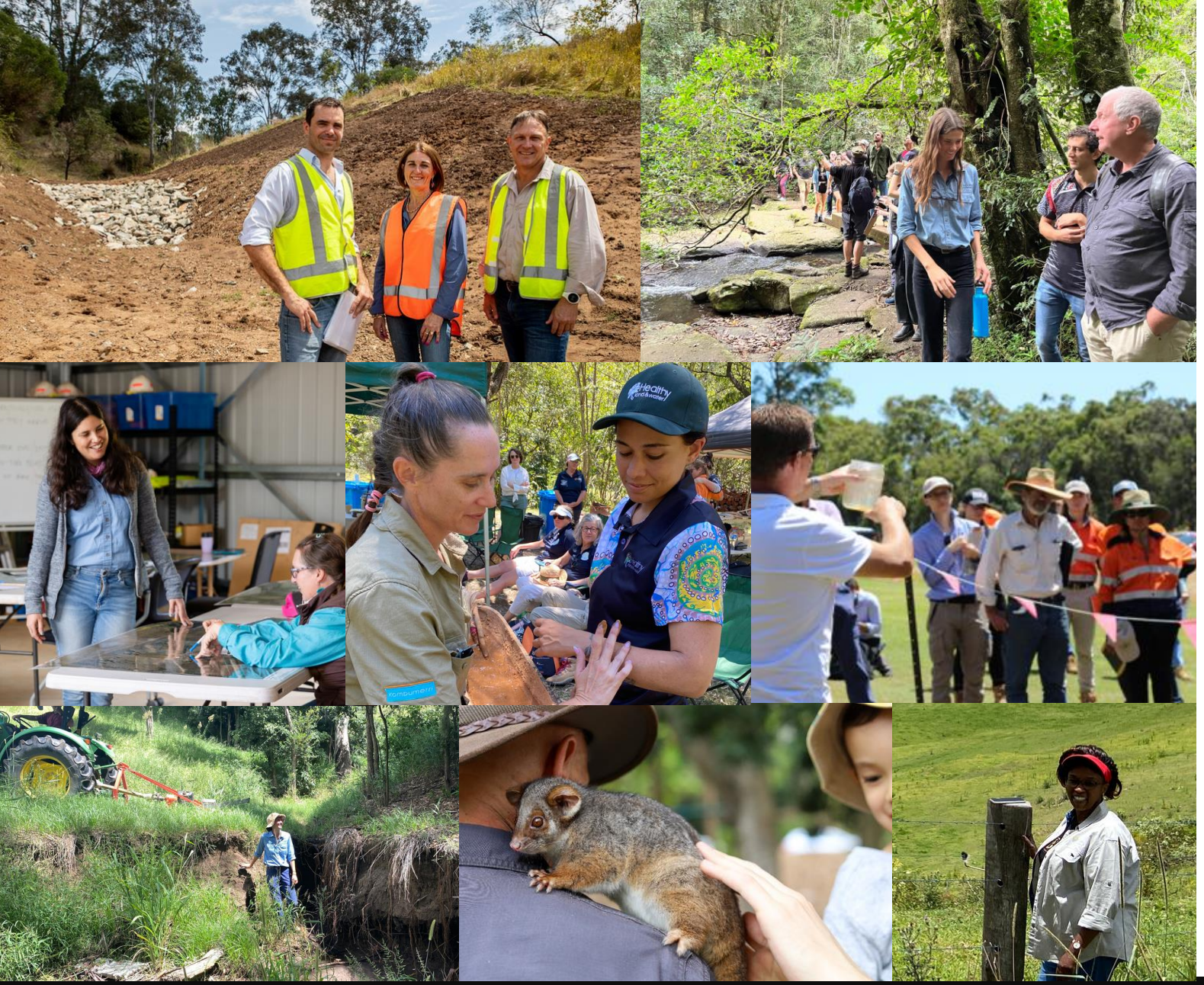


Healthy Land & Water

Land Management Principles

Marc Leman
Healthy Land & Water

Direct the investment in SEQ's environmental future

Deliver transformative environmental and community change

Create connections between people, place and culture

Delivering an environment for future generations to thrive

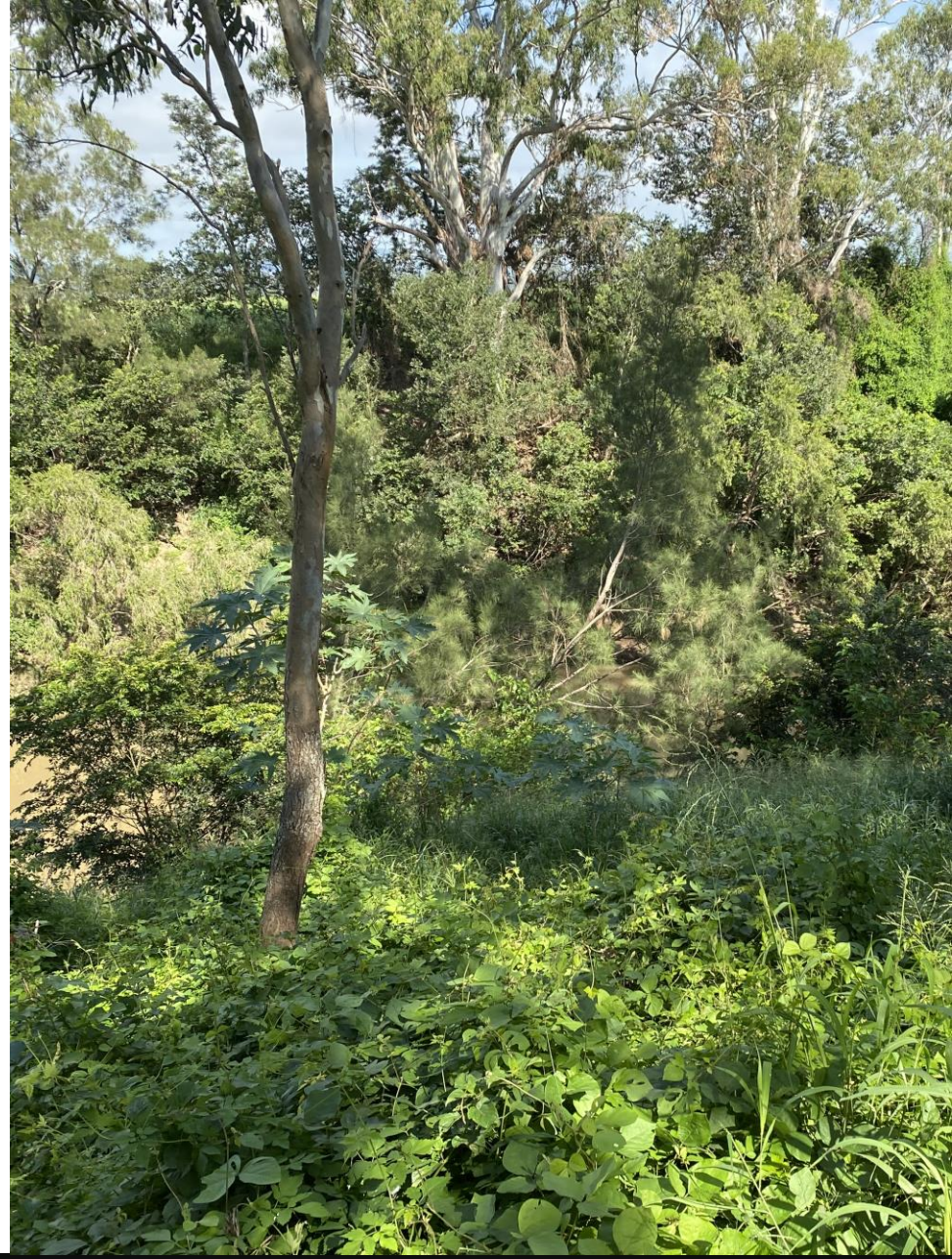
Healthy Land & Water

General Land Management Principle

Step 1 - Working within the limitations and capabilities of the land

Production & Sustainability

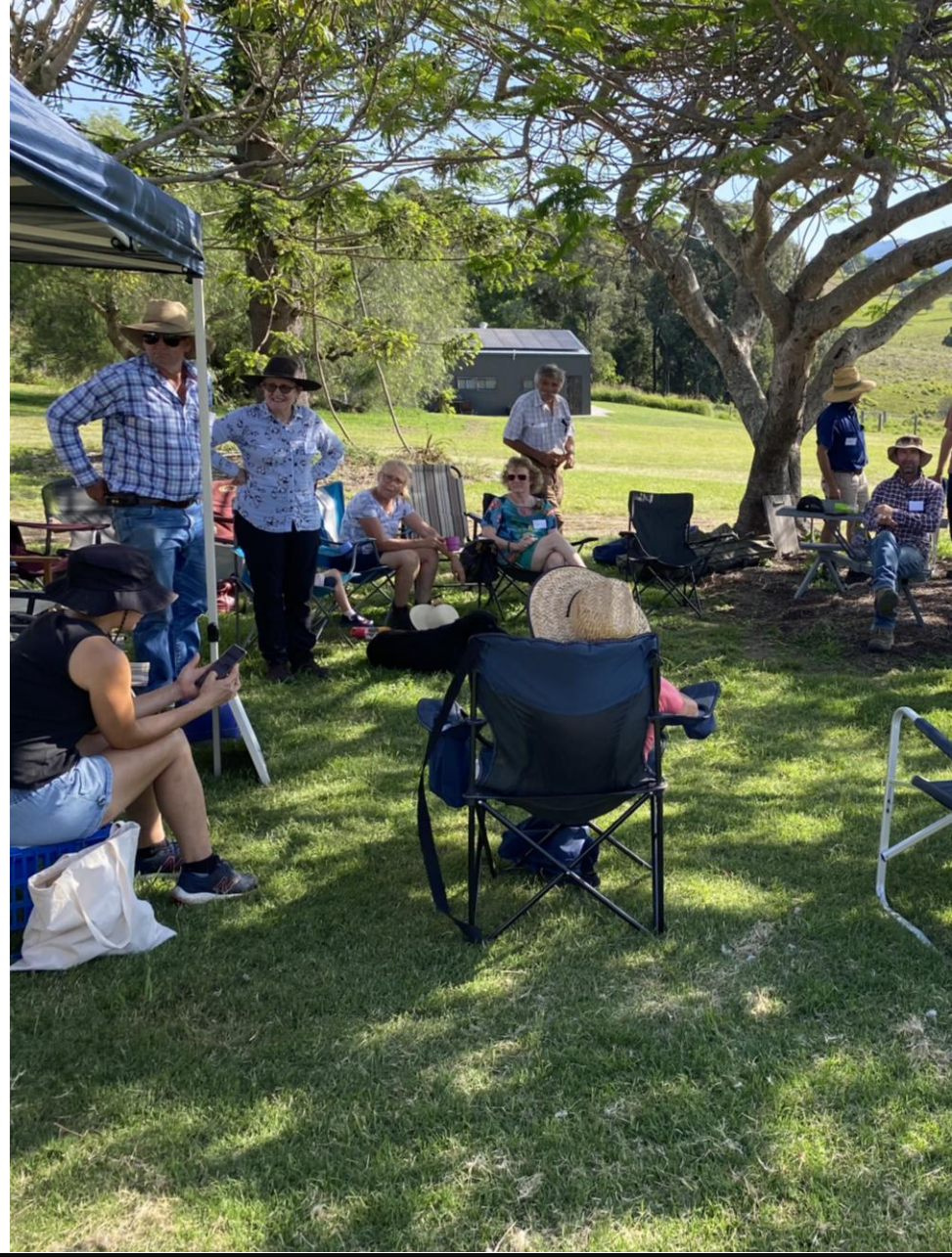
- Conserve soil health & condition.
- Bank stability.
- Water quality.
