

# A Fighting Chance

Advances in invasive predator control deliver landscape scale benefits for post-fire threatened species recovery



Kangaroo Island dunnart  
(*Sminthopsis fuliginosus aitkeni*)  
Image: Martin Stokes



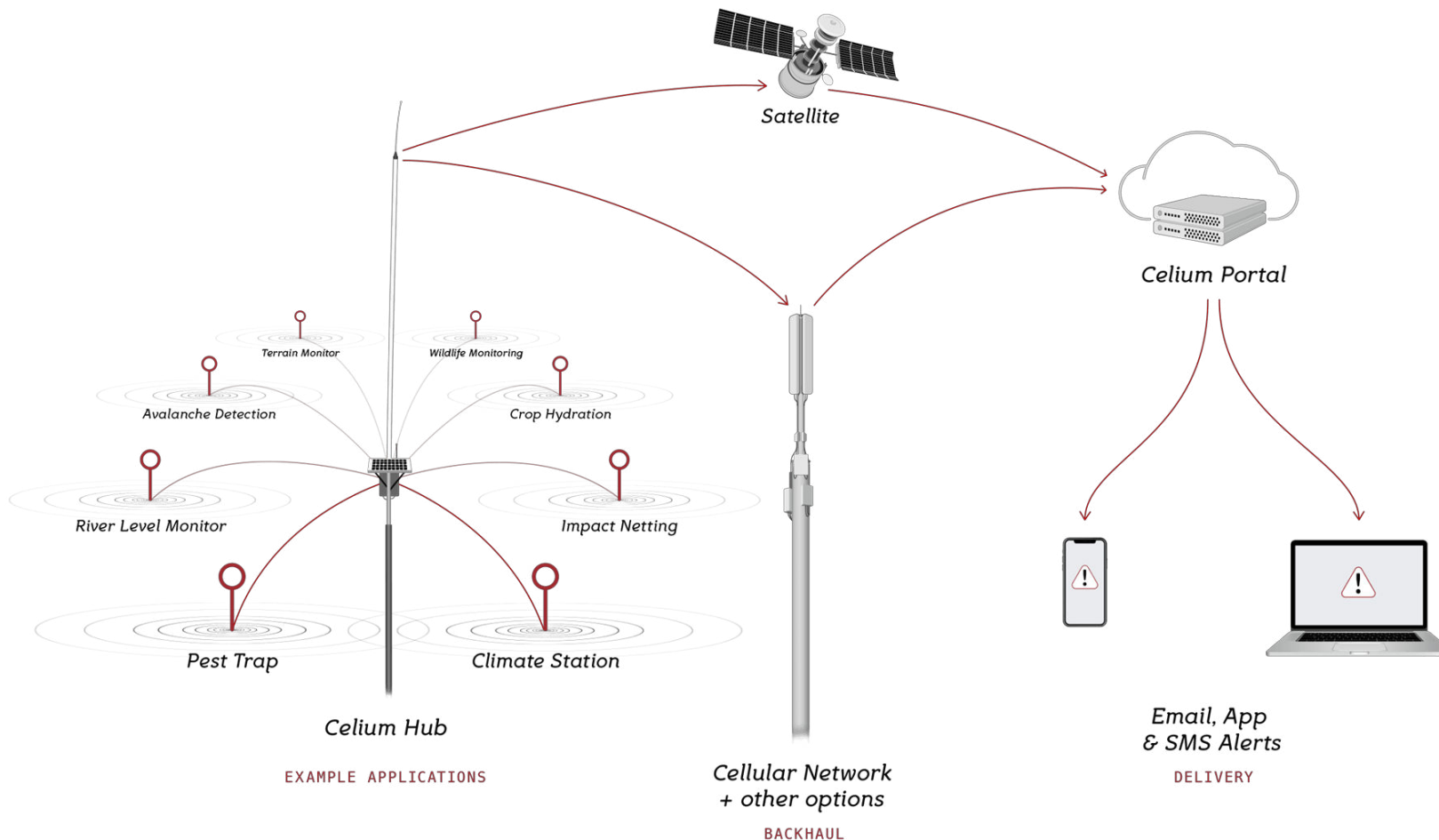
# Reducing feral cat predation

- 117,000 ha
