

OFFICIAL



# Status of Major Projects Supplement

Outcomes report 2022–23

31 October 2023



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## Background

In their pricing submissions, water businesses included their proposed major capital investment projects to be progressed or completed during the relevant regulatory period. Our final pricing determination for each business includes a scheduled list of these projects allowed for in pricing, along with the anticipated start and completion years of each project. Some scheduled projects have commenced in years prior to the current regulatory period and have now extended beyond their scheduled completion dates. We require businesses to continue to report on these projects until they are completed, regardless of which regulatory period they commenced in, as shown in Table 1 of this report.

Customers' prices include recovering capital investment costs in accordance with this approved project schedule. It is appropriate that water businesses explain delays or alterations to their project schedules because approved funds will flow from pricing whether the expenditure is incurred or not, unless the water businesses lower their prices accordingly. Also, changes to project delivery schedules may materially impact the services received by customers.

This section tracks the businesses' reported progress against their original project schedule as reflected in their price submissions and our pricing determinations.

The major project status categories are:

- on-schedule — no significant changes to the project start and end dates
- delayed — either the project start was delayed, or completion will be later than scheduled
- deferred — the business rescheduled the entire project, either within the current pricing period or into a future period
- cancelled — the project will not proceed in the foreseeable future
- completed on time — the project was completed in accordance with the original scheduled completion date (includes early completion)
- completed late — the project was completed within the period, but later than the original scheduled completion date.

Table 1 provides details for each scheduled major project for each water business, including:

- a brief description or project name
- the original scheduled start and end years (as per the pricing determination)
- businesses' latest updates on the actual or expected start and end years
- an overall project status (on-schedule, delayed, deferred, cancelled or completed)
- general comments by the water business to explain any relevant details of the project and its current status.

Table 1 also includes some projects from the business's previous pricing period that were not completed before the end of that period, and were therefore carried over into the current pricing period. We will monitor all major capital projects through to their conclusion.

The information in Table 1 has been provided to us by the businesses and is their own explanation of the status of their major projects. We have reviewed this information only to ensure that relevant dates, project status and comments are consistent with what has been previously reported.