- Biodiversity and riparian health.
- Pasture and livestock management.



General Land Management Principle

Step 2 – Gathering local knowledge

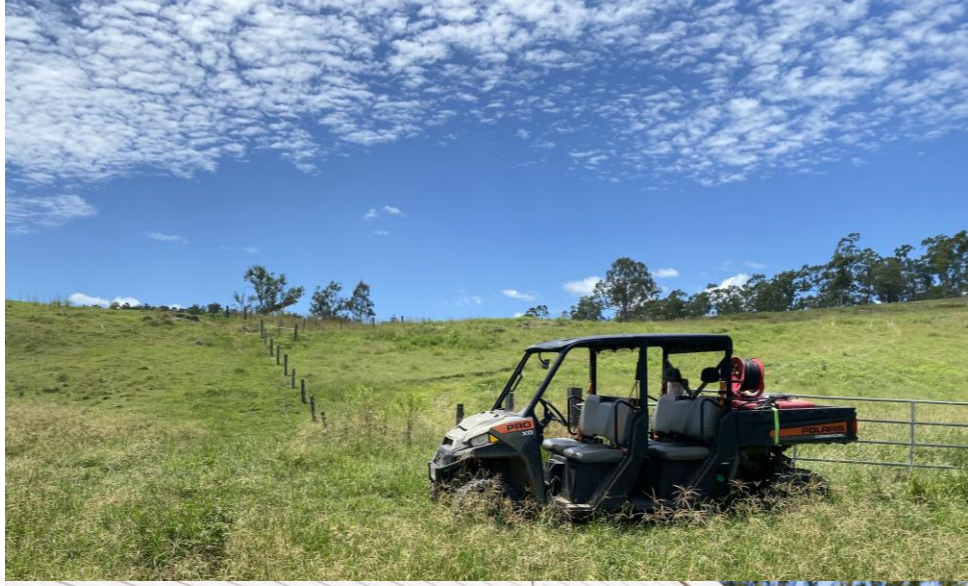
- Fire management & local history.
- Identify local weeds and pests.
- Develop action plan.
- Catchment erosion history.
- Livestock carrying capacity.
- Seasonal variations.

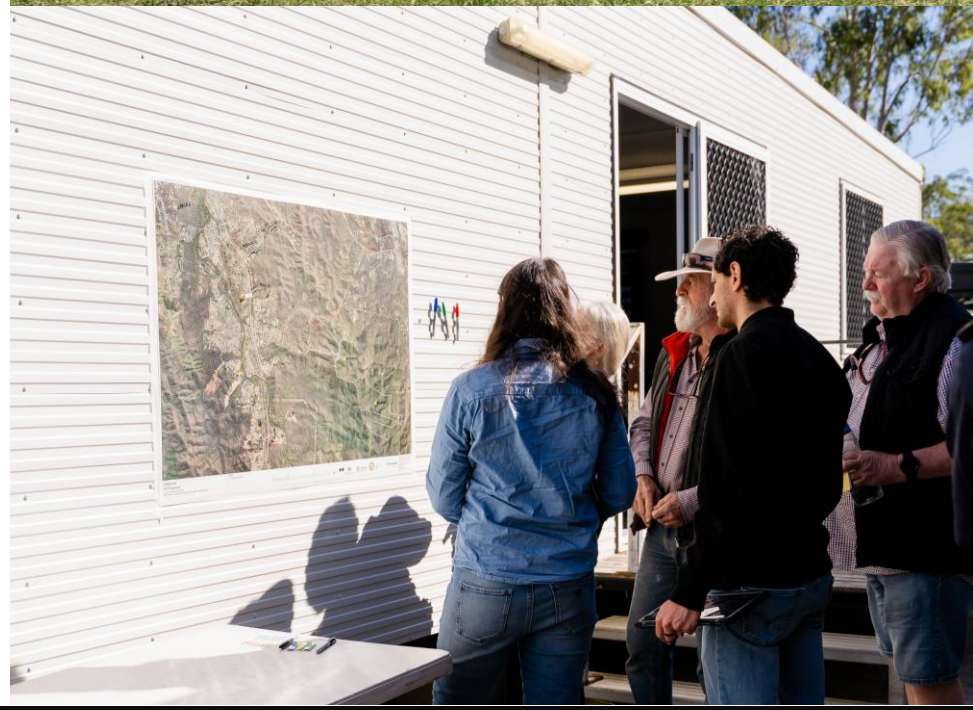


General Land Management Principle

Step 3 – Identifying infrastructure types

- Roads and laneways.
- Fences.
- Tanks and troughs.
- Drains.
- Contours.
- Sheds, shelters and workshops.
- Infrastructure buildings and yards.
- Fire management planning.

