



Granite2Goulburn

LANDSCAPE IMPACT PROGRAM



The Ian Potter
Foundation



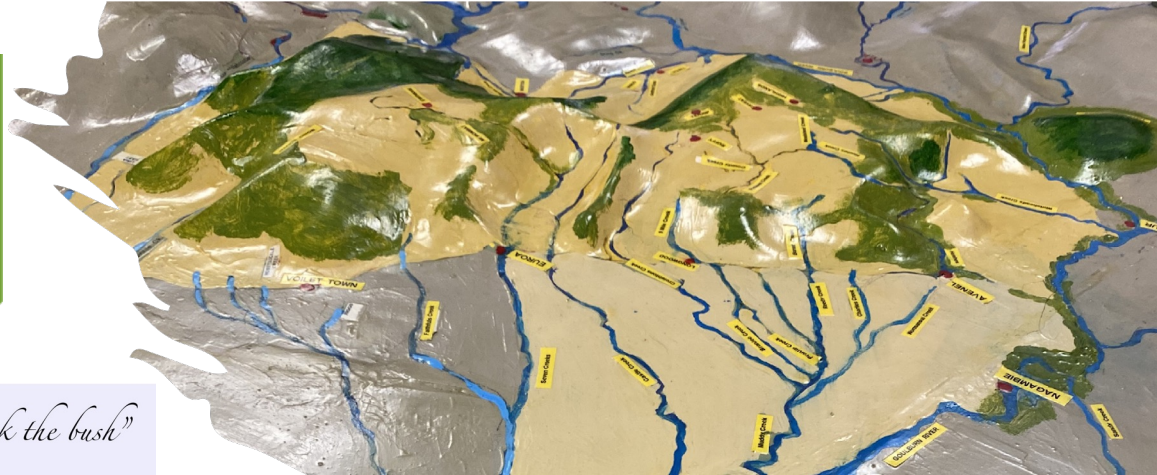
Landcare
Victoria



NATURAL
RESOURCES
CONSERVATION
TRUST

The G2G group

- Hughes Creek Catchment Collaborative Landcare Group
- Longwood Plains CMN
- Strathbogie Ranges CMN
- Euroa Arboretum (as seen on Gardening Australia)



