



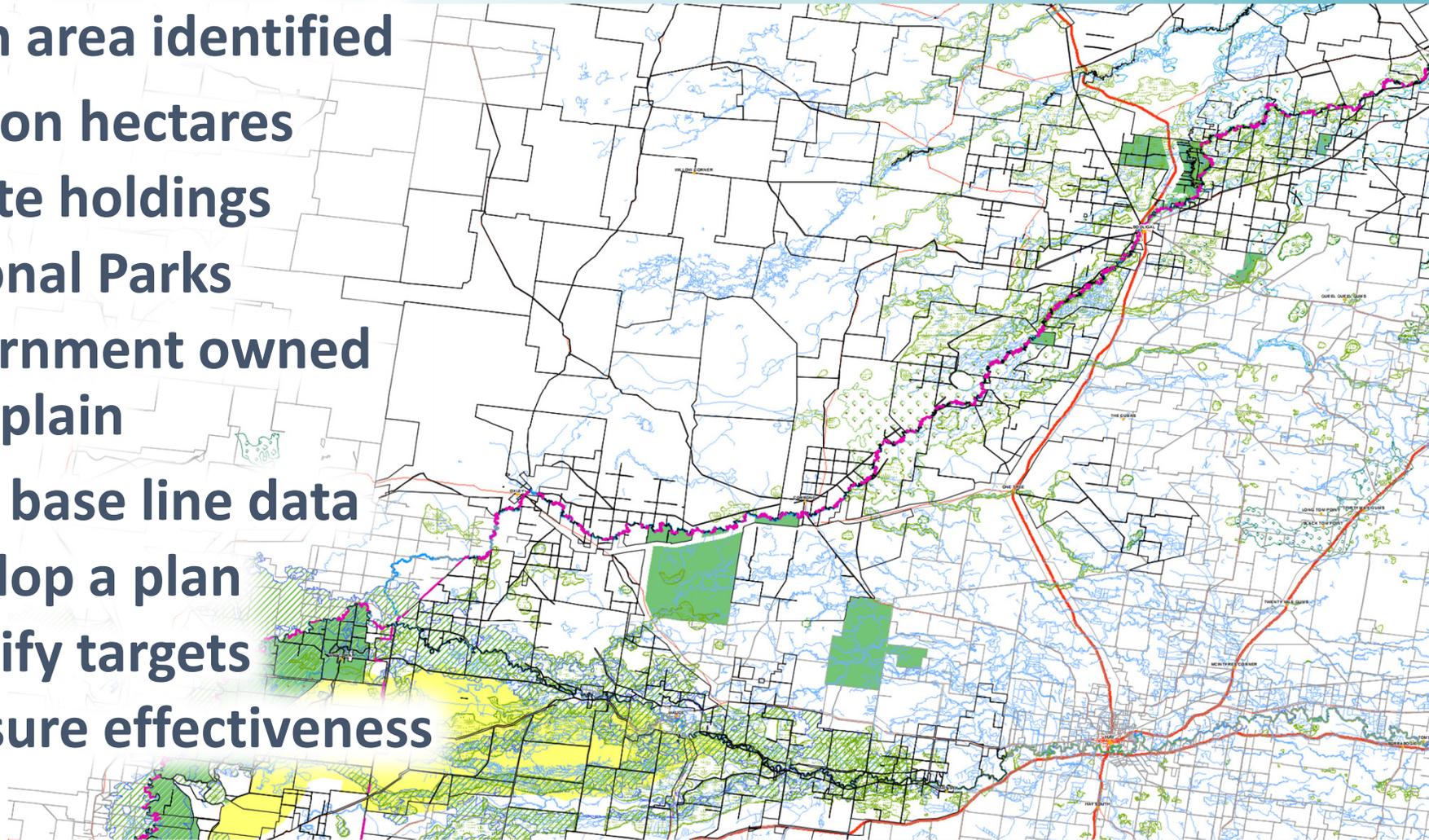
Local Land
Services
Riverina

Western Riverina Pig Project To Count or Kill Pigs? That is the Question

Suzie Holbery, Michael Leane, and Ray Willis

Western Riverina Pig Project -WRPP