# Summary of Major Projects

**Table 1 Summary of major projects by water corporation**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Barwon Water (Regulatory Period: 2018–23)</b>						
Torquay West high level feeder main	Carried over	2013-14	2025-26	2028-29	Deferred	Due to external delays in the land use planning for this future growth area, this project has been deferred to align more closely with when the asset would be required. During the 2018 Pricing Period, growth and land development has been different to what was expected - slower in Torquay and faster in Armstrong Creek, Lara West and Ocean Grove. Accordingly, expenditure has been reallocated to those growth areas to provide better value for customers in this price period.
Property realisation (Thornhill Rd Highton)	In progress	2018-19	2018-19	2020-21	Completed late	This project was completed later than scheduled in 2020-21 due to initial delays experienced seeking council approval of engineering plans. There was no impact on customers as the revenue benefits that were expected to be realised in the scheduled completion year 2018-19 were locked into our 2018-23 prices.
Colac water treatment plant clear water storage upgrade	In progress	2019-20	2018-19	2019-20	Completed on time	This project was completed on time in 2019-20.
Colac water reclamation plant sludge dewatering upgrade	In progress	2019-20	2019-20	2025-26	Deferred	Through innovation in sludge management practices, we were able to meet the project objectives at a lower cost and defer additional expenditure to a later date with a better value outcome for customers. The Colac Water Reclamation Plant Centrifuge Upgrade is forecast to be completed by June 2026. There is no impact on customer service due to the deferment.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
Property realisation (Scenic Rd Highton)	In progress	2020-21	2021-22	2029-30	Deferred	Change in Government policy relating to surplus land and subsequent delays in obtaining agreement on the treatment of a Crown Land component at this landholding. No impact on customers as the revenue that was expected in the scheduled completion year 2020-21 were locked into our 2018-23 prices.
Colac pipeline upgrade	In progress	2027-28	2023-24	2032-33	Delayed	The first stage of pipeline replacement was due to be completed by June 2024. Following a change in EPBC Act threatened species, additional environmental approvals are now required. Priority 1 and 2 sections are expected to be completed by June 2026 depending on relevant EPBC approvals to undertake the works. Priority 3 and 4 sections are scheduled to be replaced over the next two pricing periods (2023-2033).
Black Rock renewable energy project stage 2	2018-19	2019-20	2018-19	2019-20	Completed on time	This project was completed in 2019-20.
Gellibrand water treatment plant upgrade	2019-20	2021-22	2023-24	2024-25	Delayed	Contract awarded however project timeline extended and scheduled for completion by August 2025. Customer insights into the construction of the facility have also supported a new approach to the design. There is no impact on customer service due to the delay.
Telemetry RTU PLC HMI hardware & software	2020-21	2021-22	2020-21	2023-24	Delayed	Project delayed however scheduled for completion by September 2023. There is no impact on customer service due to the delay.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Barwon Water (continued)</b>						
Forrest water treatment plant upgrade	2020-21	2022-23	2023-24	2023-24	Delayed	Works progressing well, scheduled for completion by December 2023. There is no impact on customer service due to the delay.
Black Rock water reclamation plant effluent storage	2021-22	2023-24	2029-30	2031-32	Deferred	Through innovations in the configuration of existing infrastructure at the site, additional recycled water storage has been able to be efficiently achieved by utilising an existing effluent channel, enabling deferment of this project. This project has been deferred due to modifications to existing infrastructure allowing the planned project to be postponed.
<b>Central Highlands Water (Regulatory Period: 2018–23)</b>						
Ballarat South wastewater treatment plant lagoon pipeline upgrade	In progress	2018-19	2019-20	2019-20	Completed late	This project was delayed due to late changes to the design that impacted construction.
Evansford raw water pipeline renewal	In progress	2018-19	2018-19	2019-20	Completed late	Original planned construction start delayed due to Cultural Heritage and Environmental approvals.
Fellmongers siphon replacement	In progress	2019-20	2018-19	2019-20	Completed on time	Completed in accordance with original scheduled timeframes.
Daylesford water supply upgrade	In progress	2020-21	2018-19	2023-24	Delayed	Construction works underway with more than 3km of construction complete to June 30 2023. Supporting projects to assist in improving and upgrading Daylesford's Water supply security have been completed.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Central Highlands Water (continued)</b>						
Ballan wastewater treatment plant – increase in recycled water winter storage capacity	In progress	2020-21	2018-19	2019-20	Completed on time	Completed in accordance with original scheduled timeframes.
Ballarat South outfall sewer duplication	In progress	2022-23	2021-22	2023-24	Delayed	Due to local council preference, this project was deferred to allow the Ballarat East Sewer duplication commencing first. Construction works commenced in January 2023 and are progressing well. Completion scheduled for Q2 2023/24.
Ballarat South wastewater treatment plant inlet works upgrade	2018-19	2020-21	2018-19	2021-22	Completed late	Works suffered some delays due to COVID- 19 impacts. Key components needed to be sourced from overseas and presented some supply chain issues. Works complete.
Ring Road trunk water main duplication	2018-19	2022-23	2021-22	2021-22	Completed	Alternative/substitute works were identified to deliver the required pressure improvement outcome for customers including pressure reduction value improvements and network cross connections (at the Avenue of Honour).
Maryborough wastewater reuse scheme improvements	2019-20	2020-21	2020-21	2023-24	Delayed	Procurement of additional land requirements, main project component of pipeline connection complete and complimentary optimisation of irrigation infrastructure and land completed. 50% of the proposed irrigation area complete with further irrigation areas identified for expansion to occur in following years.
Ballarat East sewer duplication and flow storage	2019-20	2022-23	2021-22	2021-22	Completed	Works completed ahead of original schedule.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Coliban Water (Regulatory Period: 2018–23)</b>						
Digital customer metering	2018-19	2022-23	2018-19	2023-24	Delayed	The project has been impacted by global supply chain issues relating to the supply of components required for the manufacture of the data loggers. This will see the completion date of the project delayed by up to 18 months.
Western Bendigo water network growth and pressure	2018-19	2021-22	2018-19	2024-25	Delayed	<p>Works on site for a storage tank, booster pump station and a pipeline in Marong have been completed under existing contracts.</p> <p>Detailed design for Golden Square to Maiden Gully is complete with works for this section commencing in early 2023-24. A contract for Coliban Region pipelines has been awarded including packages of works for water mains in Marong, Maiden Gully, Strathfieldsaye and Huntly. This program of work includes further packages to be delivered during 2023 price submission.</p>
Strathfieldsaye water network augmentation	2018-19	2021-22	2018-19	2024-25	Delayed	<p>This project has been delayed for delivery in PS23 due to other projects being brought forward.</p> <p>Concept design works for storage tank and booster pump station has been developed. Storage tank and booster pump station will be delivered as part of a tank delivery program and is scheduled for completion in 2022-23.</p> <p>As detailed above (Western Bendigo water network growth and pressure), preliminary design of water mains is complete and a contract for Coliban Region pipelines has been awarded including packages of works for water mains in Marong, Maiden Gully, Strathfieldsaye and Huntly.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Coliban Water (continued)</b>						
Kyneton water reclamation plant lagoon compliance works	2018-19	2021-22	2018-19	2021-22	Completed on time	<p>Phase 1 included the lagoon compliance works planned for the 2018-2023 regulatory period and these have been completed. The works for Phase 2 included construction of a Class C to B Treatment Facility and construction of a 200ML storage lagoon.</p> <p>After completion of the originally proposed works, we have also undertaken further works at the Kyneton Water Reclamation Plant to achieve ongoing and future compliance.</p>
Heathcote water reclamation plant compliance	2018-19	2021-22	2018-19	2020-21	Completed	<p>The original plan was to undertake works at the Heathcote WRP to achieve licence compliance. However, following the investigation of options we were able to achieve licence compliance by instead undertaking backwash water reuse at the Water Treatment Plant. This reduced the loading to the Water Reclamation Plant and enabled further works at the Water Reclamation Plant to be rolled into a future project. A review of the success of the Heathcote Water Treatment Plant upgrade project has been completed.</p>
Echuca water treatment plant security of supply	2018-19	2022-23	2018-19	2023-24	Delayed	<p>The main contract was awarded early 2021 and works are well progressed on site. Works were impacted (delayed) slightly by the 2022 floods whereby the entire site had to be shut down and Water Treatment Plant protected with raising of the levee bank. Works mostly complete on schedule, however, commissioning activities have pushed into early 2023-24.</p>
Echuca West tank	2019-20	2021-22	2018-19	2020-21	Completed on time	<p>The works have been successfully delivered during 2020-21.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Coliban Water (continued)</b>						
Castlemaine water reclamation plant sludge handling upgrades	2020-21	2022-23	2020-21	2025-26	Delayed	Design works scheduled to commence in 2022-23.
Epsom Huntly water main augmentation	2020-21	2022-23	2019-20	2023-24	Delayed	Works were impacted (delayed) slightly by the 2022 floods whereby the entire site had to be shutdown. Contractor and their resources were reallocated to assist with flood response and flood recovery works. Works mostly completed on schedule, however, commissioning activities have pushed into early 2023-2024.
Bendigo water reclamation plant sludge processing upgrades	2020-21	2023-24	2020-21	2026-27	Delayed	The scope of works in the final business include additional works to upgrade the dewatering facilities and electrical infrastructure on site. As a result, the schedule has been updated to reflect the increase in scope. The project is currently in the procurement – tendering phase.
Heathcote WTP upgrades	2018-19	2019-20	2018-19	2019-20	Completed on time	The works are complete.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>East Gippsland Water (Regulatory Period: 2018–23)</b>						
Sarsfield clear water storage augmentation	In progress	2019-20	2017-18	2022-23	Completed late	Defects with the internal liner have been rectified and Practical Completion achieved.
Upgrade main supply pipeline (Sarsfield to Johnsonville)	In progress	2020-21	2017-18	2019-20	Completed on time	Construction of pipeline was completed and commissioned for service in 2019-20. This project was completed \$500k below the allocated budget for PS 2018—23.
Lakes Entrance wastewater treatment plant odour management	2018-19	2019-20	2017-18	2023-24	Delayed	Stage 1 of this project was completed in 2018-19 which significantly reduced odour levels. Stage 2 of the project is delayed due to supplier issues. Will be completed in 2023-24.
Wy Yung clear water storage	2018-19	2020-21	2017-18	2020-21	Completed on time	Construction of the 36ML reinforced concrete tank reached Practical Completion in the 2020-21 financial year.
Dinner Plain recycled water storage augmentation	2019-20	2020-21	2017-18	2027-30	Deferred	Design of 14ML new winter storage basin is in progress. Construction has been deferred to enable the completion of some sewer network infiltration rectification works. These works may reduce the volume of winter storage required.
Paynesville recycled water storage and irrigation augmentation	2020-21	2022-23	2018-19	2024-25	Delayed	Construction of 26 hectares of fixed irrigation in progress. Detailed design nearing completion to increase winter storage capacity. Significant change in scope and storage capacity required which has delayed the works. Irrigation expansion on track to be completed in 2023-24.
Bairnsdale to Eagle Point main supply pipeline renewal	2020-21	2022-23	2017-18	2021-22	Completed on time	Works were completed in 2021-22.
Mallacoota clear water storage	2020-21	2022-23	2018-19	2024-25	Delayed	Bushfires prompted business case review of key tank parameters (material and volume). Tendering and re-design to occur in 2023/24 with construction to occur in 2024-25.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>East Gippsland Water (continued)</b>						
Lindenow storage water quality improvement	2020-21	2022-23	2019-20	2024-25	Delayed	Additional tank storage volume required prompting business case review. Construction likely to be delayed beyond 2023-24.
Woodglen raw water storage– dam safety upgrades	2021-22	2023-24	2018-19	2023-24	On schedule	Changes in project scope prompted a more detailed dam safety risk review. The review has confirmed that the storage can be returned to normal operations ahead of the summer period with repair works scheduled for 2023-24.
<b>Gippsland Water (Regulatory Period: 2018–23)</b>						
Sale sewer – outfall sewer pump station	In progress	2019-20	In progress	2020-21	Completed late	Project completed and asset in service.
Drouin sewer – new wastewater treatment plant	In progress	2021-22	In progress	2021-22	Completed on time	The new wastewater treatment plant was completed in April 2022 with performance optimisation continuing in 2022/23.
Moe water – treatment plant basin liner and cover replacement	2018-19	2018-19	2020-21	2023-24	Delayed	To enable the Moe water treatment plant basin to be taken offline a new basin was required at the site. We adjusted the scheduling of projects to construct a new basin with the existing basin liner and cover scheduled to be replaced in the 2023-28 price submission period. As of the 30 June 2023 the new basin is nearing completion with the basin construction completed and the liner and cover installation underway.
Mirboo north water – rising main replacement	2018-19	2019-20	2018-19	2019-20	Completed on time	Project completed as scheduled.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Gippsland Water (continued)</b>						
Coongulla water – interconnect to Heyfield	2018-19	2020-21	2018-19	2022-23	Completed late	Project completed and asset in service.
Sale sewer – convert sewer pump station no. 2 to underground facility	2019-20	2021-22	2020-21	2022-23	Completed late	Pump station was constructed and put into service in May 2023.
Warragul water – Western Ring main to South Basin	2019-20	2022-23	2019-20	2022-23	Completed on time	Project completed as scheduled.
Warragul sewer – North East branch augmentation (to Sutton Street)	2019-20	2022-23	2019-20	2023-24	Deferred	As a result of modelling and field performance data confirming a longer life expectancy with no customer impact, the Warragul sewer north-east branch augmentation was deferred. The project is now on schedule to be completed in the 2023-28 Price Submission. There was no material impact on our capital program as the delay in this project allowed more critical works to proceed with the new Moe water treatment plant basin.
