



# Scaling up Ecological Restoration in Australia

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# The NEED for Restoration

- Our environment is deteriorating due to increasing pressures
  - habitat loss
  - a changing climate
  - invasive species
  - pollution
  - unsustainable usage
- Many species and ecosystems are now threatened with extinction
- UN Decade on Ecosystem Restoration calls for efforts to prevent, halt and reverse degradation on every continent and in every ocean
- Kunming-Montreal Global Biodiversity Framework (GBF) calls for 30% of degraded land and water across the globe to be under effective restoration by 2030.
- Nature Positive Plan for Australia – 30x30
- Protection alone is not sufficient.



Dept of Agriculture and Food, W.A



NSW National Parks



The Australian Institute of Marine Sciences



City of Gold Coast



Martin Taylor



CSIRO

# What do we Need?

## A national approach to attaining nature positive restoration in Australia

RDA Discussion paper  
Draft 02/09/2024



### Restoration Decade Alliance

Australian Restoration organisations  
supporting the goals of the UN Decade on  
Ecosystem Restoration

## Politically and Strategically

- Shifts in policy and bipartisan leadership at all levels
- Integration of biodiversity and climate change goals
- Restoration planning to foster improved conservation management and recovery of Australia's carbon dense natural ecosystems including native forests, mangroves and seagrass
- A National Restoration Plan
- A National Nature Investment Strategy
- Changes to the way we fund restoration projects – particularly at scale
- Better collaboration and partnerships
  - With First Nations People – key stakeholders
  - Between academia, scientists and practitioners
  - Between areas (states, regions, local) – corridors



# What Do We Need?



## Practically

- A larger and more highly skilled restoration workforce
- Greater capacity to assess resilience and apply a variety of restoration approaches
- Quality vocational training in Conservation and Ecosystem Management
- Better collaboration and partnerships
  - With First Nations People – key stakeholders
  - Between academia, scientists and practitioners
  - Between areas (states, regions, local) – corridors
  - Between professional practitioners and volunteers (e.g. Landcare)
- Development of practical restoration plans that
  - Integrate 6 principles from the National Standards
  - guide on ground works integrating fire, pest animal management and threatened species management
- Vary techniques
- Large scale native seed production.



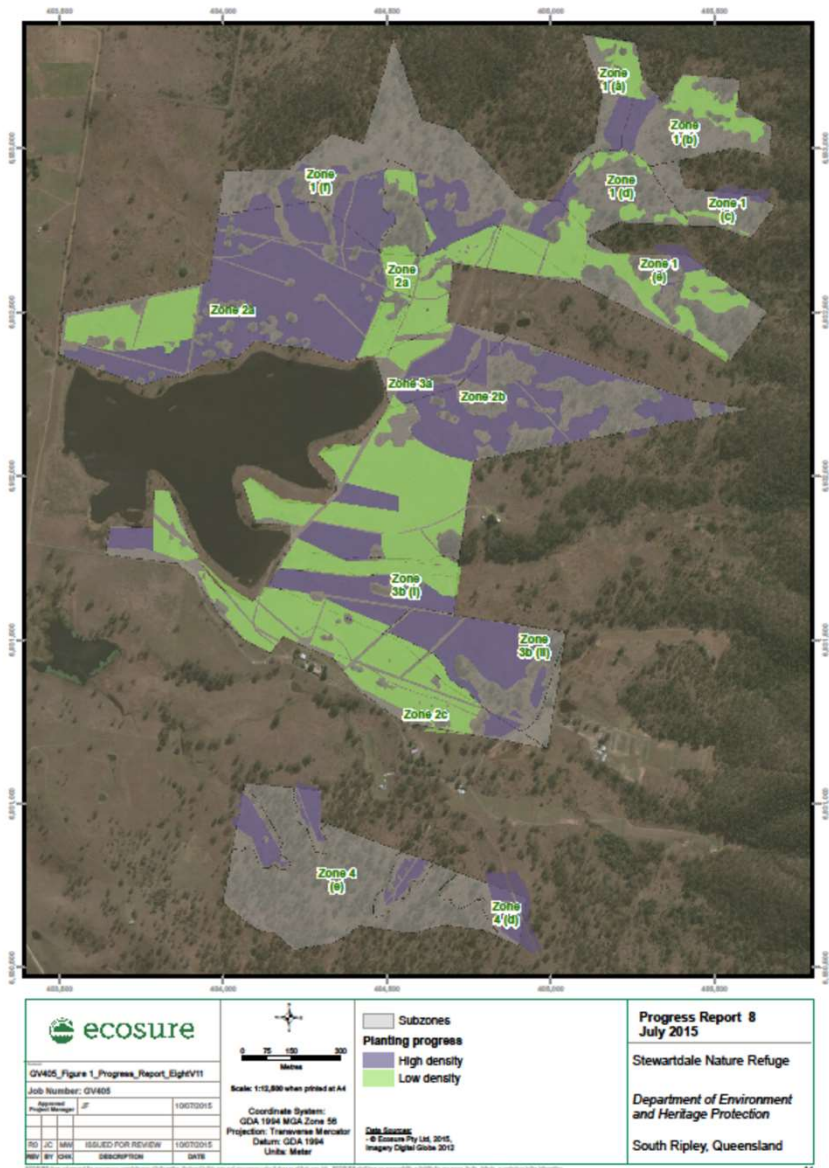
# Ecological Outcomes need to be guided by quality restoration planning, implementation, monitoring and reporting