EUROA ARBORETUM *"growing back the bush"*



G2G

Key Partners

AUSTRALIAN NATIONAL UNIVERSITY,
SUSTAINABLE FARMS TEAM

GOULBURN BROKEN CATCHMENT
MANAGEMENT AUTHORITY

TAUNGURUNG LAND AND WATER COUNCIL

CENTRAL VICTORIAN BIOLINKS ALLIANCE

TRUST FOR NATURE

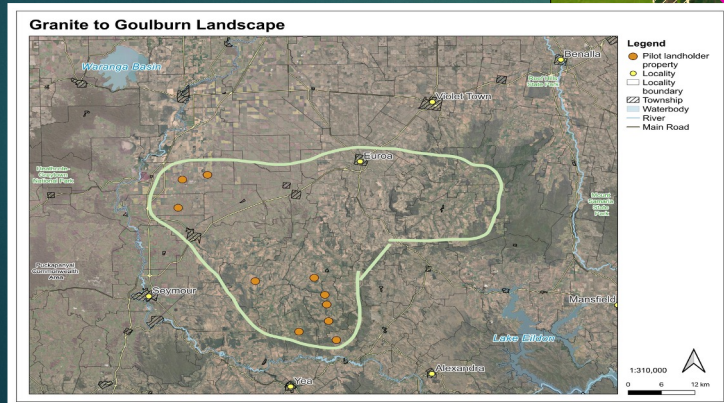
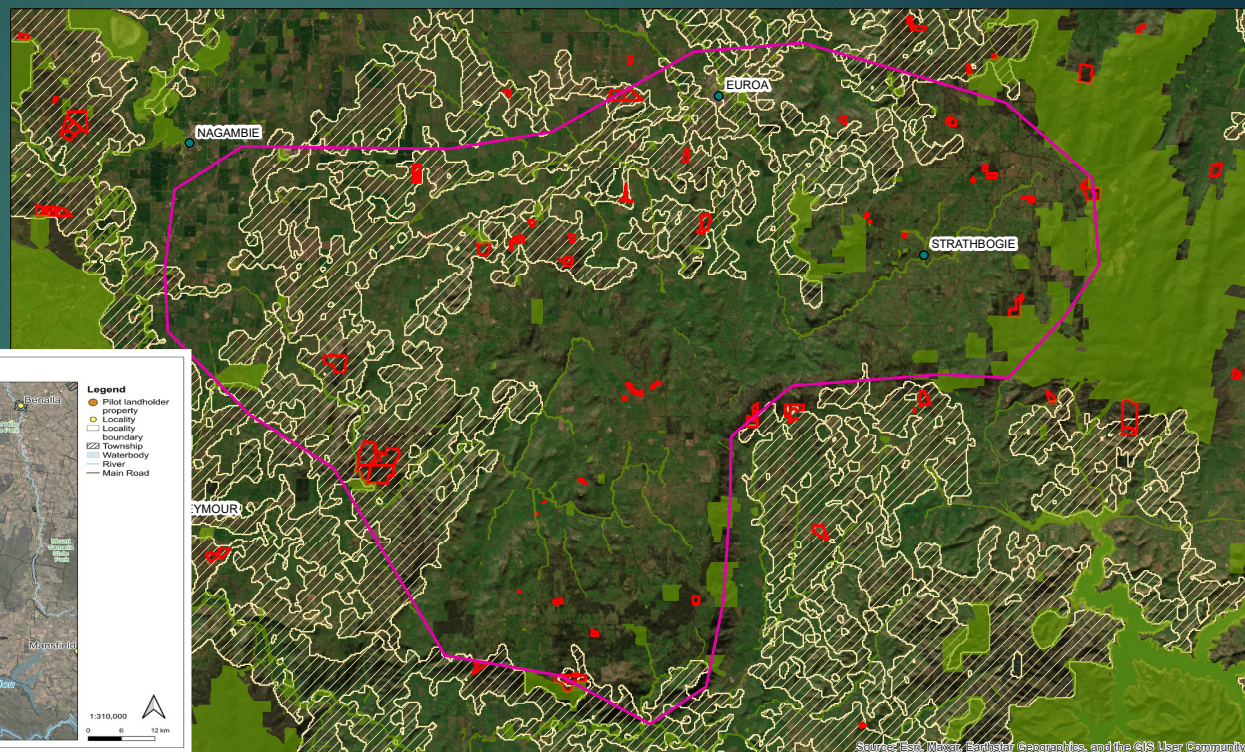
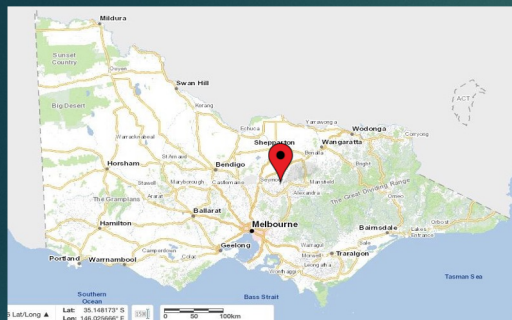
STRATHBOGIE SHIRE

Cultural partnership

- **Country is heard**
- Knowledge healing and knowledge sharing
- Holistic Taungurung view; biocultural approach to landscape
- Walking country with Taungurung people
- Storytelling



The G2G Landscape



Unique characteristics

The Goulburn catchment connects everything
Granite creeks, wetlands, springs, soaks and bogs
= giant SPONGE

Rich indigenous cultural heritage and presence
Native endangered species

Remnant BGGW in the Longwood Plains

Strong and cohesive grass-roots community

Aesthetics of granite outcrops



Threatened Species

Threats

- Ongoing land clearing
- Essential habitat destroyed
- Lack of connectivity – species isolated
- Broad acre farming
- Feral animals
- Weed invasions

Species

- Koala
- 42 birds (Gang Gang cockatoo)
- 11 mammals (Southern Greater Glider)
- 8 amphibians
- 4 fish
- 4 reptiles

Current Key priorities

- Macquarie Perch
- Greater glider
- Platypus



Photo credits: Peter B Kraehenbuehl, Neil Armstrong, Bert Lobert

TIMELINE OF G2G LANDSCAPE IMPACT PROGRAM



February

April

May

June

August

Sept-Nov

Field day,
Project Team meeting
Feb 14th

Kick-off Session,
April 23rd

- Carbon Emission Calculator with Pilot 10
- Community mapping session and field trip May 28th

