Property scale planning for the GBR coast

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Experience in water quality governance

Evolution in distinct and overlapping phases:

- Phase One (2003-2008; 2008-) - Encouraging voluntary adoption of better practices.

- Phase Two (2009-) – government intervention in the direct regulation to achieve change.

- Phase Three (2006) - frameworks of duty of care to integrate policy tools and offset trading schemes to achieve regional management targets.

(Source: Emtage and Vella, Forthcoming)
Reef Rescue/Reef Protection Package

Key-features:

• Duty of care frameworks

• Regional delivery approach linked to national targets

• Concerted efforts in education, skills building and information provision

• Incentives funding

• Reef Regulations

Result: “the 2008 scientific consensus statement that ‘current management interventions are not effectively solving the problem’ has now decisively changed” ....

The actual effects of these changes on the Reef will not be measured for up to several decades however, and the concern exists that these actions will not be enough to ‘save the reef’ (Brodie et al, 2012, p94).
GBR futures

- Future outlook of resource condition in the GBR is of concern.

- **Tighten management regimes at the property scale**
  - Further tighten management practices for agriculture
  - Coastal catchment land users
  - Marine users/property rights holders
  - Risk:
    - “Fiddling while Rome Burns”

- **Adapt resource-use systems (land and marine)**
  - In response to resource condition decline and climate change
  - Develop new opportunities, markets, business solutions
  - Risk:
    - New business solutions and market opportunities are aspirational and untested and costs of transition unknown and potentially high.
    - Financial, economic, social, cultural, institutional capacity for change needs to be fostered.
Opportunities for Property Planning

• Strategic property planning – used by decision makers in business, industry and government for over 40 years.

• Some developments:

  A. Land suitability analysis for sustainability
     • Field, farm, catchment, regional/national (and international) scales
     • Strategic decision support (Smith and McDonald 1998, 2000)

  B. Scenario Planning
     • What possible futures might look like, reframe existing decisions by providing a new context within which they are taken.

  C. Regional/watershed governance and planning
     • New institutions and social science perspectives to build capacity (Allan et al 2008)
What could a more strategic approach look like?

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<th>Scenario Planning</th>
<th>Region</th>
<th>Property scale</th>
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<td>Climate change.</td>
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<td>Risk Assessment</td>
<td>Biodiversity.</td>
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<td>- Soil</td>
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<td>Integrated Action</td>
<td>Regional targets for</td>
<td>Property-scale targets linked to property scale risks and regional targets.</td>
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<td>Planning</td>
<td>environment, social and</td>
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<td>Coordinated capacity</td>
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<td>building across scales.</td>
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## Practice-based framework

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<th>Practice Framework</th>
<th>Governance arrangements</th>
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| Ecosystem Service Delivery                              | Monitoring  
Market-based payment mechanisms  
Direct Incentives  
Positive measures (recognition schemes, education/information programs) |
| Best Management Practice (BMP)                          | Monitoring  
Direct Incentives  
Positive measures (recognition schemes, education/information programs) |
| Code of Practice (Duty of Care)                         | Monitoring  
Regulation  
Education/information programs |
| Outdated and unacceptable                               | Monitoring  
Regulation  
Punitive measures  
Education/information programs |
Applications

1. Benchmark Existing Practice
2. Action Planning
3. Change management
4. Eco-Accreditation
5. Reporting and Communication
6. Research, Monitoring and Evaluation

Multiple Assets, Industries and Multiple Goals

- Regional:
  - Increase Biodiversity Coverage and Connectivity
  - Reduce resource decline (soil, water)
  - Increase greenhouse gas mitigation in landscape

- Industry:
  - Reduce reliance on vulnerable declining resources.

- Property:
  - Manage vegetation, land, and nutrients to acceptable standards
  - Diversify income streams – eg: access eco-accreditation premiums and carbon market payments
Steps in the process

1. Regional priority setting
2. Property-scale asset-based risk assessment
3. Priority setting and action Planning
4. Skills, knowledge and capacity building
5. Monitoring and Reporting

Financial and economic capacity
Knowledge and skills

Ecosystem Payments

Climate /disaster scenarios
Industry outlook
Resource condition trends
Regional NRM Plan targets (carbon management, landscape repair, climate adaptation).

Biodiversity
Land/Productive resources
Water
Community
People and country

Ecosystem service delivery
Best Management Practice
Concluding thoughts

• Property planning has the potential to underpin change at the property scale in the GBR.

• Water quality foundations can be ramped up to address bigger resource condition and climate challenges across industries and communities in the GBR.

• Coordinated property planning needs to be linked to regional targets and integrated governance mechanisms build capacity and supports landholders through a positive change program.
References

- Vella, K and Dale, An approach for adaptive and integrated environmental planning to deal with uncertainty in a Great Barrier Reef Catchment, forthcoming.