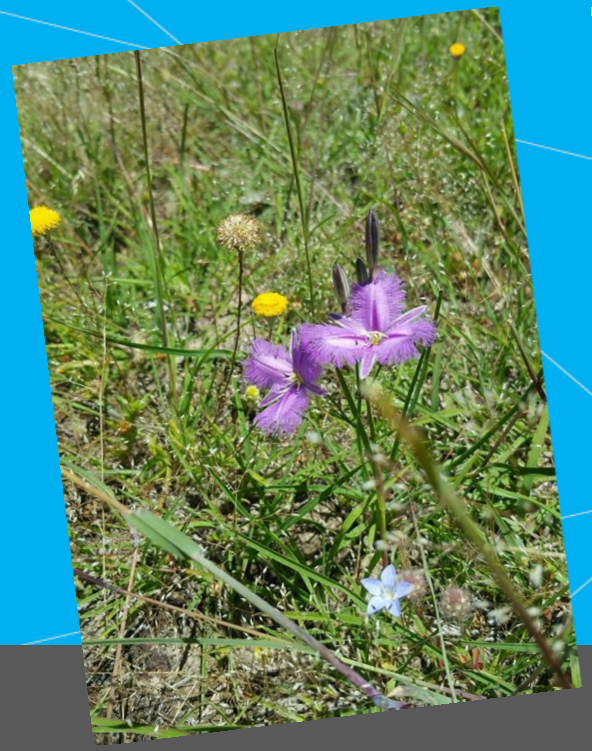
Simple Management Tools to Solve Complex Restoration Puzzles

Grassland, Moths, Cows and Weeds

Alexi Williams
ACT Parks and Conservation Service
Environmental Offsets



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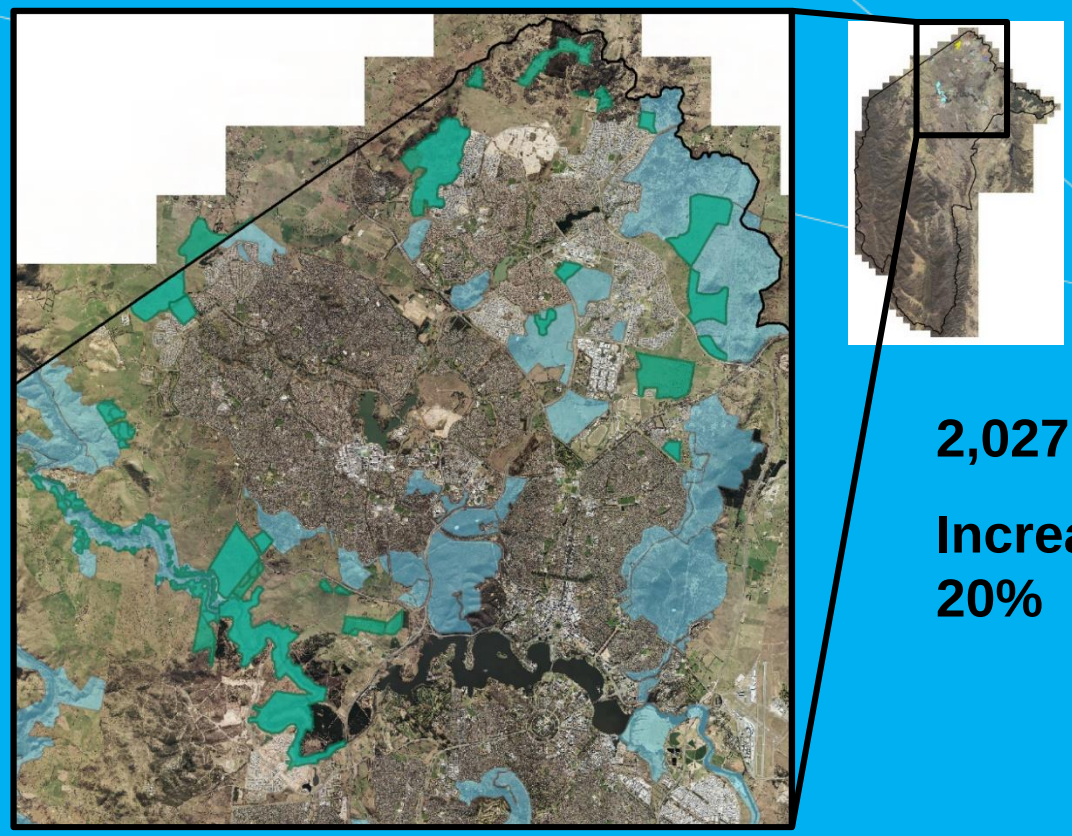
Environmental Offsets



