



**Australian Government**  
**Department of Agriculture,  
Water and the Environment**

## Wetlands Australia 33: Long Swamp: A wetland back on the right trajectory in Australia's newest Ramsar site

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Permanent restoration works completed in Long Swamp in 2019 have secured the outcomes achieved through earlier trials in 2014 and 2015. Long Swamp is a large coastal freshwater wetland complex, situated within Discovery Bay Coastal Park and also part of the Glenelg Estuary and Discovery Bay Ramsar Site.

In **Editions 22, 25 and 29 of [Wetlands Australia](#)**, we explored the early phases of a restoration project being managed by Nature Glenelg Trust (NGT) at Long Swamp, near Nelson in south-western Victoria.

Much has unfolded over the past eight years, including the designation of Long Swamp as part of Australia's 66<sup>th</sup> and most recent Ramsar Wetland of International Importance, and the recent completion of permanent restoration works in 2019. This followed field investigations, installation of trial structures and long-term monitoring efforts, allowing the focus to eventually shift to converting the 2015 (Phase 3) trial structure into a permanent, reinstated sand dune behind the newly reinstated wetland within Long Swamp called Bully Lake.

Rebuilding the dune was not a regular construction project, and required some creative engineering. The design was finalised by NGT wetland ecologist Tessa Roberts, with the Phase 3 (7000 sandbag) trial structure re-purposed to become the permanent solid 'core' of the reformed dune. More than 500 cubic metres of sand was to be added and shaped to form a sloping dune that, in time, will blend into the natural coastal landscape.

After Phases 1 and 2 - 2014



After Phase 3 - 2015



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*Bully Lake restoration and dune reformation 2015-2020. Photo: Mark Bachmann.*

The project area is ecologically sensitive and culturally significant for the local Gunditjmara people, meaning that we encountered challenges to ensure the works protected these values. The lowest impact method for moving very large quantities of sand was to pump it from the beach, over the dunes, before being shaped into its final form. NGT worked with Gunditj Mirring Traditional Owners Aboriginal Corporation to avoid any impacts to a significant shell midden on the old access track, instead moving machinery along the beach.

After the complex task of moving sand pumps and pipes to the site, the sand finally got moving. A couple of weeks later, including some stops and starts due to the unpredictable weather on this wild bit of southern coastline, the pumping and shaping was complete, and jute matting was rolled over the whole structure to help hold it in place.

As you will see below, more than 500 cubic metres of sand makes for a significant change, and the resulting dune is pretty impressive!

## Further information

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

If you are interested to learn more about the detail and history of this restoration project and how a number of historic information sources played a vital role in its progress and evolution, please refer to:

Bachmann, M.R. (2020) [The role of historical sources in the restoration of Long Swamp, Discovery Bay, Victoria.](#) Ecological Restoration & Management Vol 21 No. 1. Pages 14-25.