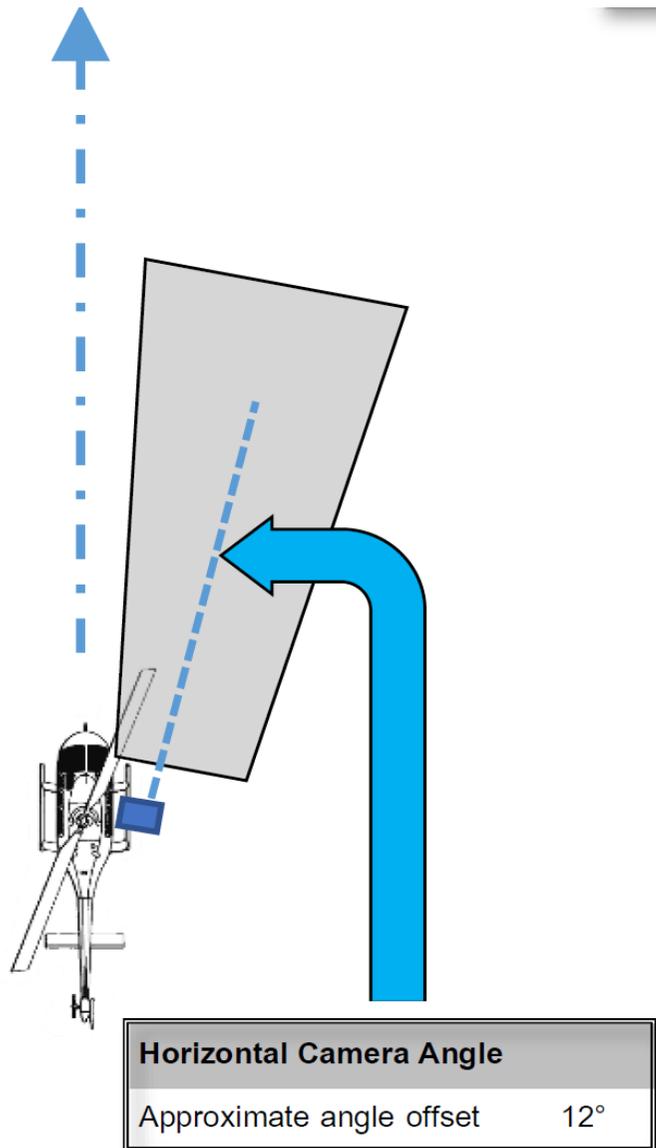
- Problem area identified
- 1.3 million hectares
 - Private holdings
 - National Parks
 - Government owned floodplain
- Needed base line data
 - Develop a plan
 - Identify targets
 - Measure effectiveness



