

EMISSION MITIGATION OPPORTUNITIES FOR SAVANNA ECOSYSTEMS IN AUSTRALIA: METHODOLOGIES AND ENABLING FACTORS.

Dr Geoff Lipsett-Moore

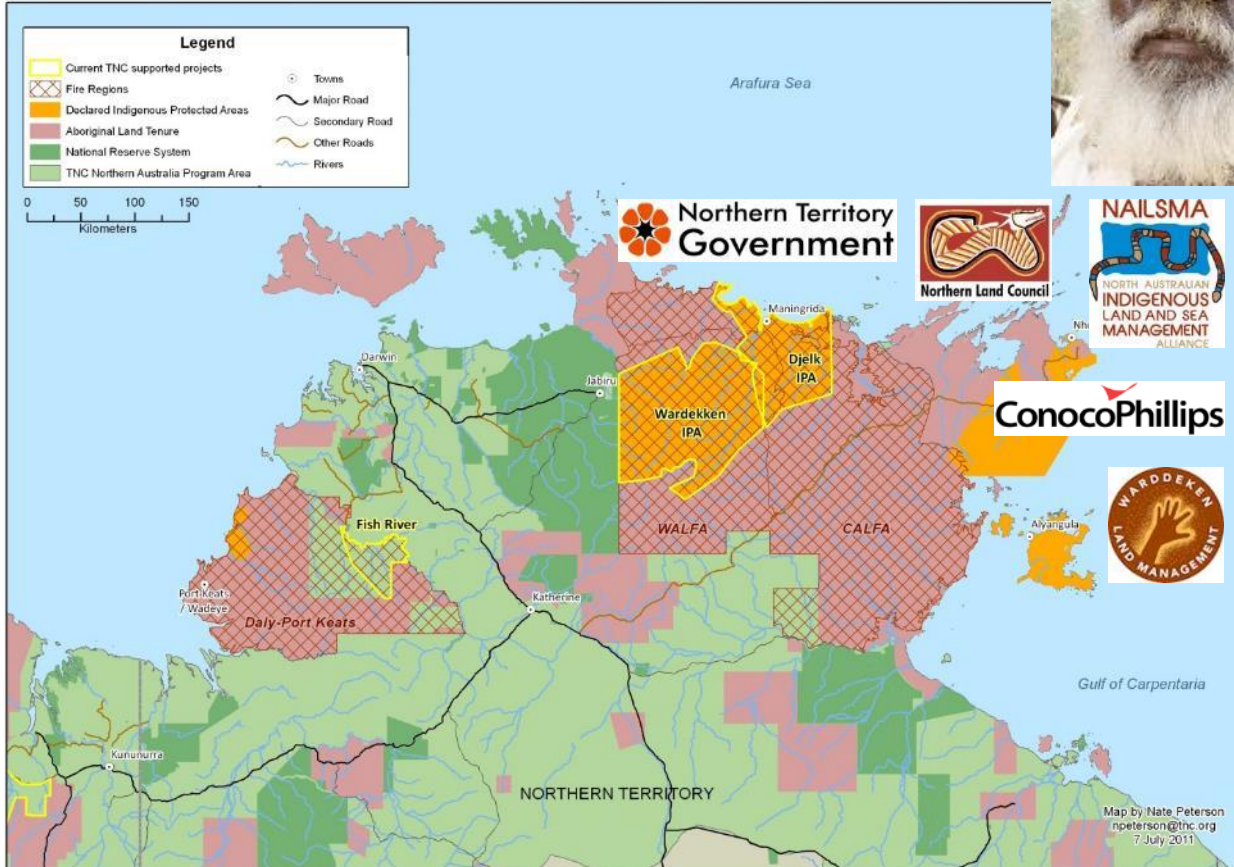


Outline

- Brief history of savanna burning (carbon projects) in Australia
- Key enabling conditions that supported the proliferation of projects
- Key opportunities for other savanna countries



WALFA



ConocoPhillips through Darwin LNG signed the West Arnhem Land Fire Management Agreement (WAFMA) in 2006, supporting the West Arnhem Land Fire Abatement (WALFA) project – across 28,282 square kilometres of West Arnhem Land in central Northern Territory