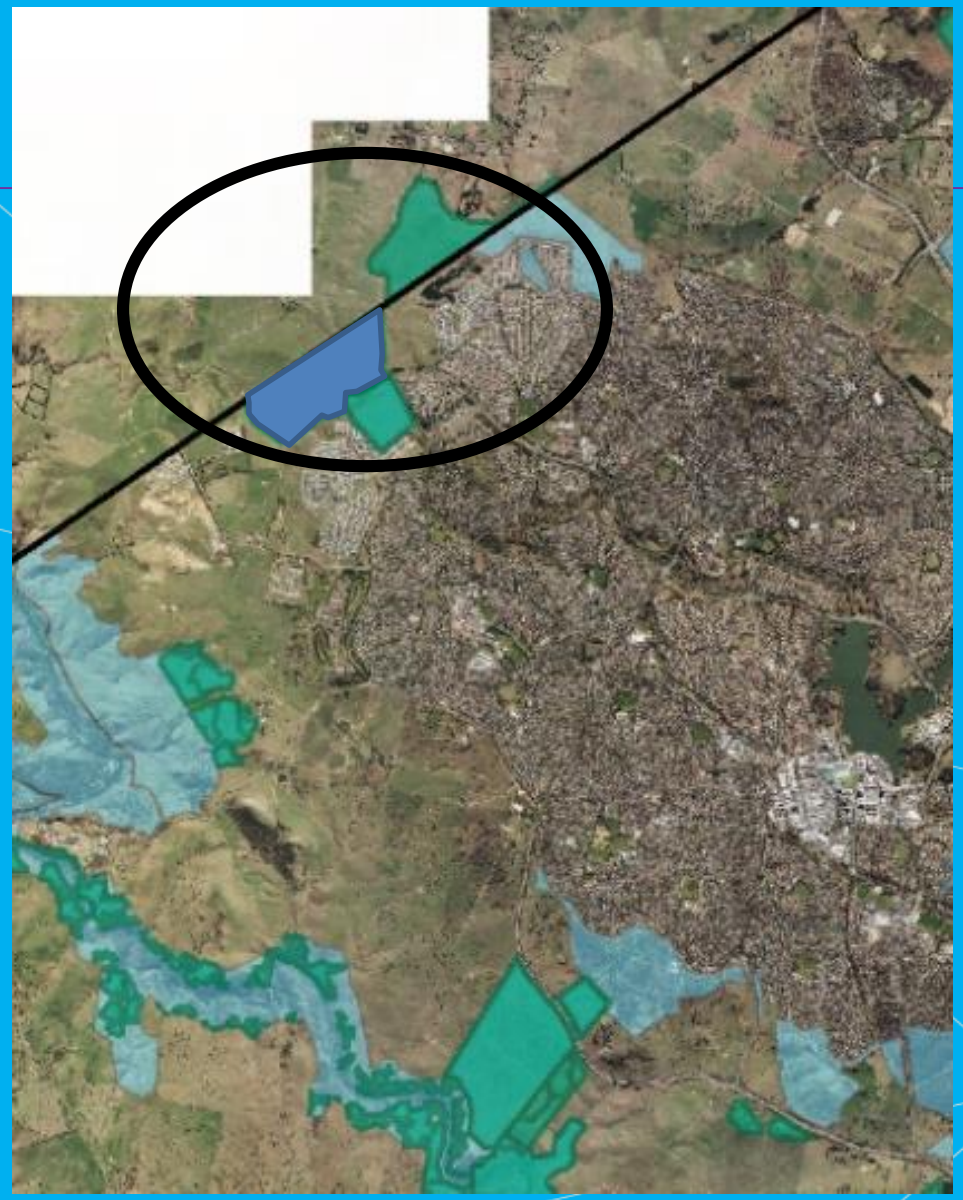
2,027 ha of approved offsets

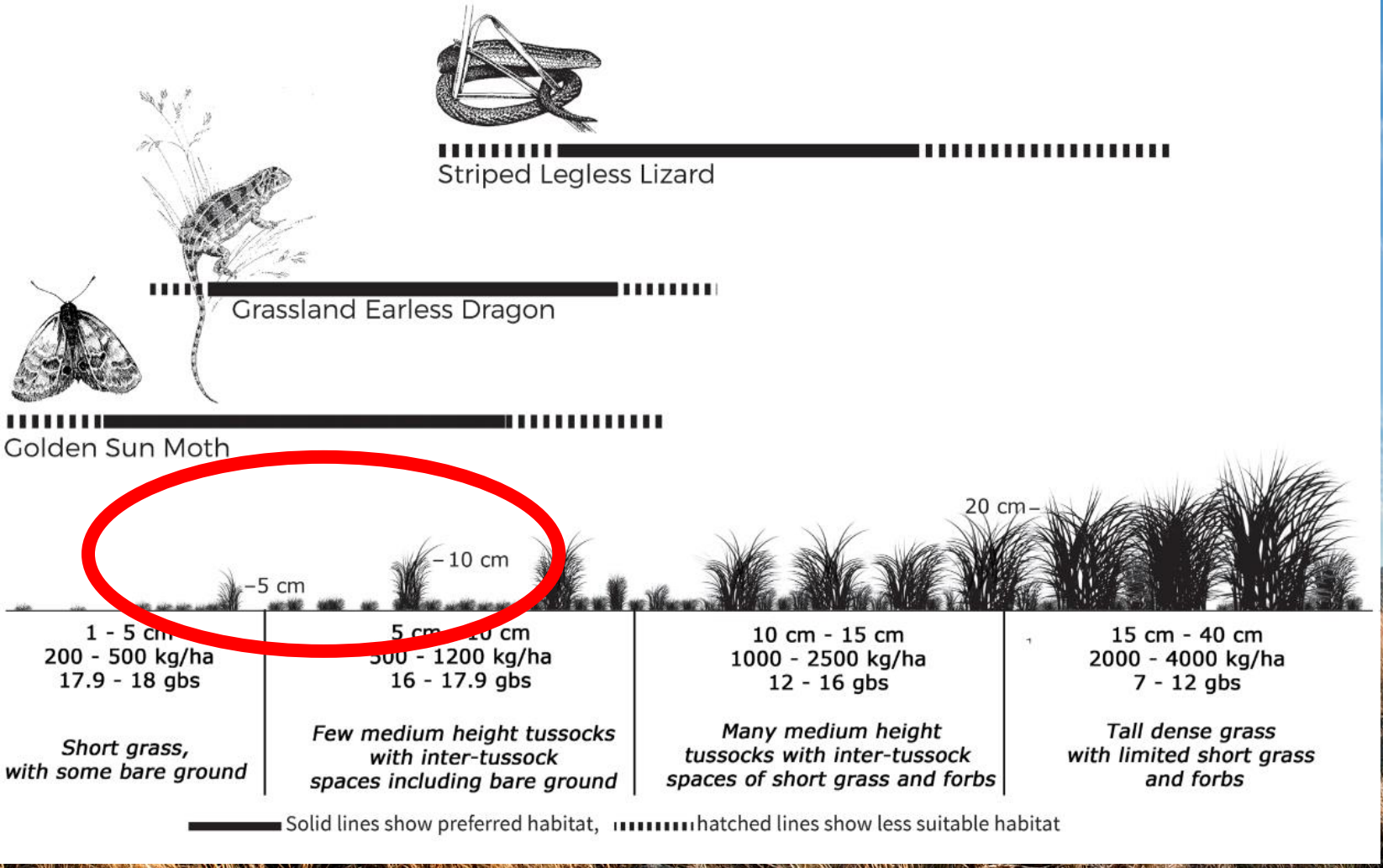
Increasing Canberra Nature Park by nearly 20%