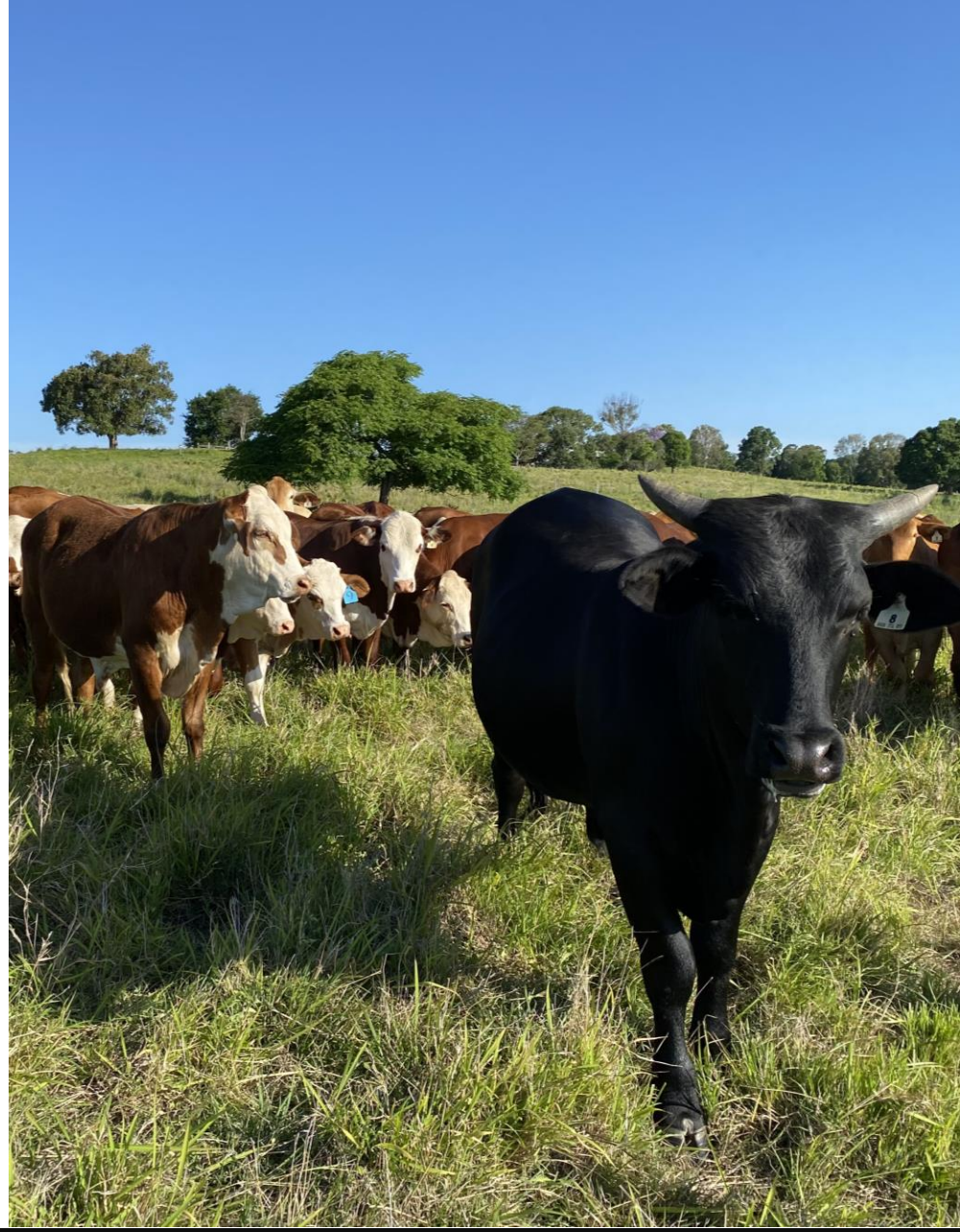




General Land Management Principle

Step 4 - Protect & rehabilitate areas that are degraded /at risk

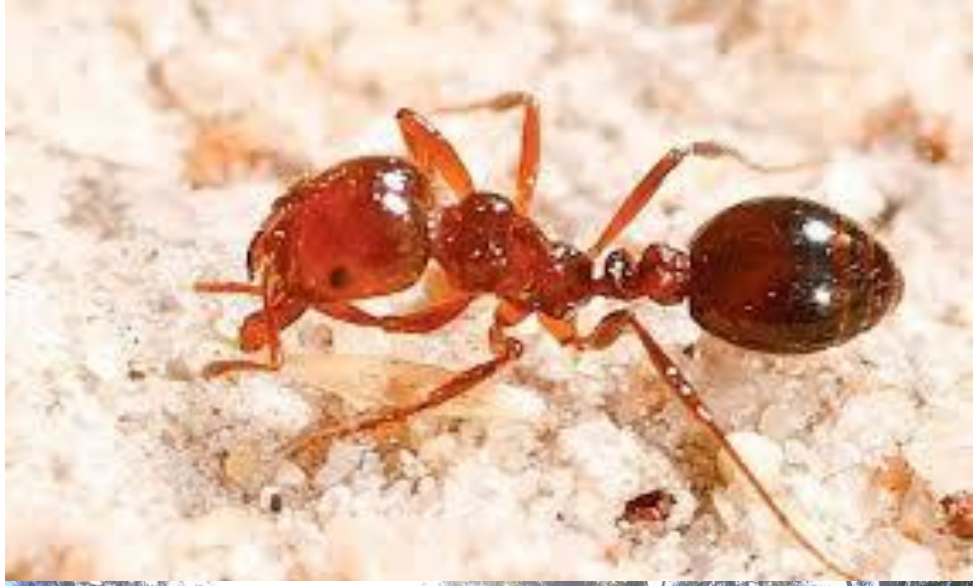
- Fencing off areas and paddock size.
- Maintain groundcover.
- Carry capacity.
- Off stream watering (tanks & troughs).
- Revegetation.
- Pressure and Release - take the pressure OFF.

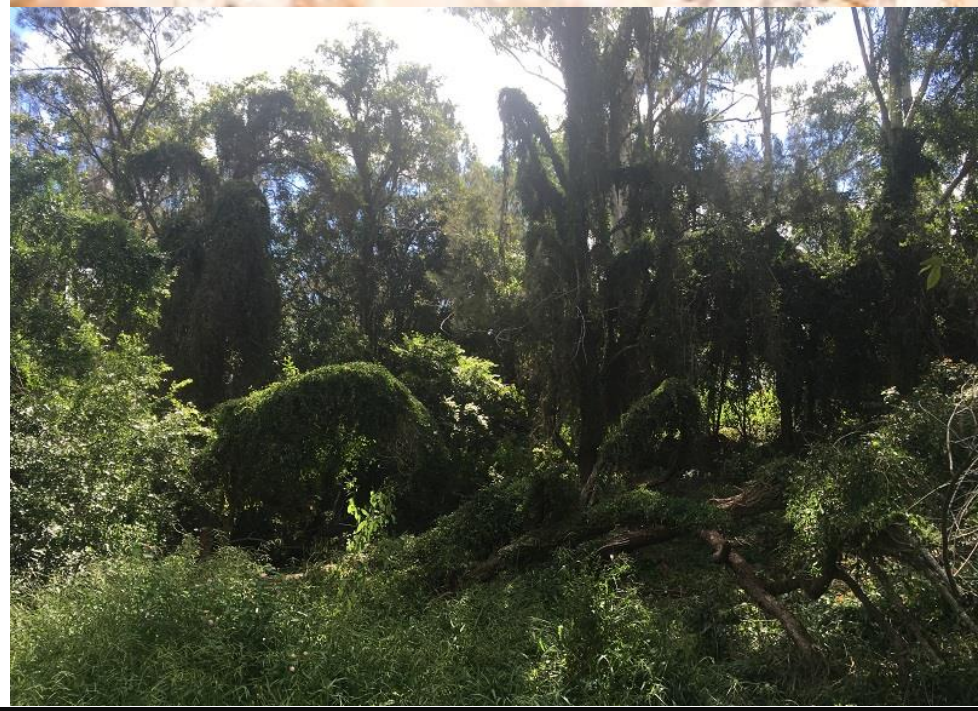


General Land Management Principle

Step 5 - Control Weeds & Pests

- Identify weeds of concern.
- Identify pests of concern.
- Plan your approach.
- Establish a sacrifice paddock.
- Monitor local biosecurity alerts.