- Co-design 1 June 11th
- Co-design 2 June 25th

Investors session
Aug 8th

Launch of G2G
Landscape investment
and action plan



Intervention Priorities

Biodiversity

- Linking corridors for habitat connectivity
- Restoring Box Gum Grassy Woodland community
- Protection of habitat for endangered species

Carbon sequestration

- Improved agricultural soils (soil C)
- Above ground revegetation

Water management

- Waterways as connectivity
- Extending/linking riparian zones
- Slowing water and improving water quality

Why Invest at Landscape Scale?

Maximize Impact

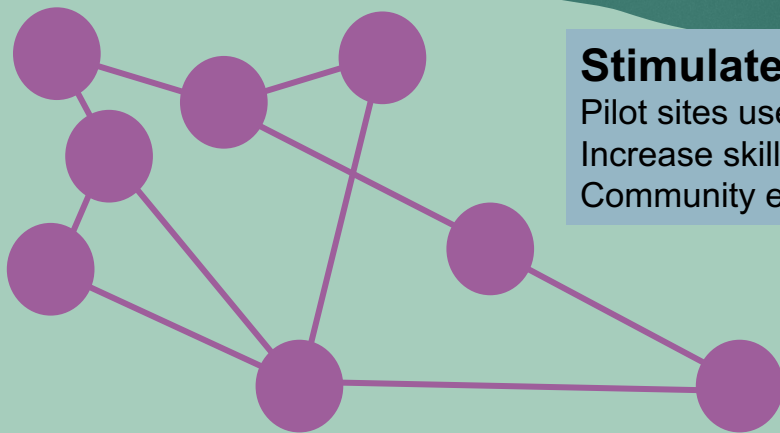
Coordinated interventions produce greater impact
Focus on linkage of corridors and riparian zones
Prioritization of resources

Stimulate broader adoption

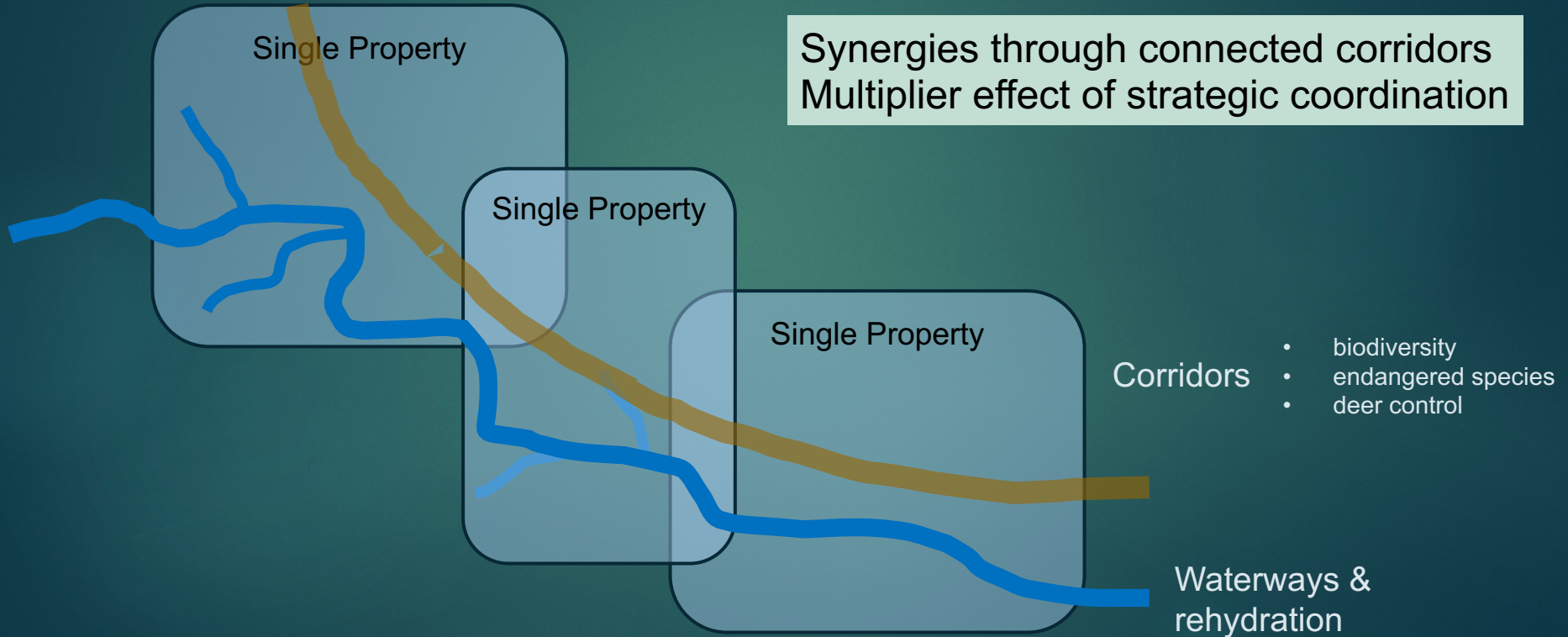
Pilot sites used to pave the way for others
Increase skills and expertise through field days
Community engagement