Environmental Offsets

Jarramlee 112 ha

Part of the Gooromon Grasslands





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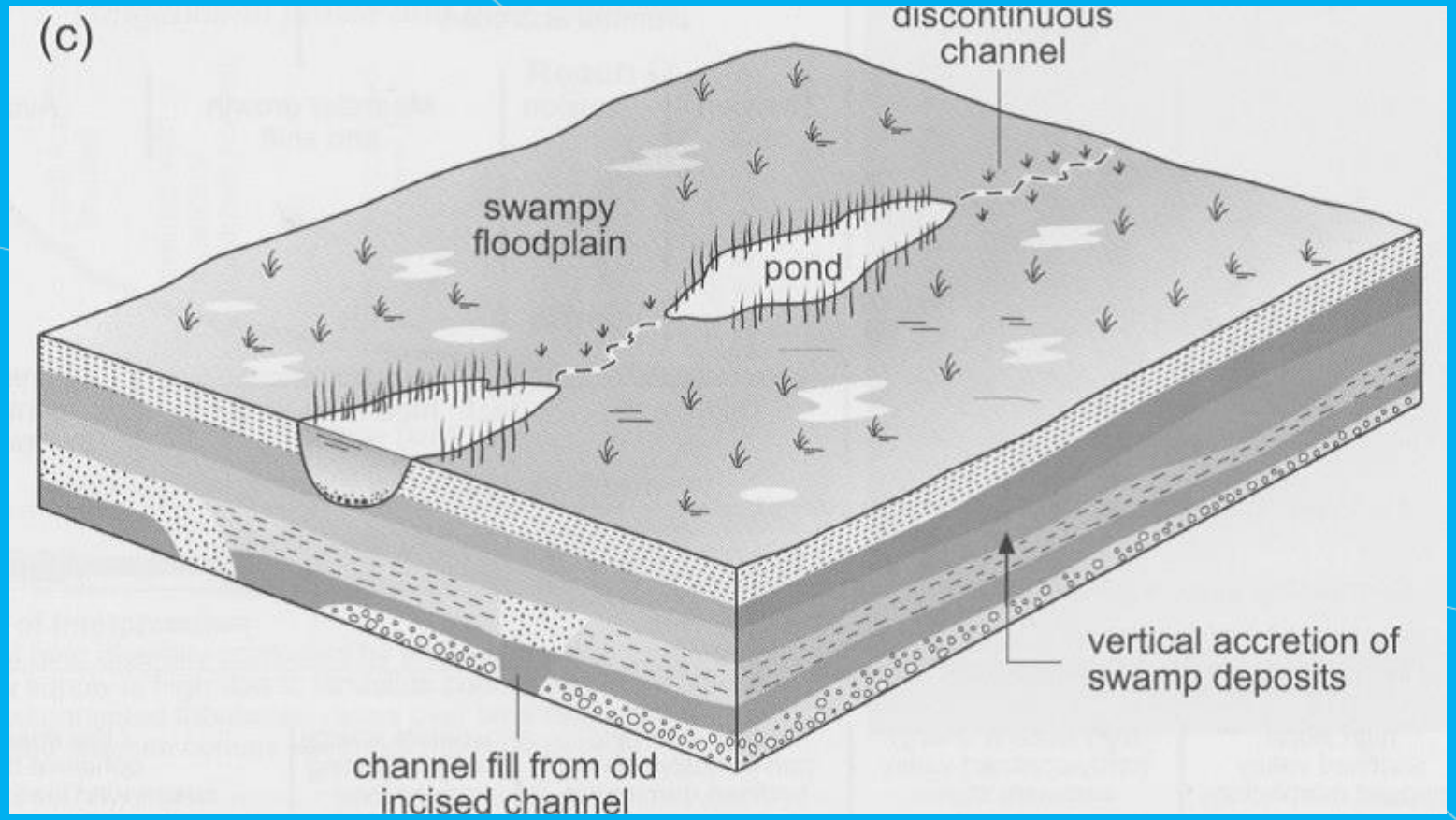
Indigenous History

Robert Hoddle paintings, Ginninderry Plains, 1832-35 (National Library of Australia)

