bushfire&natural HAZARDSCRC

BUILDING COMMUNITY RESILIENCE IN REMOTE NORTH AUSTRALIA

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Lead End Users:

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WA Department of Fire and Emergency Services

Naomi Stephens

NSW Office of Environment and Heritage

An Australian Government Initiative

CRC AUSTRALIA

RIEL Research Institute for the Environment and Livelihoods

CHARLES DARWIN UNIVERSITY

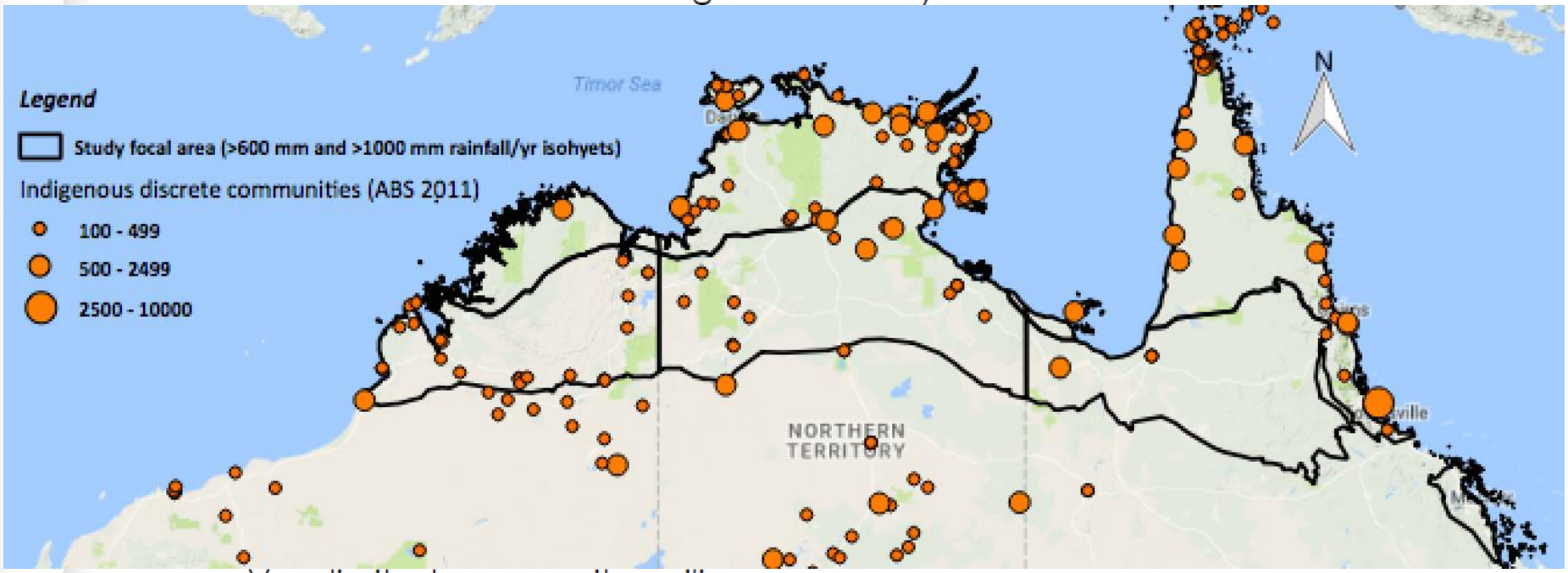
BUILDING COMMUNITY RESILIENCE IN REMOTE NORTH AUSTRALIA

- Large ‘action research’ component.
  - Transform current fire/emergency/land mgt
- Build on Existing Capacity / Capability
- Nexus between:
  - Fire / emergency / land mgt &
  - Payment for Environmental Services
  - Traditional knowledge
  - Northern ‘world view’

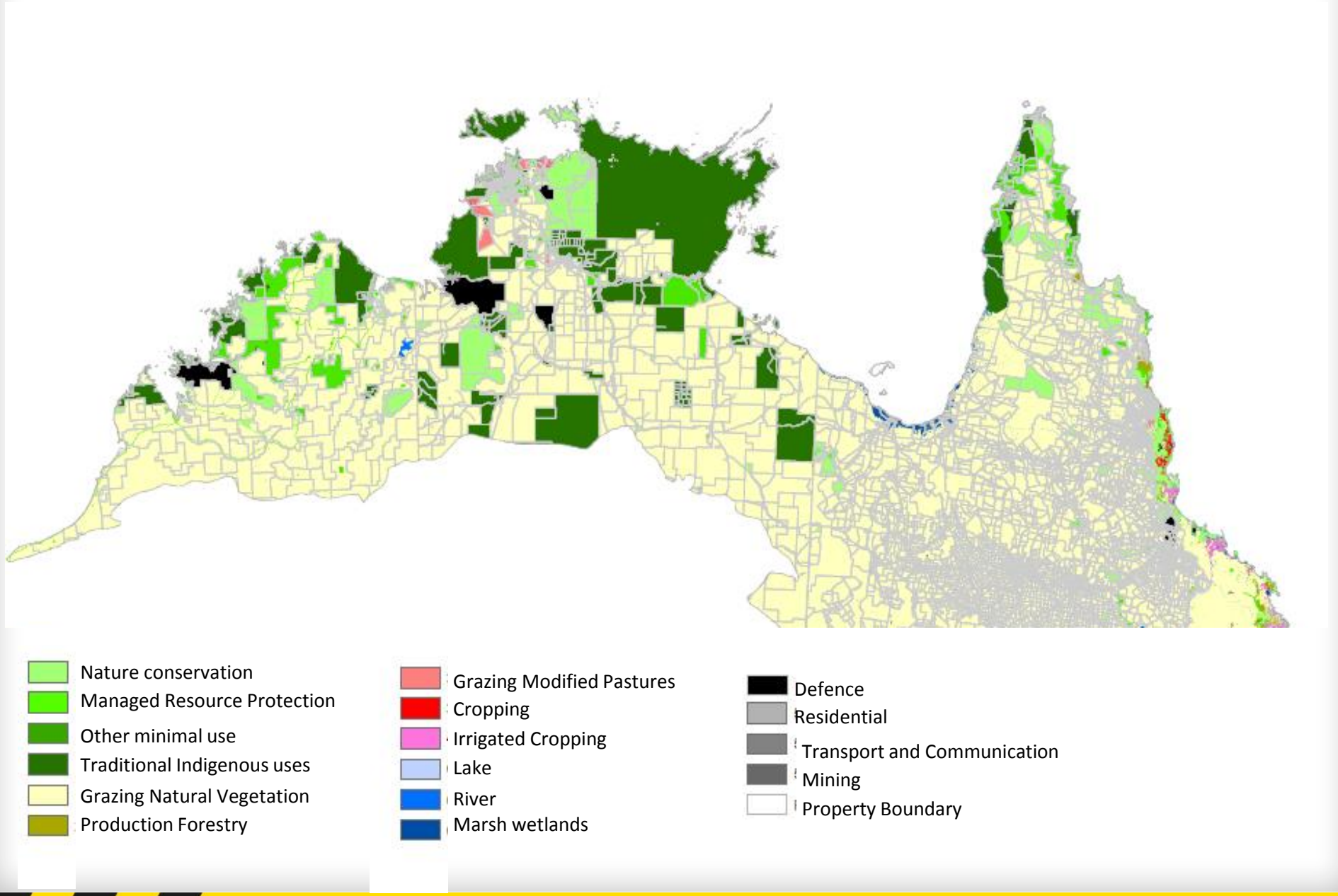
THE NORTH AUSTRALIAN BNH CONTEXT

360,000 People

\+ Communities from 'outer regional' to 'very remote'.