- > 60,000 trap nights
- > 1,400 feral cats removed in 3 years

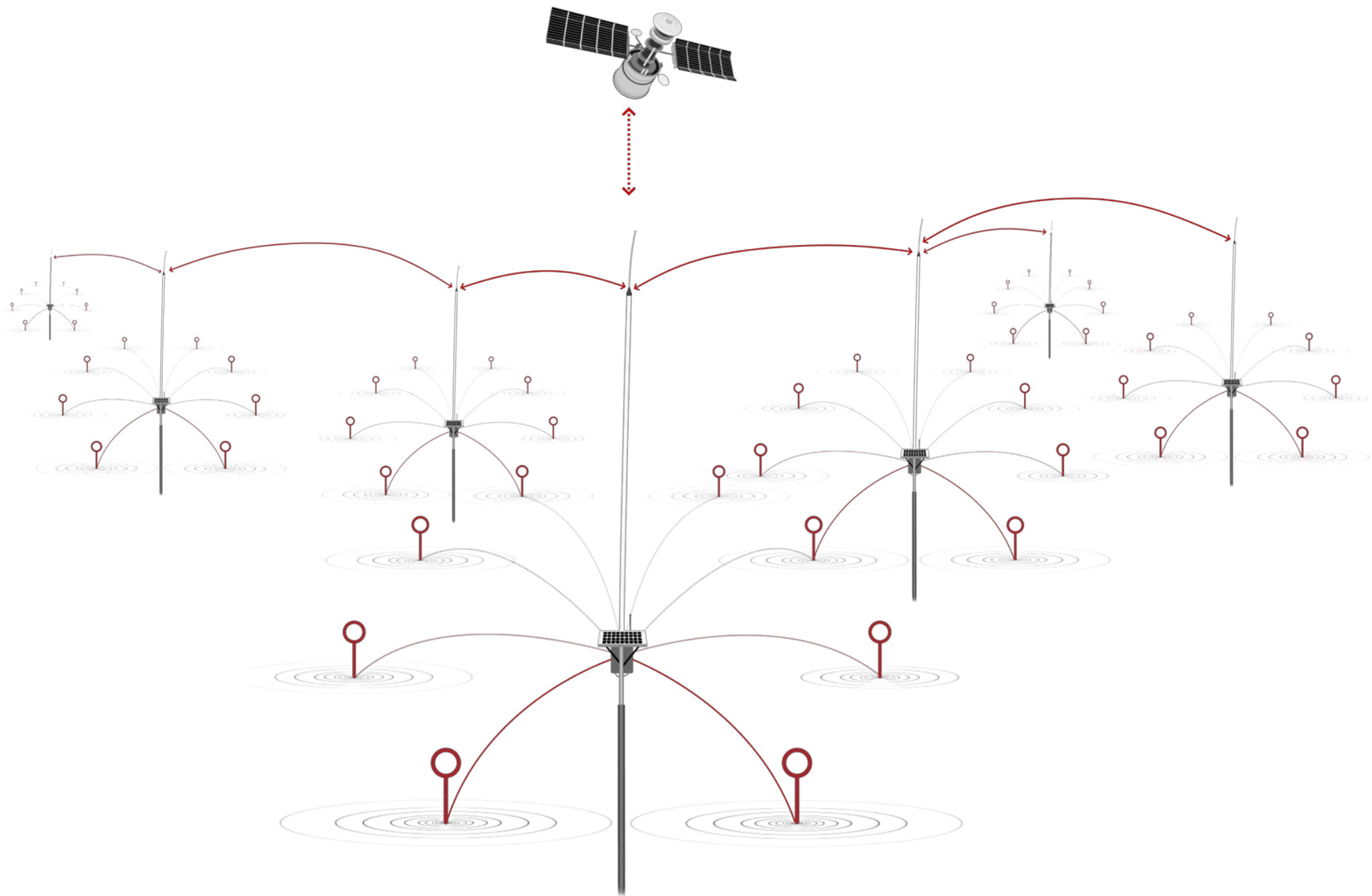


# Improving trap efficiency

- Encounter Solutions 'Celium' technology
- Wireless (VHF) network
- Extremely efficient (low power and long range) across rural and remote landscapes