Saline waste outfall pipeline – stages 4 and 5 upgrade	2021-22	2022-23	2025-26	2026-27	Deferred	The delivery timelines for this project were adjusted in consultation with the major customer while we work to determine the best delivery approach. A detailed technical review highlighted an increased life expectancy for this asset, meaning it can be deferred to the 2023-28 Price Submission. The costs associated with this project are fully recoverable from the major customer.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Gippsland Water (continued)</b>						
Churchill water – sanders treated water basin liner and cover replacement	2021-22	2022-23	2021-22	2022-23	Completed on time	Project completed as scheduled.
<b>Goulburn Valley Water (Regulatory Period: 2018–23)</b>						
Mansfield wastewater management facility additional winter storage	Carried over	2020-21	2015-16	2024-25	Deferred	<p>This project started in 2015-16 as a future winter storage and irrigation upgrade project.</p> <p>For the 2018-2023 regulatory period, this project was changed to an environmental offsets option which was under investigation at the time. The environmental offsets option was deemed as not feasible and the project reverted to a winter storage option. This winter storage design is now completed and the Corporation land has now been rezoned to allow for the construction works to commence. Construction is expected to commence in 2023/24.</p>
Shepparton wastewater management facility high rate anaerobic lagoon cover replacement	2016-17	2020-21	2016-17	2020-21	Completed on time	The new cover is in service and was completed on time.
Shepparton outfall rising main replacement	2017-18	2019-20	2017-18	2020-21	Completed late	The project is complete and the new outfall sewer is in service. The project completion date was delayed due to an initial tender process not providing offers that represented good value for GVW. A subsequent re-design and tender process delivered a better value outcome for GVW.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Goulburn Valley Water (continued)</b>						
Broadford water treatment plant upgrade	2017-18	2020-21	2017-18	2029-30	Deferred	Project works will now be completed over an extended period. Power supply upgrades are currently in progress. This will enable the construction of additional storage and major WTP upgrades to be deferred for completion in 2029-30.
Shepparton raw water pump station augmentation	2017-18	2021-22	2017-18	2028-29	Deferred	Interim risk controls have been enacted to enable the project to be deferred.
Kilmore wastewater management facility offsets	2017-18	2021-22	2017-18	2020-21	Completed on time	Project is completed and new assets are in service.
Climate change mitigation strategy	2017-18	2023-24	2017-18	2022-23	Completed on time	Climate change mitigation strategy (CCMS) projects for the 2018-2023 regulatory period have been completed. This has included Stage 1 and 2 of the renewables program.  Large scale solar is the next major project as part of the CCMS and is a standalone project for the 2023-2028 regulatory period.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
Digital enablement strategy	2017-18	2024-25	2018-19	2024-25	On schedule	<p>The first major project (Finance System Replacement) has been completed in 2020-21.</p> <p>The second major project (Asset Management System Replacement) is in its design and configuration stage of delivery with an expected 'go-live' of early 2024.</p> <p>The next significant project (Billing/CRM System Replacement) was placed on pause in 2022/23 due to the Corporation focus required on other priorities (e.g. flood impact &amp; recovery; organisational changes to the Customer &amp; Growth team (being the Billing / CRM owner)). This project will recommence in 2023/24.</p> <p>During 2022/23, a Program and Project Management software was rolled out for the Digital enablement / investment portfolio. The expansion of this solution to the Capital Works and Strategic Project portfolios will continue through the 2023/24 financial year. This organisational Change Management program has continued to mature, leveraging the ADKAR model (i.e. Awareness, Desire, Knowledge, Ability and Reinforcement), within the major digital project delivery framework. Finally, a number of smaller, supporting projects have commenced in all years. The Digital enablement strategy is an ongoing program that will extend beyond 2023-24.</p>
Seymour sewer pump station no.1 rising main replacement	2019-20	2020-21	2019-20	2021-22	Completed late	The project was completed in 2021-22. The project had been delayed by a compulsory land acquisition process.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Goulburn Valley Water (continued)</b>						
Nathalia treated water pipeline	2020-21	2023-24	2021-22	2028-29	Deferred	The project was deferred based on implementation of short term works to address risks. Design and planning commenced in 2021-22 however construction is not scheduled to commence until 2025-26.
Replacement of Abbinga reservoir	2021-22	2022-23	2017-18	2020-21	Completed on time	Works are complete and the upgraded Reservoir is in service. Project was completed earlier than originally scheduled due to the opportunity to combine projects and achieve efficiencies.
<b>Greater Western Water (previously City West Water area) (Regulatory Period: 2018–24)</b>						
CBD sewerage strategy stage 1 (Spencer Street)	In progress	2018-19	2017-18	2018-19	Completed on time	Construction at the Spencer Street sewer commenced in 2017-18 and was completed in 2018-19 ahead of schedule and under budget. The Spencer Street sewer is an integral part of our CBD sewer network, and its upgrade has reduced the risk of sewer spills from this branch.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously City West Water area) (continued)</b>						
Nicholson Street (Carlton/Carlton North) water main Renewal	In progress	2019-20	2019-20	2020-21	Completed late	<p>The new water main and associated community projects were built mainly along Canning St (Parallel to Nicholson St) and was completed in October 2020 with the work site fully reinstated and handed back to the community. This renewal included the replacement of the old 450mm diameter water main with an upgrade to a 750mm diameter water main to cater for growth.</p> <p>The project required extensive engagement and approvals from stakeholders which delayed the project slightly and resulted in requiring additional funding (compared the amount included in the 2018 Pricing Submission) to complete mainly due to higher tender prices that are reflective of the current market. The additional funding was accommodated within the overall capex program.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously City West Water area) (continued)</b>						
West Werribee sewage pump station upgrade	In progress	2019-20	2019-20	2020-21	Completed late	<p>Construction of the West Werribee sewage pump station upgrade is complete and the facility became operational in February 2021. This upgraded sewage pumping station caters for increased flows and anticipated growth in the area. The facility is now located away from housing.</p> <p>The detailed design for the upgrade, including the environmental and heritage approval and requirements for connection to the Western Trunk Sewer, took longer than anticipated. As a result, the project was delayed, and additional funding was required compared to the original 2018 pricing submission plan and allocated budget.</p>
Greek Hill water supply (Dohertys Rd, Derrimut Rd & Davis Rd mains and Melbourne-Geelong pipeline interconnection)	2018-19	2019-20	2018-19	2020-21	Completed late	All potable water project components relating to the Greek Hill dual supply system were tendered for in 2018-19 and were completed in 2019-20. Approximately 97% of the works had been completed with the only one outstanding SCADA commissioning on the Melbourne Geelong pipeline interconnection remaining. The outstanding commissioning was delayed due to availability of new power supply connections which was then completed in October 2020.
Greek Hill recycled water supply (Dohertys Rd, Derrimut Rd & Davis Rd mains)	2018-19	2019-20	2018-19	2019-20	Completed on time	Recycled water components of the Greek Hill Recycled water components of the Greek Hill dual supply system were laid in parallel to the potable water mains. There was a minor change in scope to part of the Dohertys Road section where no recycled water pipes were installed until the permanent water works were constructed, which has now been completed on time.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously City West Water area) (continued)</b>						
CBD sewerage strategy stage 2 (Lonsdale Street)	2018-19	2020-21	2018-19	2020-21	Completed on time	<p>Following extensive engagement with key stakeholders to plan and coordinate works, construction of the sewer renewal commenced in October 2019. In March 2020, a major milestone was reached with the tunnel boring machine commencing tunnelling works.</p> <p>Construction was completed and the new sewer was put online in November 2020. It comprises of a new 1400mm diameter sewer that extends for approximately 900m between the newly constructed Stage 1 (Spencer St Sewer) and Elizabeth St, completed in mid-2018-19. This upgrade is Stage 2 of the Melbourne CBD Sewer Augmentation Strategy that is required to cater for growth in Melbourne CBD. The project was delivered on time and within budget.</p>
Mt Atkinson outlet sewer	2019-20	2020-21	2019-20	2021-22	Completed late	<p>The Mt Atkinson outlet sewer comprises a new 600mm diameter sewer that extends for approximately 4km along Hopkins Rd and Derrimut Rd, Truganina in Melbourne' outer west. It will cater for growth in the area and provides a sewer outlet for the upstream Mt Atkinson Development.</p> <p>The project was completed in August 2021. The project experienced minor delay due to hard ground conditions that impacted the tunnelling works. However, the project was delivered within budget and in time to service upstream urban development.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously City West Water area) (continued)</b>						
Billing and collection system replacement	2020-21	2022-23	2020-21	2023-24	Delayed	<p>The billings and collections program was initiated in 2019-20 with a first version business case. The Go to Market and supplier onboarding was conducted in 2020-21 and included a collaborative design period that confirmed the suitability of the System Integration partner (DB Results) and selected technology (Oracle CCS).</p> <p>A second version business case encompassing the whole-of-life costs, benefits, and delivery timeframes followed and was endorsed by the GWW Board in February 2022. This updated business case reflected GWW's integration, with the resultant merging of City West Water's and Western Water's billing systems and data – thus expanding the scope of the original project which was solely focused on CWW billing and collections system only.</p> <p>Detailed design, build, integration, and testing of the technology and business preparations (including data migration, future state process mapping, and change enablement activities) commenced in April 2022.</p> <p>During late 2023 complexities in delivering dependent streams of activity and design refinements led to a comprehensive assessment of the program's remaining delivery phase. The GWW Board endorsed a business case addendum encompassing scope, schedule, and budget adjustments in July 2023.</p> <p>The revised schedule for implementing the billing and collections capability targets implementation in March 2024 and eventual project completion by the end of June 2024.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously City West Water area) (continued)</b>						
Ravenhall outlet sewer	2020-21	2022-23	2019-20	2027-28	Deferred	<p>The Ravenhall outlet sewer will be delivered in two stages. It will be partially delivered by developers over the next two years and the remainder will be delivered by Greater Western Water in 2023-24.</p> <p>A recent review of the Ravenhall Outlet Sewer catchment found that the existing upstream network has sufficient capacity to cater for the current growth.</p> <p>Key triggers for the construction of the Ravenhall Outlet Sewer (Clarke Rd SPS and the diversion from the Rockbank SPS) have been pushed back due to available capacity. As such the Ravenhall Outlet Sewer is not required to be commissioned until 2027-28.</p> <p>The updated timeframe will enable further consultation with key stakeholders and approval prior to the outlet being required.</p> <p>The integration of two catchments that straddled the former border has enabled these works to be rescheduled as greater catchment utilisation has been achieved. This is a direct benefit of the integration of both organisations in 2021.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously City West Water area) (continued)</b>						
Tarneit West outlet sewer (section 1)	2020-21	2022-23	2020-21	2028-29	Deferred	<p>The Tarneit West outlet sewer crosses the Werribee River and through major council parks. Preliminary work on investigations, design and consultation with key stakeholders commenced in 2019-20.</p> <p>Updated monitoring has identified sewer flows lower than previously forecasted and the impact of wet weather events on the sewer through inflows and infiltration was less than expected. Growth in the area has remained lower than previously forecasted. The project has now been deferred due to the new monitoring information and is now expected to be constructed in 2028-29. Engagement with Wyndham Council is ongoing to secure the sewer alignment.</p> <p>The Tarneit West Outlet Sewer is a strategic sewer in the western growth area and can be utilised, through an extension to the north, to alleviate growth pressures on the Melton RWP. The deferral will allow GWW to better understand the customer growth in Melton, the constraints on the outflows of the Melton RWP and ensure that the Tarneit West Outlet Sewer is utilised to its maximum potential in servicing the west of Melbourne.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously Western Water area) (Regulatory Period: 2018–24)</b>						
Sunbury additional water storage — Bald Hill tank	Carried over	2016-17	2021-22	2024-25	Deferred	Slower growth rates experienced over the last year due to COVID-19 indicates that additional water storages at Bald Hill will be required by 2023-24 based on the updated growth rates in Sunbury. The project has commenced with preliminary investigation and due diligence is due to be completed by end of 2022. Construction is expected to commence in early 2023. Project is expected to be completed in 2024-25.
Melton South Exford Road sewer pump station/rising main/ sewer	2018-19	2020-21	2018-19	2026-27	Delayed	<p>This project caters for growth in Melton South facilitating the construction of a new sewer pump station and rising main. Discussion for the purchase of land for the pump station site has commenced with the landowner. The business case has been developed with the site configuration changing from original design to improve accessibility for maintenance.</p> <p>With development at Toolern reaching a point where a permanent pump station and rising main was needed, we commenced pre-construction investigations in 2020-21. In early 2023 Heritage Victoria indicated that they were unlikely to support a permit for the selected site. This is in contrast to earlier correspondence in which indicated no objection from Heritage Victoria. Construction has been delayed while an alternative suitable site is identified. Completion is expected in 2026-27.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously Western Water area) (continued)</b>						
Sunbury recycled water plant upgrade	2018-19	2022-23	2018-19	2018-19	Completed on time	The official opening of the upgraded Sunbury Recycled Water Plant took place in June 2019. The \$53 million government funded upgrade is the largest capital works project in Western Water's history.
Beattys Road East Trunk Water Main (Plumpton)	2019-20	2021-22	2019-20	2023-24	Delayed	<p>Beatty's Road East Trunk Water Main in Plumpton will provide water supply to the growing Melton region. We have deferred the project to better match urban development in this region.</p> <p>This project has been deferred to better match rate of development in this region. However further onsite investigation, fieldwork and design were delayed due to pandemic restrictions in 2020-21. Construction is expected to commence in late 2022, with completion in 2023-24.</p>