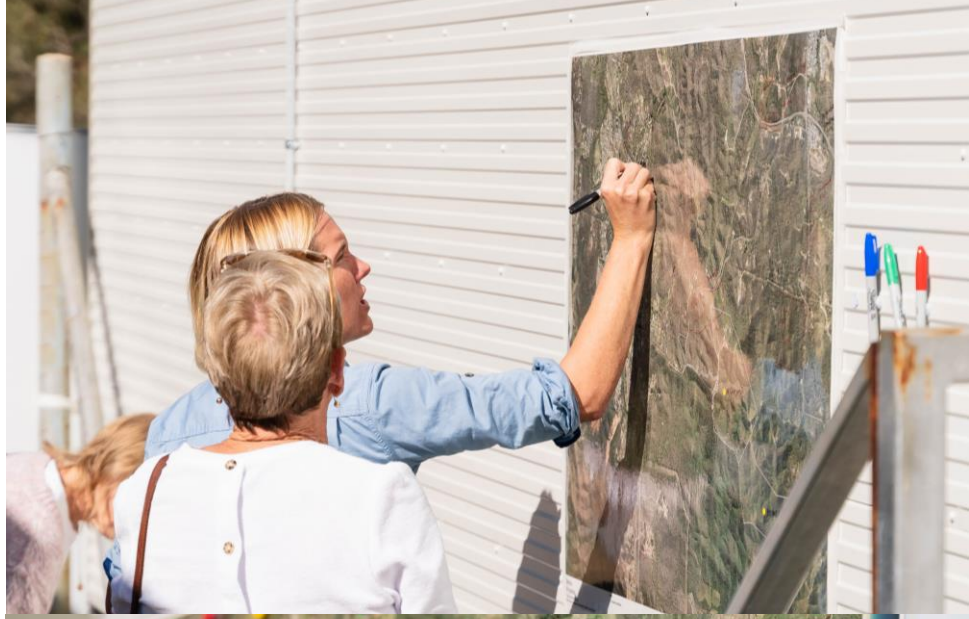


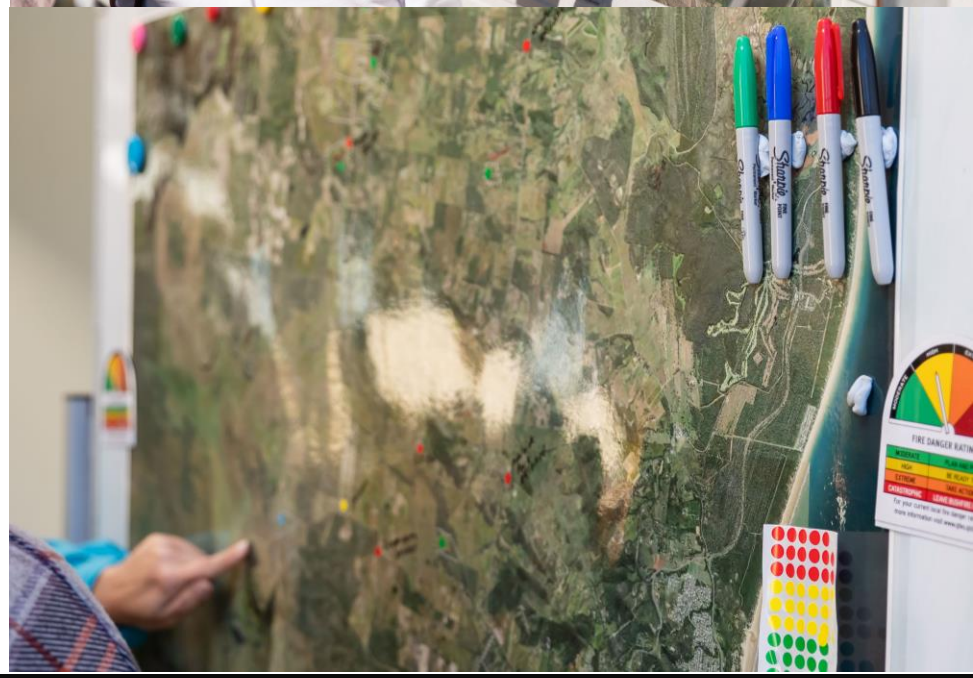


General Land Management Principle

Step 6 - Develop a Fire Management plan

- Talk to local Fire Warden.
- Map your infrastructure.
- Map your vegetation.
- Establish Fire trails and lines.
- Research fire history.
- Monitor fire & biodiversity.
- Intel on how your land responds.
- Aids in future management plans.

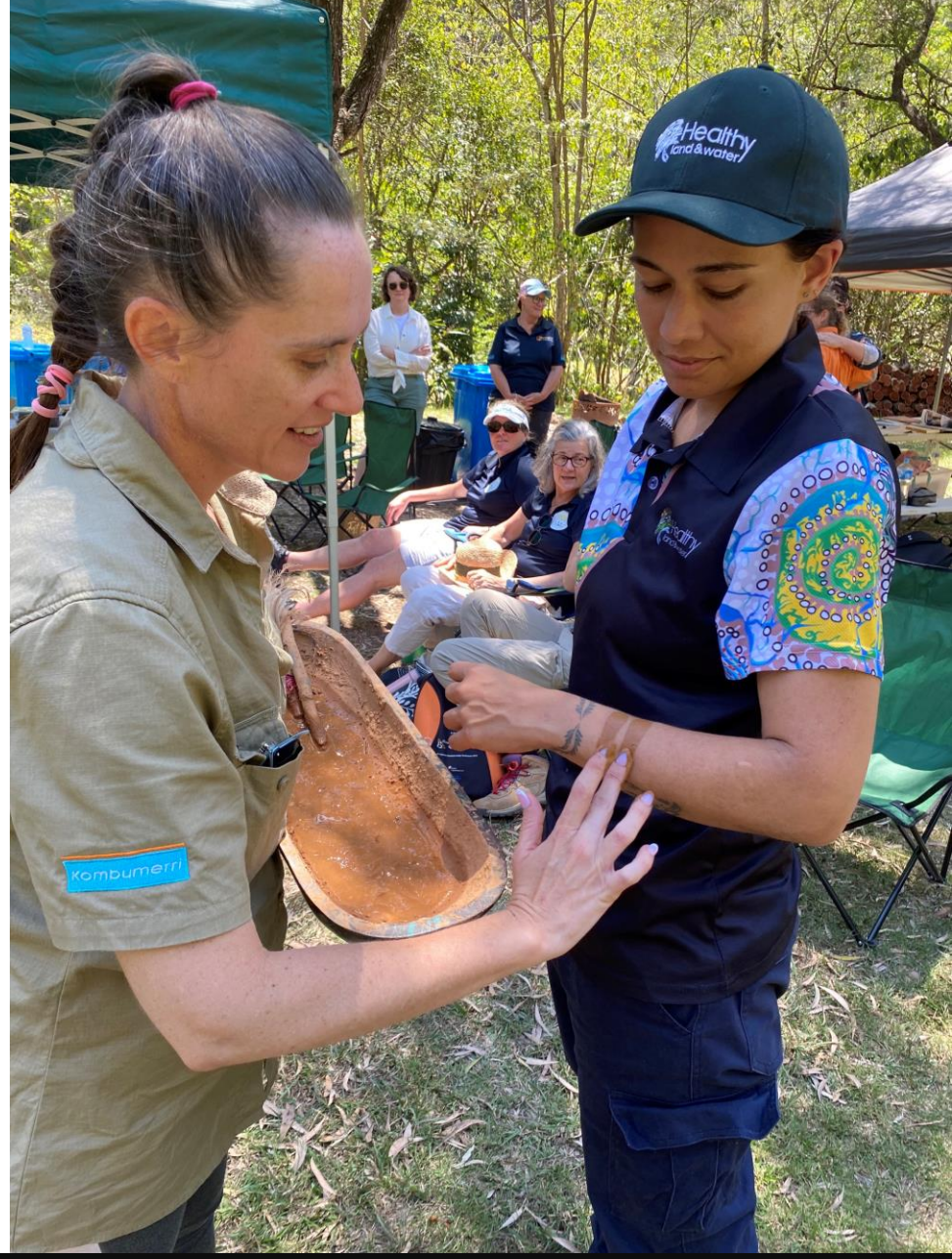




General Land Management Principle

Step 7 - Respect & Protect Cultural Sites

- Early advice to First Nations.
- Identify risks to preservation.
- Cultural heritage included in inductions.