Maximize value for landholders

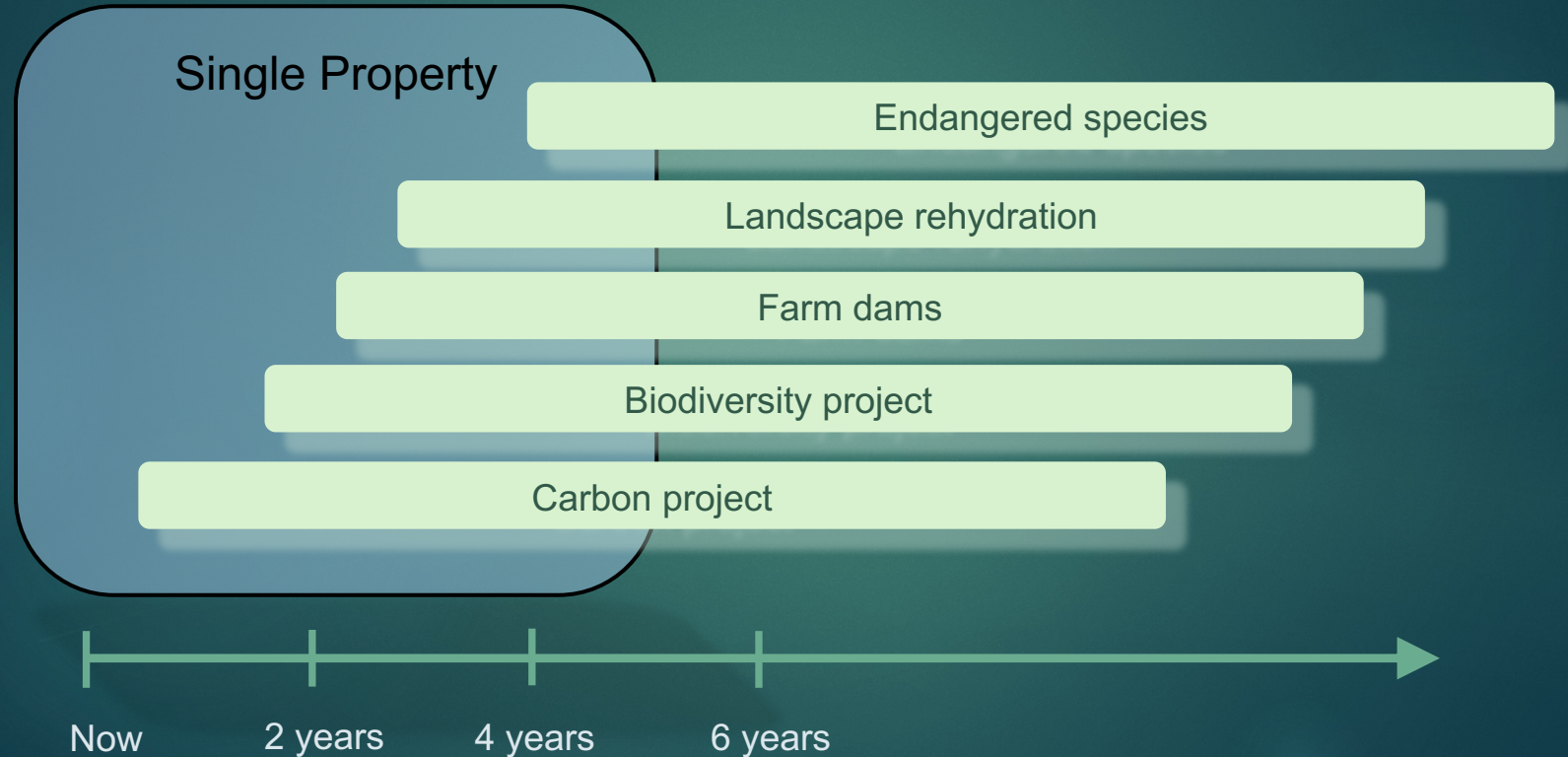
Aggregation reduces project/transaction costs
Insetting opportunities through co-branding
More compelling for impact investors