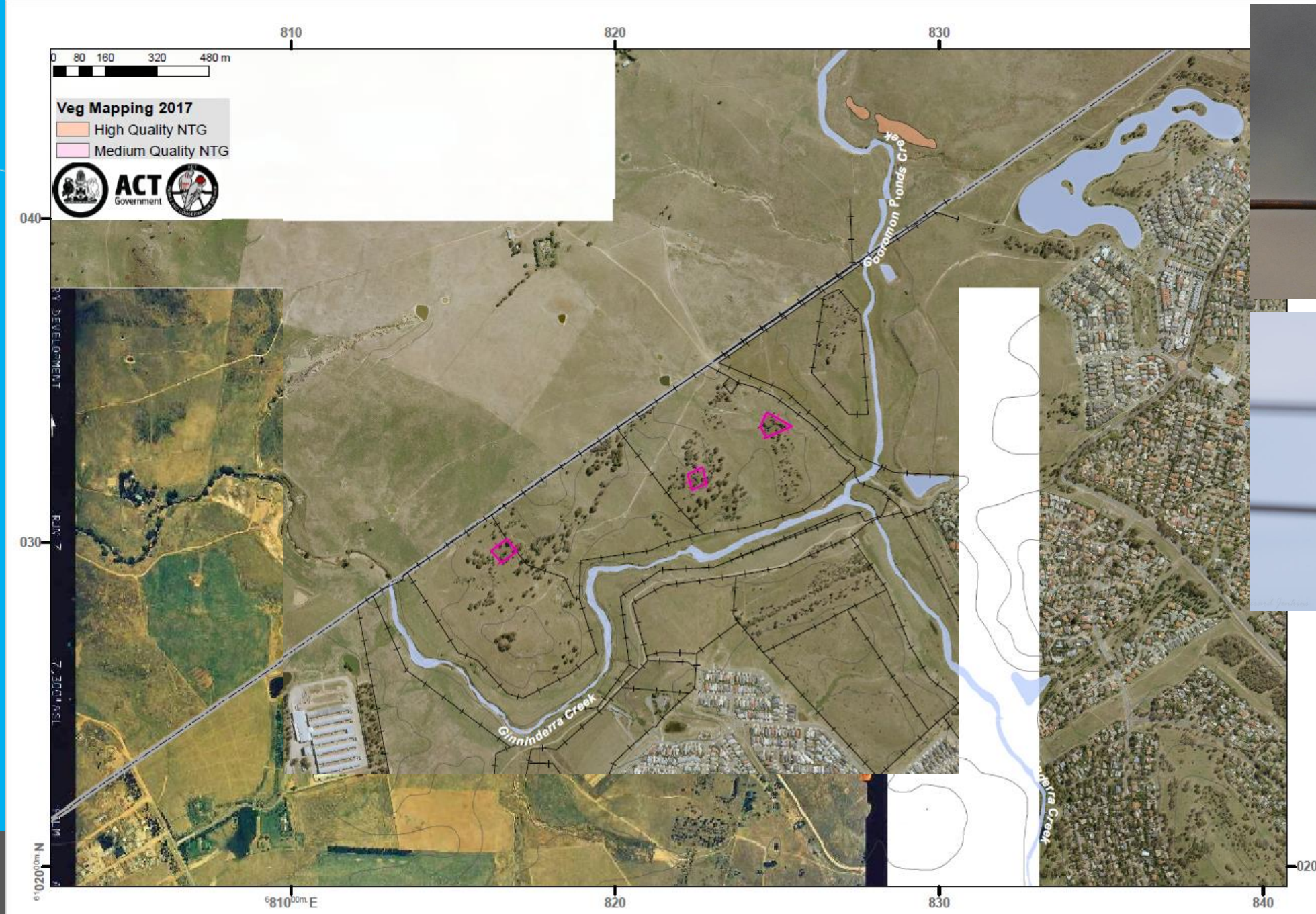
Series of Ponds



Schematic of an intact chain-of-ponds environment. These systems area variation of a cut-and-fill landscape, typified by the vertical accretion of finegrained sediments (from Fryirs & Brierley, 2013).