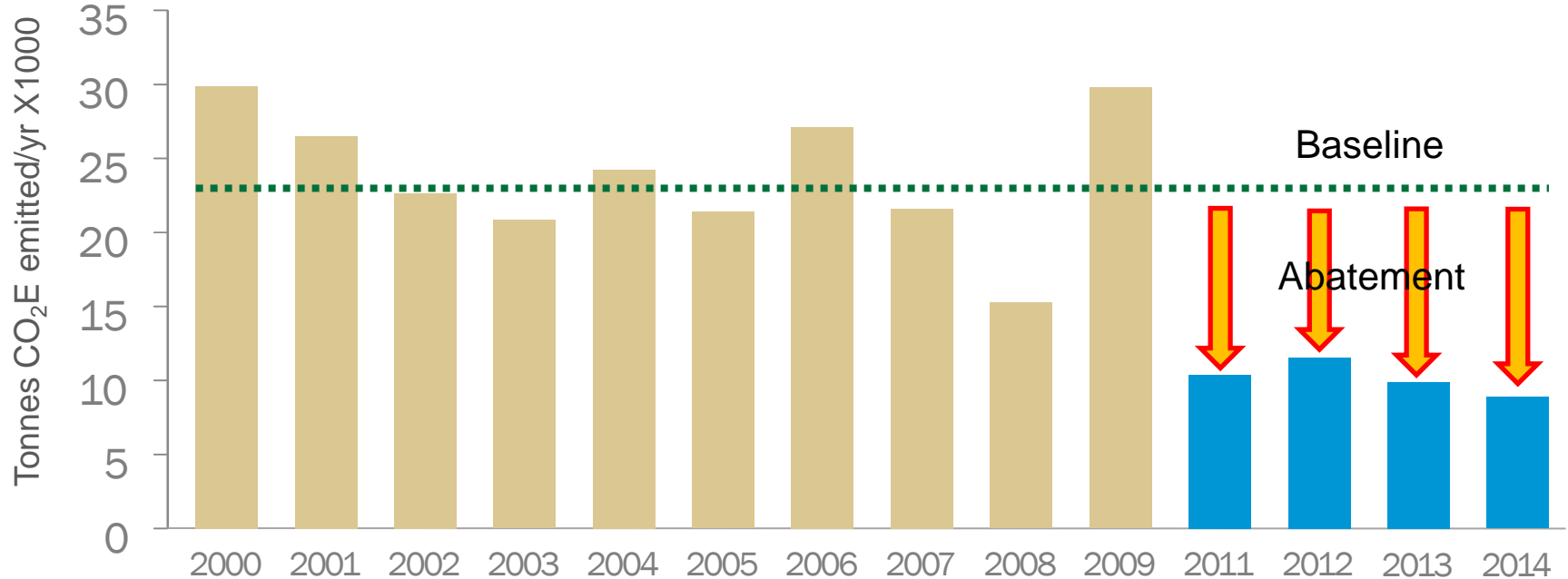
- Adjumarllarl Rangers from Oenpelli
- Djelk Rangers from Maningrida.
- Warddeken Rangers from Kabulwarnamyo.
- Mimal Rangers from Bulman.
- Jawoyn Rangers from Katherine.

