenditure \$'000	2020-21 Budget Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000	2023-24 Forward Estimate \$'000
<b>NEW WORKS</b>							
<b>COVID-19 WA Recovery Plan</b>							
Coral Bay Wastewater Treatment Plant Evaporation							
Pond Relining .....	1,470	-	-	150	1,320	-	-
Election Commitment - Olga Road - Albany Highway and Kelvin Road Intersection (Pipe Relocation) .....							
	5,500	-	-	3,000	2,500	-	-
Irrigation of Public Open Space in Broome.....	9,133	-	-	550	3,000	5,583	-
Remote Aboriginal Communities Accelerated Works .....	38,900	-	-	4,200	10,300	11,800	12,600
<b>Total Cost of Asset Investment Program <sup>(b)</sup> .....</b>	<b>8,232,381</b>	<b>1,292,566</b>	<b>634,569</b>	<b>694,219</b>	<b>702,538</b>	<b>671,605</b>	<b>671,453</b>
<b>FUNDED BY</b>							
Borrowings .....			28,466	18,354	16,146	18,825	12,600
Internal Funds and Balances.....			606,103	675,865	686,392	652,780	658,853
<b>Total Funding.....</b>			<b>634,569</b>	<b>694,219</b>	<b>702,538</b>	<b>671,605</b>	<b>671,453</b>

(a) Based on preliminary annual report data for 2019-20. Some aggregates may be adjusted for annual report information finalised after agency Budget Statements were prepared.

(b) Capitalised interest is not included in the table. For 2020-21, the total Asset Investment Program including capitalised interest is \$708.5 million.

## WA Recovery Plan - Other Initiatives

- In addition to the WA Recovery Plan projects included in the Asset Investment Program, the Corporation will spend an additional \$1.5 million on the Water-Efficient Public Schools program through targeted intervention in 50 to 100 public schools across the Perth metropolitan area and regional Western Australia to reduce scheme water demand.
- Further, the Corporation has also engaged with customers and the community to explore ways to support the Western Australian economy through the pandemic. Support measures include:
  - freezing its water-related charges for residential customers until 1 July 2021, and no increase in wastewater and drainage bills as a result of the revaluation of gross rental values. This has a total cost of \$183.1 million;
  - rent relief to eligible commercial tenants for six months, totalling \$0.5 million in support;
  - wastewater service charges relief for business customers for the period of 1 May to 31 August 2020. Charges from four to 200 fixtures will be waived for all businesses that are eligible for JobKeeper payments, totalling \$5.5 million in support;
  - water charges relief for regional businesses affected by COVID-19 through delay to increase to non-residential water charges across 10 regional schemes, totalling \$1.4 million in support; and
  - penalty interest charges relief on deferred bill payments for residential customers experiencing COVID-19 related financial hardship, totalling \$4 million in support.

# Bunbury Water Corporation

## Part 12 Utilities

### Asset Investment Program

1. Bunbury Water Corporation's (Aqwest) Asset Investment Program totals \$25.6 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.
2. The total investment in the City over the Budget and forward estimates period includes:
  - 2.1. \$4.1 million to replace ageing water mains; and
  - 2.2. \$6.5 million to refurbish and maintain existing reservoir and water treatment plant infrastructure.

### WA Recovery Plan

3. Aqwest will invest \$11.9 million under the WA Recovery Plan for the Bunbury Water Resource Recovery Scheme. The Scheme will provide recycled water for use on major infrastructure projects and irrigation of public open spaces, reducing the impact on groundwater sources.