## Restoration planning

- Requires detailed site analysis and understanding of how each ecosystem / area on a site was disturbed and is disturbed naturally - influences intervention
- Understand and assess resilience / capacity for recovery and what techniques would stimulate recovery
- Analysis of connectivity and how local / regional flora and fauna are likely to move onto or through the site
- Habitat requirements for local and migratory fauna
- Integration of fire, threatened species management
- A practical document that guides on ground restoration, management and monitoring
- At scale – brings multiple stakeholders and people together so it practically direct works and keeps us moving in the same direction

# Stewartdale Nature Refuge

- Queensland Govt. funded project as part of Nature Refuges Program
- Site connects to the largest remaining dry sclerophyll corridor in SEQ – Flinders Karawatha Corridor
- Restoration area is 205 ha of 969 ha site
- Facilitated Natural Regeneration across 65 ha
- Enabled specified planting of 114 000 trees to be focussed to areas less resilient
- 5 years funding + 1 year to plan incl. seed collection, restoration planning, fencing etc.
- Saved >\$500K and facilitated better results
  - Planting survival approx. 92%
  - Maintenance reduced
  - Site connectivity significantly improved
  - More efficient use of resources - environmental, financial and human.







# Stewartdale - Varying Approaches to Restoration Facilitated Natural Regeneration and Revegetation (planting)



2014



Dec 2015



June 2016



## Stewartdale - Varying Approaches to Restoration Facilitated Natural Regeneration and Revegetation (planting)



December 2018



September 2024





Utilising varying restoration approaches to maximise resources - environmental, financial and people





## What is Needed

- A much larger, skilled workforce that are properly remunerated
- Expansion of courses delivered across Australia delivered by experienced restoration practitioners
  - The course is now Conservation and Ecosystem Management, Certificates I to V (Diploma)
- Greater collaboration with universities and researchers to:
  - learn and share ideas
  - carry out research and development
  - Innovate
  - Carry out monitoring
- Large scale and longer term funding

Numinbah Conservation Area, a 598 ha site on Gold Coast with 402 ha restored  
Only 17 ha planted



2007



2011



2024



## Numinbah Conservation Area Facilitated Natural Regeneration



May 2008



August 2008



## Numinbah Conservation Area Facilitated Natural Regeneration



July 2009



June 2010



## Numinbah Conservation Area Facilitated Natural Regeneration



June 2011



June 2012



## Numinbah Conservation Area Facilitated Natural Regeneration



June 2014



November 2015

Photo credits: Saul Hondow and  
Darcey Forster  
City of Gold Coast



## Balaam Hills, Lockyer Valley Facilitated Natural Regeneration



2013



2023

Restoration carried out by Ecosure



## Facilitated Natural Regeneration



2018



2023

Restoration carried out by Ecosure



## Facilitated Natural Regeneration Wide Bay



2018



2023

Restoration carried out by Ecosure



## Facilitated Natural Regeneration Brisbane



2014



2020

Restoration carried out by Ecosure



## RDA Discussion Paper Feedback

Use this form to provide your feedback on the [Draft Restoration Decade Alliance \(RDA\) Discussion paper - to attain a national approach for nature positive restoration in Australia](#). To contact the RDA please email: [admin@restorationdecadealliance.org](mailto:admin@restorationdecadealliance.org)