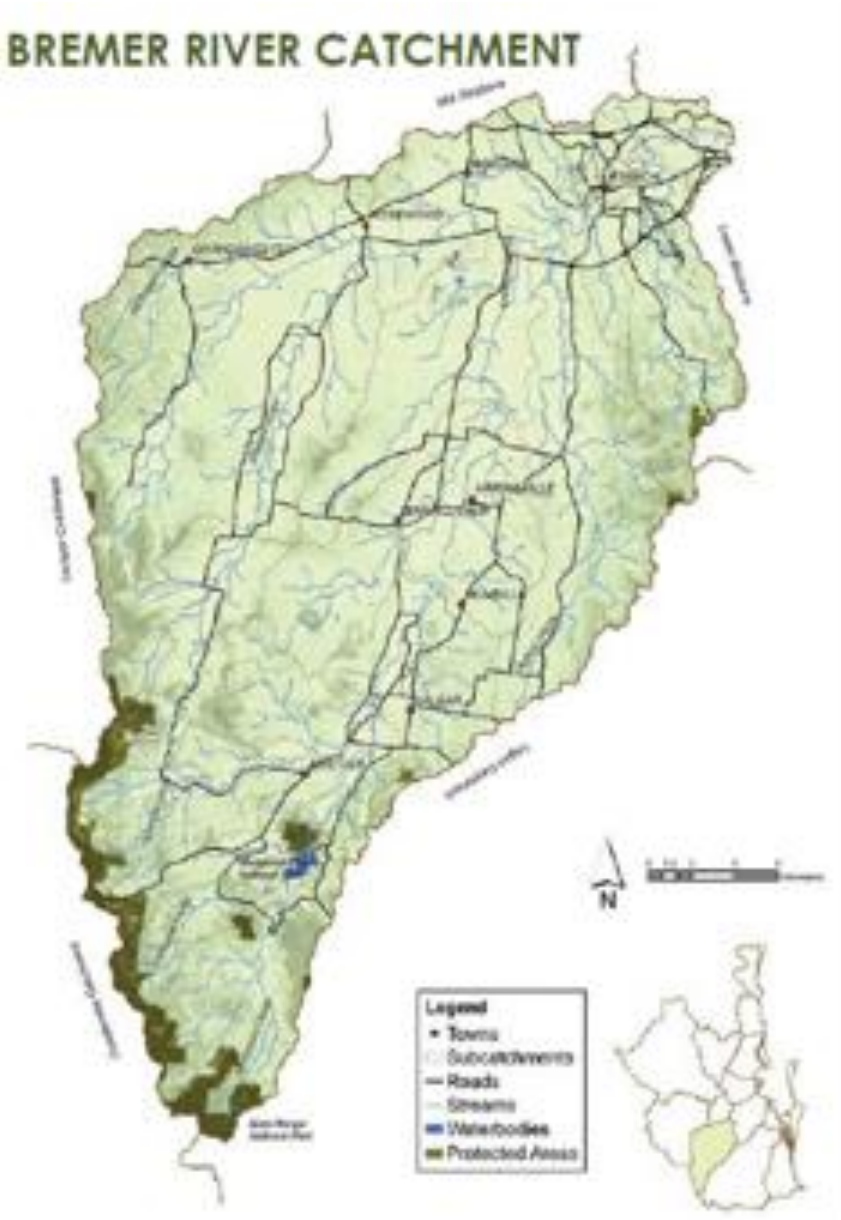
General Land Management Principle

Step 8 - Manage native forests

- Implement sustainable practices.
- Fencing off sensitive areas.
- Allow for natural regeneration.
- Maintain and enhance to improve biodiversity.

Property Management Planning

- **Long term vision**
  - Define goals.
  - Actions.
  - Monitoring.
- **Where your property fits into your catchment**
  - Based on land types.



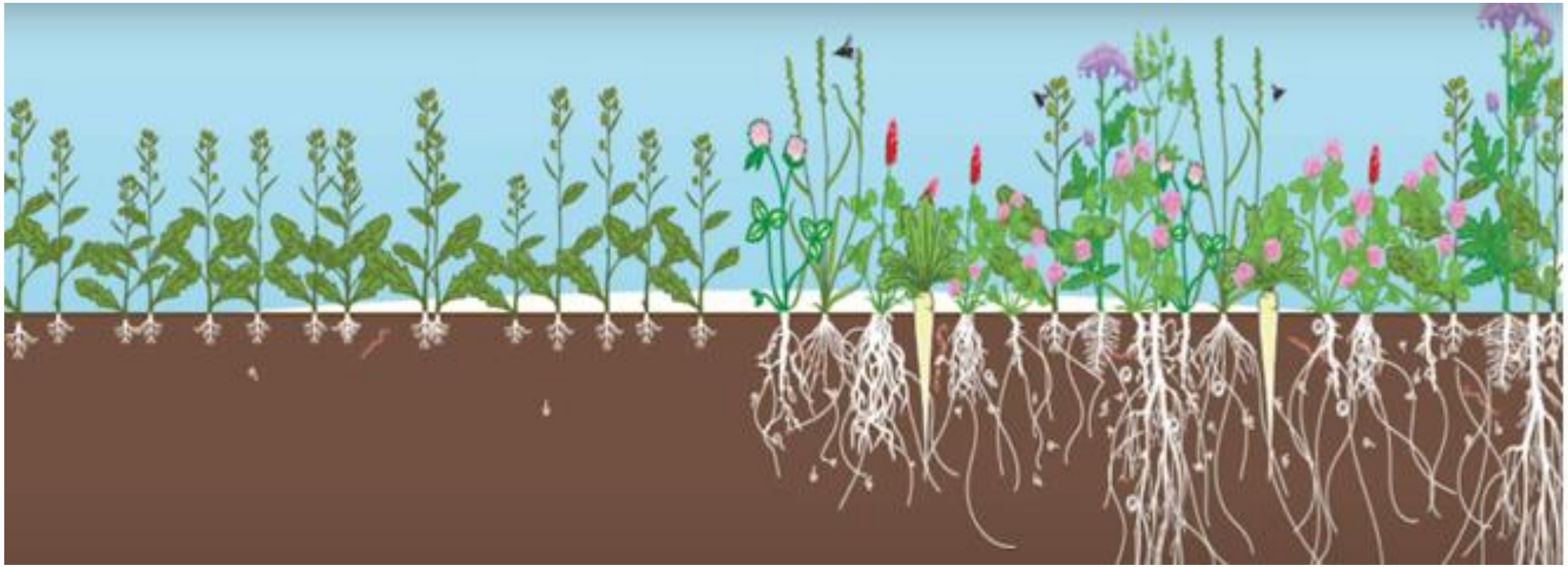
Healthy Land

Managing soil and pastures

- High level of ground cover >90%
- Protect the Soil.
- Manage land condition.
- 3P grasses (persistent, perennial, productive) min 80%.
- Encourage other species (e.g. forbs and legumes).
- Monitor Stocking rates.