Dealing with a modified landscape and conflicting values

Eucalyptus species include
E. mannifera
E.globulous
E.cinerea
E. tricarpa



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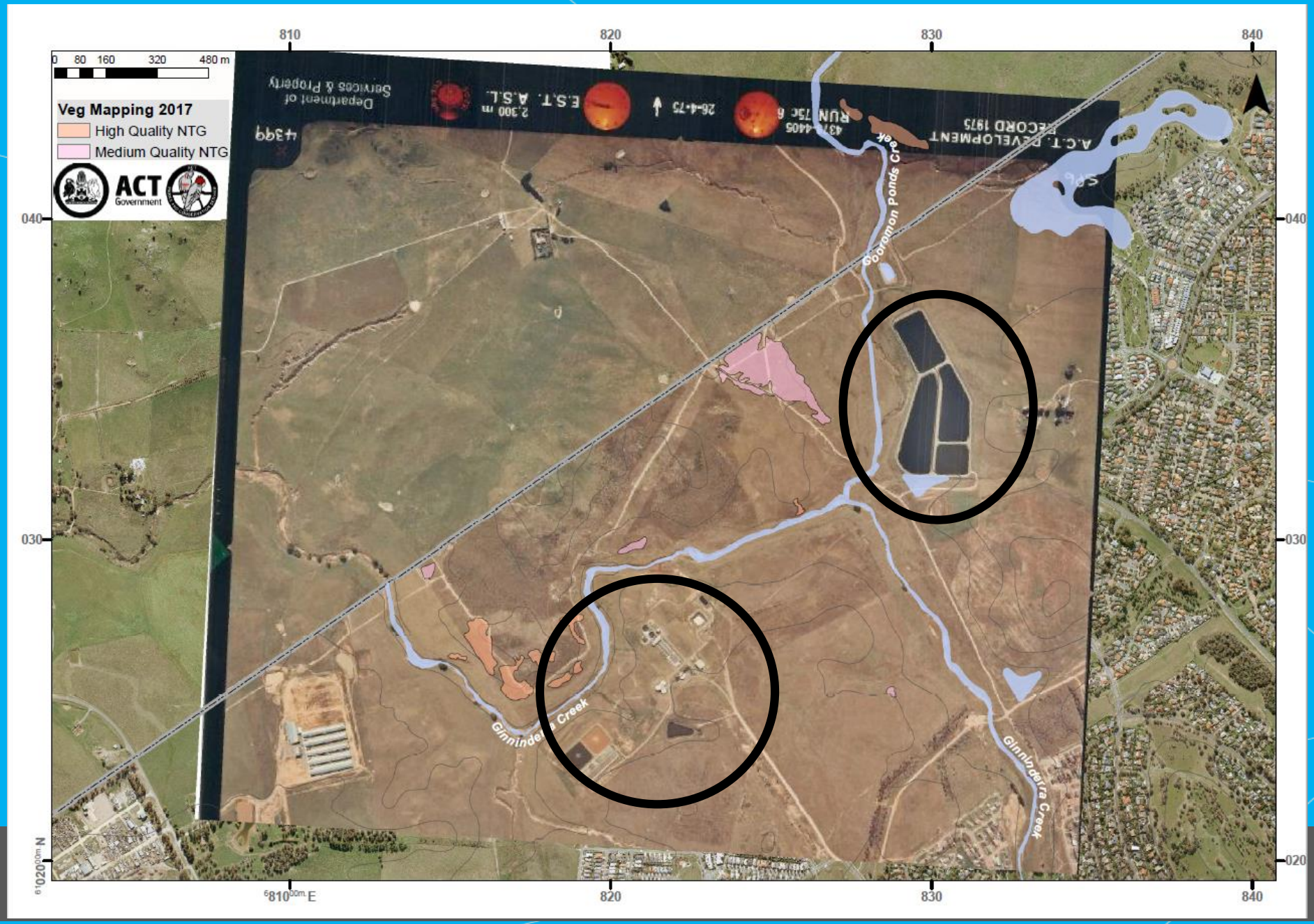