	Estimated Total Cost \$'000	Actual Expenditure to 30-6-20 \$'000	2019-20 <sup>(a)</sup> Expenditure \$'000	2020-21 Budget Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000	2023-24 Forward Estimate \$'000
<b>COMPLETED WORKS</b>							
Fleet, Information and Communications Technology and Other - 2019-20 Program.....	440	440	440	-	-	-	-
<b>Works</b>							
Mains - 2019-20 Program.....	1,191	1,191	1,191	-	-	-	-
<b>Reservoirs</b>							
2018-19 Program.....	174	174	-	-	-	-	-
2019-20 Program.....	138	138	138	-	-	-	-
Services - 2019-20 Program.....	17	17	17	-	-	-	-
<b>Treatment Plants</b>							
2018-19 Program.....	1,253	1,253	-	-	-	-	-
2019-20 Program.....	670	670	670	-	-	-	-
Glen Iris Water Treatment Plant.....	13,598	13,598	9,664	-	-	-	-
<b>NEW WORKS</b>							
<b>COVID-19 WA Recovery Plan</b>							
Water Resource Recovery Scheme.....	11,900	-	-	11,900	-	-	-
<b>Other New Works</b>							
Fleet, Information and Communications Technology and Other							
2020-21 Program.....	415	-	-	415	-	-	-
2021-22 Program.....	404	-	-	-	404	-	-
2022-23 Program.....	437	-	-	-	-	437	-
2023-24 Program.....	1,356	-	-	-	-	-	1,356
<b>Works</b>							
<b>Mains</b>							
2020-21 Program.....	1,052	-	-	1,052	-	-	-
2021-22 Program.....	869	-	-	-	869	-	-
2022-23 Program.....	1,021	-	-	-	-	1,021	-
2023-24 Program.....	1,123	-	-	-	-	-	1,123
<b>Reservoirs</b>							
2020-21 Program.....	900	-	-	900	-	-	-
2021-22 Program.....	500	-	-	-	500	-	-
2022-23 Program.....	500	-	-	-	-	500	-
2023-24 Program.....	715	-	-	-	-	-	715
<b>Services</b>							
2020-21 Program.....	128	-	-	128	-	-	-
2021-22 Program.....	118	-	-	-	118	-	-
2022-23 Program.....	121	-	-	-	-	121	-
2023-24 Program.....	123	-	-	-	-	-	123



	Estimated Total Cost \$'000	Actual Expenditure to 30-6-20 \$'000	2019-20 <sup>(a)</sup> Expenditure \$'000	2020-21 Budget Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000	2023-24 Forward Estimate \$'000
Treatment Plants							
2020-21 Program .....	1,463	-	-	1,463	-	-	-
2021-22 Program .....	859	-	-	-	859	-	-
2022-23 Program .....	413	-	-	-	-	413	-
2023-24 Program .....	1,135	-	-	-	-	-	1,135
<b>Total Cost of Asset Investment Program .....</b>	<b>43,033</b>	<b>17,481</b>	<b>12,120</b>	<b>15,858</b>	<b>2,750</b>	<b>2,492</b>	<b>4,452</b>
<b>FUNDED BY</b>							
Internal Funds and Balances .....			12,120	15,858	2,750	2,492	4,452
<b>Total Funding .....</b>			<b>12,120</b>	<b>15,858</b>	<b>2,750</b>	<b>2,492</b>	<b>4,452</b>

(a) Based on preliminary annual report data for 2019-20. Some aggregates may be adjusted for annual report information finalised after agency Budget Statements were prepared.

## WA Recovery Plan - Other Initiatives

1. In addition to the WA Recovery Plan project included in the Asset Investment Program, Aqwest has supported customers through the COVID-19 pandemic by freezing water-related charges for residential customers until 1 July 2021. This has a total cost of \$1 million.

# Busselton Water Corporation

## Part 12 Utilities

### Asset Investment Program

1. The Corporation's Asset Investment Program (AIP) is investing in the Busselton region, with \$2.9 million allocated in 2020-21, followed by an additional \$11.9 million to 2023-24.
2. The AIP includes:
  - 2.1. \$1.7 million to upgrade operational building facilities to function within a more sustainable environment;
  - 2.2. \$1.1 million on the implementation of new information and communications technology (ICT) solutions;
  - 2.3. \$1.3 million on new water supply connections and delivery of an ongoing meter replacement program;
  - 2.4. \$1.7 million on the upgrade of water mains and services; and
  - 2.5. \$8.4 million for planned asset replacement and infrastructure upgrades at various water treatment plants.

