

East Rockingham Wastewater Treatment Plant



For more information on the this project, please visit
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Artist's impression of the East Rockingham Wastewater Treatment Plant

Wastewater is the spent or used water from a community that comes from domestic, commercial and industrial sources. The collection, treatment and disposal or recycling of wastewater is a core Water Corporation function and is an integral part of the water cycle that maintains the balance of water in nature.

The population of Perth's south-west metropolitan corridor is growing rapidly and is currently serviced by wastewater treatment plants at Kwinana and Point Peron. The population of the area is expected to increase by between 5,000 to 8,000 people a year until 2015.

Current and predicted growth means that a new wastewater treatment plant will be required at East Rockingham by 2015, even with the current capacity upgrades to the wastewater treatment plants at Kwinana and Mandurah.

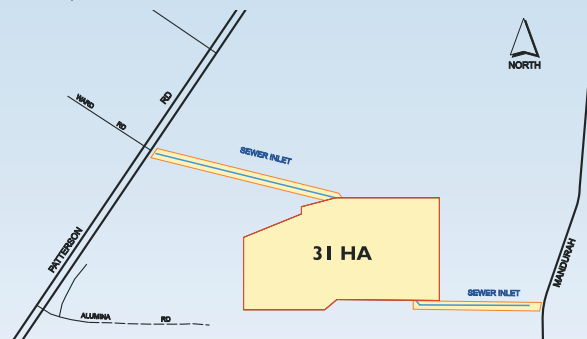
Proposed Location

The Water Corporation is well advanced in its planning for a new wastewater treatment plant at East Rockingham. The plant is scheduled to be operational by 2015 and it will initially treat up to 25 million litres of wastewater a day generated from areas bounded by Naval Base to the north, Singleton to the south and Byford to the east. The plant's long-term capacity will build to 160 million litres a day.

For some years now, the Water Corporation has been looking for suitable land between Naval Base and Mandurah to locate the wastewater treatment plant and it has identified a site west of Mandurah Road as a strong possibility.

The 31-hectare site, which will have an additional odour buffer zone, is located within an appropriately-zoned industrial area, is central to the south-west metropolitan wastewater catchment and is close to the existing Sepia Depression Ocean Outlet Landline.

The plant and associated infrastructure will use the latest technology and it will be designed to meet stringent environmental requirements. Operation of this modern plant will ultimately see the decommissioning of the wastewater treatment plant at Point Peron.



Proposed location for East Rockingham Wastewater Treatment Plant.

Water recycling

Water recycling is an essential part of the Water Corporation's strategy to manage the state's water resources efficiently.

Water recycling in the Perth metropolitan area has increased significantly in recent years, due mainly to the Kwinana Water Reclamation Plant (KWWRP), which supplies about 24 million litres a day of highly treated wastewater to industries in the Kwinana industrial strip. KWWRP has reduced demand for scheme and bore water by six million kilolitres a year, which is equivalent to about two per cent of Perth's total unrestricted scheme water use.

The proposed East Rockingham Wastewater Treatment Plant will provide Cockburn industry with the possibility of recycling water by connecting to the system in the future. As well as helping local industry, this will assist the Water Corporation build on the State Water Strategy, which is committed to achieving 20 per cent re-use of treated wastewater by 2012.

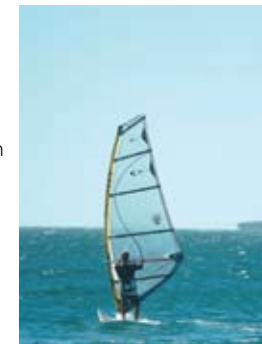
Ocean disposal

Even with the Water Corporation's strong push to increase water recycling, ocean disposal of treated wastewater will always be necessary and it has proved that this method is the best environmental option available.

More than 12 consecutive years of independent scientific research by the Water Corporation's Perth Long-term Ocean Outlet Monitoring (PLOOM) program shows that discharging treated wastewater to the ocean is environmentally sustainable and is not harming Perth's beaches or marine environment.

The PLOOM program comprises a mix of monitoring to meet regulatory conditions and investigative studies. It includes measurement of treated wastewater characteristics and associated nutrient loads; intensive summer and seasonal water quality surveys; modelling and surveys of contaminants and pathogens in the marine environment; and measurement of the marine environment's response to treated wastewater discharges.

Treated wastewater from the East Rockingham Wastewater Treatment Plant will be discharged to the ocean through the existing Sepia Depression Ocean Outlet Landline, which extends 4km offshore from Point Peron.



Community consultation

Wastewater treatment plants are vital. However, finding the right location for such facilities is not easy because of social and environmental constraints, as well as the general scarcity of land around Perth.

The Water Corporation considers that the potential site it has identified for the East Rockingham Wastewater Treatment Plant fulfils the key selection criteria. However, before a site is confirmed, the Water Corporation will continue to consult with the community and other key stakeholders as part of the regulatory approvals process.