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RRRD032

Improving grazing management
practices to enhance ground
cover and reduce sediment loads

Scott Wilkinson, CSIRO



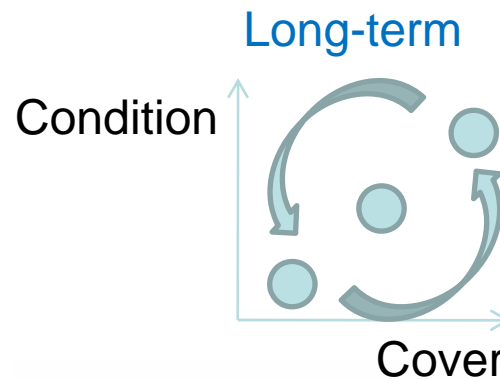
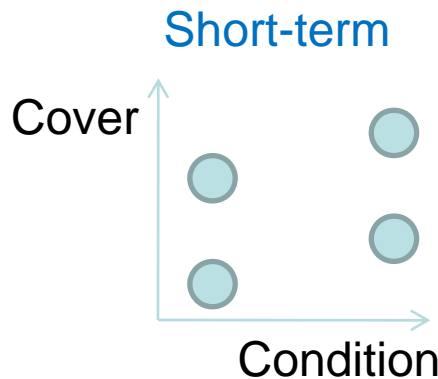
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Summary of Issue

- Stocking rates influence ground cover and water quality outcomes, for given rainfall and land type
- Past practices influence condition or “capability”
- Use different stocking rates between properties to compare outcomes (cover, condition, productivity)





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Project objectives

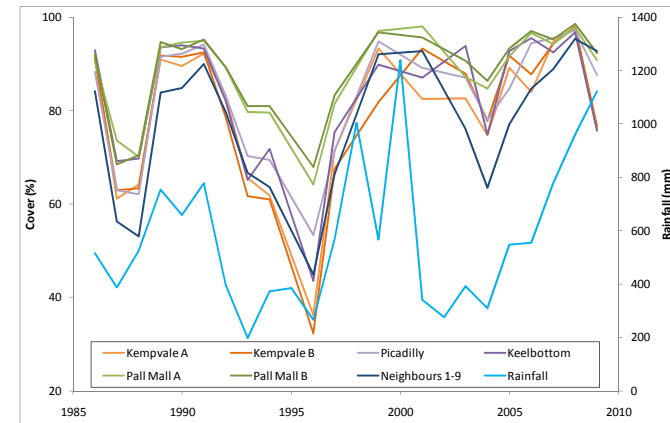
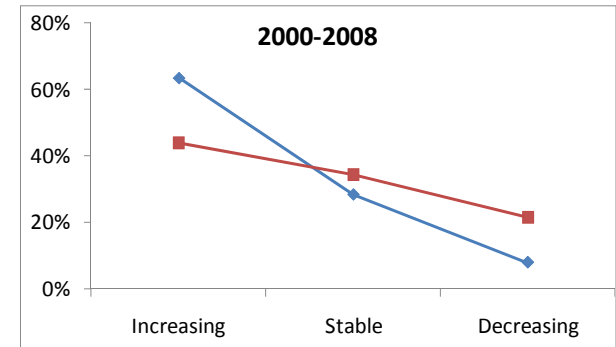
- Develop relationships between stocking rates and land cover, condition, productivity and erosion rates.
- Estimate the landscape-scale impacts of future changes to grazing practices
 - Erosion
 - Pasture productivity and beef production
- Build industry capacity to use cover information
 - For managing productivity and erosion
 - For identifying priorities for practice change.





Approach: Team, Methods

- Identify case study sites (3x3)
- Site assessments (Hawdon)
 - Ground truth Cover
 - Condition
- Landscape and property cover analysis (Abbott)
- Model erosion (RUSLE) (Henderson)
- Model productivity (GRASP) (Stokes)