Landscape of the region

- Flat
- River red gums
- Flood plain
- Lignum swamps
- Saltbush plains





Suspended Mount Damper

Ken-Lab KS8 Mechanical Gyro

Sensor Platform Tilt Adjustment

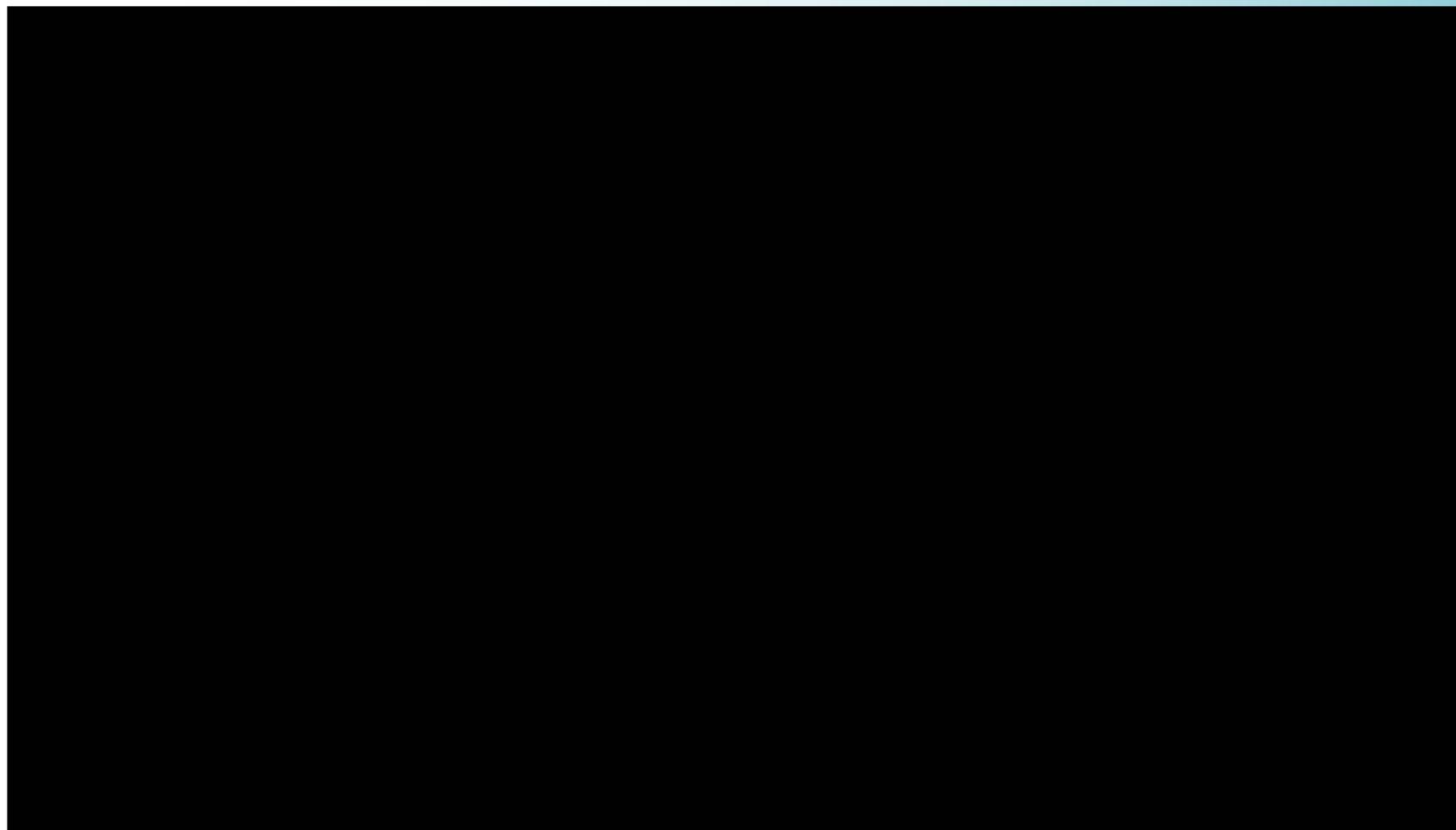


