Landcare matters

Hotham-Williams sub-catchment update





NRM is the management of natural resources such as land, water, soils, plants and animals. It brings together land use planning, water management, biodiversity conservation and sustainability of industries such as agriculture, mining, tourism, fisheries and forestry.



Defending Dryandra

PHCC has been successful in our Feral Cat Management **Grant Application!**

The Defending Dryandra Feral Hotspots Project will be delivered over 3 years and will involve targeted feral cat control by a pest animal control contractor at known feral cat hotspots on properties surrounding Dryandra Woodland National Park.

We will use 4G monitoring cameras on these properties to determine the effectiveness • of the management activities and to monitor native animals that visit the farms.

The project will receive \$183,865 of funding and aims to:

- Reduced predation pressure from feral cats (and opportunistically foxes) for key threatened species including numbats and woylies to help maintain or improve their populations
- Reduced disease risk from feral cats to livestock including toxoplasmosis and sarcocystis.
- · Use of technology to monitor feral species in real time.
- Raise awareness of threats from feral cat and best practice management.

The Defending Dryandra Project receives funding as part of the Western Australian Government's Feral Cat Management Grants.





Numbat. Image by John Lawson Feral cat captured on camera monitoring from Dragon Rocks. Image by Rob McLean

Landscape Rehydration Workshop

We recently held a Landscape Rehydration workshop on a property in Quindanning in our Hotham-Williams subcatchment. Lance Mudgway from the Mulloon Institute provided technical and practical in-field demonstrations to landholders on how to retain on-farm water through water conservation techniques and

good landscape planning.

Our host farmers, Neil and Maree shared strategies they have used to improve water conservation on their property and were also able to pick up some additional tips from Lance on actions they could implement into the future.

The group viewed three paddocks on the property and





In-field demonstration

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learnt about the concept of the "three zones", recharge, production and filtration and how using this thinking can achieve landscape rehydration on small through to large scale areas.

Whilst out on the farm, we were also able to see Neil and Maree's saltbush plantings from a recent PHCC Community Environment Grant.

For more information visit the Mulloon Institute website: https://themullooninstitute.org/

This Regenerative Agriculture event was made possible thanks Regen WA and funding from Lotterywest. RegenWA is powered by the Perth NRM Collective Impact Program with funding from Lotteywest, Commonland and NAB Foundation Communities Grant.



Maree and Neil with Lance (Mulloon) and Mel (PHCC)

What the OOZE is that?!

Monosulfidic black ooze (MBO) looks like it sounds... Dark and squishy mud that if stepped in, can be very hard to extract your foot from!

In simple terms, it is a solid deposition resulting from a chemical reaction within the sediments of waterways. MBOs form under certain conditions, including stagnant and deoxygenated water with soils enriched in chemicals like iron sulfide. This is why you can currently see MBOs being exposed and drying out as the water levels reach a

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particularly low point this year.

MBOs form in pools and degraded sections of waterways. De-oxygenation occurs during the process, so benthic (bottom-dwelling) materials die and become part of the MBO, as does phosphorous. MBOs may be easily mobilised when flow begins after rain, which can lead to the release of nutrients and toxins, as well as deoxygenation and acidification of the water.

There are lots of projects being tirelessly run by organisations, landholders and volunteers to

find a new equilibrium of river health within the constraints of low flows and high temperatures. Projects are focused on localised areas to increase water depth, improve in-stream habitat, increase oxygen levels in the water and restore the function of the riparian ecosystem. Check out the waterways projects being run by PHCC on our website

www.peel-harvey.org.au

Hotham and Williams Rivers projects in the upper catchment are funded through partnerships with both South32 Worsley Alumina and Newmont Australia (Boddington)





Recent photographs of the Hotham River in Boddington





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