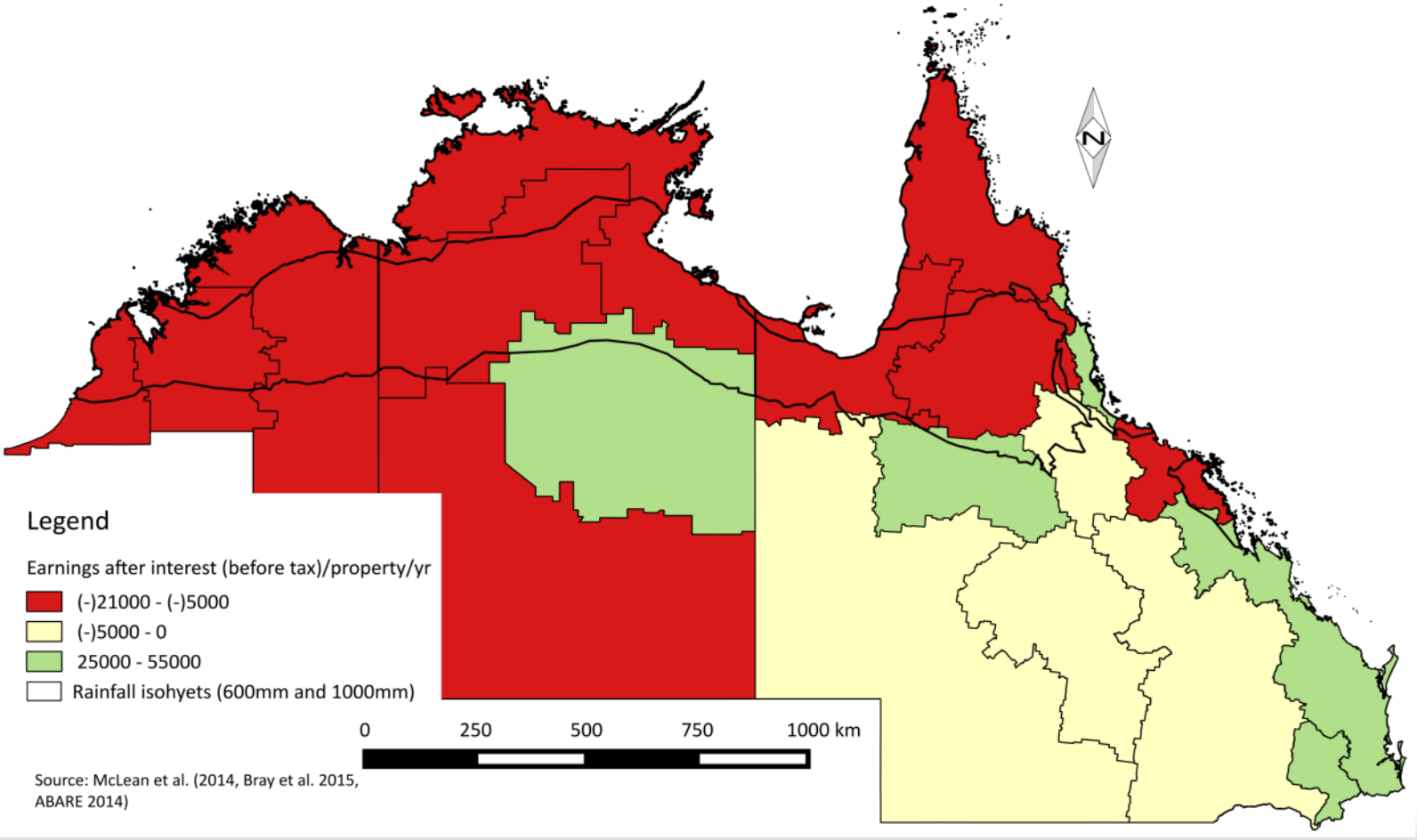
= Very limited community resilience


Nature conservation
Managed Resource Protection
Other minimal use
Traditional Indigenous uses
Grazing Natural Vegetation
Production Forestry
Grazing Modified Pastures
Cropping
Irrigated Cropping
Lake
River
Marsh wetlands
Defence
Residential
Transport and Communication
Mining
Property Boundary

Annual long-term (2001-2012) economic returns from <u>a typical, median-sized pastoral business in the north: Earnings After Interest but Before Tax (EAIBT)/yr</u>

(Source: based on ABARES 2014, McLean et al. 2014, Bray et al. 2015)

except ~25% top performers



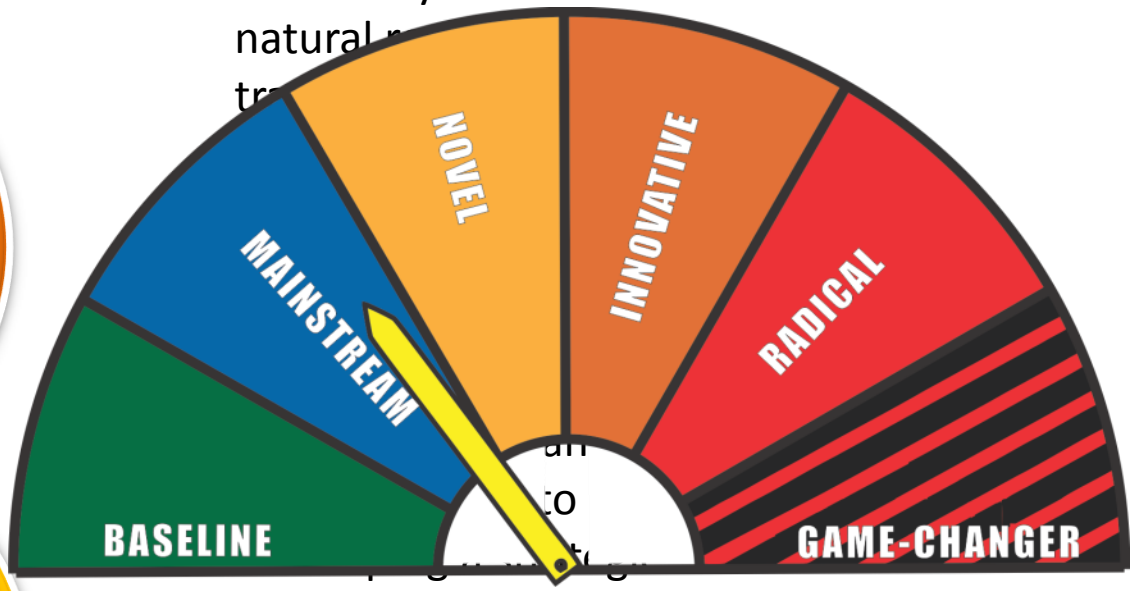
Documenting governance and leadership structures that work
Identifying emerging opportunities for wealth through PES
Focussing on existing strengths and capacities
Understanding Resilience from a remote community perspective
Enhancing capacity through training and PAR
Document physical risks in landscapes and communities

LANDSCAPE RISK ASSESSMENT

Focussing on existing strengths and capacities

Document physical risks in landscapes and communities

The ability to fall back on natural r
tr



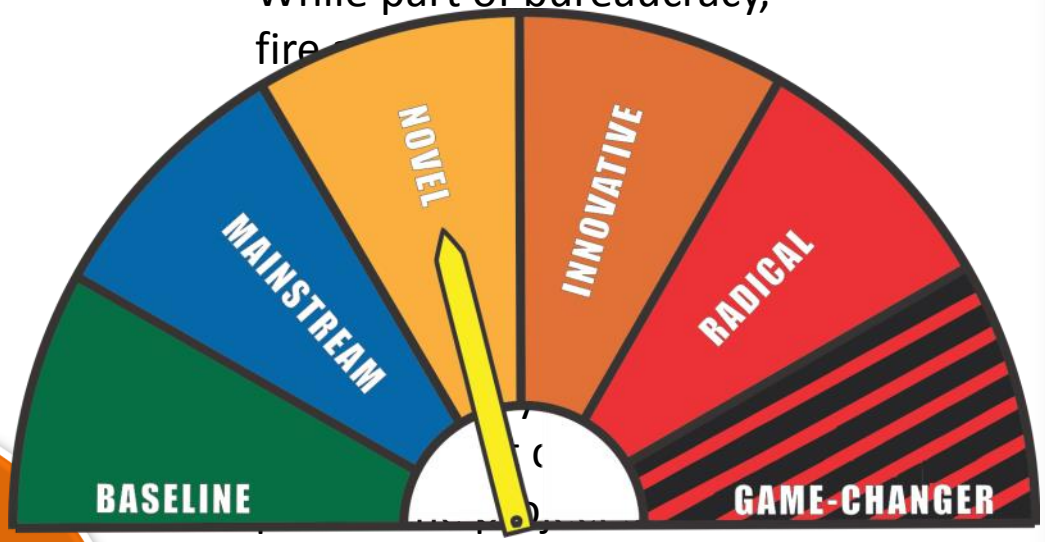
an
to
approach to investment for improving resilience.