0 80 160 320 480 m
Veg Mapping 2017
High Quality NTG
Medium Quality NTG
ACT Government
810
820
830
840
040
030
020
N
E
Gininderra Creek
Gininderra Creek

NOT Giant Sumo
Golden Sun Moth Larvae

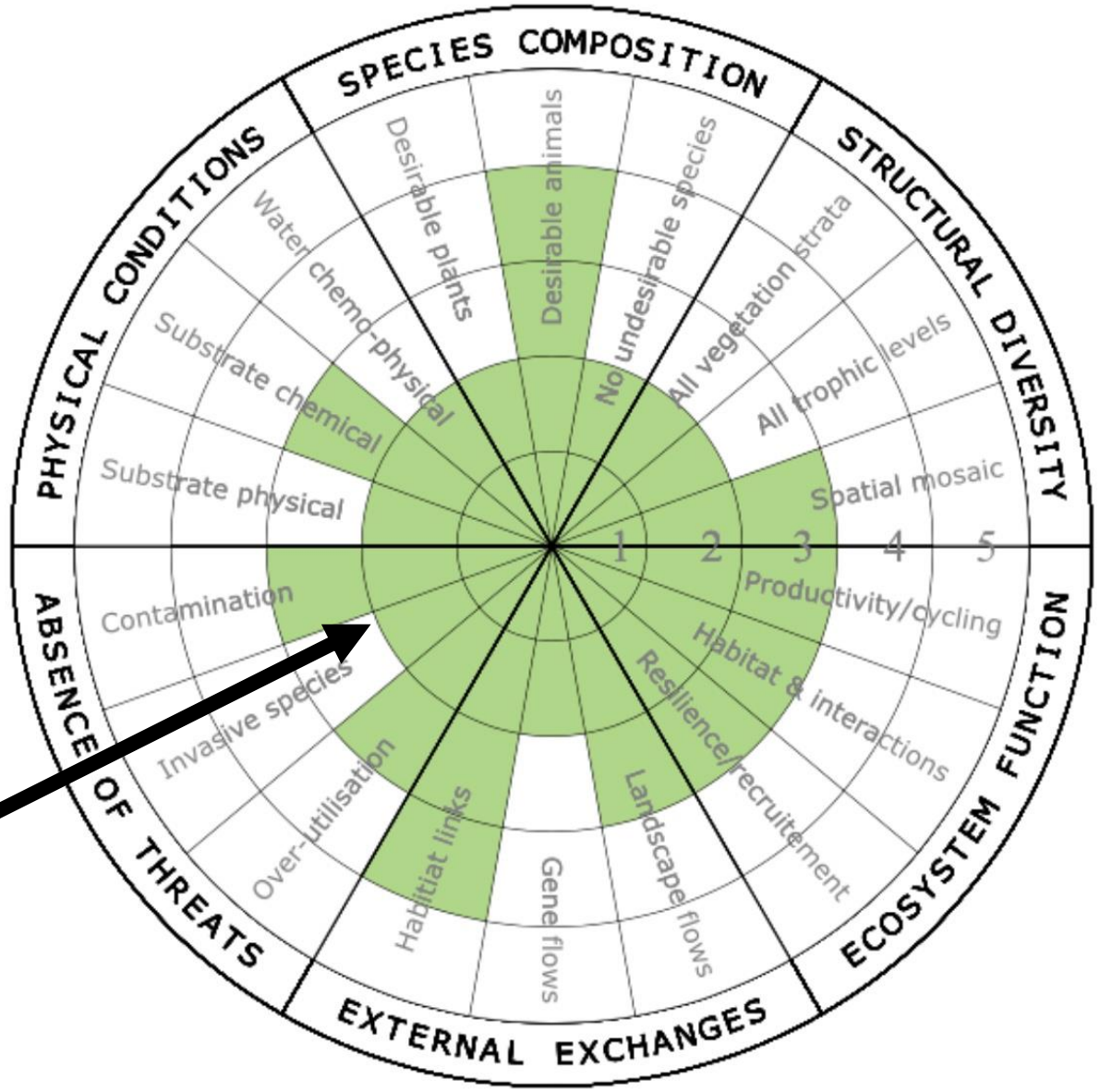
ACT Government

-Increase the Natural Temperate Grassland from 6.8 ha to 7.6 ha

-Increase the Golden Sun Moth habitat from 32 ha to 48 ha

-Improve connectivity to link surrounding sites so as to increase the total

Society for Ecological Restoration Standards Recovery Wheel



ASSESSOR: Alexi Williams DATE: 2018-09-10