Fish River Station

Early dry season fire management

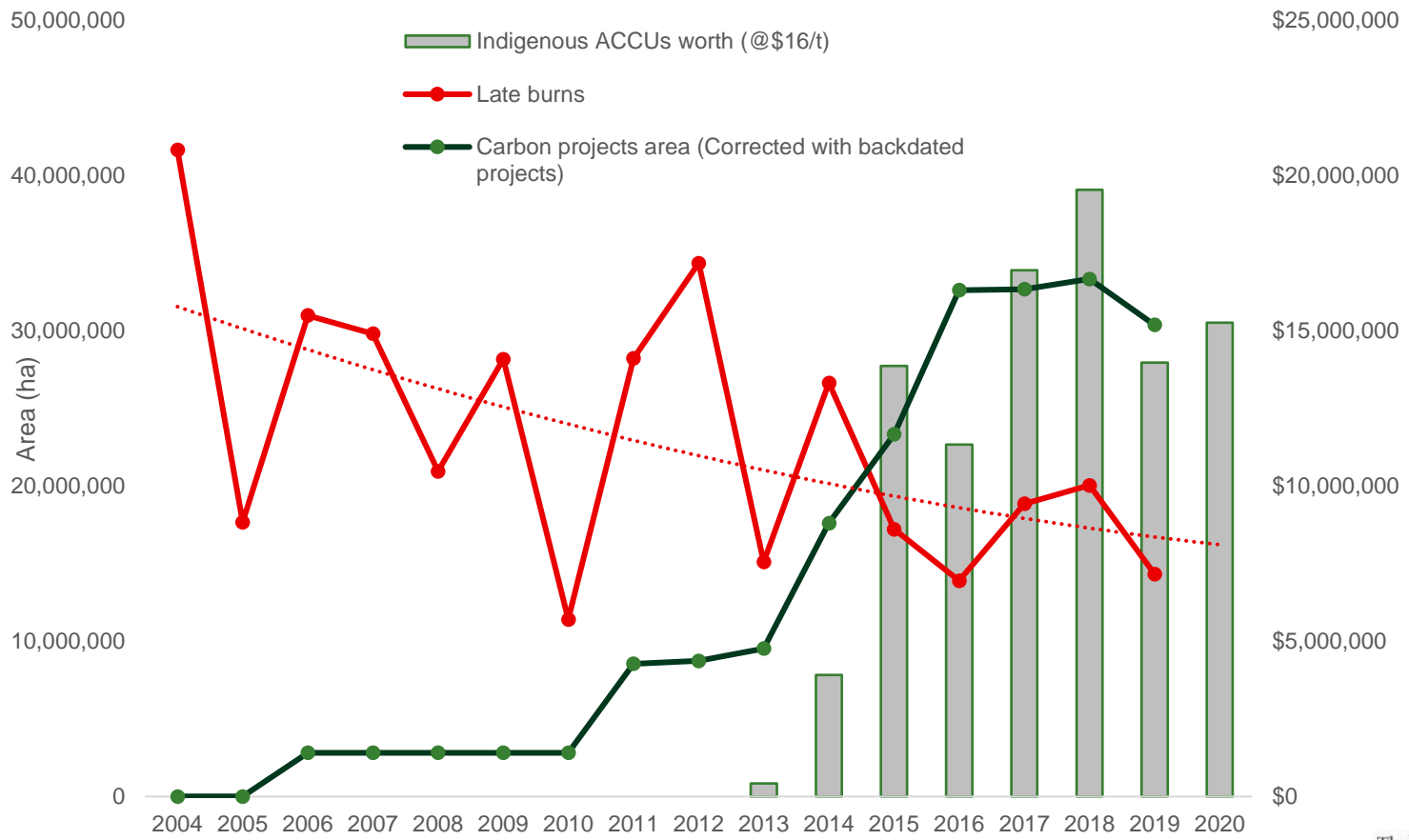


49,000 tonnes of CO₂-e abated over 4 years






19 million ha of Savanna Burning projects registered under the ERF



Luke Preece TNC

New savanna fire methods registered under the Emissions Reduction Fund in 2018.

- Savanna fire management—sequestration and emissions avoidance, the first method to credit sequestration and emissions avoidance from improved fire management, and
- Savanna fire management—emissions avoidance, a replacement for the 2015 savanna fire management method.
- However, little uptake of combined sequestration and emissions avoidance method.



