



## Wetlands Australia 34: Putting wetland restoration science into practice at Walker Swamp, Victoria

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After above average rainfall in October 2020, Walker Swamp has filled for the first time in several decades, capping off a complex seven-year restoration journey at this important site.

Situated adjacent to the Grampians National Park, a restoration trial commenced at Walker Swamp in 2014, the site became a Nature Glenelg Trust reserve in 2018 and extensive property-wide hydrological restoration works were completed in autumn 2019.

As reported in **Editions 25, 26 and 31 of [Wetlands Australia](#)**, Nature Glenelg Trust has been progressively working to restore the wetlands of the Upper Wannon River floodplain across public and private land. Successful permanent works have been completed at Brady Swamp and Gooseneck Swamp in the Grampians National Park in 2015, complemented by more recent major works at Walker Swamp on Nature Glenelg Trust's new 1,000 acre Restoration Reserve.

The combined impact of these works can be seen in the image below.



*Looking north at the landscape-scale impact of NGT's restoration works across the Wannon River inland delta, across public and private land, straddling the boundary of the Grampians National Park. Photo: Dale Bachmann.*

The completion of these works is the culmination of several years of investigative work by a number of staff at Nature Glenelg Trust, especially Greg Kerr and Lachlan Farrington, who used a range of techniques to help us document the restoration potential of the site. These included: testing and monitoring the results of initial trial works, modelling restoration scenarios, developing a scientifically sound restoration plan, seeking engineering advice where required and then overseeing the accurate implementation of those works by contractors.

In keeping with Nature Glenelg Trust's philosophy for simple but effective, set-and-forget solutions and to avoid any future visible impact by working with natural landforms, we backfilled over 20 km of artificial drains. Wherever possible we minimised the use of built infrastructure in our designs. The only exceptions to this being the reinforcement of 2 minor earthen levees to protect neighbouring farmland from inundation and an upgrade to Lynchs Crossing Road, which bisects the chain of wetlands linked to

Walker Swamp, to prevent it from being inundated. Except for the installation of additional pre-fabricated culverts under the road, no concrete was used in the project.

All surface flows out of Walker Swamp are regulated by an inexpensive geofabric spillway, where a short length of retained artificial drain links the newly restored chain of wetlands back into to the pre-existing drainage network where it exits the property.



*The geofabric spillway where discharge from Walker Swamp is managed back into the artificial drainage network. Shown here full with a slow trickle over the spillway on 16th November 2020. credit: Mark Bachmann.*

As water levels have risen, we've come across some very picturesque wetlands that have re-appeared for the first time. Threatened fish and crayfish are already expanding into new habitats, the waterbirds have returned, and growling grass frogs have been heard calling in a loud chorus across these newly restored wetlands.

The recovery process is now in full swing, and Walker Swamp is demonstrating that our wetlands are capable of incredible transformations when we take bold but calculated, cost-effective action at strategic locations in our landscape. We hope this story inspires others to join us, in more regularly putting restoration science into practice.

## Further information

For more information on the early restoration results see: [The long-term transformation of Walker Swamp truly begins.](#)

Please visit [Nature Glenelg Trust](#) for further updates.



*A picturesque wetland area within the southern lunette of NGT's Walker Swamp property, 17th October 2020. Photo: Mark Bachmann.*