Sunbury Outfall Sewer Duplication	2018-19	2022-23	2018-19	2024-25	Delayed	<p>Sunbury is experiencing significant growth and this augmented sewer will be required to service the new areas of Sunbury. This pipeline will transfer gravity flows into the Sunbury Recycled Water Plant from the existing township as well as the new growth areas to the north, east and south of Sunbury.</p> <p>The construction contract has been awarded and construction is expected to be completed in 2024-25.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously Western Water area) (continued)</b>						
Melton Recycled Water Plant - Convert Aeration tank 5 & 6 to IFAS (Integrated Fixed Film Activated Sludge)	2020-21	2022-23	2024-25	N/A	Cancelled	<p>This project has been cancelled in favour of others that still meet the business need, but provide a better service. Further analysis of the identified package of upgrades needed at the Melton site found that this original project would no longer meet requirements and has thus been replaced with other projects.</p> <p>As part of our efficiencies program, we are moving away from the conversion to integrated fixed film to membrane aerated biofilm reactors.</p> <p>Our current priority is to build two new tanks fitted with membrane reactors (tanks 7 and 8) to be delivered in 2026-27.</p>
Derrimut Diversion Sewer Pump Station/Rising Main	2018-19	2023-24	2022-23	2029-30	Deferred	<p>Updated modelling of the catchment has shown that the combined catchments have sufficient capacity to delay the need for the construction of the Clarke Rd SPS.</p> <p>Land acquisition is progressing now such that a site can be acquired early in the event that the flows increase faster than forecast.</p> <p>GWW will continue to monitor the catchment and progress the design such that the construction can commence once the pump station is required.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously Western Water area) (continued)</b>						
Gisborne Recycled Water Plant - Stage 1 Bioreactor	2018-19	2023-24	2018-19	2026-27	Delayed	<p>The contract to design, build and operate the new Gisborne Recycled Water Plant was executed in March 2022. Detailed design has been completed and construction commenced in December 2022. The expected completion date has included a two-year operations and maintenance period and we are currently on track for delivery in 2026-27.</p> <p>Once commissioned the new facility will improve waterway health, reduce greenhouse gas emissions, and cater for the growing community.</p>
Parwan-Balliang Irrigation District network (Western Irrigation Network Stage 1)	2019-20	2023-24	2021-22	2023-24	On schedule	<p>This project will connect existing Western Water recycled water sources to supply a new irrigation district in the Parwan Balliang area. The project allows for recycled water to be transferred between multiple sites to meet customer demand needs and optimise the use of onsite storages. The design was completed and pipework procured in 2021-22. The construction contract was awarded in 2022-23. We expect the project to be completed in 2023-24.</p>
Melton Recycled Water Plant - additional onsite storage	2018-19	2020-21	2019-20	2021-22	Completed late	<p>This project addresses a future EPA compliance requirement (from June 2022) by installing an additional 1.0 GL of on-site storage at the recycled water plant. Draft Detailed Design has been completed. After some COVID interruptions, the construction of the storage was completed in December 2021 on schedule and is now operational.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Greater Western Water (previously Western Water area) (continued)</b>						
Bacchus Marsh recycled water plant to Melton recycled water plant interconnector	2018-19	2020-21	2019-20	2023-24	Delayed	<p>This project connects the Melton and Bacchus Marsh recycled water plants to allow recycled water to be transferred between the sites to meet customer demand needs and enable the best use of the onsite storages. The design has been completed with pipework procured, and pipeline construction contract awarded.</p> <p>Construction of the first 12.5 km is complete with the remaining section delayed until Werribee River crossing is complete. The project is expected to be completed in 2024-25.</p>
Grant Street sewer pump station, Bacchus Marsh	2018-19	2020-21	2019-20	2020-21	Completed	<p>The timeline for the project delivery was delayed due to design, cultural heritage, and asbestos pipe issues at the site. The new pump station was completed during 2020-21, and provides for enhanced environmental compliance through containment of sewer flows.</p>
<b>GWMWater (Regulatory Period: 2018–23)</b>						
South West Loddon Rural Water Supply Project	2016-17	2018-19	2016-17	2019-20	Completed late	<p>The project was planned on the basis that the planning concessions that applied to the Wimmera Mallee Pipeline would apply to the South West Loddon Project and as a consequence delays were experienced with planning and environmental approvals.</p> <p>During commissioning a blue-green algae bloom in the West Waranga Channel further delayed the declaration of the system as operational. The project was completed in March 2020.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>GWMWater (continued)</b>						
Mallee Towns Drinking Water Project – Brim, Beulah, Woomelang and Sea Lake	2017-18	2018-19	2017-18	2019-20	Completed late	This project was delayed due to a combination of delays in obtaining planning permits and pipe manufacturing constraints. Gazettal of the towns as a drinking water supply was applied for in late May 2019 and announced in late August 2019.
Sewerage scheme – Goroke	2018-19	2018-19	2018-19	2021-22	Completed late	Stage 1 of the Goroke sewerage scheme involved the construction of a reticulated sewer scheme and sewerage treatment plant. Community consultation on the technical solution delayed the initiation of the project. A South Australian based consultant was engaged for the design components of the project given the proximity of the project to South Australia. Border closures impacted the delivery of the design. The project was completed during 2021-22. Properties were formally declared as serviced for sewerage services effective from 1 April 2022.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>GWMWater (continued)</b>						
Urban remote metering and customer portal	2018-19	2019-20	2018-19	2020-21	Completed late	<p>There were 31,307 digital meters installed between 2019 and 2021. The completion of the final meters was slowed due to pipe modification works required for large meter installations and meter and RTU devices manufacturing delays resulting from COVID-19. The delivery of the project was also staggered to manage pressure reduction issues.</p> <p>GWMWater’s Customer Portal functionality was extended to Urban customers during 2020-21. The first phase involved recruiting 200 ‘early adoptors’ to provide feedback on the sign-up process and functionality in late 2020. During 2021 GWMWater implemented a phased rollout issuing more than 10,000 activation links to urban customers with a take-up rate of around 30 per cent. At the end of 2022-23 there are close to 6,700 GWMWater customers now actively accessing the Customer Portal to set alerts and monitor their water usage.</p> <p>In addition to this GWMWater is monitoring services that have low levels of continual water use to advise customers of a potential leak with many of these customers being able to trace the leak once brought to their attention.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>GMMWater (continued)</b>						
East Grampians Rural Water Supply Project	2018-19	2020-21	2018-19	2023-24	Delayed	<p>New rural pipeline services to previously un-serviced landowners in the East Grampians Water Supply Project area. The business case proposed an \$85M project, with \$32M funding committed by the Victorian Government and \$32M committed by the Commonwealth.</p> <p>Market costs for infrastructure projects have shifted significantly since July 2021, due to freight, raw material, global unrest, market volatility and fuel costs.</p> <p>Applications for additional funding have been unsuccessful to date. A review of what can be constructed within the available funding envelope has been undertaken and discussed with the Customer Consultative Committee at their May 2023 meeting. Approvals from State and Commonwealth have been received for a reduced scope and revised milestones. All environmental approvals including Public Land Manager Consents have been received. More Cultural Heritage Management Plan fieldwork may be required for Stage 4 and 6 areas.</p> <p>The revised scope builds from the water sources – Lake Fyans and Mt Cole – and allows for future connections to the network. The initial stage captures approximately 70% of meter points identified for the project.</p> <p>GMMWater will continue to apply for funding for the remaining 30% of meter points and future stages of the pipeline will progress as funding becomes available.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>GWMWater (continued)</b>						
Water treatment plant upgrades – health based treatment targets (Wilaura, Ouyen, Underbool and Manangatang)	2018-19	2020-21	2018-19	2022-23	Completed late	Planned upgrade (construction of DAF pre-treatment) at the Wilaura water treatment plant was completed in 2021. UV disinfection facilities at both Ouyen and Underbool water treatment plants were commissioned in March 2023. UV at Manangatang water treatment plant was temporarily deferred as water quality deteriorated from the Murray River and construction of a DAF occurred. Works are 100% completed for Ouyen and Underbool, while the treatment improvement works at Manangatang are 95% with only the shed/lean-to remaining.
Treated water supply – Ultima	2019-20	2019-20	2019-20	2022-23	Completed late	Project to provide potable (drinking) water supply to the township of Ultima. Potable water is sourced from Lower Murray Water and transferred directly to Ultima via a 29km pipeline (Swan Hill to Ultima).  Pipeline construction was completed in February 2023. Facility Sites at Swan Hill and Ultima were completed August 2022. Ultima tanks cleaning and reticulation flushing have been undertaken. Application has been made to the Minister for Health gazette Ultima as a drinking water supply under the provisions of the Safe Drinking Water Act 2003.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>GWMWater (continued)</b>						
Upgrade wastewater treatment plant & reuse system – Donald	2019-20	2020-21	2019-20	2024-25	Delayed	<p>Final design and scope were to be informed by the extend that highly saline groundwater infiltration could be reduced to inform the technical process with a view of maximising the value of the waste stream.</p> <p>Planning and finalisation of technical scope is well progressed with the first phase of upgrades to improve the treatment and reuse infrastructure planned for completion in 2022-23.</p> <p>The balance of construction work will be completed in 2023-24, followed by commissioning of the upgraded plant expected in late 2023.</p>
Treated water supply – Kaniva	2020-21	2020-21	2020-21	2023-24	Delayed	<p>The project was delayed to confirm the most cost effective technical solution given developments in desalination technology. The assessment confirmed a surface water solution as the most cost effective technical solution.</p> <p>Construction is underway on the receiving infrastructure at Kaniva and capacity upgrade at the Dimboola WTP which will supply the water. Works are expected to be completed in late 2023.</p> <p>Pipeline planning works for Kaniva commenced in late August 2022. These works are progressing slower than originally anticipated primarily due to availability of the planning consultants. Design and Construction Works are expected to be tendered in September 2023 and run in parallel to the completion of the statutory planning work.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>GMMWater (continued)</b>						
Development servicing – pressure improvements commercial and industrial – fire services	2020-21	2021-22	2018-19	2022-23	Completed late	Further engagement with industrial and commercial customers was undertaken for the 2023-2028 GMMWater Price Submission. During the next regulatory period, a targeted program of upgrades and renewals will be undertaken to deliver industrial fire flows that meet the requirements of the National Construction Code. Customers in industrial zones receiving the service improvement will transition to an industrial fire tariff on completion of upgrade works on a town-by-town basis.
Dam safety works – Lake Fyans	2021-22	2021-22	2021-22	2022-23	Completed late	A construction contract for the rehabilitation of the Lake Fyans embankment was awarded in December 2021. Construction commenced in early 2022. Late winter and early spring rains in 2022 delayed works and ground conditions did not improve until late summer for work to recommence.  The project has since been completed.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>GMMWater (continued)</b>						
Treated water supply – Moyston and Elmhurst	2022-23	2022-23	2021-22	2023-24	Delayed	<p>Project planning for the Moyston upgrade has progressed slower than originally anticipated primarily due to availability of the planning consultants. Design and Construction Contract expected to be tendered in September 2023 and run in parallel to the completion of the statutory planning work.</p> <p>The Design and Construct Contract for Elmhurst was awarded in February 2022. Construction was delayed due to wet weather in late winter/spring 2022 and is now expected to be completed in August 2023.</p>
Urban Pressure Improvement Works  ***NEW PROJECT***			2019-20	2022-23	Completed on time	<p>This project was initiated to ensure water flowrates committed to in GMMWater’s Urban Customer Charter were achieved across all urban towns. The need for this work was identified during the delivery of the Urban remote metering project. Works completed include construction of new pump stations, main renewals and valve replacements, service line renewals, reconfiguration and interconnection of pressure zones and augmentation of the network. Works have been undertaken at Ararat, Charlton, Dimboola, Donald, St Arnaud, Elmhurst, Glenorchy, Stawell, Warracknabeal, Kaniva and Moyston. The performance of GMMWater’s urban systems will continue to be monitored and improvements implemented where required.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>GWMWater (continued)</b>						
'Clean Water' Pilot - Northern Mallee Pipeline  ***NEW PROJECT***			2021-22	2022-23	Completed on time	This project was initiated in response to the increasing vulnerability to adverse water quality events, arising from the increased incidence of algal events in the Murray River, on rural and urban to customers serviced by the Northern Mallee pipeline. This pilot is focused on the area serviced by the Wemen pump station. A Design and Construct Contract for a DAF plant at Ouyen was awarded in October 2021. Construction commenced in mid-2022 and was completed in March 2023.
Horsham Agriculture SmartWater and Integrated Water Management Project  ***NEW PROJECT***			2021-22	2023-24	On Schedule	The Horsham Agriculture SmartWater and Integrated Water Management Project is part of the National Water Grid construction program and will support agricultural research activities and expand recycled water use. The project will convert Horsham's municipal wastewater into high quality irrigation water by improving water quality. The technologies proposed will secure and expand vital agricultural research and innovation (R&I) benefits for the Australian grains industry (cereals, pulses, and lentils), and its 22,000 grain farming businesses Australia wide. The project also aims to contribute benefits to the broader community's recreational, economic and environmental values identified in the Wimmera IWM Forum Strategic Directions Statement (August 2020).