GOVERNANCE THAT WORKS

Documenting governance and leadership structures that work

Focussing on existing strengths and capacities

While part of bureaucracy, fire

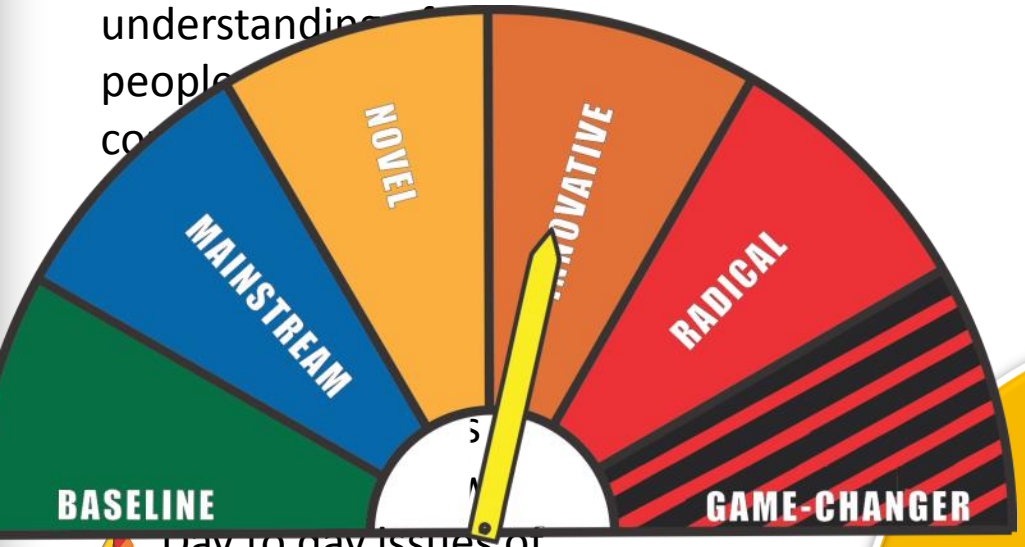


to identify ways of devolving fire and emergency management in remote communities.

As far as we know this hasn't been done before…

UNDERSTANDING RESILIENCE

Surveys, workshops and interviews to get an understandi… people… co…



- Day to day issues of poverty and dysfunction far outweighed concerns about 'disasters'
- "…the biggest disaster is government".
- No one had ever talked to them about this stuff

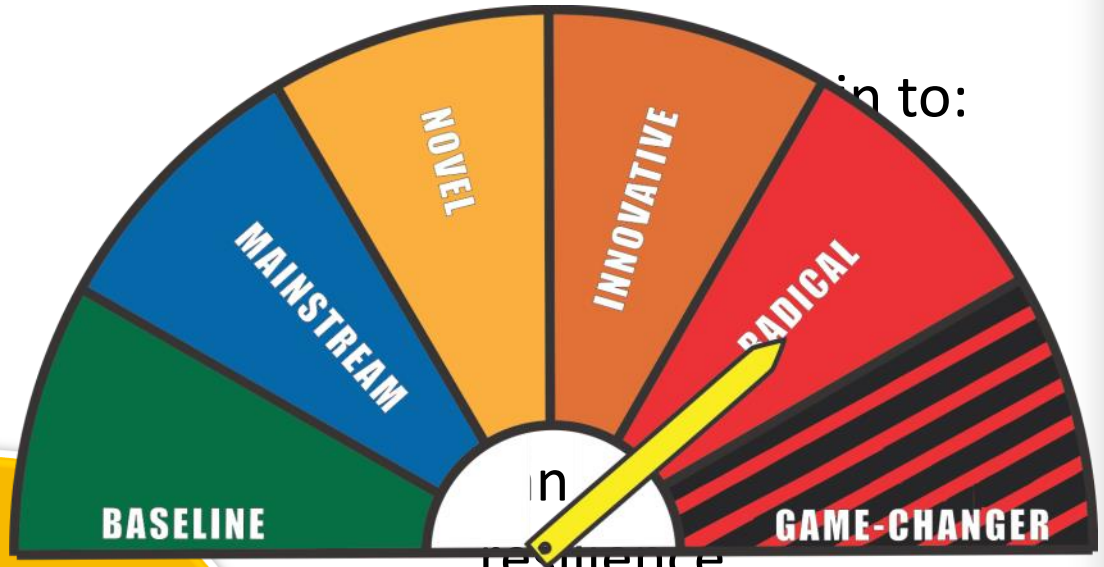
Understanding Resilience from a remote community perspective

Focussing on existing strengths and capacities

"PAR"- PARTICIPATORY ACTION RESEARCH:

Focussing on existing strengths and capacities

Enhancing capacity through training and PAR



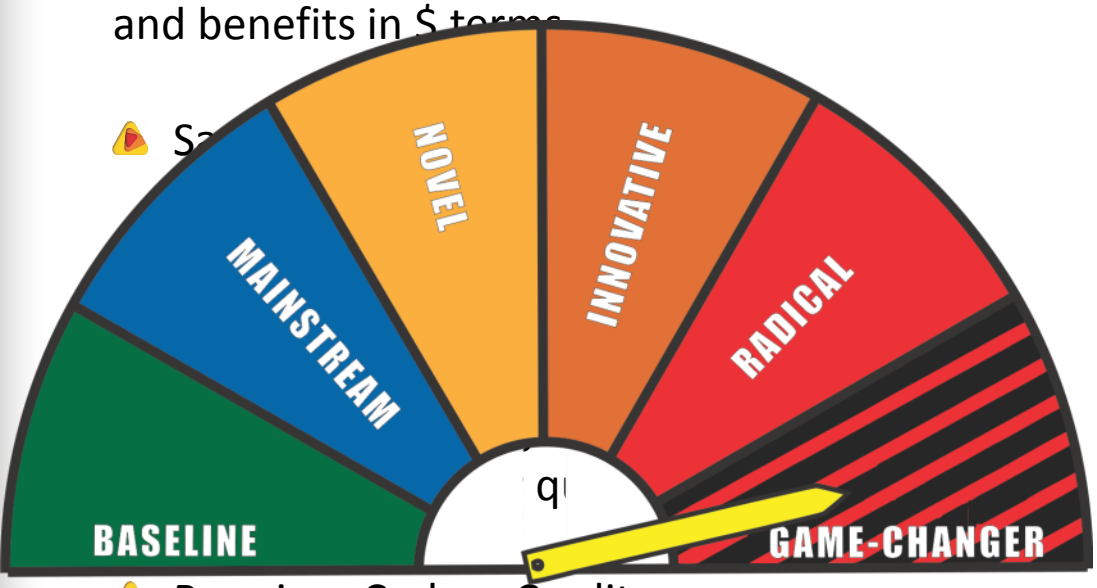
in to:

