Total Environmental Concepts

PROJECT CASE STUDY

North Maclean Rehabilitation

Environmental weed management and threatened-species revegetation

North Maclean, Queensland · 2026

Project at a glance

830	100%	24	24,500
MELALEUCA IRBYANA TUBESTOCK PLANTED	PLANTING LOCATIONS GPS-RECORDED	MONTH MAINTENANCE PERIOD	M² REHABILITATION AREA

Client	Maclean Estates Pty Ltd (Brad Hanson)
Receiving authority	Logan City Council — Natural Areas, Parks Branch
Ecological design	28°South
On site	July – August 2026, then a 24-month maintenance period from 28 August 2026
Extent	24,500 m² rehabilitation area plus an adjoining 4,000 m² strip
TEC project manager	Robert Cock

SCOPE OF WORKS

Environmental rehabilitation and restoration · Environmental weed management · Preparation of rehabilitation areas · Native revegetation and infill planting · Irrigation to support plant establishment · Vegetation maintenance and rubbish removal · Ongoing monitoring and reporting

Site location and extents

The rehabilitation area sits within a vegetated corridor off Greenbank Road at North Maclean, with site access taken from the road frontage. The scope plan sets out the rehabilitation extents against the surrounding zoning.

Site locality and access point off Greenbank Road.

Scope plan — 24,500 m² within the cyan boundary, plus a 4,000 m² adjoining strip.

The challenge

The rehabilitation area was affected by environmental weed infestation, particularly Asparagus africanus, competing directly with native vegetation and reducing the ecological condition of the site.

Rehabilitation also required establishing appropriate native vegetation, including the threatened Melaleuca irbyana — raising the bar on both planting method and record-keeping.

Dense weed growth through the understorey, with vines smothering retained canopy trees.

Weed groundcover carpeting the forest floor and suppressing native regeneration.

A threatened community

Melaleuca irbyana remnants are of high conservation value in the Logan region. The rehabilitation was designed to reinforce that community rather than simply revegetate the area.

Working with a threatened species meant the works had to produce healthy plants and an auditable spatial record Council could rely on well after handover.

Remnant melaleuca woodland within the site.

Our approach

1 Targeted weed management

Control focused on Asparagus africanus across the rehabilitation area, with retained native vegetation protected throughout, followed by site preparation and rubbish removal.

2 Threatened-species revegetation

830 Melaleuca irbyana tubestock planted as infill through the Environmental Management Zone, each location recorded on a Garmin GPS and staked for field identification.

3 Irrigation, maintenance and monitoring

Irrigation provided through establishment, with ongoing maintenance and monitoring reporting used to identify and address requirements as they arise.

Barrier fencing along the boundary of retained vegetation, protecting standing natives during works.

Every plant on the map

Individual planting locations were recorded on a Garmin GPS and staked in the field. Those points do two jobs.

They give the project a spatial baseline that can be revisited plant-by-plant to assess survival and establishment over time — and they feed directly into Council's Melaleuca irbyana register, so the planting becomes part of the region's conservation record rather than a one-off delivery.

830

GPS points recorded — one for every tubestock planted, supporting Council's irbyana register.

Each point marks a GPS-recorded planting location. Base imagery: Google Earth.

Before and after

LOCATION 1 OF 6

BEFORE

AFTER

Aerial imagery over the same extent at the same scale, before and after weed management works.

Before and after

LOCATION 2 OF 6

BEFORE

AFTER

Aerial imagery over the same extent at the same scale, before and after weed management works.

Before and after

LOCATION 3 OF 6

BEFORE

AFTER

Aerial imagery over the same extent at the same scale, before and after weed management works.

Before and after

LOCATION 4 OF 6

BEFORE

AFTER

Aerial imagery over the same extent at the same scale, before and after weed management works.

Before and after

LOCATION 5 OF 6

BEFORE

AFTER

Aerial imagery over the same extent at the same scale, before and after weed management works.

Before and after

LOCATION 6 OF 6

BEFORE

AFTER

Aerial imagery over the same extent at the same scale, before and after weed management works.

Outcomes

- Environmental weeds actively managed and the rehabilitation areas prepared for native vegetation establishment.
- Infill planting of 830 Melaleuca irbyana increased native vegetation cover, supported by irrigation through establishment.
- Every planting location GPS-recorded and staked, giving Council a plant-level spatial baseline.
- Continued monitoring and reporting provides an ongoing record of rehabilitation progress.
- Logan City Council accepted the completed works onto a 24-month maintenance period from 28 August 2026.

Handover

The environmental area is progressing toward handover to Logan City Council as a significant conservation asset.

Survival and establishment results to be added following the first monitoring round.

What the client said

“The site looks fantastic.”

Logan City Council, on accepting the completed rehabilitation works

Council acknowledged the significant work undertaken, including the additional Melaleuca irbyana plantings, and accepted the works onto the 24-month maintenance period. The client described the planting outcome as an “excellent result”.

Brad Hanson, the project owner, described the outcome as “a good result”, with the environmental area progressing toward handover to Logan City Council as a significant conservation asset.

Total Environmental Concepts

Established in 2014, TEC delivers end-to-end environmental contracting across South East Queensland, Northern NSW and the Toowoomba–Lockyer region — supporting councils, government agencies, developers and Tier-1 contractors from early stabilisation and establishment through to rehabilitation, maintenance and long-term performance.

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ACCREDITATION

- ISO 9001 — Quality Management
- ISO 14001 — Environmental Management
- ISO 45001 — Health & Safety Management
- Local Buy approved supplier (LB303/304/305/313)
- Member — Landscape Queensland and IECA