Sony 4K Camera

Jenoptik HD1024 Thermal Camera

Ken-Lab KS8 Mechanical Gyro

IR thermal & 4K video



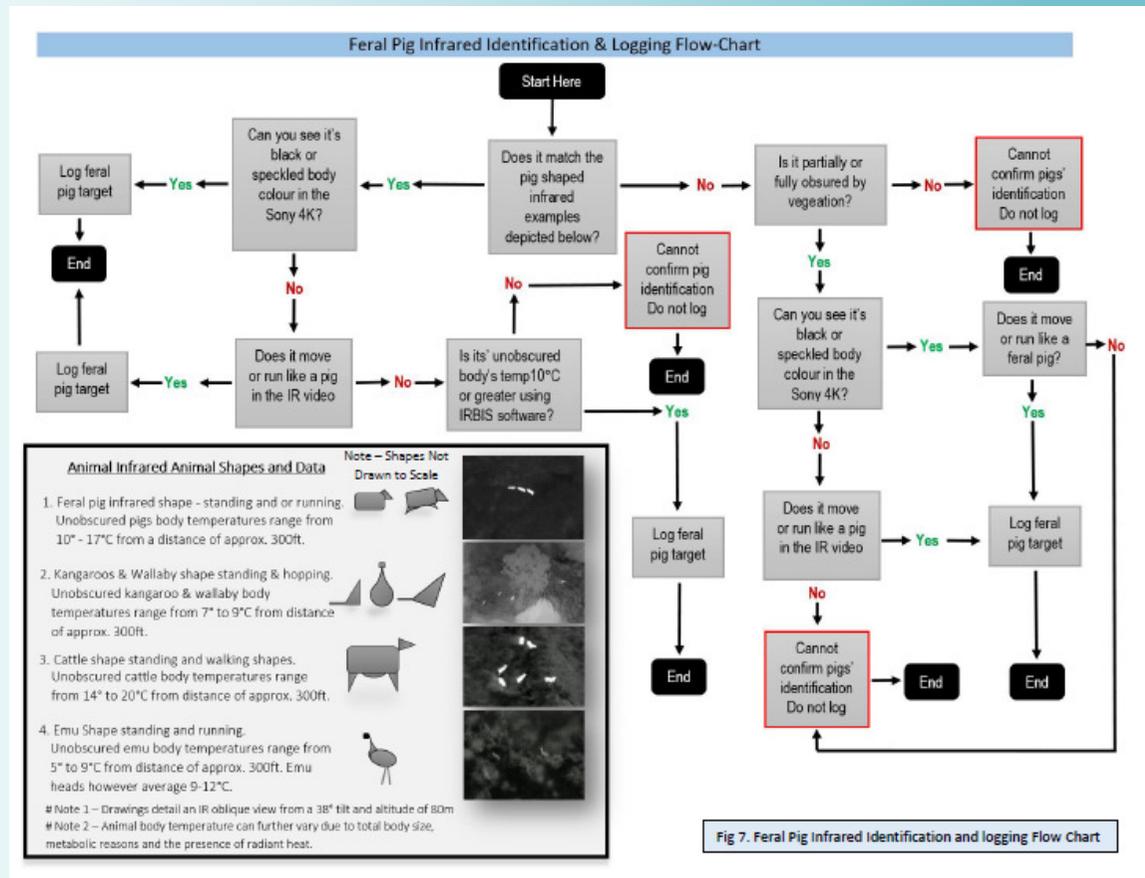
Analysis

1. Animal shape

2. Temperature