SITE: Jarramlee Offset

Major Threat – Invasive Species

0 80 160 320 480 m

N

Coordinate System:
GDA 1994 MGA Zone 55
Aerial Photography 2018

Veg Mapping 2017

- ACT01_Zone1___NativeDom___High_VeryHighDiversity
- ACT01_Zone2___NativeDom___Mod_HighDiversity

Disclaimer: While all care is taken to ensure accuracy, the ACT Government does not warrant that the map is free from errors.

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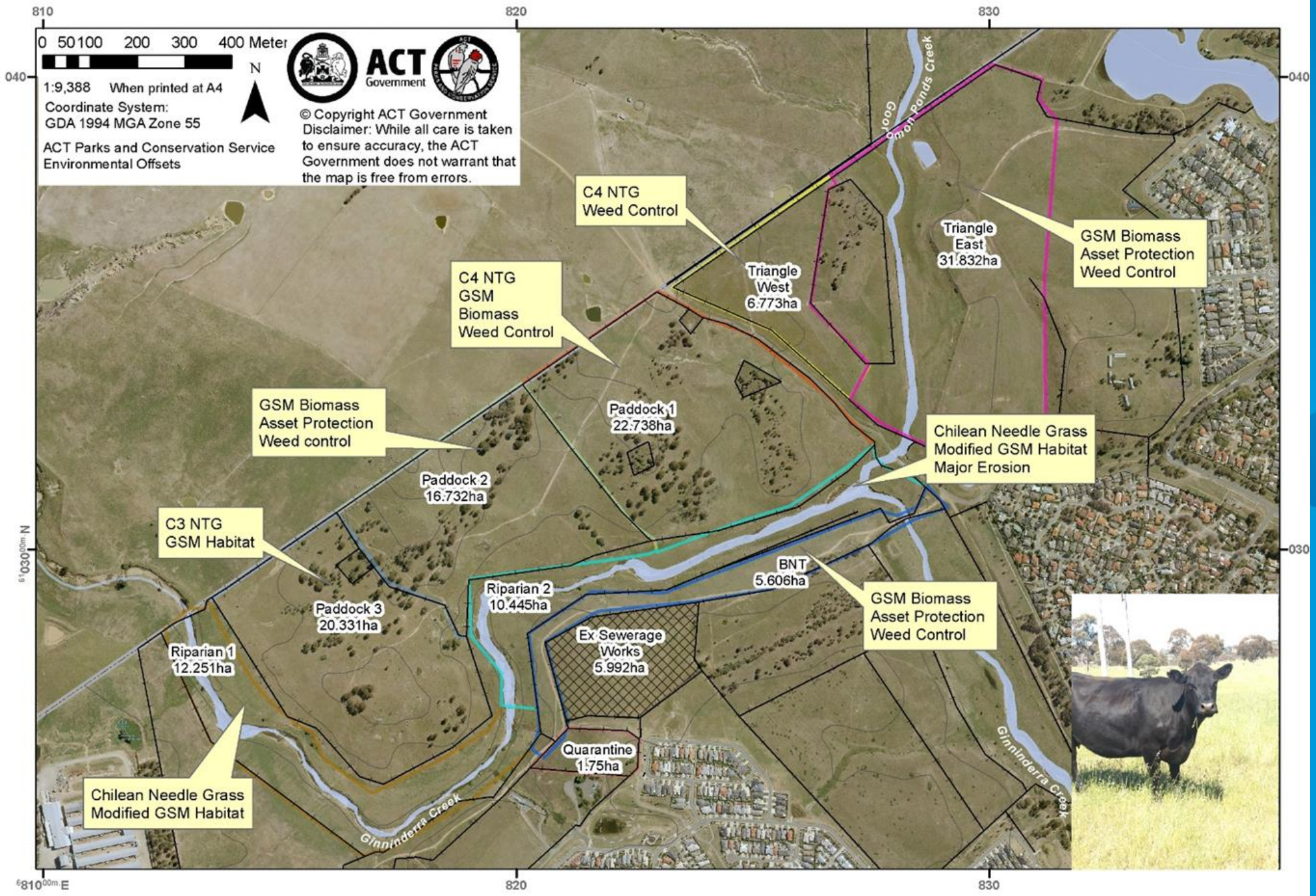
Grazing management (well researched, simple and cost effective)


