

Sunbury Recycled Water Plant Upgrade

ON TRACK
FOR
COMPLETION
LATE 2018

Downer will begin testing Stage One of the upgrade in September. This project ensures Western Water can continue to service the growth expected in Sunbury and Diggers Rest.

What has been happening on site?

Downer have completed Stage One of the upgrade project. This has included construction of several new structures (inlet works, membrane tank, UV structure and odour control facility) as well as the mechanical fitout of these structures.

The last two months have focused on installation of underground pipelines and services such as power, communications and dosing lines.

Large equipment deliveries to the site are now finished.

What's next?

Stage One works will now be checked, tested and brought online. This is referred to as commissioning (see more in the profile on the reverse). Stage Two works will then commence, which include refurbishing parts of the old plant.

This will involve inspecting and rehabilitating some existing in-ground tanks and then preparing them for their new purpose.

Two of these tanks will become stormwater retention tanks. This will improve management of wet weather flows at the plant.

Who is behind the upgrade?

Over 60 workers have been working on-site at any one time, with a total of 350 people being inducted to work on the site across the life of the project (equating to over 122,000 hours being completed on the upgrade). This demonstrates the capability and commitment of all those who have contributed to the project.

When complete, the plant will be automated and run by three full time operators and a team leader.



IN THIS UPDATE

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Photos

Above: Odour control unit

Far left: Switch room fit out in progress

Left: Membrane tank

HOW TO STAY INFORMED

Let us know if you'd like to be added to the contact list for the Sunbury RWP Upgrade Project:

Mail: PO Box 2371, Sunbury DC Vic 3429

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Profile: Commissioning

What is commissioning?

Commissioning is the process of checking, inspecting and testing all new sections of the plant to ensure they are installed and working according to Western Water's project requirements. It is a quality focused process.

Why is it so important?

Commissioning allows contractors to operate the plant, its processes, ensure it works as intended and tests the plant to identify any problems or concerns before it is brought online.

What does it involve?

There are a number of stages involved in commissioning:

- Pre-commissioning: involves the testing of all assets, plant,

equipment and associated components to ensure that they have been correctly built, installed and functioning as per the design plans.

- Wet commissioning: involves all plant and equipment being tested using recycled water (in place of sewage) over the full range of operating conditions so that it operates correctly before it is brought into service.
- Process commissioning: all plant and equipment is progressively brought into service on the operating plant, optimised, tested and proven fit-for-purpose before the equipment that it is replacing is taken out of service and decommissioned.



What happens if something doesn't meet standards?

Any problems or leaks found during the inspection and testing phase will be fixed and tested again in order for commissioning to be declared complete. If something doesn't meet standards in the testing phase the old parts of the plant are still able to be brought back online in the interim.

Sunbury upgrade on track

Member for Sunbury Josh Bull MLA toured the plant mid August to mark the completion of Stage One of the upgrade project. Mr Bull was joined by Western Water Chairman, Terry Larkins, General Manager, Graham Holt, as well as members of the project team.

Several elements of the upgrade are now complete and ready to begin testing prior to commissioning, including:

- Inlet works, where wastewater will receive primary treatment
- Membrane tank, where wastewater will be further treated to remove all particles and bacteria,
- Odour control facilities, including tanks and odour dispersal stack.

The upgrade will increase the volume of wastewater the plant is able to treat from almost six to over nine million litres per day, catering to expected high population growth in the area.

Despite the significant increase in treatment capacity, the innovative design means the upgrade mostly remains within the footprint of the existing treatment plant.

Local residents and stakeholders are closely involved in the project via the Project Reference Group, which was set up to provide input and feedback. The group has been meeting every two to three months since the project's planning phase.



Above: (L-R) General Manager Customer & Community Relations Graham Holt, Member for Sunbury Josh Bull and Western Water Chair Terry Larkins.

Community signage



Given the rich cultural and environmental history of Jacksons Creek and the Sunbury Recycled Water Plant site, a series of three signs have been installed along the footpath on Palomino Drive. This area was selected due to the spectacular views of Jacksons Creek, the valley and its close proximity to Western Water's Sunbury RWP site.

The Project Reference Group (made up of residents and stakeholders) were keen for Western Water to share, promote and celebrate the cultural and environmental history of the site as well as help explain its current use and benefit to the community.

If you are interested in joining the Project Reference Group, contact Western Water's Community Engagement Advisor on 9218 5409.