Prioritisation in Practice

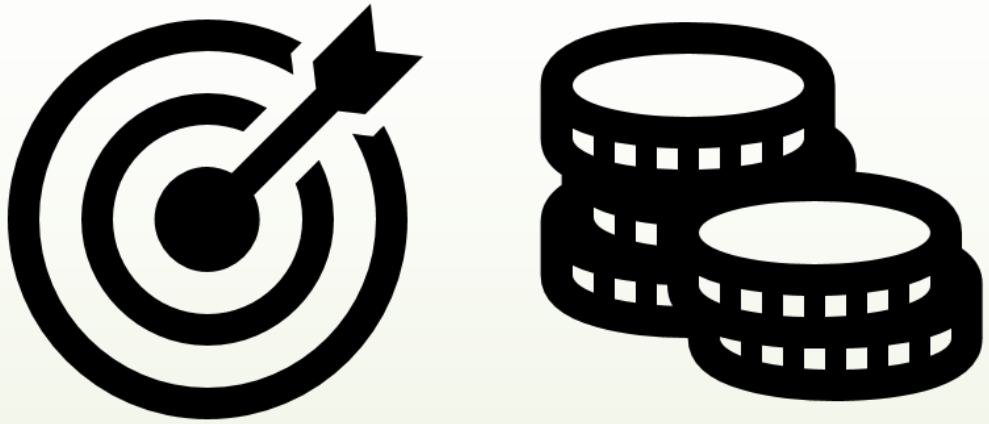
Targeted Extension in Great Barrier Reef Water Quality Improvement Programs

Lana Hepburn – Terrain Natural Resource Management
Michael Nash – Wet Tropics Sugar Industry Partnership

Context

Wet Tropics - Great Barrier Reef Protection

- Reef 2050 Long-term sustainability plan
- Scientific Consensus Statement
- Reef 2050 - Water Quality Improvement Plan [WQIP]
- Reef Trust Funding targeted:
  - WQIP targets and priorities
  - P2R Water Quality Risk Frameworks
  - Supporting management beyond ‘Best Practice’
- Limited by funds and time; calls for greater efficiency and return on investment

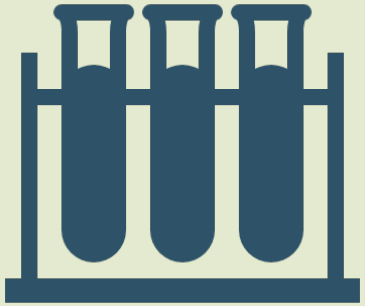


Reef Alliance's Reef Trust project: 'Growing a Great Barrier Reef' in the Wet Tropics

- 3 Year Reef Water Quality Improvement Sugar Industry Extension Program (2016-2019)
- Successfully achieved DIN target (266T) reduction across Wet Tropics
- Deliverd by unique collaboration of 17 Sugar Industry, NRM & Gov partners across 6 milling districts

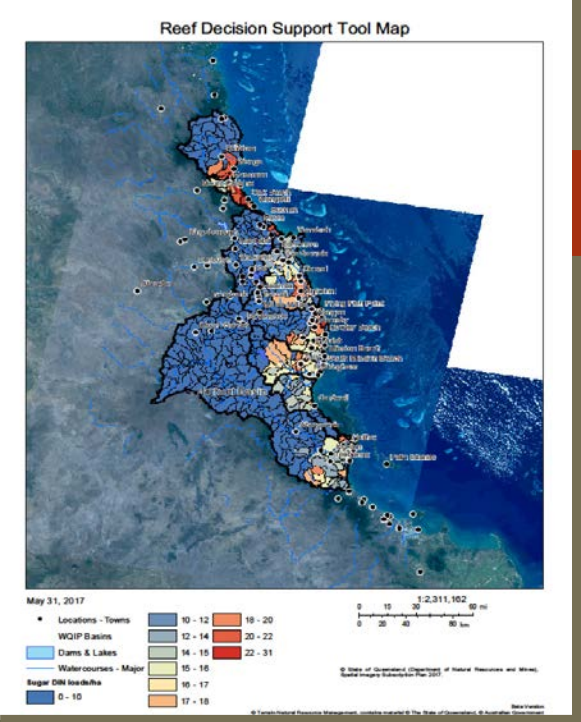
- Prioritisation based on
  - Policy instruments (eg WQIP)
  - Sub-catchment scale risk ratings for DIN loss (modelling)
  - Paddock-to-Reef Sugar Water Quality Risk Framework
  - Identification of priority practices
  - Community Network Analysis