- n
- resilience
- Improve their understanding of the role for government

“PES”-PAYMENT FOR ENVIRONMENTAL SERVICES

Economic Analysis of costs and benefits in $ terms

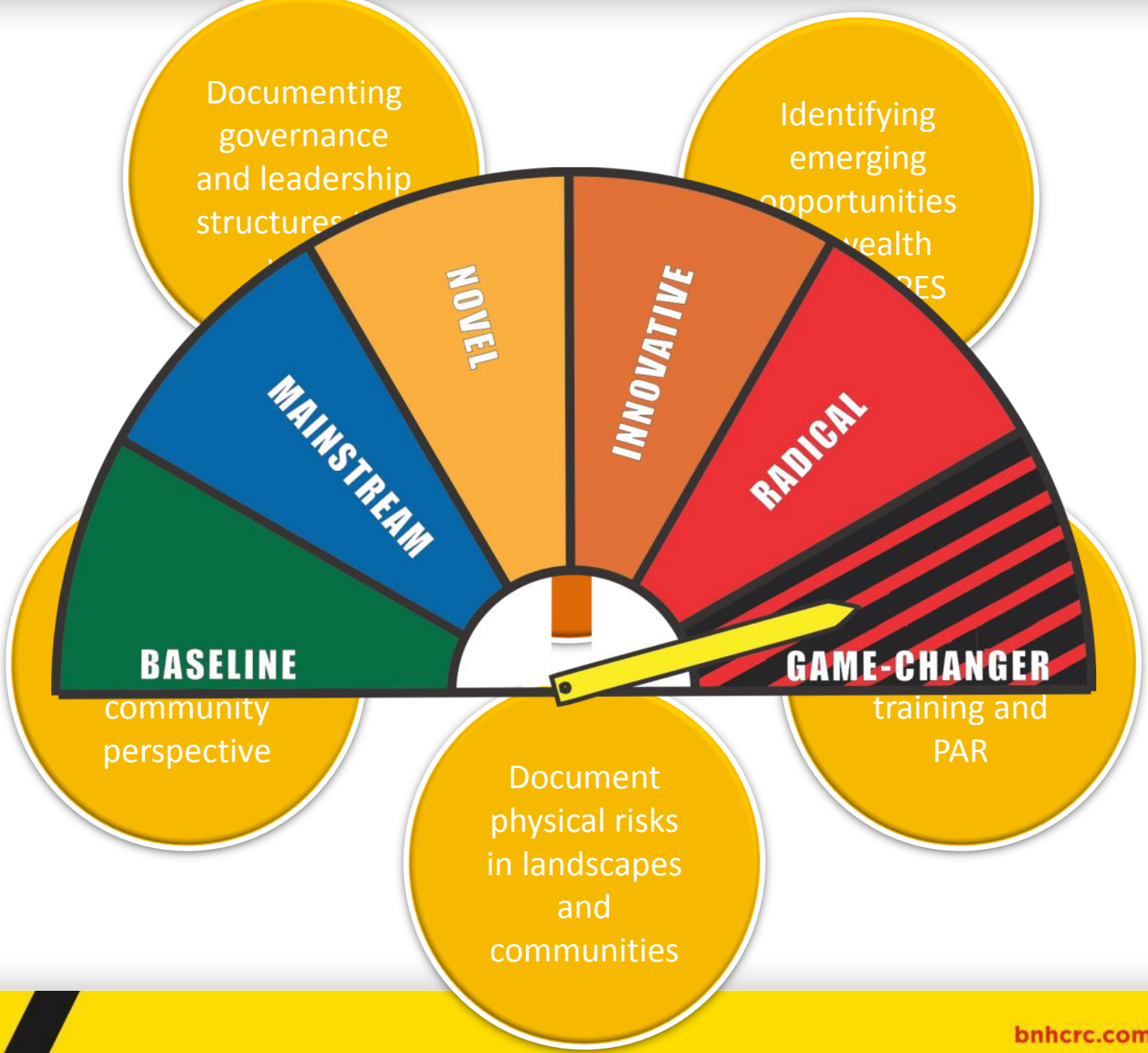
- Sa



- Premium Carbon Credits
- Biodiversity Offset Credits

Identifying emerging opportunities for wealth through PES

Focussing on existing strengths and capacities


Documenting governance and leadership structures
Identifying emerging opportunities
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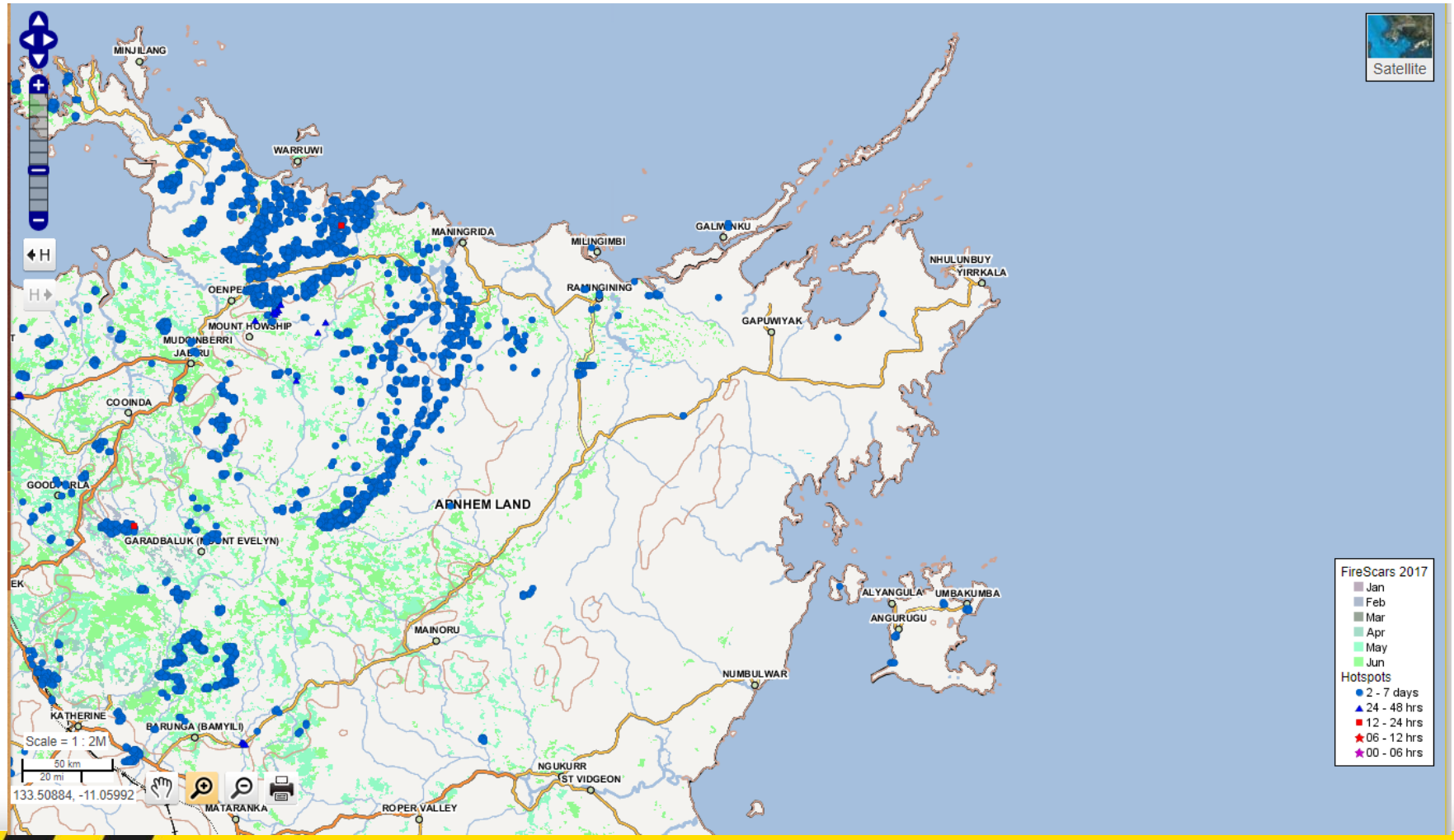
ES
BASELINE
MAINSTREAM
NOVEL
INNOVATIVE
RADICAL
GAME-CHANGER
community perspective
training and PAR
Document physical risks in landscapes and communities