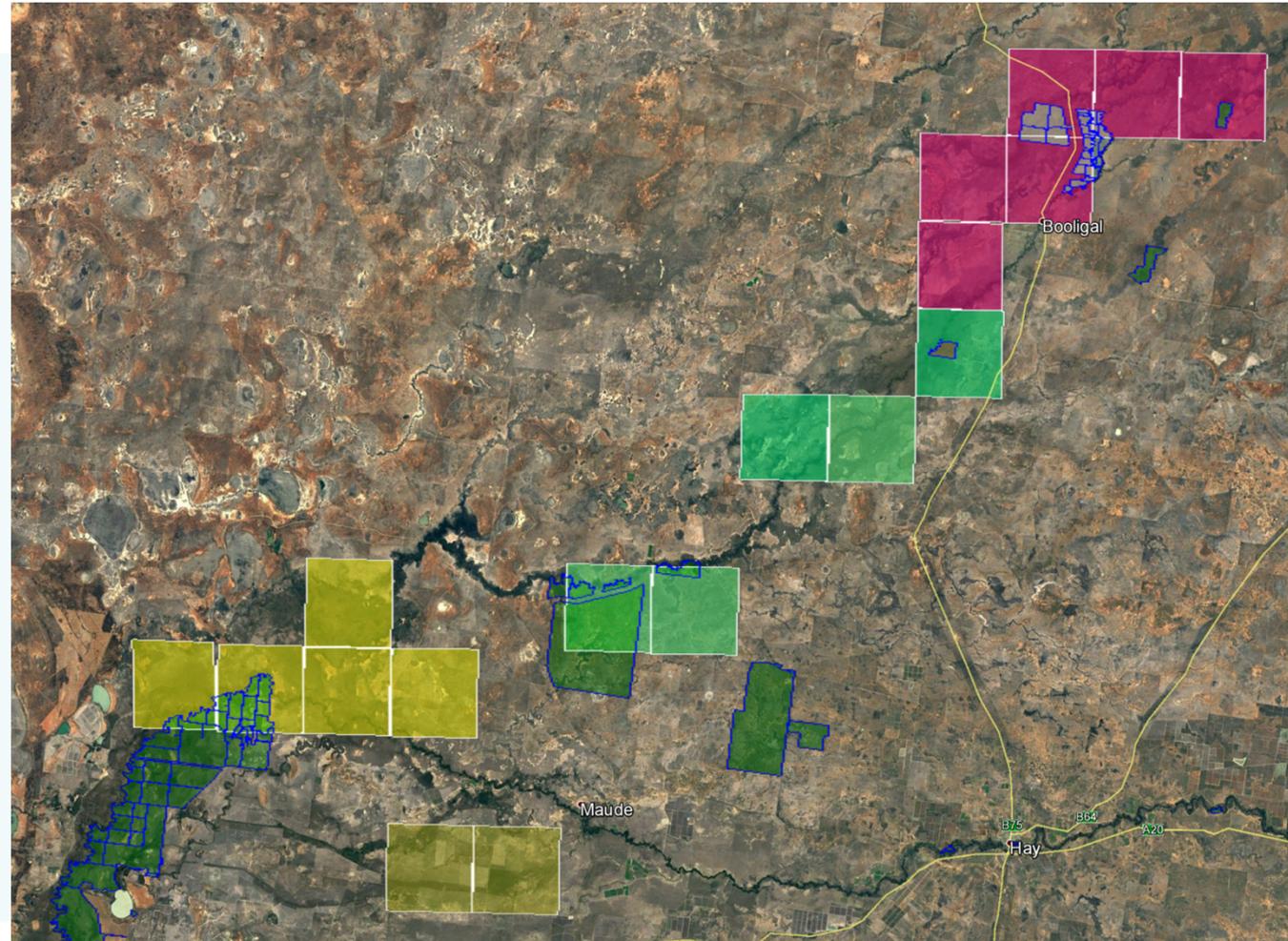
3. Style of movement

4. 4K video imagery



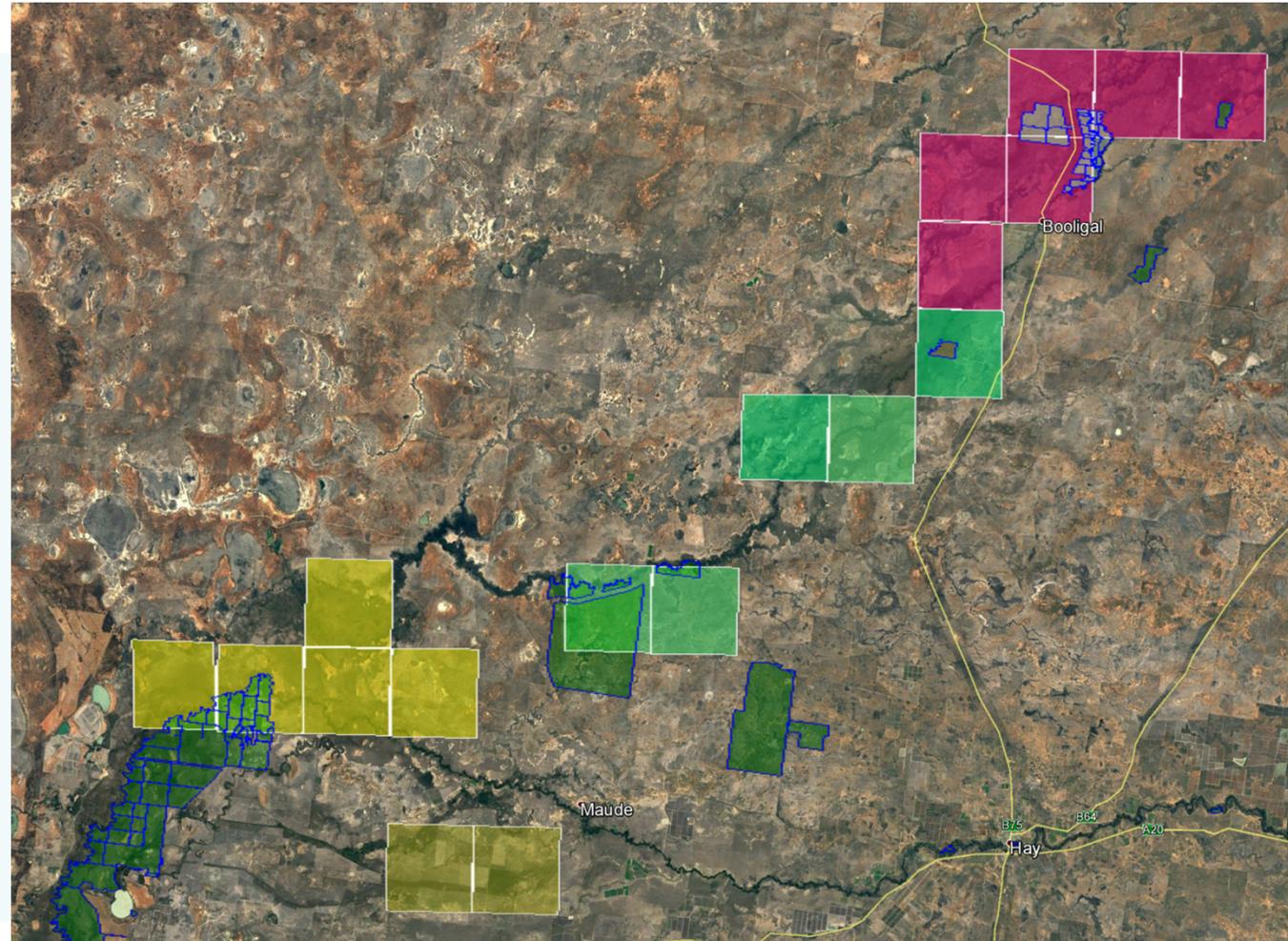
Results 2016

- 18 Blocks (10km x 10km = 10,000 ha)
- 582 ha per block, or 10,476 ha total survey
- 487 pigs spotted over 18 blocks
- 1 pig per 21 hectares



Results 2017

- 18 Blocks (10km x 10km = 10,000 ha)
- 582 ha per block, or 10,476 ha total survey
- 923 pigs spotted over 18 blocks
- 1 pig per 11 hectares