Prioritisation in Practice: Learnings from local-scale ‘applied’ prioritisation



Good Water Quality science informs Reef Water Quality program investment.

Community, agricultural and social landscapes are just as important to understand for program success.

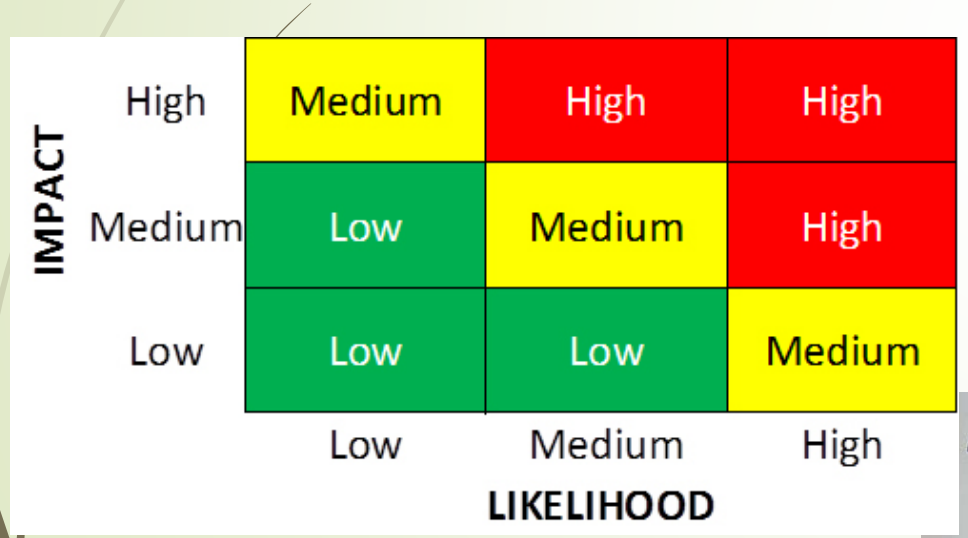


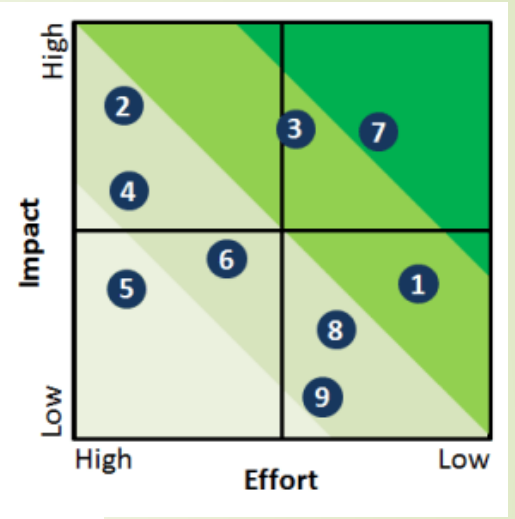
Prioritisation in Practice: Learnings

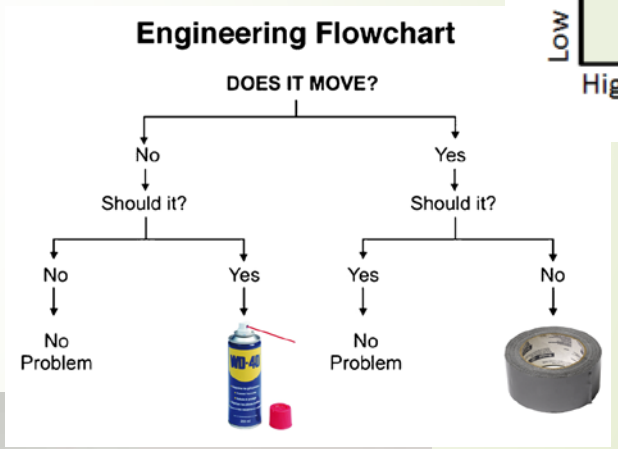
- Extension Officers embedded in district industry organisations
- District workshopping after establishment period
- Local teams involved in analyses of ‘hot-spot’ mapping and community networks
- Aimed to test decision support tool for Wet Tropics extension
  - Re-affirmed ‘one size does not fit all’

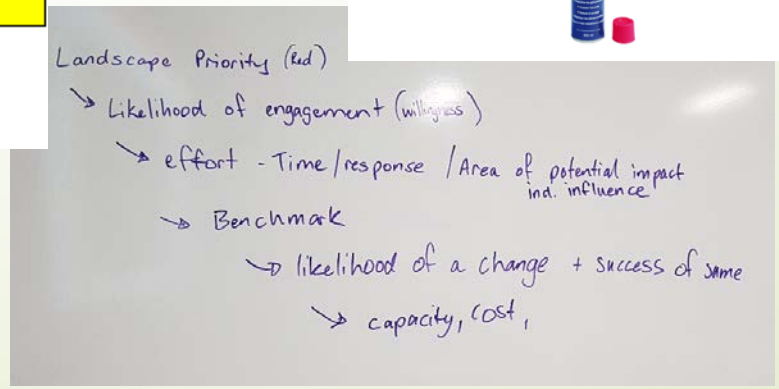
Decision Support for Prioritisation

- What filters/parameters need to be considered to make prioritisation decisions?
- What format for decision support is most useful?









Parameters influencing prioritisation decisions

Impact

- DIN Loss Potential (hot-spot)
- Area (size)
- Benchmarking of Management Practices
- Influence on others (in-degree)

Likelihood

- Willingness
- Capacity (knowledge, skills, resources etc)
- Culture
- Influence (out-degree)
- Risk tolerance
- Alignment with grower aspirations
- Feasibility
- Expressions of Interest

Available funds

Time

Delivery capacity

Existing relationships

Overlapping programs

Average size of farm units

Average distances from mill

Harvesting contractor/s (size, equipment etc)

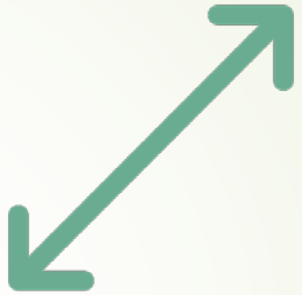
Industry network