TRACK RECORD : NAFI



TRACK RECORD : GREENHOUSE GAS EMISSIONS ABATEMENT

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CO_2
CH_4
N_2O

CO_2
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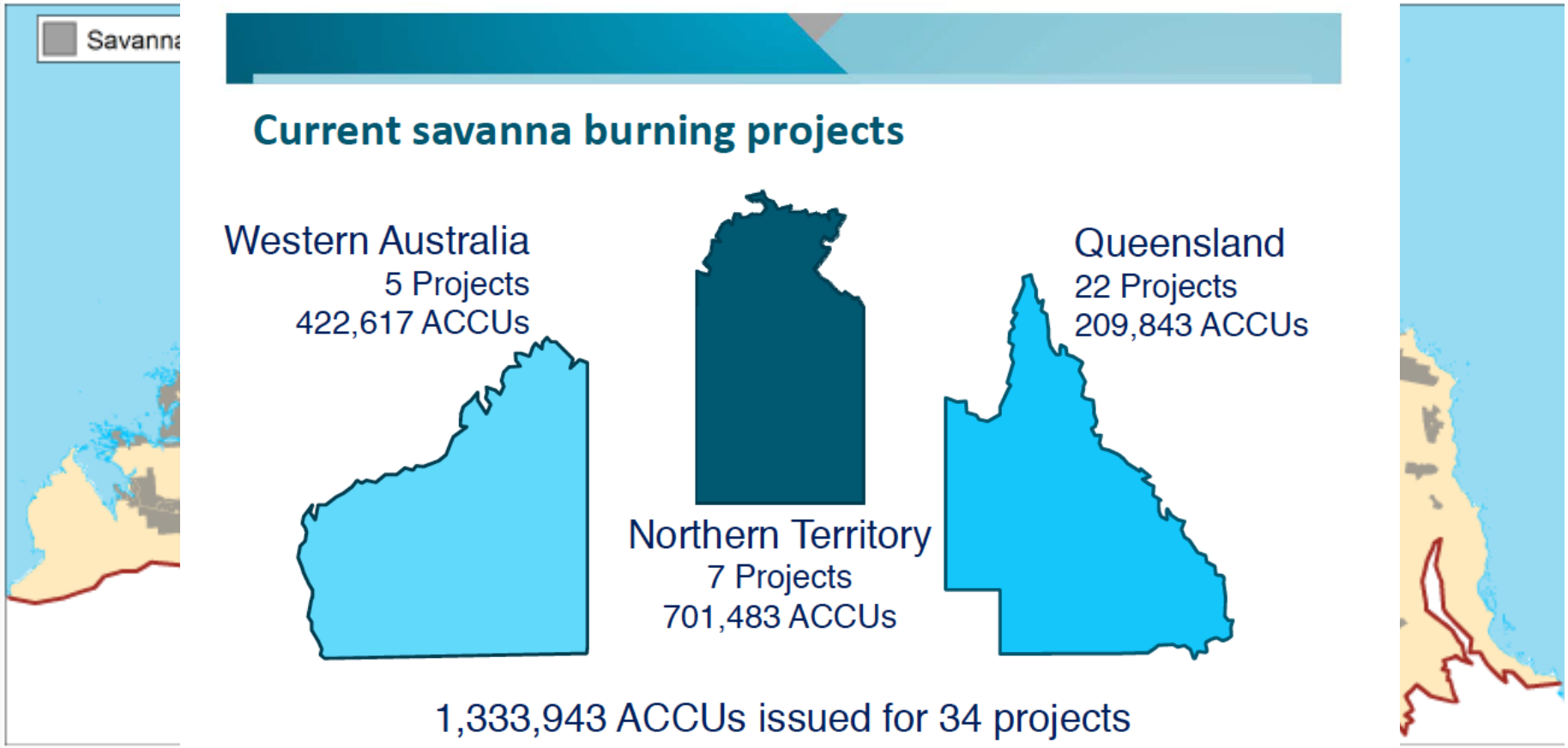
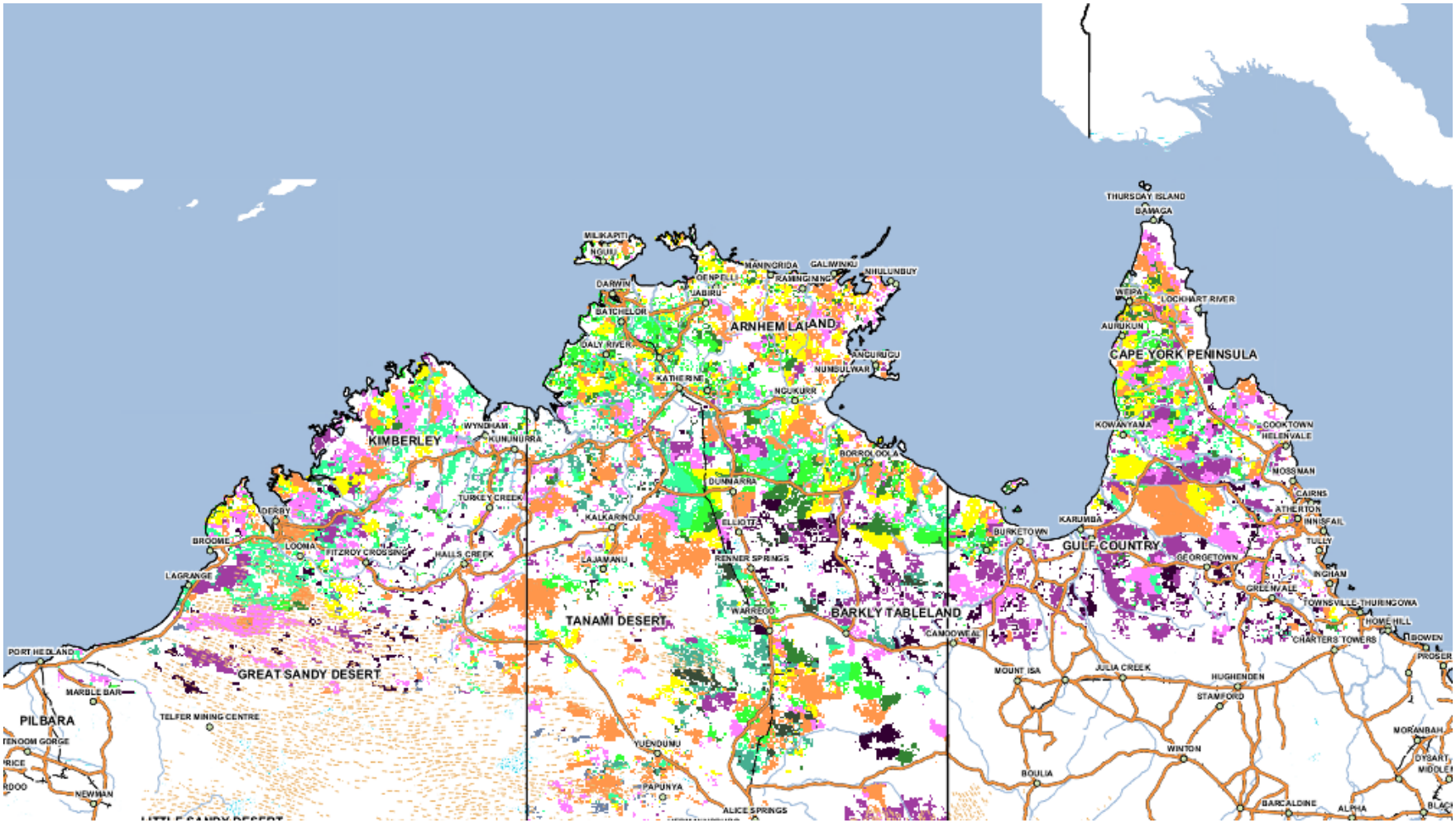
…FIRES OF DIFFERING INTENSITY RELEASE DIFFERENT AMOUNTS OF GREENHOUSE GAS…

Carbon credits earned from Savanna burning projects, as at March 2015

Note: 1 carbon credit = 1 t.CO2e = AUD15 (as of May 2015)