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Table 1 Summary (continued)

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>GWMWater (continued)</b>						
Behind the Meter Solar ***NEW PROJECT***			2018-19	2023-24	On Schedule	The Behind the meter solar project involves the staged roll out of cost effective solar photovoltaic (PV) generation and Battery Energy Storage Systems (BESS) at existing operational sites. The program commenced in 2019. The majority of PV installations have been established where cost effective and the roll-out of Battery Energy Storage Systems has commenced with a pilot installation at Harrow. As at 30 June 2023, we had installed 2,273 kW of solar panels across 58 sites providing 21 percent of our electricity requirements. During the year we introduced our first battery solution at Harrow and in doing so established operating and management systems that can be replicated as we expand the use of battery as part of our Clean Energy Strategy. The Behind the Meter Renewable Energy program combined with past investments and efficiency improvements has reduced our carbon emissions by 25 percent compared to our carbon pledge baseline of 19% reduction by 2025.
<b>Lower Murray Water – Rural (Regulatory Period: 2018–23)</b>						
Mildura central pump station replace manifold/rising main	2018-19	2018-19	2018-19	2019-20	Completed late	Project Complete.
Millewa replace river pump station	2018-19	2018-19	2018-19	2022-23	Completed late	Project Complete.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Lower Murray Water – Rural (continued)</b>						
Red Cliffs main pump station upgrade to clear supervisory control and data acquisition	2018-19	2018-19	2018-19	2019-20	Completed late	Project Complete.
Robinvale – HPPS 100 kilowatt solar photovoltaic pilot	2018-19	2018-19	2018-19	2018-19	Completed on time	Project Complete.
Millewa upgrade to clear supervisory control and data acquisition	2019-20	2020-21	2019-20	2022-23	Completed late	See Millewa Replace River Pump Station
<b>Lower Murray Water – Urban (Regulatory Period: 2018–23)</b>						
Kerang replace treated water pump station	2018-19	2018-19	2017-18	2018-19	Completed on time	Project Complete.
Merbein wastewater treatment plant divert to Koorlong	2018-19	2018-19	2018-19	2022-23	Completed late	Project Complete.
Swan Hill – replace wastewater treatment plant rising main stage 2	2018-19	2018-19	2018-19	2018-19	Completed on time	Project Complete.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Lower Murray Water – Urban (continued)</b>						
Koorlong – wastewater treatment plant construct 400 ML wet weather storage no 1	2018-19	2019-20	2018-19	2020-21	Completed late	Project Complete
All sites – ultraviolet treatment plants	2018-19	2022-23	2018-19	2023-24	Delayed	Seven sites operational. Stage 2 (Kerang, Robinvale, Mildura West) sites were completed on time. Stage 3 works for Swan Hill WTP and Mildura WTP are still under construction. Works were delayed due to floods and resource availability but expected to be complete in early FY24.
Koorlong – wastewater treatment plant upgrade to clear supervisory control and data acquisition	2019-20	2021-22	2019-20	2026-27	Deferred	Review of strategy in regards to roll out of common SCADA platform and renewal of automation hardware resulted in reduced work scope to maximise existing electrical asset life with implementation of common alarming platform
Swan Hill DN450 Truck main Arnoldt/Stratbroke (1,245 m)	2020-21	2020-21	2019-20	2030-31	Deferred	This project was for a connection to a future Swan Hill North Water Treatment Plant. The construction of the new plant has been deferred to Water Plan 7 as a result of increasing our storage as per the Swan Hill North Treatment Plant 6ML ground level storage.
Swan Hill – North water treatment plant 6 ML ground level storage	2020-21	2020-21	2019-20	2021-22	Completed late	Options assessment concluded that additional storage can be constructed within the reticulation reducing the need for a new re lift pump station and interconnecting main. Tank is online and being utilised. Project completed June 2022.
Swan Hill – North water treatment plant treated water pump station (stage 1)	2020-21	2020-21	2019-20	2020-21	Cancelled	See Swan Hill North WTP 6 ML ground level storage.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Melbourne Water*<sup>1</sup> (Regulatory Period: 2021–26)</b>						
ETP sludge digester augmentation	Carried Over	2022-23	2019-20	2023-24	Delayed	This project was carried over from the 2016-21 regulatory period. Project construction commenced August 2020. The project will be completed in 2023-24.
WTP Primary Treatment Augmentation	2020-21	2025-26	2023-24	2027-28	Delayed	The commencement date for this project was delayed to mitigate cost escalation risks and to refine the delivery strategy.
WTP 55E Activated Sludge Plant Upgrade <sup>2</sup>	2020-21	2025-26	2022-23	2025-26	On schedule	Construction is underway and the project is on schedule.

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<sup>1</sup> Note that Melbourne Water has a different regulatory period from the other businesses: Melbourne Water’s regulatory period is from 1 July 2016 to 30 June 2021.

<sup>2</sup> Melbourne Water will now report on the carried over project *WTP 55E renewal*, previously scheduled to be completed in the 2016-21 regulatory period and reported on in past outcome reports, through the above *WTP 55E Activated Sludge Plant Upgrade*, which includes the works of the deferred project in its project scope.



**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Melbourne Water (continued)</b>						
Hobson's Bay Main Sewer Yarra Crossing Duplication	2020-21	2027-28	2021-22	2024-25	On schedule	Construction is underway and the project is on schedule.
Maribyrnong Main Sewer Augmentation	2020-21	2023-24	2021-22	2024-25	Delayed	Construction is underway but was delayed due to an extended planning approvals process. This delay has pushed completion out by a year but the project remains scheduled to be delivered in the 2021-26 regulatory period.
WTP Gas Plant Renewal	2022-23	2027-28	2025-26	2027-28	Delayed	This project has been delayed to allow for further investigations and to better understand cost escalations.
Yan Yean to Bald Hill Pipeline	2020-21	2023-24	2021-22	2024-25	Delayed	Construction is underway but was delayed due to an extended planning approvals process. This delay has pushed completion out by a year but the project remains scheduled to be delivered in the 2021-26 regulatory period.
Maroondah Res Outlet and Aqueduct Stage 3A	2020-21	2027-28	2026-27	2028-29	Delayed	The project has been delayed reflecting updating functional design timeframes. Construction is now scheduled to occur in the 2026-31 regulatory period.
Winneke Treatment Plant - UV Disinfection System <sup>3</sup>	2020-21	2024-25	2021-22	2024-25	On schedule	The project was deferred from the 2016-21 regulatory period to the 2021-26 regulatory period. It is in its construction phase and is on schedule.