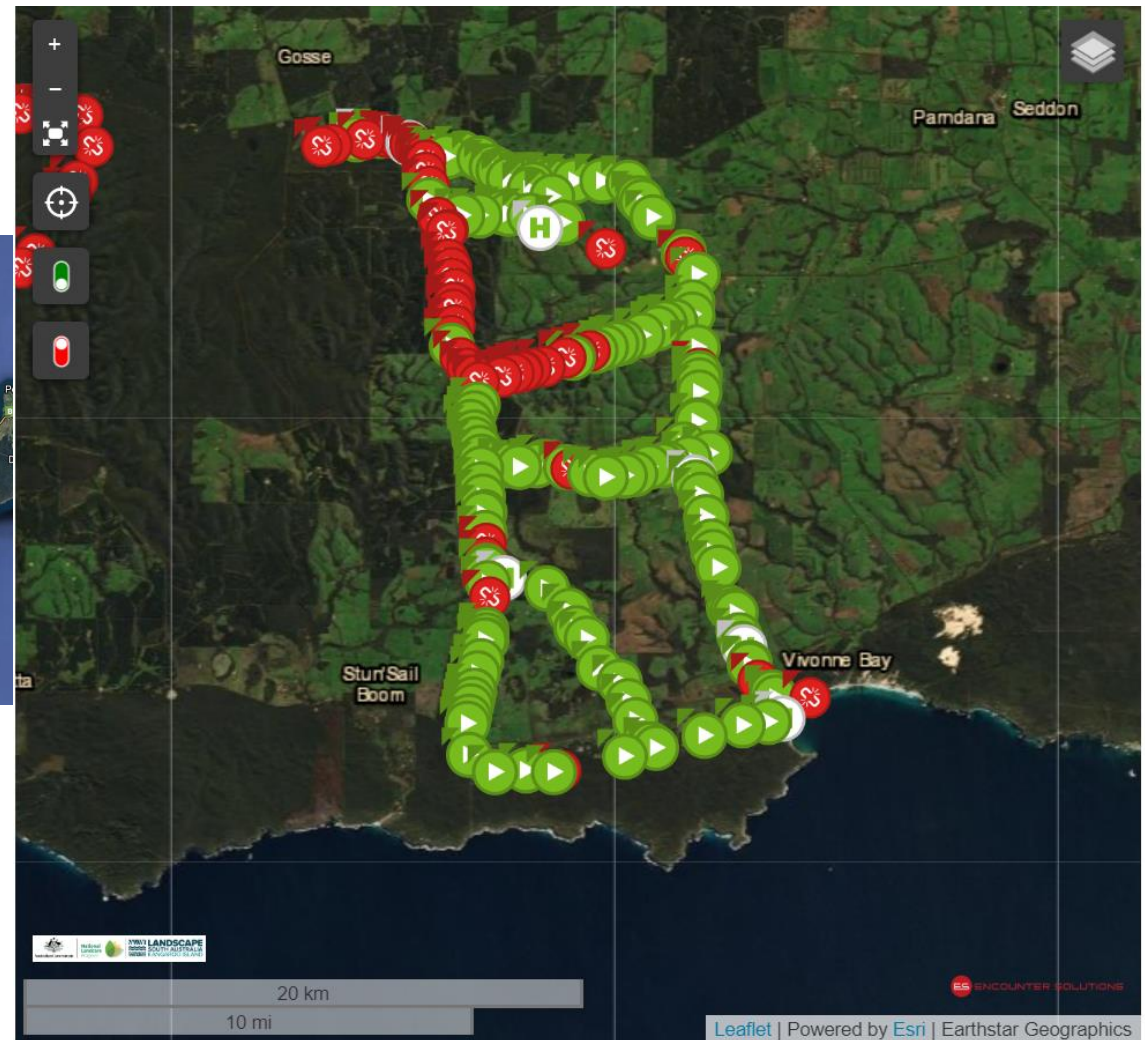






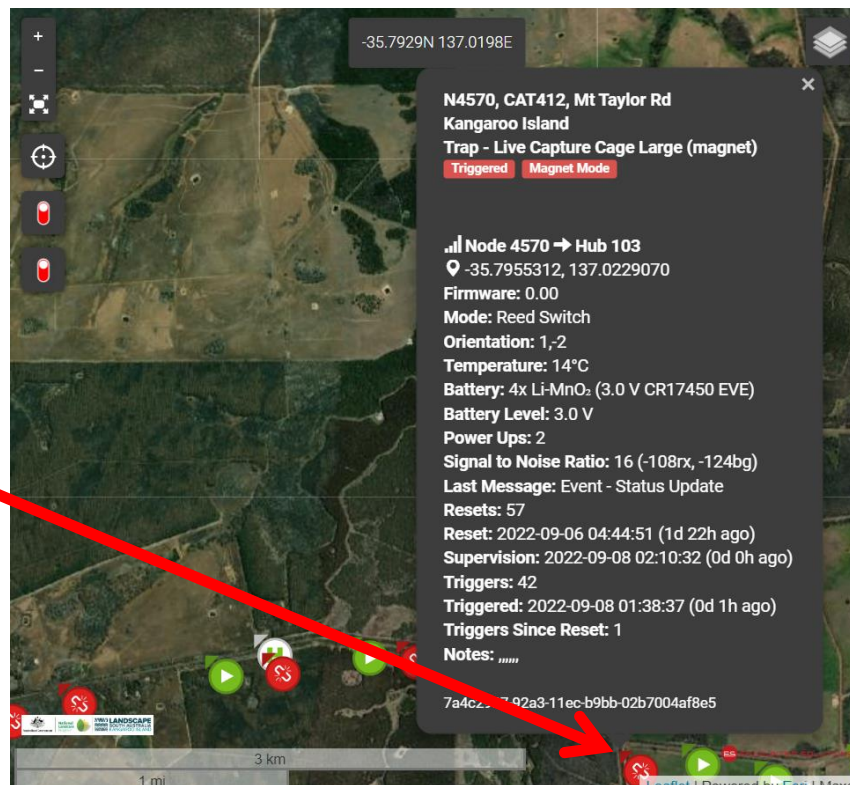
# Measuring performance

- 180 traps over 17,000 ha
- 2 week trial, checking all traps
- Second 2 week trial, using Celium



# Results

	Trial 1	Trial 2
Trap nights	1,324	2,287
Triggers	100%	354
Cats captured	47	33





# Benefits

- Traps open 80% of the time when checked manually
- 70% reduction in time and effort
- 43% reduction in vehicle km travelled daily
- Improved animal welfare outcomes





