



## Case study: Mott

Property location: Exeter, NSW  
 Size: 412 hectares  
 Project completion: February 2021

### Initial site assessment

Property is an operational farm and is largely clear of native vegetation. Topography is steep with degradation to landscape function and processes due to land use changes over time.

Depositional zones provide the best opportunity for landscape rehydration as the natural sponges of the landscape – where water slows, spreads out, infiltrates and is stored within sediments.

### Project objectives

- Enhance landscape and ecological function of property using an integrated design approach, and as overseen by Charles Massy.
- Improve ecological and aesthetic values of selected flowlines by improving landscape and hydrological function.
- Implement practices which complement the landscape setting.

#### Take home message

Understanding different landscape elements and working with them to enhance existing features and reinstate natural functions and processes will have the most effective outcomes.



**Top:** After – Ponds and earth sills created to slow and hold water in the landscape.  
**Right:** Before – Depositional feature in gully with incised creek.



## Services provided



### Site assessment

Consultants visited property and made a series of recommendations regarding most appropriate sites for undertaking landscape rehydration works based on landscape elements present.



### Design

A design for landscape rehydration works was developed in GIS and CAD software based on the site inspection.



### On-ground works

Eleven earth banks were constructed across existing gullies and depressions to create ponds, combined with four extended level sills to redistribute surface flow across the old swampy meadow surface.



### Vegetation

Perennial grasses were planted back over the banks after construction. Extensive revegetation is occurring as part of a broader farm plan.



### Materials

- Rock and earth – obtained on-site
- Transplanted grasses – obtained on-site.



Level sill – Slows and holds water in the landscape.



Incorporating existing infrastructure into landscape rehydration works, with ponds and sills added to retain water runoff from current dam.

## Outcomes

A swampy meadow has been recreated, with a series of ponds that provide essential habitat. On completion of construction, groundwater was already filling the holes, with frogs, yabbies and dragonflies present on-site.

The surrounding landscape will be rehydrated and hold water for longer, like a sponge, meaning streams will flow for longer in dry times, and plants and animals can thrive.