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<sup>3</sup> Melbourne Water will now report on the carried over project *Winneke WTP UV system upgrade*, previously scheduled by Melbourne Water to be completed in the 2016-21 regulatory period and reported on in past outcome reports, through the above *Winneke Treatment Plant - UV Disinfection System* project, which includes the works of the deferred project in its project scope.



Table 1 Summary (continued)

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Melbourne Water (continued)</b>						
Olinda to Mitcham Water Mains Replacement Stage 1	2020-21	2022-23	2022-23	2024-25	Delayed	The project has been delayed but remains scheduled to be delivered in the 2021-26 regulatory period.
Mt Atkinson Reservoir Inlet Pipeline	2021-22	2023-24	NA	NA	Cancelled	The project has been cancelled following identification of an alternative solution for long-term supply to the Melton growth area to be delivered by Greater Western Water.
Port Melb Pump Station Renewal	2021-22	2022-23	2023-24	2025-26	Delayed	The project has been delayed but remains scheduled to be delivered in the 2021-26 regulatory period.
Regan St Retarding Basin <sup>4</sup>	2020-21	2022-23	2026-27	2028-29	Deferred	<b>**Developer Project: See footnote 5**</b> Increased project costs identified. The project has been deferred to the 2026-31 regulatory period.
Shakespeare Grove Main Drain Renewal	2020-21	2021-22	2020-21	2021-22	Completed on time	<b>**Developer Project: See footnote 5**</b>
Hallam Valley Retarding Basin Wetland	2020-21	2023-24	2020-21	2024-25	Deferred	<b>**Developer Project: See footnote 5**</b> The project is in its construction phase and has encountered delays but remains scheduled to be delivered in the 2021-26 regulatory period.

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<sup>4</sup> Melbourne Water will now report on the carried over project *Regan St Flood mitigation project*, previously scheduled by Melbourne Water to be completed in the 2016-21 regulatory period and reported on in past outcome reports, through the listed *Regan St Retarding Basin* project, which includes the works of the deferred project in its project scope.

Summary of Major Projects



Table 1 Summary (continued)

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Melbourne Water (continued)</b>						
Gladstone St Wetland Rectification	2020-21	2021-22	2025-26	2028-29	Deferred	<b>**Developer Project: See footnote 5**</b> Increased project costs identified from investigations and concept design. The project has been deferred so that other projects may continue to be delivered within current regulatory period funding limits.
Shogaki Drive DSS Interim Outfall Works <sup>5</sup>	2022-23	2022-23	2022-23	2022-23	Cancelled	This project is no longer being delivered by a developer. An internal MW project has been raised to deliver it instead. Expected construction remains in 2022-23.
Wyllies Drain Section 3 RBPWL2	2021-22	2022-23	2021-22	2024-25	Delayed	Works commenced in 2021-22. The project remains scheduled to be completed in the current Price Determination Period.
Trib of Skeleton Creek Upper - Section 1	2022-23	2023-24	2021-2022	2023-24	On schedule	Civil works are complete. Planting to be completed in 2023-24
Clyde Creek Section 92 Liliium WL9	2021-22	2022-23	2021-22	2022-23	Completed on time	Project is complete

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<sup>5</sup> Melbourne Water previously listed the following four projects as major projects they would report against over the 2021-26 regulatory period and were subsequently included within its 2021 final determination. Melbourne Water have informed us that these projects are funded via customer contributions and carried out by developers, with Melbourne Water only holding a broad oversight role in the delivery the projects. Given this, Melbourne Water will also report against the four following projects: *Regan St Retarding Basin*, *Shakespeare Grove Main Drain Renewal*, *Hallam Valley Retarding Basin Wetland*, and the *Gladstone St Wetland Rectification*, for the purpose of their major projects reporting.

Summary of Major Projects



**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>North East Water (Regulatory Period: 2018–26)</b>						
Yackandandah reclaimed water management	Carried over	2016-17	2018-19	2029-30	Deferred	This project has commenced but as previously reported deferred due to proportionally large areas of development and accelerated growth projections impacting the system. The continued development of a system strategy will inform the project outcomes.
Beechworth wastewater system upgrade	2018-19	2019-20	2018-19	2022-23	Completed late	The long bore section is now complete. The full system review and development plan for the wastewater treatment plant in initial definition.
Wodonga wastewater treatment plant capacity & emissions reduction	2018-19	2021-22	2020-21	2025-26	Delayed	This project remains a key project in delivering against the Corporation's greenhouse gas emissions reduction pledge outcome while providing needed capacity to meet the growth requirements for a rapidly expanding city. Currently this project is going through the tender process with the project team continuing to address requests for information.

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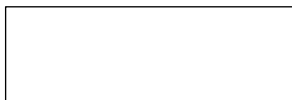




**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>North East Water (continued)</b>						
Region-wide digital business sustainability	2018-19	2021-22	2018-19	2021-22	Completed on time	Project completed.
Wodonga wastewater treatment plant solar power	2018-19	2022-23	2018-19	2022-23	Completed on time	Project Completed.
Region-wide information and communications technology infrastructure	2018-19	2027-28	2018-19	2027-28	On schedule	Project commenced and on schedule.
Benalla water distribution upgrade	2019-20	2020-21	2019-20	2028-29	Deferred	Engineers commenced network modelling in 2019-20. A reprioritisation of the programme has resulted in this project being rescheduled.
Wodonga sewerage transfer capacity	2019-20	2022-23	2021-22	2029-30	Deferred	Program reprioritisation sees this project rescheduled.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>North East Water (continued)</b>						
Wodonga wastewater treatment plant major upgrade	2020-21	2024-25	2019-20	2024-25	On schedule	On Schedule.
Benalla wastewater treatment plant upgrade	2023-24	2025-26	2019-20	2027-28	Deferred	Program reprioritisation sees this project rescheduled.
Wangaratta water distribution	2023-24	2025-26	2023-24	2025-26	On schedule	Engineers commenced network modelling in 2019-20.