	Estimated Total Cost \$'000	Actual Expenditure to 30-6-20 \$'000	2019-20 <sup>(a)</sup> Expenditure \$'000	2020-21 Budget Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000	2023-24 Forward Estimate \$'000
<b>COMPLETED WORKS</b>							
Building, Land and Land Improvements - 2019-20 Program.....	113	113	113	-	-	-	-
New Connections and Meters - 2019-20 Program .....	347	347	347	-	-	-	-
New Mains and Services - 2019-20 Program .....	839	839	839	-	-	-	-
Plant, Mobile and Other Purchases - 2019-20 Program.....	141	141	141	-	-	-	-
Treatment Plants - 2019-20 Program .....	1,095	1,095	1,095	-	-	-	-
<b>NEW WORKS</b>							
Building, Land and Land Improvements							
2020-21 Program .....	20	-	-	20	-	-	-
2021-22 Program .....	221	-	-	-	221	-	-
2022-23 Program .....	983	-	-	-	-	983	-
2023-24 Program .....	452	-	-	-	-	-	452
ICT							
2020-21 Program .....	100	-	-	100	-	-	-
2021-22 Program .....	200	-	-	-	200	-	-
2022-23 Program .....	398	-	-	-	-	398	-
2023-24 Program .....	395	-	-	-	-	-	395
New Connections and Meters							
2020-21 Program .....	320	-	-	320	-	-	-
2021-22 Program .....	318	-	-	-	318	-	-
2022-23 Program .....	253	-	-	-	-	253	-
2023-24 Program .....	400	-	-	-	-	-	400
New Mains and Services							
2020-21 Program .....	641	-	-	641	-	-	-
2021-22 Program .....	351	-	-	-	351	-	-
2022-23 Program .....	264	-	-	-	-	264	-
2023-24 Program .....	458	-	-	-	-	-	458
Plant, Mobile and Other Purchases							
2020-21 Program .....	58	-	-	58	-	-	-
2021-22 Program .....	133	-	-	-	133	-	-
2022-23 Program .....	261	-	-	-	-	261	-
2023-24 Program .....	148	-	-	-	-	-	148

	Estimated Total Cost \$'000	Actual Expenditure to 30-6-20 \$'000	2019-20 <sup>(a)</sup> Expenditure \$'000	2020-21 Budget Estimate \$'000	2021-22 Forward Estimate \$'000	2022-23 Forward Estimate \$'000	2023-24 Forward Estimate \$'000
<b>Treatment Plants</b>							
2020-21 Program.....	1,747	-	-	1,747	-	-	-
2021-22 Program.....	1,667	-	-	-	1,667	-	-
2022-23 Program.....	2,239	-	-	-	-	2,239	-
2023-24 Program.....	2,772	-	-	-	-	-	2,772
<b>Total Cost of Asset Investment Program</b> .....	<b>17,334</b>	<b>2,535</b>	<b>2,535</b>	<b>2,886</b>	<b>2,890</b>	<b>4,398</b>	<b>4,625</b>
<b>FUNDED BY</b>							
Internal Funds and Balances.....			2,535	2,886	2,890	4,398	4,625
<b>Total Funding</b> .....			<b>2,535</b>	<b>2,886</b>	<b>2,890</b>	<b>4,398</b>	<b>4,625</b>

(a) Based on preliminary annual report data for 2019-20. Some aggregates may be adjusted for annual report information finalised after agency Budget Statements were prepared.

### WA Recovery Plan - Other Initiatives

1. The Corporation has supported its customers through the pandemic by freezing its water-related charges for residential customers until 1 July 2021. This has a total cost of \$0.7 million.