Horizontal stacking (Landscape)



Vertical Stacking (Property)



How Will We Do It?

Interventions

- Wire and Water
- Exclusion fencing
- Add vegetation
- Changed practices

Funding Project Type

- Soil Carbon
- Environmental Plantings Carbon
- Box Gum Woodland Credits
- Farm Dams
- Landscape Rehydration Credit
- Native Animal Credits (Glider)
- Native Aquatic Animal (Platypus and Perch)

Outcomes/improvements

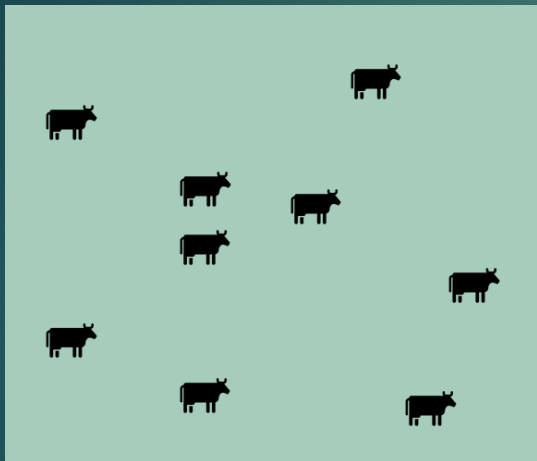
- Biodiversity
- Carbon Sequestration
- Landscape rehydration
- Farm profits



Changing Practice

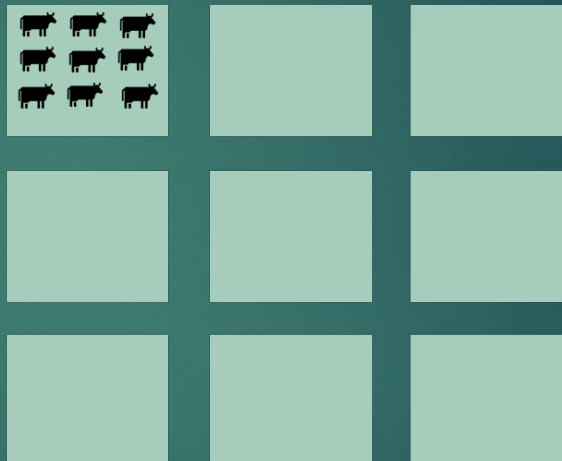
Set Stocking

No rest, selective browsing



Rotation to manage rest

Most paddocks in rest
Move to drive plant growth

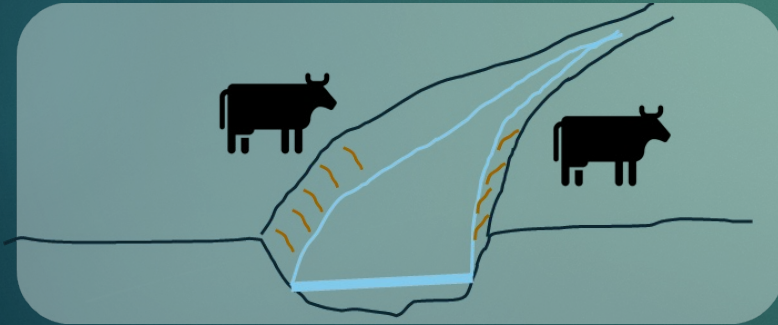


100% groundcover
Multi-species perennial pastures
Deeper roots, increased biomass/soil-C

