

Western Treatment Plant Biodiversity Conservation Advisory Committee (BCAC)

Newsletter, Issue No. 1- February 2026

The Western Treatment Plant is listed as part of a wetland of international significance under the Ramsar Convention. This listing is intended to maintain the biodiversity values of the site. The WTP is managed by Melbourne Water to treat about half of the sewage produced by Melbourne, as well as for other purposes including biodiversity conservation.

To help with this process Melbourne Water established a committee, now known as the Biodiversity Conservation Advisory Committee (BCAC), tasked with providing specialist advice on the conservation, research, enjoyment and management of the Western Treatment Plant's native biodiversity values. The committee has operated for almost 40 years (since 1986) and has helped Melbourne Water achieve many successes in biodiversity conservation. This newsletter highlights some of the work undertaken by BCAC during 2024-25.

What's Been Happening

Conservation lagoon environmental water management

During the winter months planning is undertaken for the management of water levels in conservation ponds to provide or enhance habitat for migratory shorebirds, other waterbirds and Growling Grass Frogs. For migratory shorebirds the aim is to optimise habitat values during the times of peak abundance between September and April. Additional water is also delivered across irrigated pastures to support critical terrestrial habitat for waterbird species such as Straw-necked Ibis.

Biodiversity monitoring and mapping

Melbourne Water manages the range of habitats at the Western Treatment Plant via a program of vegetation management, pest animal control, conservation pond hydrological manipulation and other associated civil and natural resource management activities. This year activities that benefitted from BCAC advice include:

- ❖ Monitoring of a range of bird species (waterfowl, shorebirds, Straw-necked Ibis and Pied Cormorant) and other wildlife (e.g. intertidal fauna and Growling Grass Frog).
- ❖ Annual weed mapping.

- ❖ Vegetation mapping (including saltmarsh).
- ❖ Monitoring of the prevalence of bird diseases such as Avian Botulism and Avian Influenza, through testing of sick and recently deceased birds, and management responses when needed.
- ❖ Endorsement and facilitation of various biodiversity and conservation research projects.

Countering coastal erosion

Melbourne Water is developing a Coastal Hazard Assessment Adaptation and Resilience Plan to address site specific risks and issues resulting from sea level rise and the consequent foreshore erosion. This includes protecting critical habitats and biodiversity infrastructure such as intertidal areas, saltmarsh and constructed wetlands. BCAC provided advice on the habitat values and how to best minimise disturbance.

Opportunities & Improvements

In February 2024 Melbourne Water raised opportunities for BCAC members to contribute ideas for minor capital works to enhance biodiversity and conservation values across the site. Interest was expressed by BCAC and the MW team for improving habitat for cormorants, such as installing floating platforms in operational lagoons to provide additional sites for roosting and nesting.

This project has progressed to the design stage, with the aim of installation at the 25W lagoon in the non-breeding season in 2026. The main breeding season for Pied Cormorants at the WTP is from January to June. Pied Cormorants are the main focus as they are the most numerous species nesting at the WTP, and they are known to nest regularly at only a few sites in Victoria. Five species of cormorant roost regularly at the 25W lagoon and four of them nest there (plus a few related Australasian Darters (*Anhinga novaehollandiae*), making it one of the most diverse breeding colonies of such birds in the world.

Agricultural Activities

Melbourne Water and BCAC continue to work closely in with MPH Agriculture to manage and enhance biodiversity outcomes across the site. In 2023, farming leaseholders MPH Agriculture conducted a review of the current agricultural lease. This review investigated the relationship between irrigation of the terrestrial margins and bird populations, particularly the Straw-necked Ibis which relies on irrigated pasture and paddocks for foraging.

As a result of this this review, the timing of irrigation delivery has been adjusted to provide more water to paddocks during the period of peak abundance of Straw-necked Ibis (December to June), and less water from July to November. The latter period coincides with generally high rainfall in Victoria, and most ibis leave the WTP to breed at wetlands elsewhere.

Straw-necked Ibis monitoring

A new initiative this year has been to supplement regular monitoring of ibis numbers, with use of GPS transmitters to assess the extent of their movements more broadly. The Arthur

Rylah Institute (ARI) has monitored Straw-Necked Ibis numbers and habitat use at the plant since 2001 and continues to do this funded by Melbourne Water. Eighteen solar powered transmitters have been attached to Straw-necked Ibis captured at the treatment plant, and they will provide detailed movement data in real time for about two years before falling off. Already, the transmitters are providing detailed data on feeding, roosting and breeding sites, how management at the treatment plant affects these behaviours, and the effects of irrigation on ibis numbers.

The extent and complexity of their movements have proved remarkable, with some ibis flying over 10,000 km in a single year. Most of these movements were made within southern Victoria, but some also visited the Murray River floodplains, one travelled west to South Australia and one went north to Queensland.

Orange-bellied Parrot

During autumn and winter 2025, 13 individuals of this critically endangered species were observed at the treatment plant. This number is the most seen at the WTP this century, reflecting a welcome increase in the wild population as a result of active management by the multi-state Orange-bellied Parrot Recovery Team.

The WTP and adjacent Spit Nature Conservation Reserve were a stronghold for the species from the 1970s to the 1990s. In research aimed at streamlining monitoring of this species, both the Australian National University and ARI have deployed acoustic monitoring equipment in appropriate habitat at the treatment plant to test its efficacy for detecting the presence of Orange-bellied Parrots.

The resulting data will be used to develop improved call recogniser models for the species with application across the entire range of the species. Orange-bellied Parrots breed in remote wilderness in south-west Tasmania and migrate to spend the winter in coastal saltmarsh mainly in Victoria and South Australia.



Orange-bellied Parrot (Neophema chrysogaster). Photo courtesy of Kathryn Hocking.



Straw-necked Ibis tracker fitting. Photo courtesy of Dan Purdey.

Terrestrial Biota

During the past few years our dedicated birdwatching community has added two new species to the Western Treatment Plant bird list - a Black Tern found on the 2nd of April 2023 and an American Golden Plover found on the 19th of April 2024. Both were in breeding plumage, and the Black Tern was found to be of the American subspecies *surinamensis*. With these additions the WTP bird list now stands at 313 species!

Another significant find was the Fat tailed Dunnart and their unique nests, recently spotted by Melbourne Water staff and Wadawurrung Traditional Owners whilst undertaking survey and conservation works at T-Section Grassland. It's been 10 years since the dunnart has been sighted on the treatment plant.



American Golden Plover at the Borrow Pit conservation pond Photo courtesy of MW.



Fat-tailed Dunnart Western Treatment Plant Grasslands. Photo courtesy of MW.

For more information about this project
or our other activities please call
MW on 131 722 or visit
[Birdwatching | Melbourne Water.](#)



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