Continued on next page



**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>South East Water (Regulatory Period: 2018–23)</b>						
Rye–Portsea backlog scheme	Carried over	Beyond 2017-18	2013-14	2022-23	Completed late	Property connections in the Peninsula ECO project area and backlog region of the peninsula has continued. Over 7,500 properties have been connected to the network as at end of June 2023, which is within the expected range of connections forecast for the year. From 1 July 2023, we are embarking on a new promotional campaign and program of work to continue the connection of Peninsula ECO project area and backlog region customers to the network. Connections will be delivered under a new project in our 2023-28 Price Submission and revised pricing structure.
Pakenham East sewer servicing	2018-19	2019-20	2022-23	2024-25	Delayed	As a result of various delays, completion of this project has been rescheduled to late 2024 / early 2025. Construction of the first stage has been completed although final reinstatement has been deferred until the drier months of the year. Continued issues with obtaining required approvals and access to developer land has prevented construction works on the second stage from commencing. While some progress is being made on resolving delays, there is still significant uncertainty in projected timelines. We are keeping development stakeholders informed and working with them to minimise delays in development.
Digital capability pilot	2018-19	2019-20	2019-20	2021-22	Completed late	Project completed.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>South East Water (continued)</b>						
Ballarto Road East sewer pump station	2017-18	2019-20	2017-18	2021-22	Completed late	Project completed.
Boneo water recycling plant upgrade	2018-19	2020-21	2018-19	2021-22	Completed late	Project completed.
Land purchase (Fishermans Bend)	2018-19	2021-22	2018-19	2023-24	Delayed	Securing land in Fishermans Bend has remained challenging despite using several acquisition strategies. We are currently progressing with compulsory acquisition. In parallel, we are also engaging with the landowner's legal representatives to encourage a negotiated, expedited settlement. Purchase of the land in Fishermans Bend is expected to be concluded by mid-2024. In the meantime, a site adjacent to our preferred site has been acquired for strategic reasons at a cost of \$8.5m (included in the total approved expenditure).
Water recycling plant drying pan and stockpile area upgrades	2018-19	2022-23	2018-19	2022-23	Completed on time	Project completed.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>South East Water (continued)</b>						
Land purchase (Pakenham WRP)	2019-20	2022-23	2019-20	2023-24	Delayed	The strategy for the South East Regional Biofactory has confirmed the requirement for the Pakenham land purchase. A plan for purchasing the land has been developed and property land valuation completed. We are currently progressing through the easement compensation process for a recently constructed branch sewer on the land. During this process, we aim to establish an agreed value for the land. The approach to the landowner to buy the land is expected at completion of the easement compensation process. In parallel, we are preparing as many requirements as possible in the event compulsory acquisition is ultimately required. The purchase of the land in Pakenham is expected to be concluded by mid-2024.
Hanna Street sewerage capacity improvements	2018-19	2021-22	2020-21	2023-24	Delayed	The project has been delayed due to an increased growth forecast in the catchment, which necessitated a revision of the catchment servicing strategy and sequencing of works. The revised Stage 1 scope of works commenced in late 2022 and is forecast to be completed late 2023 / early 2024, Preparation works for the Stage 4 connection, which was brought forward to minimise future re-work, is progressing and will be delivered along with Stage 1.
Elster Creek sewer catchment capacity improvement works	2018-19	2022-23	2021-22	2023-24	Delayed	Following a delay in commencing this project due to needing to apply a revised rainfall standard that was unavailable until 2020, construction works commenced in late 2022 and are progressing well. Work on the detention tanks in McKinnon Reserve and reinstatement of the turf around the football oval are complete. The pipeline in Higgins Road has been installed and work on the maintenance holes is in progress. Work has also commenced on the pipeline in Tuckers Road and is going to plan. Completion is expected late 2023 / early 2024.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>South East Water (continued)</b>						
Clayton East and West sewer catchment capacity improvement works	2020-21	2022-23	2024-25	2026-27	Deferred	This project has been re-evaluated based on a strategic analysis of work required across the region. Consequently, the project has been superseded by several new projects that will continue to deliver on the work started by this one. The catchments of Clayton, Mile Creek and Westall continue to be closely monitored. During the significant rainfall events in the Spring and Summer of 2022/23, no spills or significant surcharging was observed in the areas of Clayton East and West, where the 2018 Price Submission works were deferred. Preliminary modelling on the regional strategy has been completed with more detailed planning for Stage 1 of the strategy planned to commence in 2023-24. Continued works are expected to occur across the coming regulatory periods.
<b>South Gippsland Water (Regulatory Period: 2018–23)</b>						
Lance Creek water connection project	2018-19	2018-19	2016-17	2018-19	Completed on time	This contract received funding in the 2016-17 State Budget, later than originally anticipated. The project was completed before the completion date specified in the funding agreement and within budget. Customers in the connected towns are now benefiting from a more secure water supply with fewer restrictions forecast. The project has also help improve taste and odour of drinking water delivered to customers.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>South Gippsland Water (continued)</b>						
Sewer system major renewal item (Lawler Street Sewer Pump Station renewal)	2018-19	2019-20	2018-19	2019-20	Completed on time	Project has been completed. The project aimed to maintain service standards in Yarram by renewing aged and unreliable assets.
Wonthaggi wastewater treatment plant inlet pump station renewal	2018-19	2019-20	2018-19	2019-20	Completed on time	Project has been completed. The project aimed to maintain service standards by renewing aged and unreliable assets, while also accommodating growth in the catchment.
Fish Creek treated water distribution main renewal	2018-19	2022-23	2019-20	2027-28	Deferred	Project scope and schedule changed in 2018-19.
Sewer System Augmentation - Wonthaggi Mains	2018-19	2026-27	2018-19	2026-27	On schedule	Project is under construction in stages and is progressively increasing system capacity to maintain service standards while accommodating growth.
Water treatment plant disinfection upgrade projects	2018-19	2026-27	2018-19	2029-30	Delayed	Disinfection upgrades at water treatment plants are occurring in two stages. The first stage was completed late in 2022-23. The second stage was planned for the 2023-28 Regulatory Period but has been delayed until 2028-33. The projects will further improve drinking water safety in the region.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>South Gippsland Water (continued)</b>						
Carbon emission reduction upgrades	2018-19	2022-23	2018-19	2023-24	Completed late	Installation of five behind the meter solar power facilities has been completed. The projects are helping meet South Gippsland Water's obligations to reduce greenhouse gas emissions and reducing the cost of importing power.
Leongatha raw water transfer main	2020-2021	2022-23	2022-23	2023-24	Delayed	The project aims to maintain service standards in Leongatha by renewing assets. The revised completion date for the first stage of renewal is 2023-24.
Sewer system expansion (Inverloch) sewer pump station	2020-21	2022-23	2020-21	2023-24	Delayed	A construction contract is underway for a project with three drivers; supporting growth, compliance and renewal of assets to maintain service standards. The project is scheduled for completion by October 2023.
Wonthaggi Low Level Basin Pump Station Renewal	2019-20	2020-21	2019-20	2020-21	Completed on time	The project renewed and upgraded an existing pump station to maintain service standards in Wonthaggi and Cape Paterson.
Leongatha Water Supply Augmentation	2020-21	2020-21	2020-21	2020-21	Completed on time	The project scope in Regulatory Period 4 covers planning for future work to secure water supply in Leongatha and Koonwarra.
Leongatha Wastewater Treatment Plant Inlet Works	2020-21	2021-22	2020-21	2024-25	Deferred	The project aims to maintain services and to address compliance risk. This project was deferred to allow for holistic master planning for the site.
Port Albert Vacuum Sewer Renewal	2021-22	2023-24	2021-22	2023-24	On schedule	Installation works are underway to renew the system and reduce the likelihood of spills.
Service Basin Cover and Liner Replacements	2020-21	2024-25	2020-21	2024-25	On schedule	Construction work for five of six service basins is complete and planning work for the final basin is underway. The project aims to maintain drinking water safety in the region.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>South Gippsland Water (continued)</b>						
Wonthaggi Wastewater Treatment Plant Augmentation	2021-22	2024-25	2021-22	2024-25	On schedule	Design work is underway for a project that will be delivered in stages over multiple Regulatory Periods. The first stage of upgrades is due for completion ahead of 2024-25. The project aims to maintain service standards for the growing town.
Facilities Strategy	2022-23	2024-25	2022-23	2027-28	Delayed	Implementation of a renewal strategy has been delayed and is being reviewed and revised based on lessons from the COVID19 pandemic.
<b>Southern Rural Water (Regulatory Period: 2018–23)</b>						
Werribee office redevelopment	2018-19	2018-19	2018-19	2018-19	Completed on time	This project reached practical completion at the end of 2018-19. The budget was increased subsequent to the Price Submission. The redevelopment is to be funded from non-prescribed asset sales, and so doesn't impact customer prices.
Werribee irrigation district modernisation	2018-19	2019-20	2018-19	2019-20	Completed on time	The project is now in the benefits realisation phase.
Bacchus Marsh irrigation district modernisation	2018-19	2019-20	2018-19	2018-19	Completed on time	The project is now in the benefits realisation phase.
Maffra weir operating gear	2018-19	2019-20	2018-19	2021-22	Completed late	Practical completion has been reached.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Southern Rural Water (continued)</b>						
Asset management system upgrade	2018-19	2019-20	2023-24	2024-25	Deferred	The project has been deferred until the 2023-28 regulatory period while other ICT enterprise projects are developed. Deferral seeks to ensure the asset information software can be integrated with our broader enterprise systems.
Macalister irrigation district 2030 1B	2018-19	2020-21	2018-19	2020-21	Completed on time	Phase 1b was completed in 2020. We have also commenced initial construction of Phase 2 works which will complete the full modernisation business case.
Macalister irrigation district channel bank renewal	2018-19	2022-23	2018-19	2022-23	Completed on time	This represents an annual provision of funds for an on-going preventative maintenance program progressively refurbishing eroded earthen channels in the MID. Following a capital prioritisation review we have reduced the scope to provide funds within our revenue cap more critical emerging projects, including replacement of Siphon No 1 (see below)
Glenmaggie re-paint spillway gates	2018-19	2022-23	2024-25	2025-26	Deferred	This project was reprioritised and is now scheduled to commence in 2024-2025. Gate painting during the 2023-2028 regulatory period will comprise Gates 1-3 (this project) and gates 6-8.

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Table 1 Summary (continued)

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Southern Rural Water (continued)</b>						
Groundwater and rivers meter replacement	2018-19	2022-23	2018-19	2023-24	Delayed	<p>This represents an annual provision of funds to continually undertake meter replacements and upgrades to ensure we meet our obligations under the National Framework for Non-Urban Meters and associated State Implementation Plan. This program is guided by the SRW Metering Action Plan.</p> <p>Progress has been constrained by meter replacement being classified as non-essential work throughout Covid-19 restrictions. Since restrictions have eased, the focus has been on reconfiguring the program to achieve scale and align with new procurement requirements. The program is approximately two years behind targets set in the Metering Action Plan. Achieving the targets set out in the state plans will require significant investment, which is planned for the 2023-2028 regulatory period.</p>
Macalister Irrigation District Siphon replacement ***NEW PROJECT***			2018-19	2019-20	Completed	<p>The MID siphons are typically between 50 and 100 years old. Siphon failures cause significant disruption to supply and can take several weeks to return supply to customers.</p> <p>Siphon No 1 has previously had preventative maintenance work carried out but a large, detected leak has required this siphon to be replaced. Funding for this project required some reprioritisation of other projects, such as channel bank renewal and Glenmaggie spillway gate painting.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Wannon Water (Regulatory Period: 2018–23)</b>						
Hamilton – new biosolids drying area	2018-19	2019-20	2018-19	2020-21	Completed late	This project was completed in March 2021. Design was completed and construction commenced in 2018-19. The original Contractor engaged to undertake the works was unable to complete the works. This caused a delay as the remaining works were retendered and completed by another Contractor.
New clear water storage for Hamilton water treatment plant	2018-19	2019-20	2018-19	2020-21	Completed late	Construction of a new clear water storage tank is complete and the tank is operational. Contractor travel and attendance at site was impacted by COVID-19 border restrictions which resulted in delays to project completion date.
Warrnambool – water reclamation plant augmentation project	2018-19	2021-22	2018-19	2024-25	Delayed	This is Wannon Water’s largest ever capital project. Delays relating to pre-construction approvals significantly impacted preconstruction timelines. The project was tendered in June 2022 and a construction contract was awarded in October 2022. Construction commenced late 2022 with completion expected late 2024, subject to the contractors proposed programme and impact of weather and any supply chain issues.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
Warrnambool – Wangoom Road water tower and pump station	2018-19	2021-22	2018-19	2024-25	Delayed	The construction of the pipeline element of this project commenced during 2020-21 however the initial contractor engaged to undertake these works was unable to complete the project. The pipeline element has subsequently been re-tendered, awarded and works are due to recommence on site in November 2023. The construction of a new water tower initially experienced delays due to land acquisition issues which have subsequently been resolved. A tender for a water tower resulted in prohibitive tender prices from the market forcing Wannon Water to reevaluate the preferred solution to a water pump station. Design of the pump station is underway with tendering planned for 2023/24 and construction of the pump station during 2024-25.
Substitution works to improve summer flows in Gellibrand River	2018-19	2021-22	2018-19	n/a	Cancelled	Project study and design phase has been cancelled. Commencement of works will be dependent on matching funding to ensure value for money outcomes for our customers.
Camperdown – refurbish Camperdown biosolids facility	2019-20	2020-21	2018-19	2020-21	Completed on time	Construction of the refurbished biosolids drying facility is complete.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Wannon Water (continued)</b>						
Warrnambool water treatment plant – install ultraviolet	2019-20	2020-21	2019-20	2023-24	Delayed	A contract has been awarded for the procurement of the UV equipment, which has been delivered to site. A contract has been awarded for the construction of the UV building and associated UV infrastructure. Construction and installation commenced in 2022-23 and is due be completed in 2023-24.
Warrnambool – Wollaston Road Tower and water pump station	2019-20	2020-21	2019-20	2024-25	Delayed	This project is not funded within Wannon Water's current Price Submission period. Further assessments have identified a pressure booster pump system is preferred to a water tower. Delivery of infrastructure to cater for increased residential growth will be staged over the next 2 pricing periods. Tendering of the first section of feeder main is underway with construction planned for 2023-24. Design of the first phase booster pump station commenced in 2022-23, allowing for tendering of the booster pumps in 2023-24 with predicted commissioning of the pump station in 2024-25.
Hamilton water reclamation plant – effluent reuse upgrade	2019-20	2020-21	2018-19	2023-24	Delayed	Construction of Stage 1 of infrastructure to upgrade the effluent reuse options at Hamilton WRP commenced in 2019-20 and was completed in 2020-21. Design of Stage 2 infrastructure was completed in 2022-23. Tendering and construction of Stage 2 is planned for 2023-24, however is subject to budget availability.
Port Campbell – second bore	2020-21	2021-22	2019-20	2023-24	Delayed	Contract for the new bore was awarded in 2022-23. Delays associated with stakeholder approvals prevented construction of the bore from commencing during the 2022-23 winter off-peak period. Construction has been deferred to winter off-peak period 2023-24.