Exclusion Fencing and Vegetation

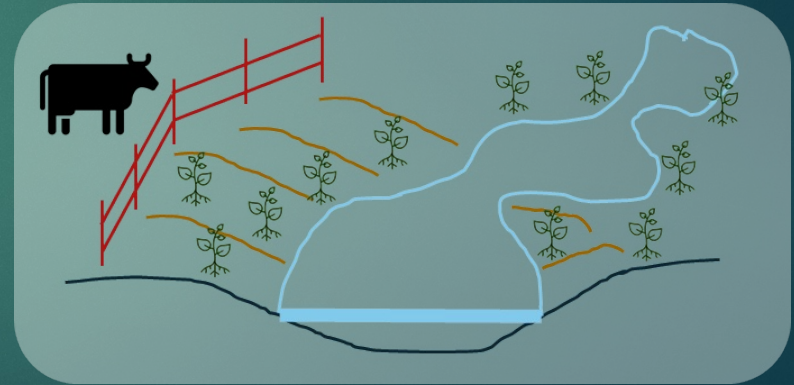
Degraded riparian area

Deep narrow channels
Poor water retention/quality



Hydrated landscape

Revegetation, excluded stock,
Improved landscape function





Land Mgmt Units

Open/Cleared Grazing

Sparse Trees (Paddock trees)

Wooded Grazing

Wooded non-grazing

Riparian

Farm Dam

Potential funding opportunities

Land Management units

Project type and timeframe

	Soil-C	Env. planting	Box gum woodland	Farm Dam	Landscape rehydration	Native Animal
Cleared/grazing						
Sparse tree paddock						
Wooded grazing						
Wooded non-grazing						
Dams						
Riparian						

Potential \$

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Now

~2 Years

3-5 Years

Expert Input

- ↯ Sustainable Farms: Michelle Young, Angelina Siegrist, ANU
- ↯ Farm dams emissions: Martino Malerba, Blue Carbon Lab, Deakin Uni
- ↯ Riparian and wetland ecology: Ashley Sparrow, Arthur Rylah Institute
- ↯ River health: Christine Glassford, GB CMA
- ↯ Native fish: Tim Curmi, Native Fish Australia (Macquarie Perch)
- ↯ Greater gliders: Bert Lobert, Ecologist at Strathbogie Ranges CMN
- ↯ Birdlife: Chris Tzaros, conservation manager at Birds Australia
- ↯ Soil Health: Declan McDonald, RegenSoils
- ↯ Landscape rehydration: Jono Forrest, Mulloon Institute



Measurement considerations

We have good baseline data for the landscape

- ❖ Soil sampling (landscape monitoring and ACCUs)
- ❖ Stocking data and production yields
- ❖ Water quality: dams and creeks, Waterwatch data
- ❖ Water quantity
 - Strathbogie Groundwater Project (2018+), monitoring bore water levels
- ❖ Erosion monitoring
 - Sand slug in Hughes Creek
- ❖ Remote sensing for vegetation/habitat
- ❖ Biodiversity surveys
 - BirdCast, ANU
 - Annual fish surveys in Sevens Creek and Hughes Creek, endangered and threatened fish spp.
 - Local historic data: Chris Tzaros (birds), Bert Lobert (gliders), Koalas
 - Citizen science: monitoring of mammal and nocturnal bird fauna of the Strathbogie Forest, data for 2014-2020 (SRCMN)
- ❖ Pest and weed monitoring



Known Gaps and Blockers for Co-design

Biodiversity/nature repair markets are still immature; 2 years away?

- What do we do in the meantime?

Smaller property sizes will require new aggregation models

Big up-front investments are required:

- Wire and water infrastructure
- Soil baseline sampling (eg ACCUs)
- Environmental planting costs
- Earthworks for landscape rehydration

Practice change

- Significant education/training required
- Inertia to change & pathway dependency
- Local showcase sites are critical

Landowners sensitive about long-term covenants (25 years)

Yet to engage the very large landholders

A scenic landscape featuring a large, gnarled tree on the right bank of a calm body of water. A large, fallen log lies horizontally across the middle ground, partially submerged. The background is filled with a dense line of green trees under a bright blue sky with scattered white clouds. The water reflects the sky and the surrounding vegetation.

Discussion