

Catchment Repair

Constructed Wetland - Mourilyan

AIM

To improve the hydraulic function of an existing vegetated swale and maximise its potential as a treatment system for paddock runoff.

SITE DESCRIPTION

This site consisted of a grassy swale with a deep channel through the middle. The swale is the result of many years of soil removal from this site and while this section of the farm had some good wetland attributes, factors such as poor hydrological connection, water depth and vegetation species were hindering treatment potential.

CATCHMENT REPAIR TECHNOLOGY

The shape and profile of the swale was redesigned to provide a more linear system that would work within the current farming system, improve hydrology and promote growth of native wetland plant species. The seed bank in the existing topsoil was utilised as a source of native, wetland vegetation which have thrived under the improved hydrological conditions. <https://wetlandinfo.des.qld.gov.au/wetlands/>

A weed management program was developed and implemented using selective herbicides to control the growth of Para grass in the wetland during the establishment phase.

KEY CHALLENGES:

Acid Sulphate Soil was present at the wetland site, so it was imperative that all excavation was above this soil stratum. Construction methods also needed to manage or remove the risk of oxidation of the pyrite within the soil profile.

APPROVALS/PERMITS REQUIRED: Riverine Protection Permit

CONSTRUCTION TIME: 1 month



For more information contact:

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