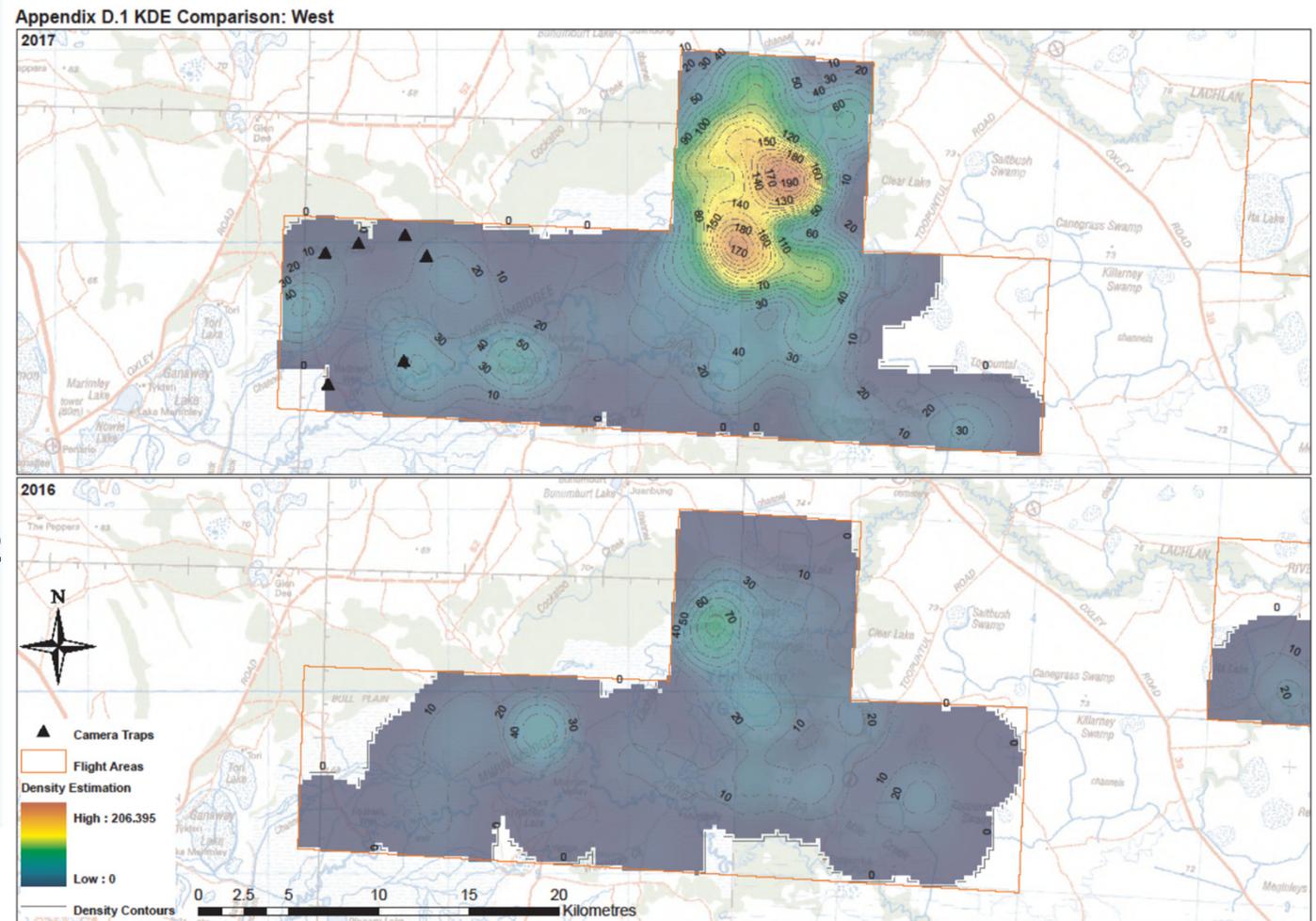
What Did We Achieve

- **Approx 10,000 pigs culled between surveys**
- **Despite control pig numbers doubled**
- **Good data – needed better analysis**
- **Need population & density modelling**
- **Contracted Ecolknowledge to further analyse data**



Further Results – Same Data

- Survey methodology scientifically valid
- Used two different sampling methods to confirm numbers
- Pig density & abundance model-23 000 @206 pigs km²
- Population trend figures-2.77 increase – 2m in 5 yrs
- Required cull numbers for effective control -16 000



Actions

- Identified “hotspots “ to be targeted for control
- Accessed State & Federal \$
- Correspondence with land managers
- Proof that current control not effective
- Participate for free or compliance at your cost
- Undertaking or Direction



WRPP – Count or Kill

- Need to count before you kill
- Governs where and how many
- Effectiveness of control
- Cost of different methods
- Overall cost of control
- Are you as a pest manager doing a good job.





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Funding provided through the 2015-16 & 2017-18 Pest and Weed Drought Funding Program



Australian Government

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