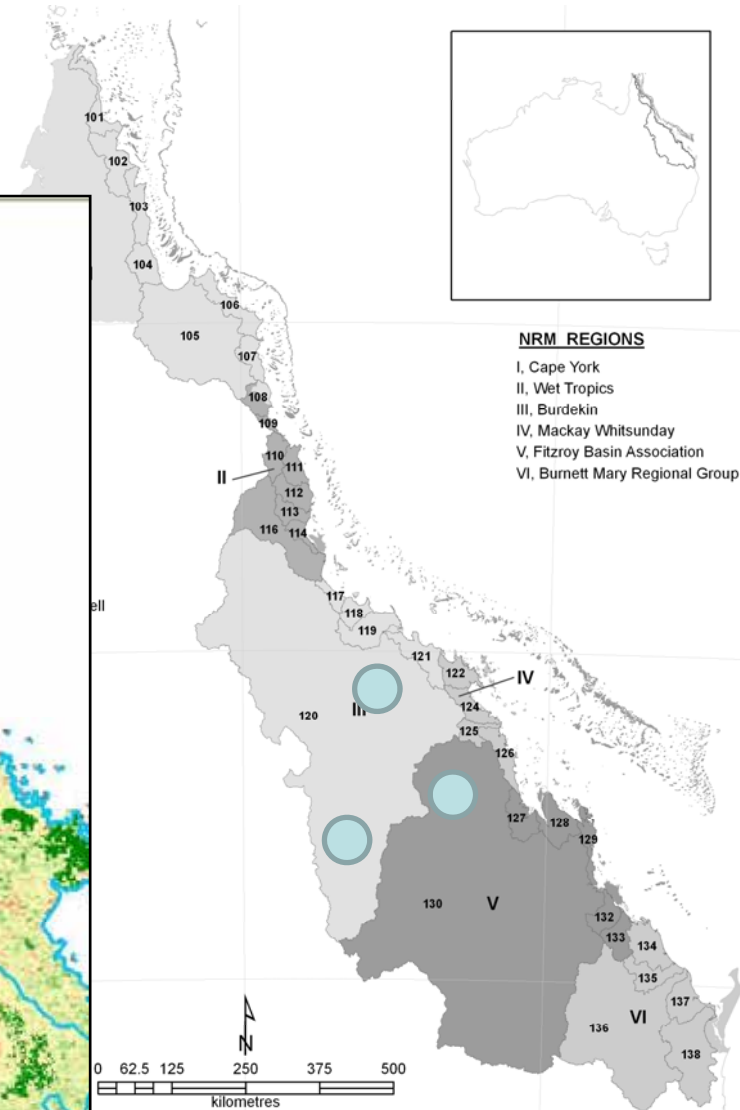
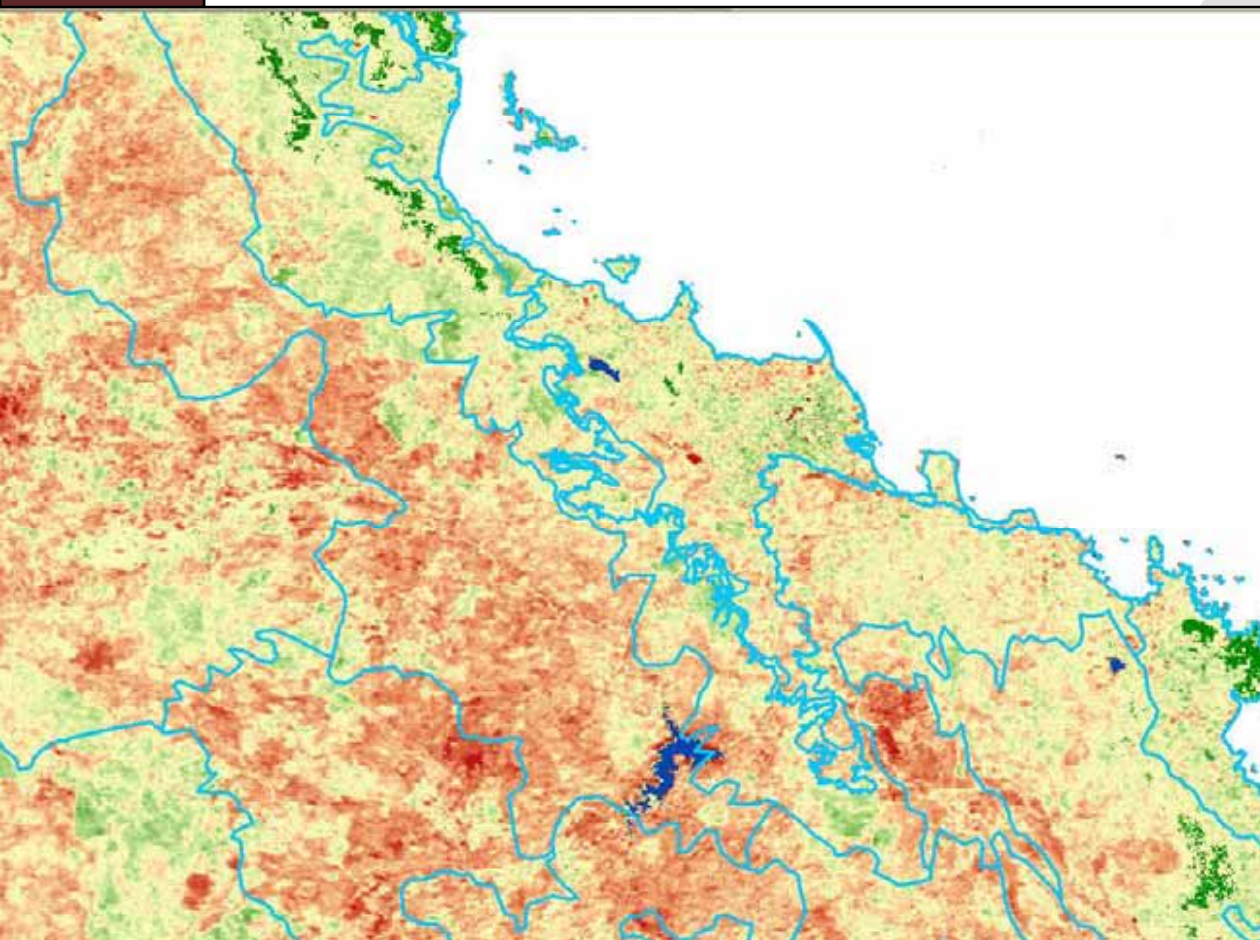




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Geographic scope

- Three land types e.g:
 - Goldfields, Sedimentary, Volc.





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Outputs

- Relationships between stocking rates, cover, condition.
- Histograms of property cover
- Cover scaling rules
- RUSLE scenarios
- GRASP scenarios



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Synergies – Reef Rescue & external

- Hall – land type imagery
- Beutel – land holder tools and techniques
- Whitten – productivity data



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Management Implications

- Ability to compare water quality and productivity outcomes of practice scenarios
- Snapshot of cover, inferred management practices
 - 20 year window



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End user engagement & delivery

- Factsheets
- Reference group
- Case study demonstrations



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