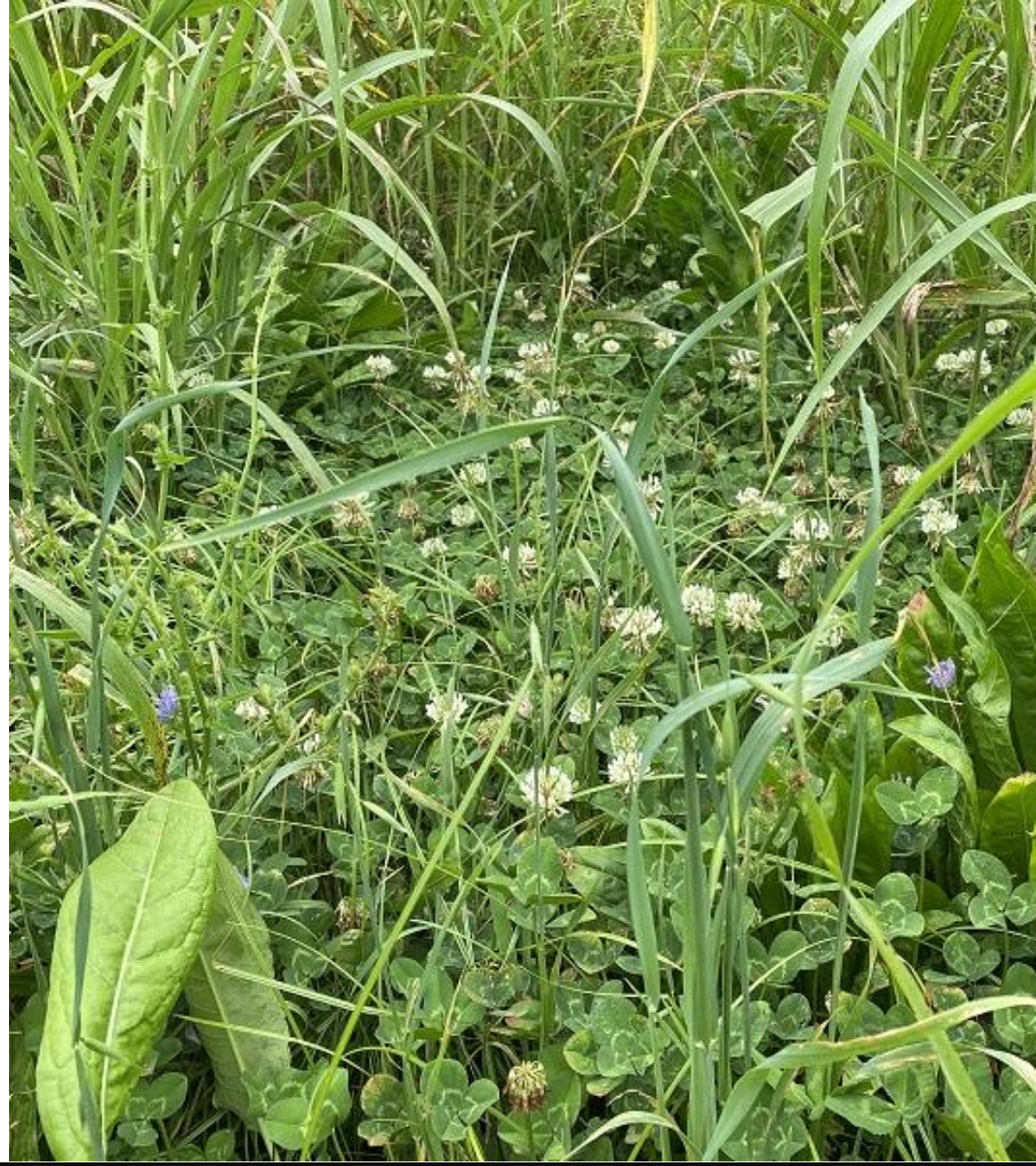
Healthy Land

Monoculture vs **Mixture?**



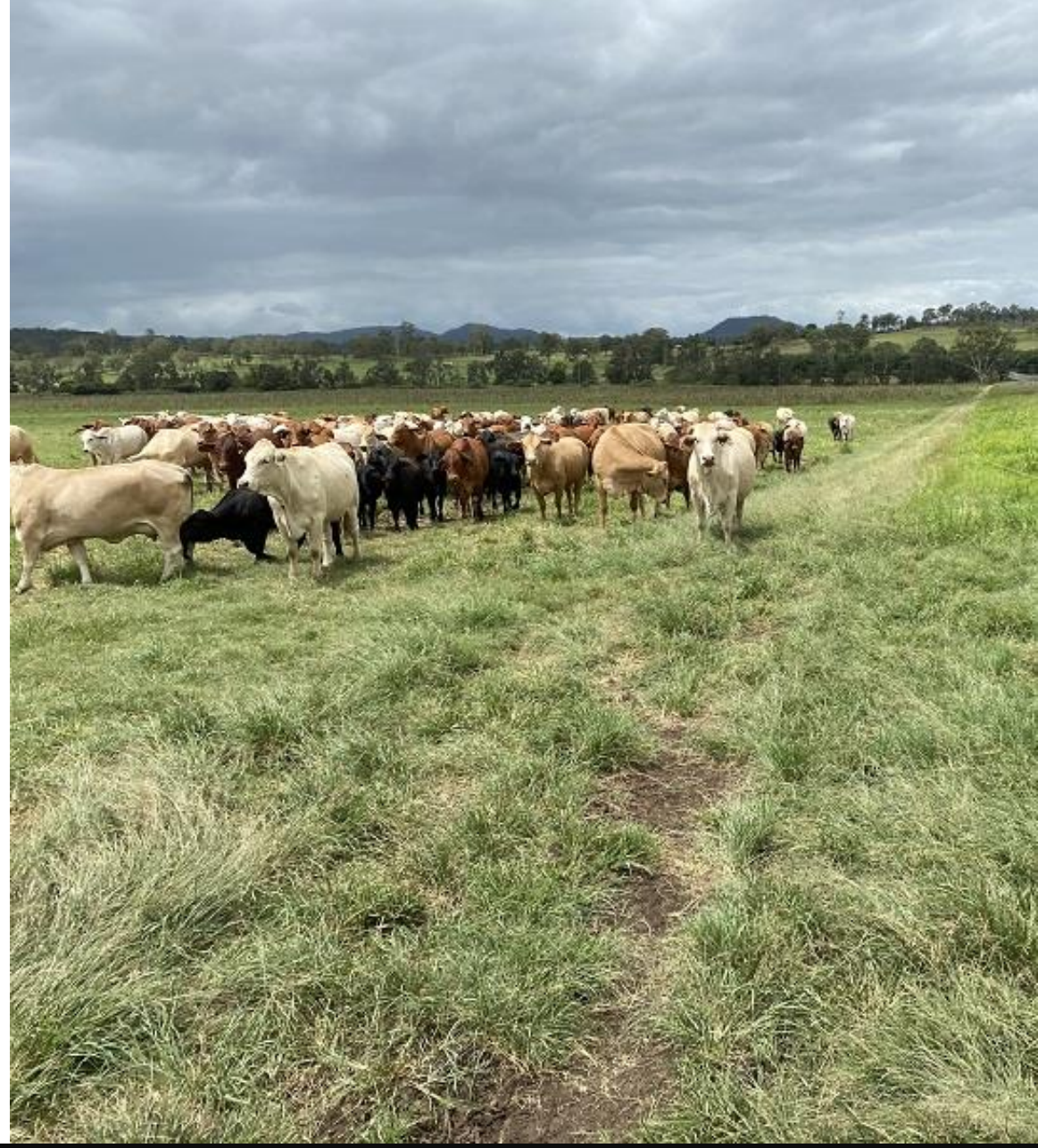
Healthy Land

- **Monitor Stocking rates**
  - Match dry matter (DM) feed to stock units.
  - Use steel & poly concept.
  - Smaller paddocks must have shade and water.
  - Move livestock around – rotation.
- **Monitor feed volume and dry matter**
  - Never have vegetation below your ankle.