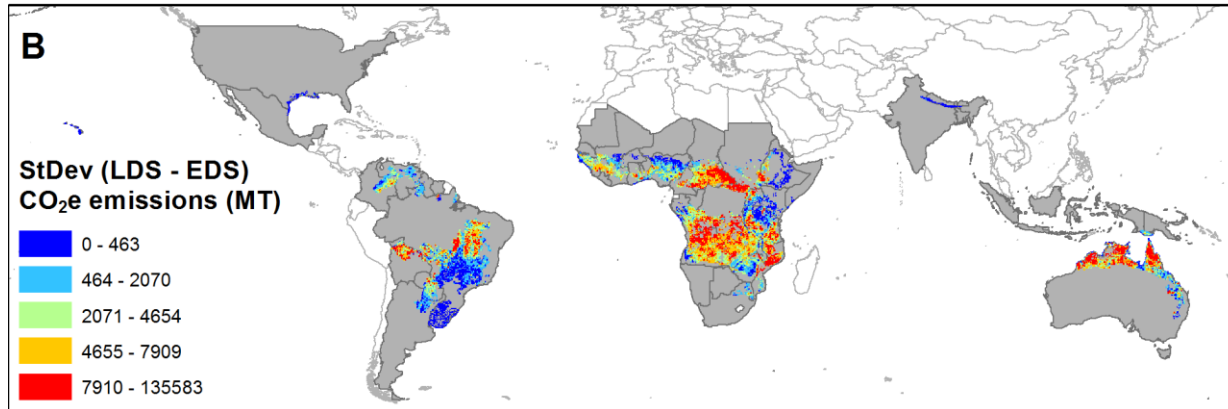
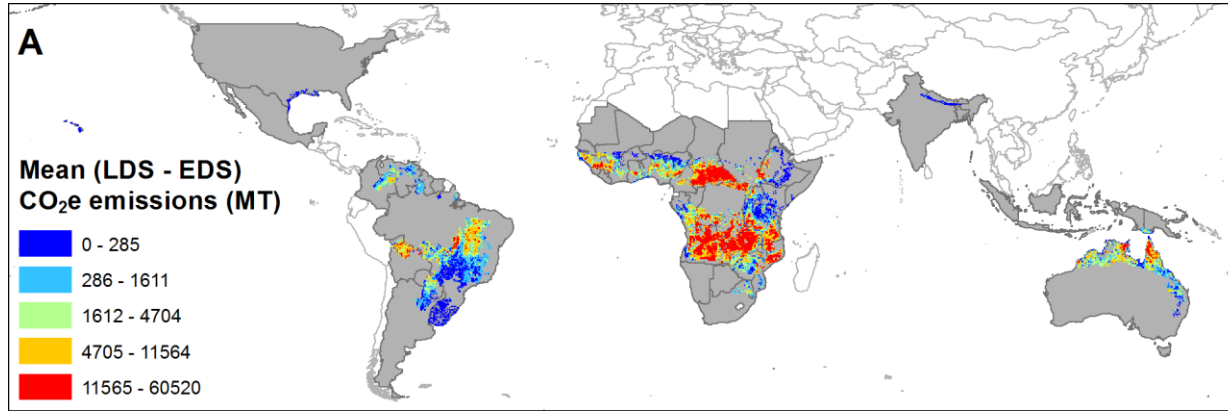
Additional Co-benefits

- Improved biodiversity and landscape health
- Reinvigorating cultural and social traditions
- Enhanced economic development
- Increased employment
- Climate change adaptation (reduction in LDS wildfires)
- Community social and cultural development
- Empowering communities

Key enabling conditions that enabled the proliferation of projects

- Strong scientific foundation (veg mapping, fire scar mapping, EF's)
- Proof of concept projects WALFA and Fish River Station
- Indigenous Ranger programs with IFM knowledge and skills
- Regulatory Carbon Market (CFI and ERF)
- Approved savanna burning abatement methodologies
- Key tools available for fire planning and calculating baselines and emissions reductions estimates (NAFI and SavBAT)

Lipsett-Moore, G.J., Wolff, N.H., and Game E.T. (2018) Global opportunity for emissions reductions from savanna burning. Nature Communications, 9 <https://www.nature.com/articles/s41467-018-04687-7>



Options for global scale up

- Inclusion of provisional mitigation estimates and adaptation opportunities within NDC's for relevant countries (see Lipsett-Moore et al. 2018).
- Adaptation of existing approved methodologies (Australia) under the VCS for other geographies by vegetation type: Cerrado, Miombo, etc (no need to reinvent the wheel)

Key resources

- NAFI <https://firenorth.org.au/nafi3/> for fire planning
- SavBat2.2 and 3 <https://savbat.environment.gov.au/> for calculating baselines and emissions reductions
- Approved Australian methodologies
<http://www.cleanenergyregulator.gov.au/ERF/Choosing-a-project-type/Opportunities-for-the-land-sector/Savanna-burning-methods>
- NB: 2015 methodology provides the best framework for adapting method under the VCS for other geographies
- Contact: glm-consulting@outlook.com