# How this measures up

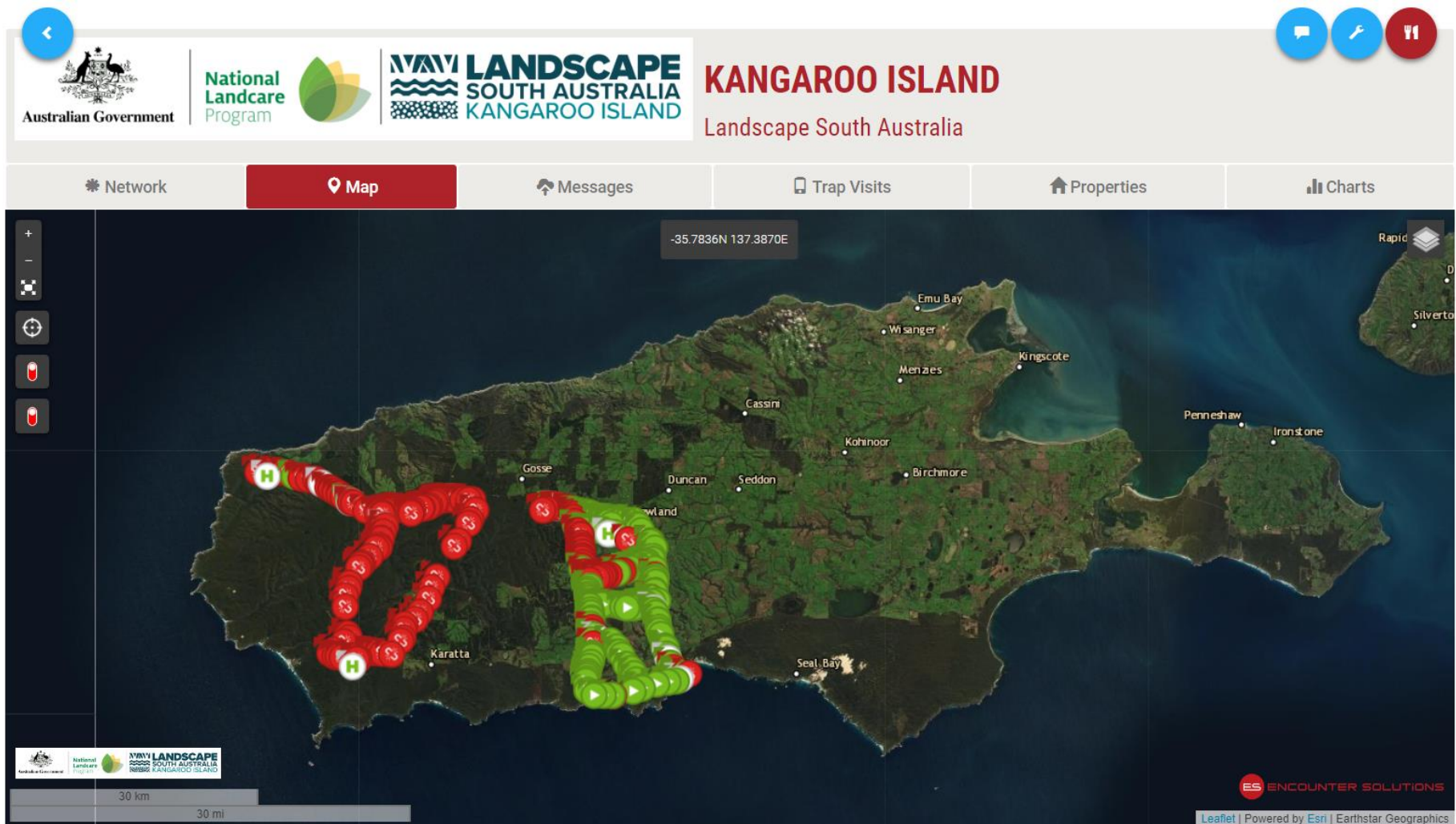
- Return on investment for a 12 month program
- Cost-benefit analysis indicated a 36.2% decrease in cost
- ROI in less than 6 months





# Making the most of these efficiencies

- Expanded network to 88,000 ha, connecting > 300 traps
- In first 15 weeks, 200 feral cats removed
- Collaboration and engagement = effective landscape scale control



# Indicators of recovery and persistence

- Post-fire island-wide surveys replicated across 280 sites
- KI dunnarts detected at 101 sites

2020 – 2021                      2022

Time to detection (nights)                      25.5                      7.3

Frequency of detection (50 nights)                      2.3                      4.6

Changes in occupancy (no. sites detected)                      50%                      68%





**WAV LANDSCAPE**  
**SOUTH AUSTRALIA**  
**KANGAROO ISLAND**

Thank you

Paul Jennings – KI dunnart project manager

Chantelle Geissler – Feral cat project officer

Joe Donaldson – Feral cat field officer

Kelly Gledhill – KI dunnart project officer

Hannah Byrne-Willey – KI dunnart field officer

Simon and Kate Croft – Encounter Solutions

This recovery project is supported through the Australian Government's, Environment Restoration Fund, Wildlife and Habitat Bushfire Recovery Program and Landcare Led Bushfire Recovery Grants.