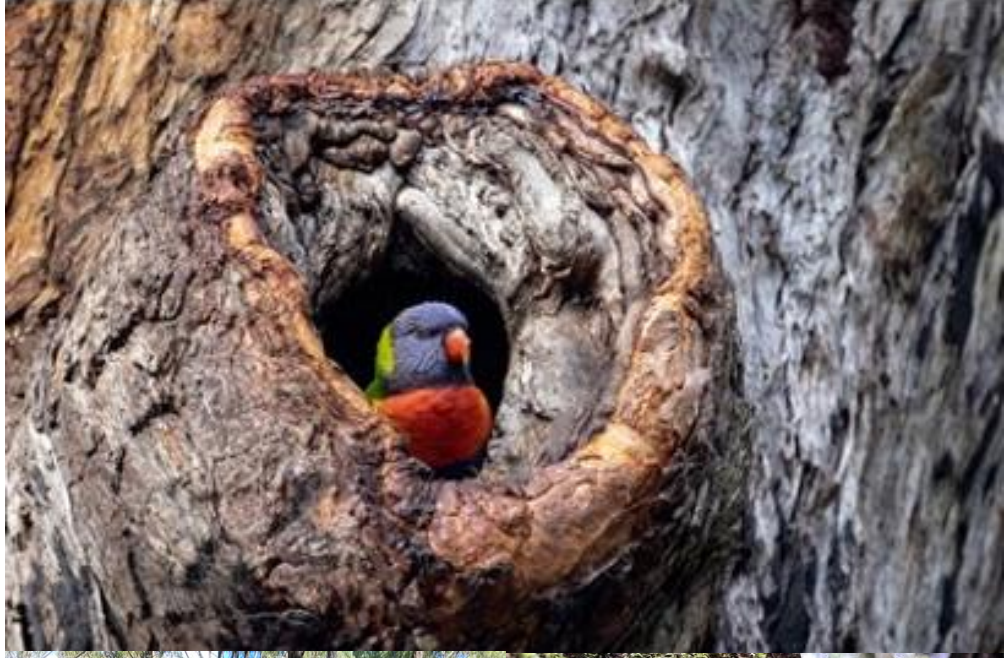
Healthy Land

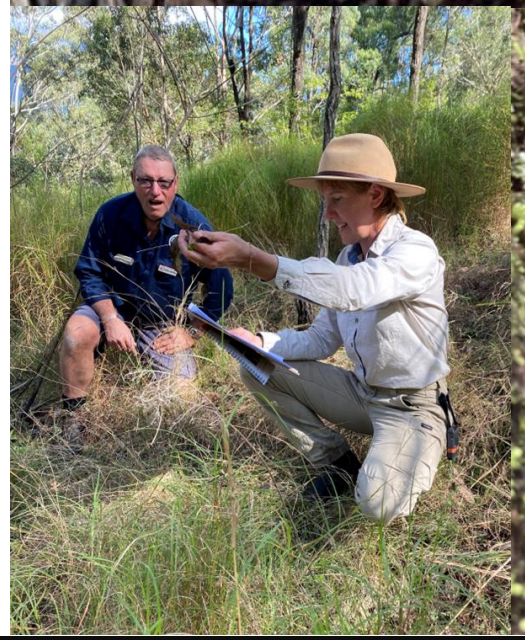
- **Regular REST & SPELLING**
  - Allow for plant growth recovery.
  - Release pressure on plants.
  - Nutrient build up in soil.
  - Allow plant to photosynthesis / capture sunlight / solar panel.
  - Promote seed set.

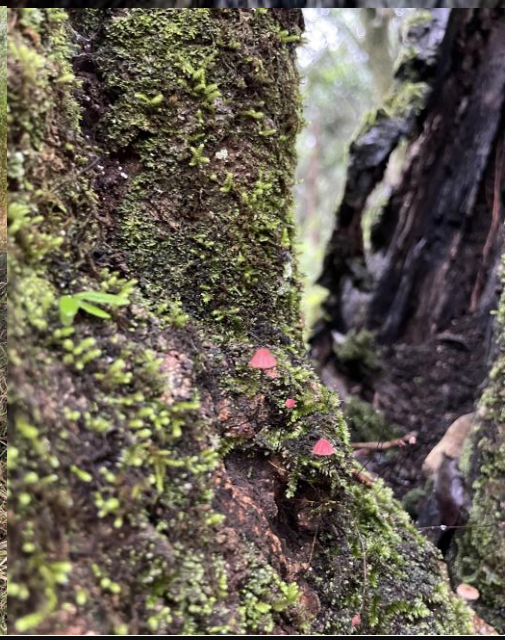


Conserving Biodiversity

- **Protect and manage remnant vegetation**
- **Retain large trees, hollows/hotels**
- **Maintain natural structure**
  - Resist 'cleaning-up' understory.
  - Retain organic litter and fallen trees.
  - Keep habitat for invertebrates /reptiles/birds/mammals.