Some local considerations influencing weighting of parameters

Example

New, Short program, limited funds

‘Low hanging fruit’ are targeted first
ie. most willing, helps to get ‘runs on the board’ especially with new staff, shows others what you are about and which builds momentum



Longer program and/or continuation of existing

‘low hanging fruit’ no longer priority, established trust and relationships allow for more sophisticated targeting of effort to address barriers affecting likelihood (eg building capacity, demonstrating feasibility, better alignment)

Potential for greater engagement where impact will be higher

Applying prioritisation:
In a district where majority of landscape is mapped as ‘hot-spot’

Applying prioritisation:
In a district where clear ‘hot-spots’ exist

Implications of Learnings

Important to understand all the factors affecting good program design for maximum efficiency

Science, social, community, industry

Learnings re-affirm the need for place-based planning approaches that are adaptable

Not top-down, prescriptive and/or ‘one size fits all’

Reducing duplication of investment effort by adopting collaborative approaches with a long term view

Greater success likely where programs are designed locally to align with productivity, profitability and sustainability outcomes for communities and local industries

Demonstrates again the importance of continuity and long-term approaches that recognise both agricultural cycles (5-7 years in cane) and behaviour change processes

Questions and Comments Please

Lana Hepburn – Lana.Hepburn@terrain.org.au

Michael Nash – Michael.Nash@terrain.org.au