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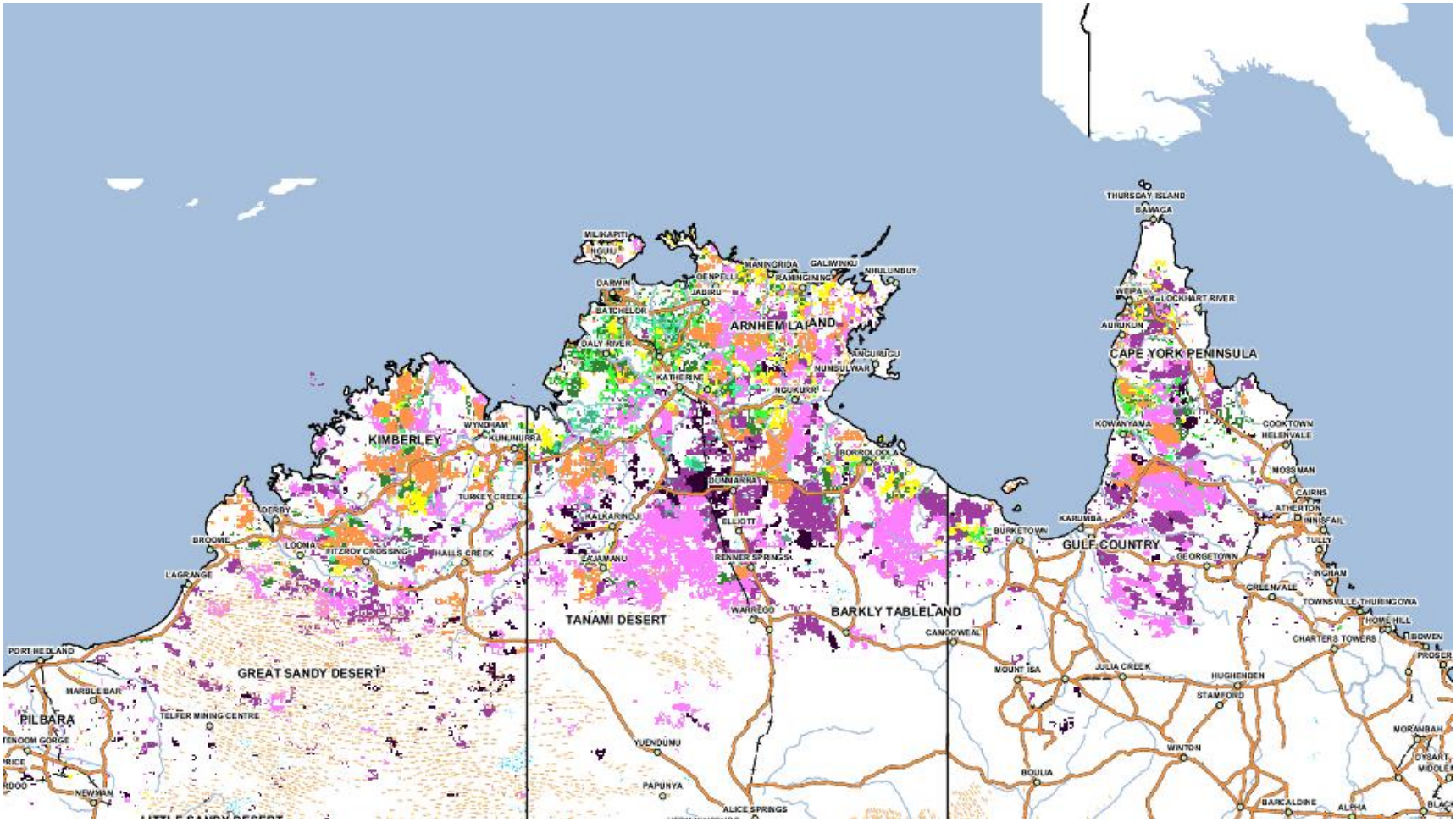
ALPHA