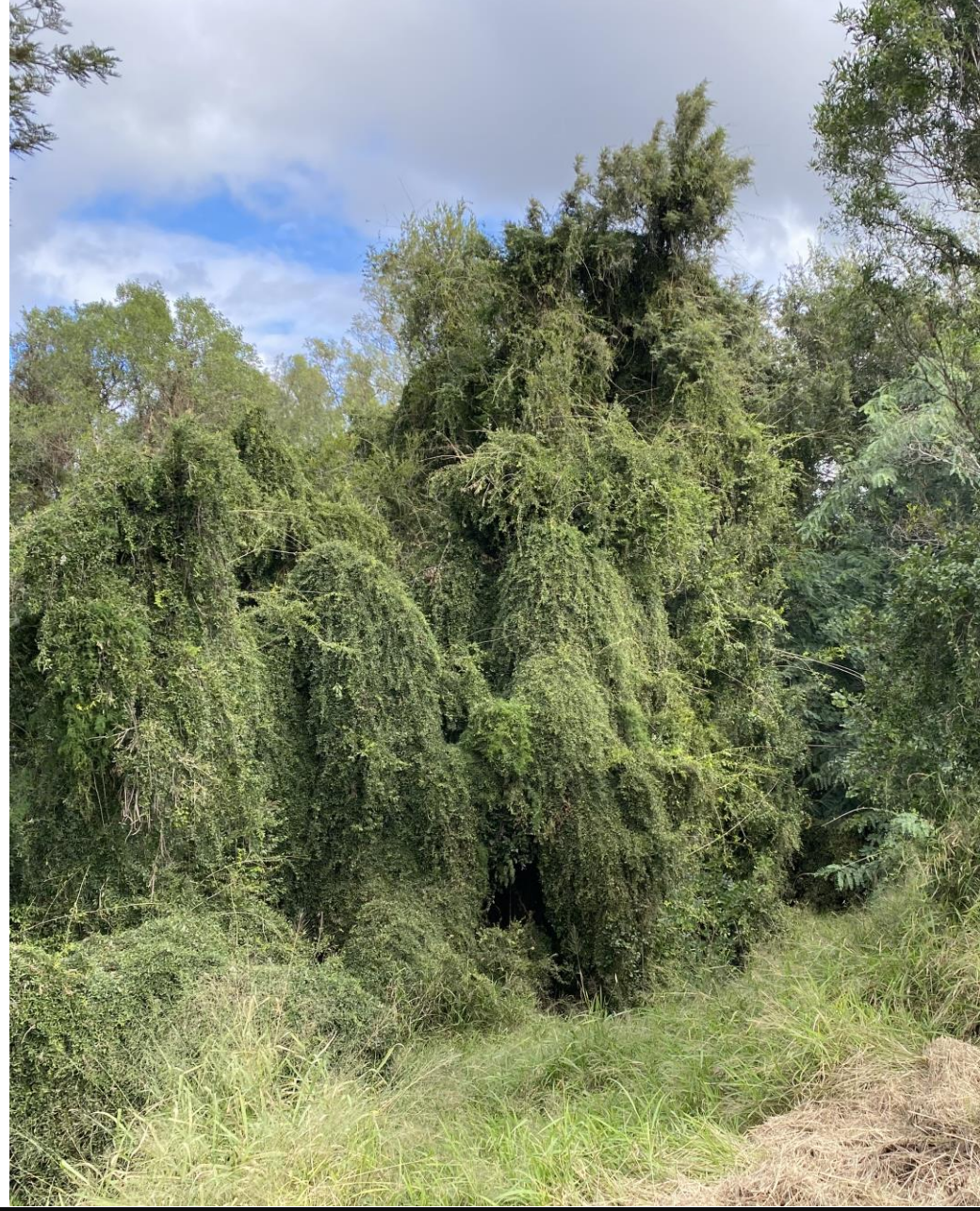


Conserving Biodiversity

- Improve connectivity between isolated patches of vegetation
- Aim for >5ha

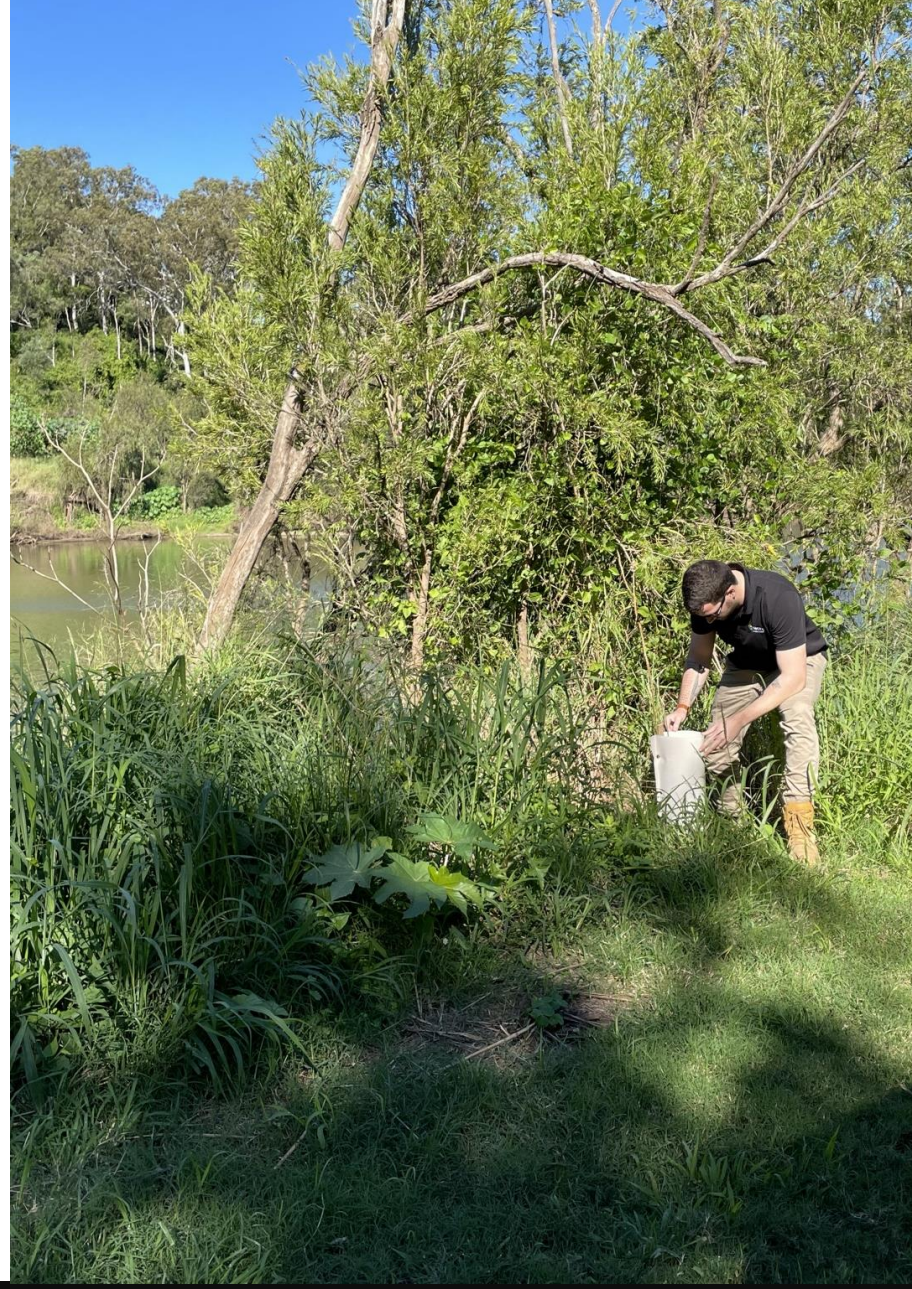
3 Rs Principle

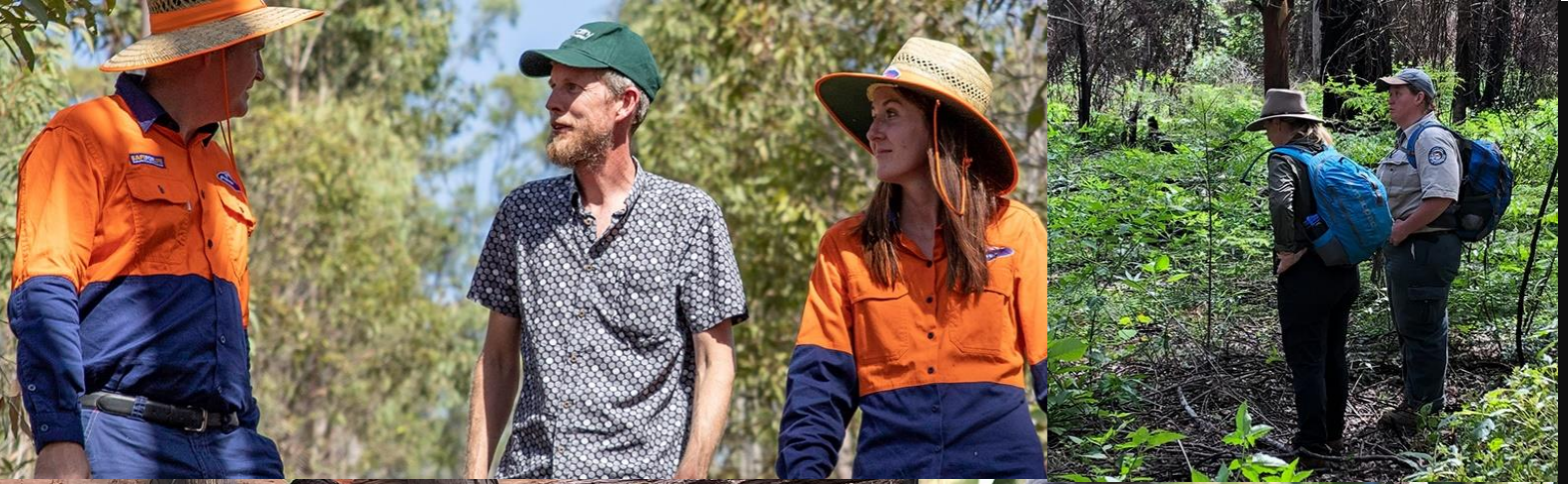
- **Retain**
  - Protect all existing **Native vegetation**.
- **Restore**
  - Through strategic **fencing**.
  - **Fire** management.
  - **Weed** control.
  - Encourage natural regeneration.
- **Revegetate.**
  - Key areas to **enhance diversity** and **improve connectivity** of existing vegetarian.

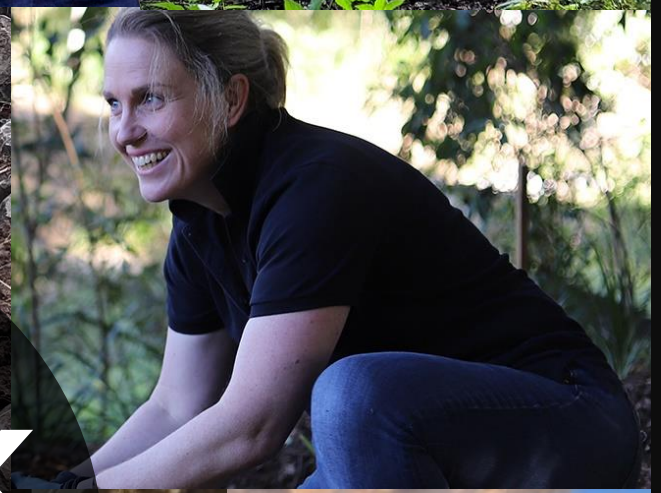


Protect waterways & riparian zones

- Ensure land management practices **don't impact riparian and aquatic ecosystems**
- **Protect native vegetation** along Riparian zones
  - Helps to prevent erosion, filters nutrients and provides habitat.
- **Reduce sediment and pathogen loads** into waterways
  - Fencing off sensitive areas.
  - Off stream water.
  - Stock effluent management.
  - Maintain ground cover.







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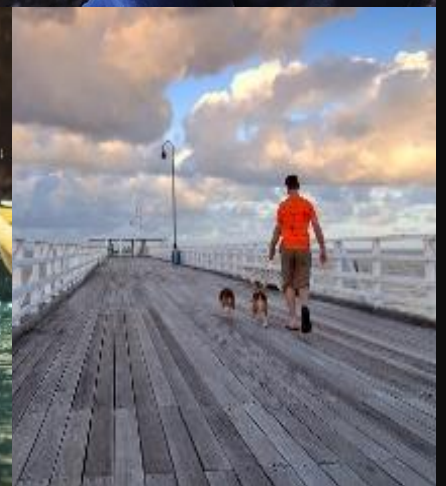

Delivering an **environment** for **future generations to thrive**

Healthy Land & Water