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Table 1 Summary (continued)

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Westernport Water (Regulatory Period: 2018–23)</b>						
Business transformation project	2018-19	2019-20	2019-20	2021-22	Completed late	<p>This project includes renewing Westernport Water’s billing, finance, payroll and HR information ICT systems. Payroll and HR systems have now been renewed. The existing approaches to renewing finance and billing systems are under review to ensure value.</p> <p>This Program has transitioned Westernport Water to a new managed service provider and delivered new HR and payroll systems, including an integration platform. In February 2022 Westernport Water’s Board approved the formal closure of the finance system implementation. Utility billing and finance system enhancements from the original scope were delivered in 2022-23 as part of Year Two of the Technology Roadmap.</p>
Building asset management plan – stage 3	2018-19	2019-20	2018-19	2020-21	Completed late	<p>This project includes the upgrade of existing warehousing and workshop, focusing on safety by reducing the risk to staff undertaking mechanical works. The project scope has been successfully delivered even with COVID -19 restrictions. The following upgrades were delivered: pipe and fittings storage; new storage shelving and racking; new concrete plant and machinery parking area; security gates and electronic access.</p>
Phillip Island water supply security project	2018-19	2020-21	2018-19	2020-21	Completed on time	<p>This project's scope includes constructing a 2.3ML potable water storage tank and pipework to reduce water supply interruptions on Phillip Island. The construction phase commenced in 2019-20 but was delayed due to COVID-19 restrictions. Nonetheless, construction works reached practical completion and the system commissioning was successfully completed by the scheduled completion date 2020-21.</p>

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Westernport Water (continued)</b>						
Cowes wastewater treatment plant upgrade – stage 2	2018-19	2021-22	2019-20	2021-22	Completed on time	The Cowes Wastewater Treatment Plant (Cowes WWTP) is Westernport Water’s major wastewater treatment plant that services Phillip Island and the township of San Remo. Stage 1 upgrade was completed in Water Plan 3. Stage 2 upgrade will increase the clarifier capacity to meet 2036 demand. The construction contract was awarded in March 2021 and the construction works reached practical completion in December 2021. The project was successfully completed before the scheduled completion date of 30 <sup>th</sup> June 2022.
Zone metering and pressure management	2018-19	2022-23	2018-19	2020-21	Completed on time	This project aims to reduce the water pressure in reticulation mains to extend asset life. The project includes the construction of seven pressure reduction stations in Westernport Water’s distribution network. The concept design has been completed for all seven zones. The pressure reduction facility at Cape Woolamai has been successfully commissioned as a pilot project. The remaining six pressure reduction stations have been deferred to the next regulatory period. An assessment has been undertaken and deferring the remaining six stations will not impact our performance service levels for customers. The project budget was reallocated to Cowes WWTP Stage 2 upgrade.

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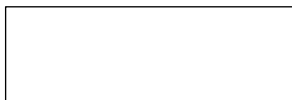




**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Westernport Water (continued)</b>						
Emissions reduction pledge implementation	2018-19	2022-23	2018-19	2020-21	Completed on time	This initiative assists Westernport Water in meeting its 8% emissions reduction pledge. The project includes installing behind the meter solar photovoltaic (PV) renewable energy across the three top energy-consuming Westernport Water sites (Stage 1). That includes solar arrays at Church Street Pump Station, Newhaven office and depot, and King Road WWTP. Stage 1 was successfully completed in 2019-20. Under Stage 2 of the project, 99.6kW ground-mounted solar PV at Cowes WWTP has been successfully installed. Construction works have reached practical completion and the system commissioning has been successfully completed.
San Remo basin renewal project	2020-21	2022-23	2020-21	2022-23	Completed on time	San Remo Basin is Westernport Water’s main drinking water storage in our water distribution system. The basin was originally constructed in 1968 as an uncovered earthen basin. Later in 1999, the basin was upgraded with a polyethylene (PE) liner and a floating cover. The theoretical useful life for the San Remo Basin liner and floating cover was 20 years. This project will replace the existing liner and cover. The Design and Construct contract was awarded and construction commenced in October 2021. The new liner and floating cover have been installed and commissioned in April 2022. Other miscellaneous upgrade works including rabbit proofing and embankment works have also now been successfully complete.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Westernport Water (continued)</b>						
Sustainable water reuse & land management	2020-21	2022-23	2018-19	2020-21	Completed on time	This project delivers on Westernport Water's Recycled Water Strategy. The project scope includes land purchase at the King Road WWTP and expansion of irrigation at the Cowes WWTP to increase our effluent reuse targets. The land purchase component of the project was completed in 2018-19. The associated irrigation connecting the new pivot at King Road WWTP has been completed.
San Remo basin to Cowes '648 pipeline valve renewal program	2020-21	2022-23	2020-21	2022-23	Completed on time	This project includes renewing critical valves in our 650mm diameter water supply pipeline from San Remo Basin to Cowes. The project commenced, and procurement of valves was completed in 2021-22. After stakeholder engagement, a decision was made not to proceed with valve replacement for one (1) site in San Remo as the existing valve seals well. Practical completion has been issued and this project was completed on time and within budget.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
San Remo to Newhaven Bridge pipeline and fittings renewal project	2021-22	2022-23	2023-24	2023-24	Delayed	Westernport Water has two water pipelines (400mm diameter Mild Steel Cement Lined and 375mm diameter HOBAS ) and one sewer pipeline (300mm diameter HOBAS) under the Phillip Island Bridge. These pipelines are critical to providing water and sewer services to Phillip Island. The pipeline brackets have experienced corrosion. The scope of this project includes renewal of the under-bridge pipeline brackets and fittings. The detailed designs and technical specifications were completed in 2020-21. The contract only tender was released in 2021-22 and was to be awarded in November 2022 after Board acceptance, subject to DTP approval to utilise a scaffold system on the bridge. Unfortunately, this decision has not been forthcoming due to delays in the proof engineering certificate for the scaffold load structural assessment. Preparation for site works continue to progress, with the majority of key project management documents developed and subsequently reviewed and accepted by WPW. This project is listed in Year 1 of the next price period.

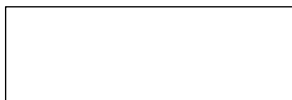
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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Yarra Valley Water (Regulatory Period: 2018–23)</b>						
Kalkallo Creek BS – stage 1E	2018-19	2018-19	2018-19	2019-20	Completed late	The project was completed in 2019-20. It was delayed due to a longer than anticipated tendering phase.
Epping branch sewer To MCM – tunnel extension	2018-19	2019-20	2018-19	2019-20	Completed on time	The project was completed in 2019-20.
Drinking water (DW) pumping station 610 Kalkallo pumping station augmentation (Mt Ridley to Bald Hill)	2018-19	2019-20	2019-20	2020-21	Completed late	The project was completed in 2020-21. It was timed to match the timing of the Melbourne Water Bald Hill Tank which was delayed due to a protracted land acquisition process.
Doreen pressure main sewage pumping station 651 to ELT49	2018-19	2020-21	2018-19	2021-22	Completed late	Major storms delayed the project. It was completed in 2021-22.
Craigieburn flow storage and distribution – stage 2A tank3	2018-19	2020-21	2020-21	2024-25	Deferred	The pipeline (stage 2A) for the project was completed in 2021-22. The wet weather storage portion (tank 3) has been deferred and combined with the next stage of storage expansion (tank 4) to create efficiencies in delivery and is scheduled to be completed in early 2024-25.
Lockerbie main sewer	2018-19	2021-22	2019-20	2021-22	Completed on time	The project was completed in 2021-22.

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**Table 1 Summary (continued)**

Project description	Scheduled start date	Scheduled completion date	Expected/actual start date	Expected/actual completion date	Status	Water corporation comments
<b>Yarra Valley Water</b>						
CSA034A The Patch (West) – community sewerage program	2018-19	2023-24	2018-19	2022-23	Completed	This project was completed in 2022-23.
CSA032 Monbulk (Central) – community sewerage program	2018-19	2024-25	2017-18	2022-23	Completed	This project was completed in 2022-23.
CSA033 Sherbrooke / Kallista (West) – community sewerage program	2018-19	2024-25	2018-19	2022-23	Completed	This project was completed in 2022-23.
CSA030A Sassafras (East) – community sewerage program	2019-20	2024-25	2019-20	2023-24	On schedule	The project is currently in the tender phase and is expected to be completed in 2023-24.

Table completed