2001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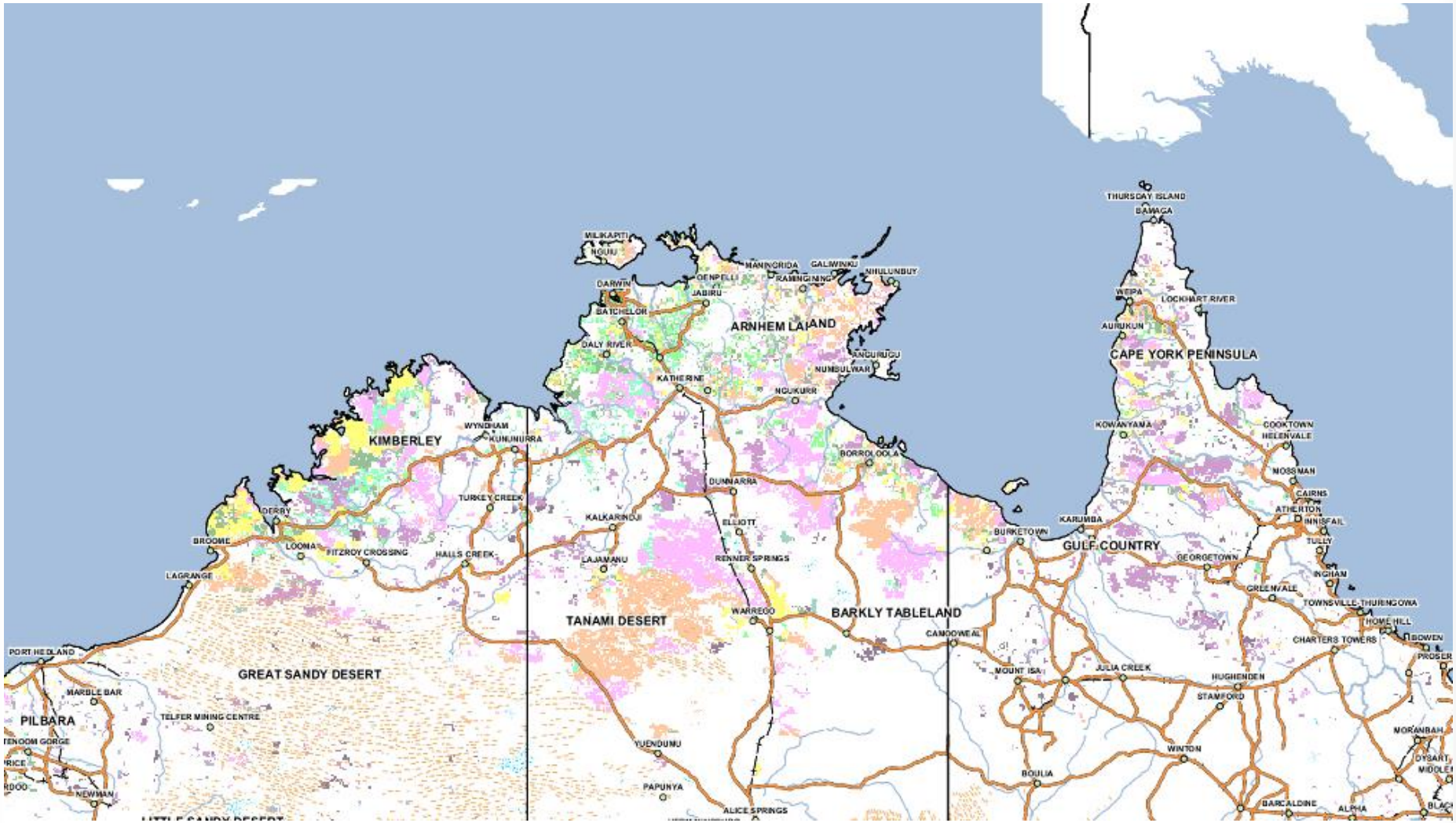
2004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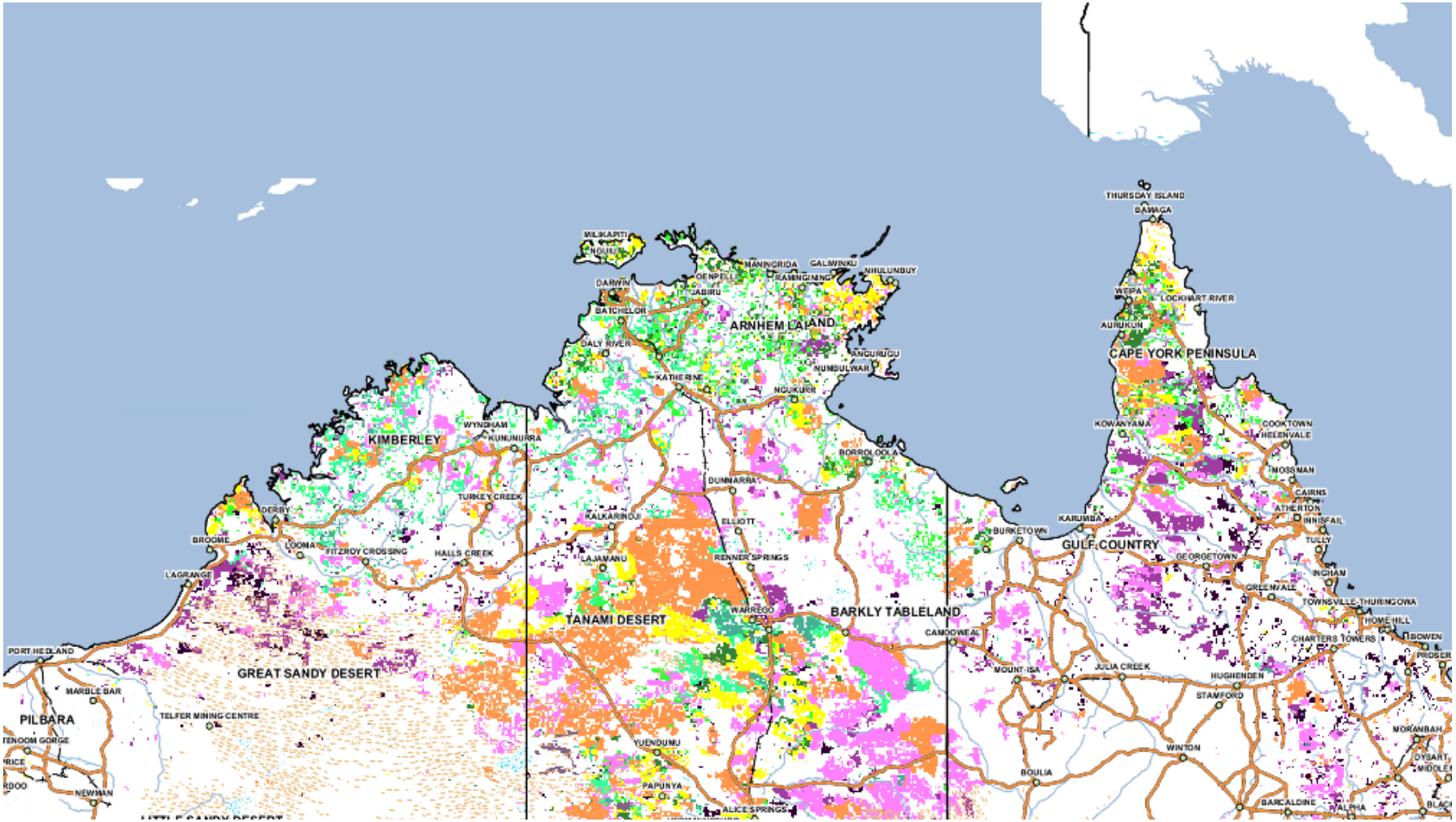
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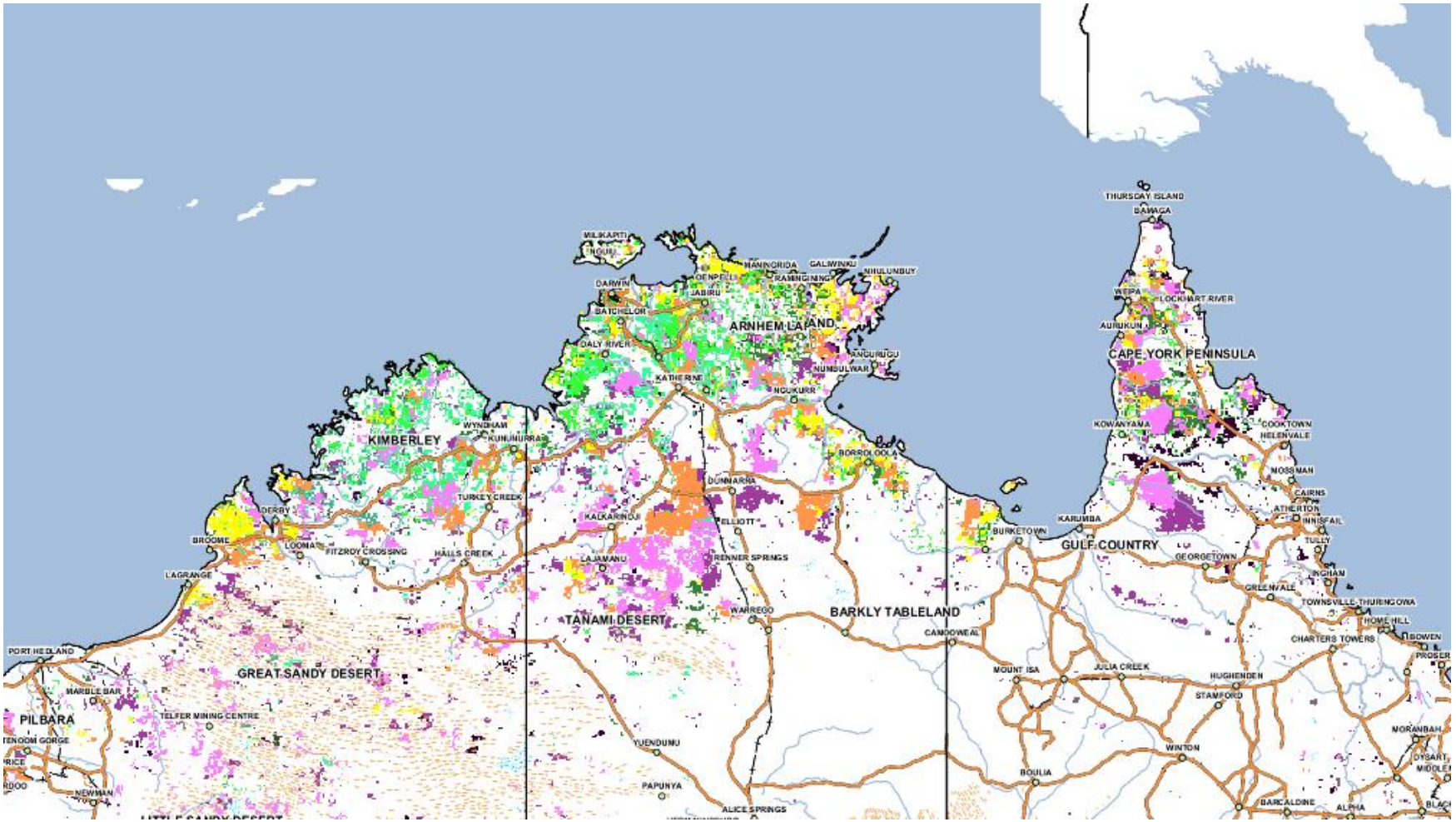
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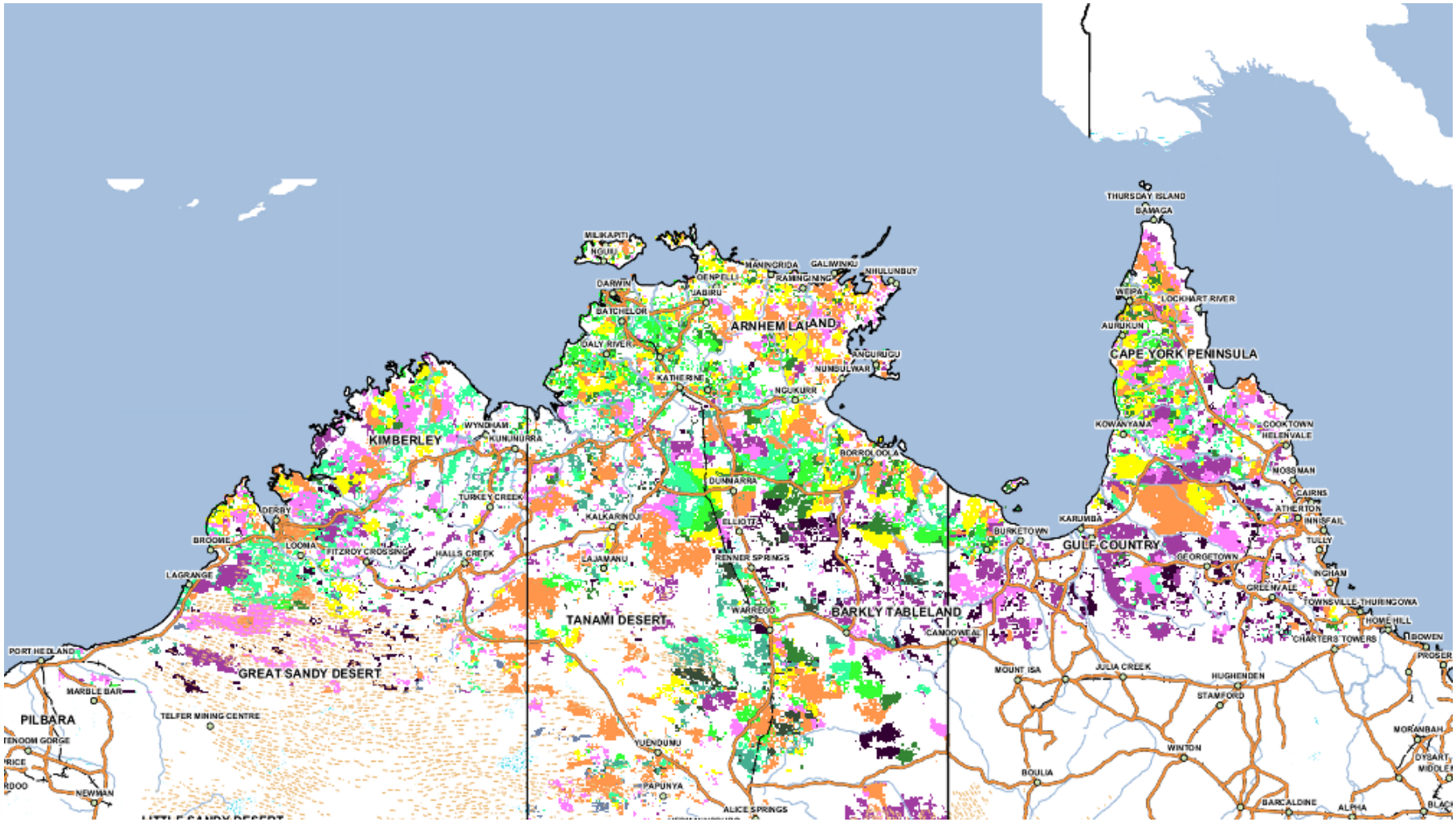
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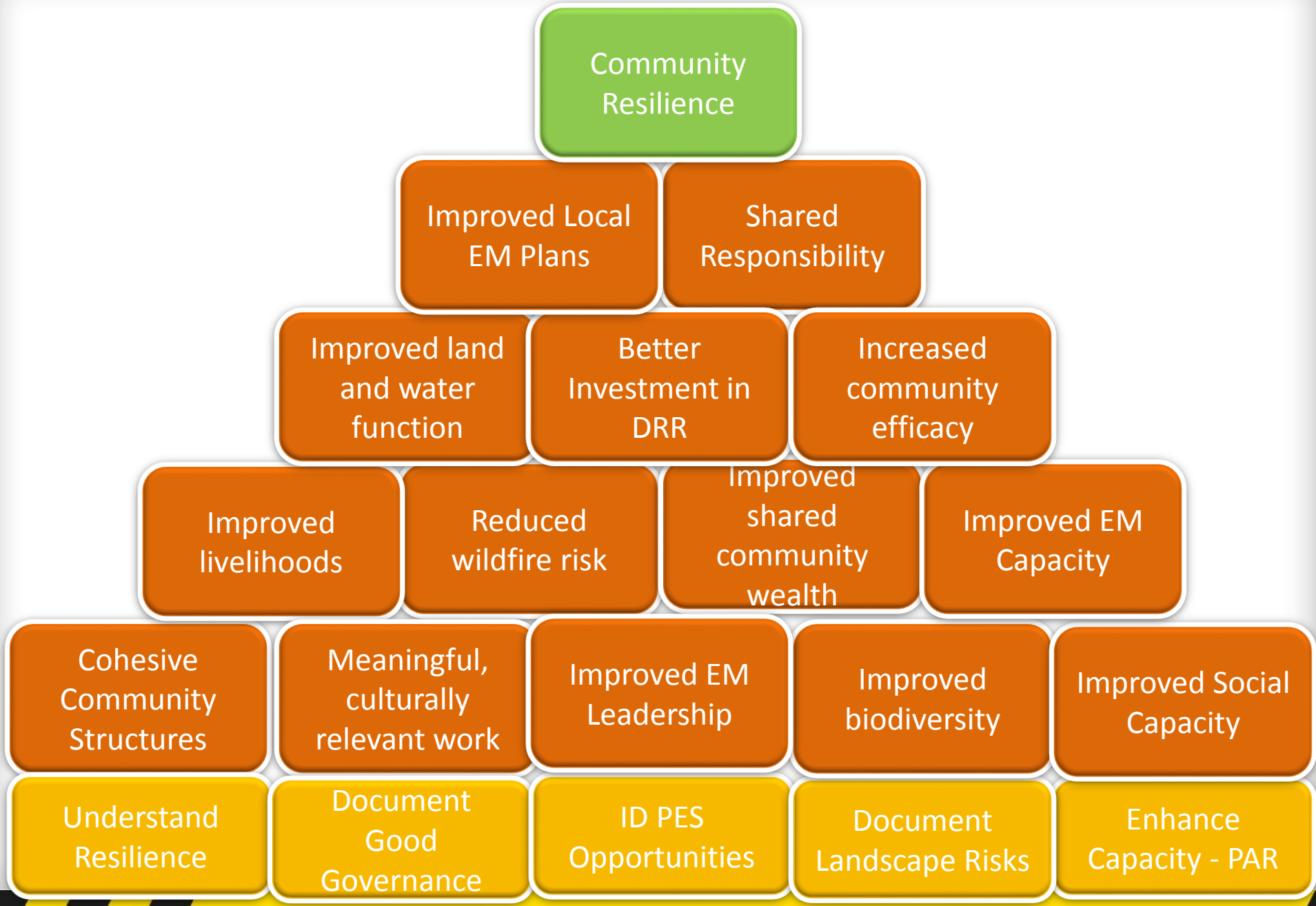
Community Resilience
Improved Local EM Plans
Shared Responsibility
Improved land and water function
Better Investment in DRR
Increased community efficacy
Improved livelihoods
Reduced wildfire risk
Improved shared community wealth
Improved EM Capacity
Cohesive Community Structures
Meaningful, culturally relevant work
Improved EM Leadership
Improved biodiversity
Improved Social Capacity
Understand Resilience
Document Good Governance
ID PES Opportunities
Document Landscape Risks
Enhance Capacity - PAR

CONCLUDING REMARKS

- The Australian Governments CRC program has achieved remarkable changes in fire and emergency management.
- Providing equity of service in remote north Australia is closely linked to ‘closing the gap’.
- BNH Management structures (volunteering) lends itself to innovation.
- Landscape-scale change is possible.

THANK YOU

An Australian Government Initiative

CRC AUSTRALIA

RIEL Research Institute for the Environment and Livelihoods

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