810
820
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0 50 100 200 300 400 Meter
1:9,388 When printed at A4
Coordinate System:
GDA 1994 MGA Zone 55
ACT Parks and Conservation Service
Environmental Offsets
N
ACT Government
© Copyright ACT Government
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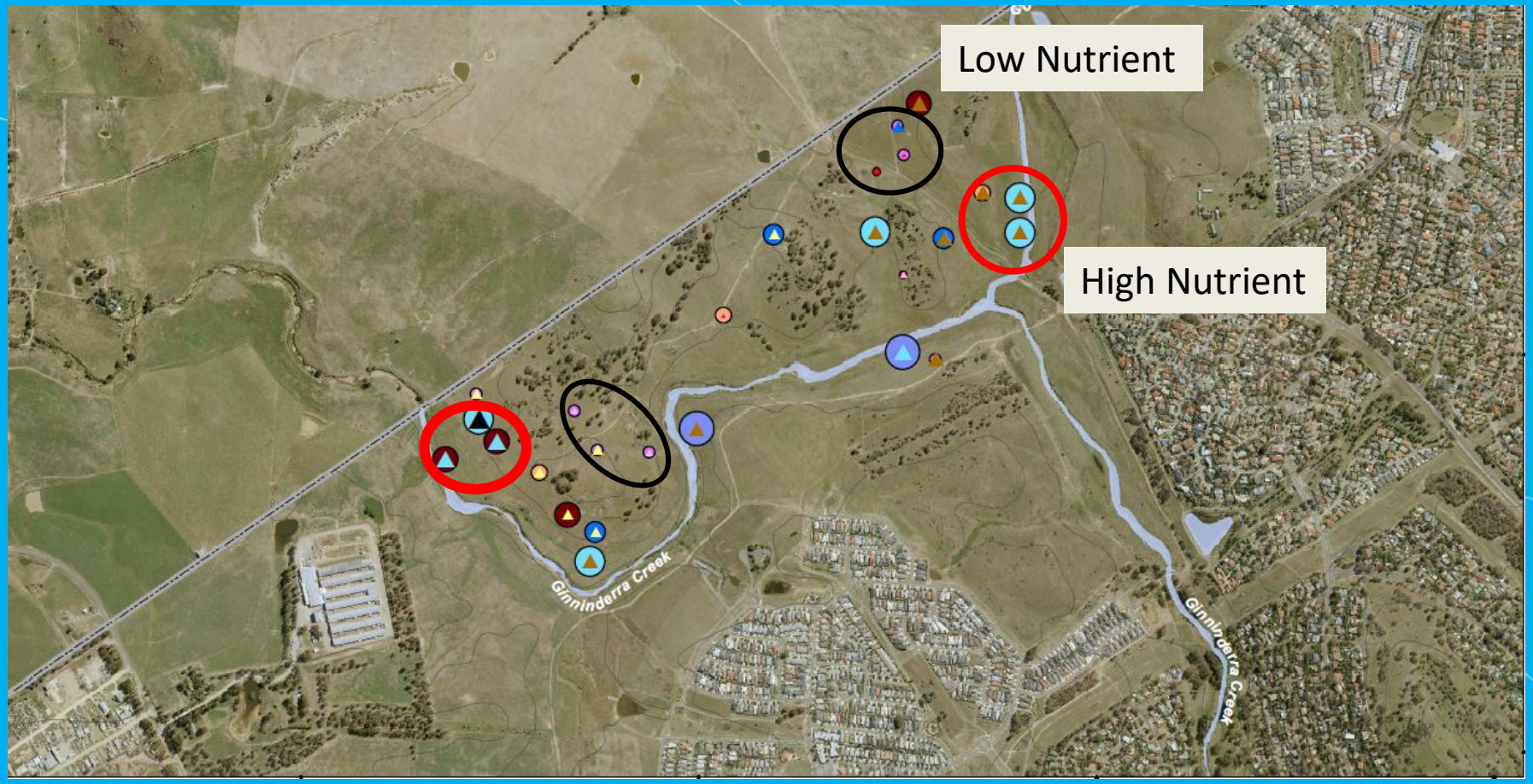
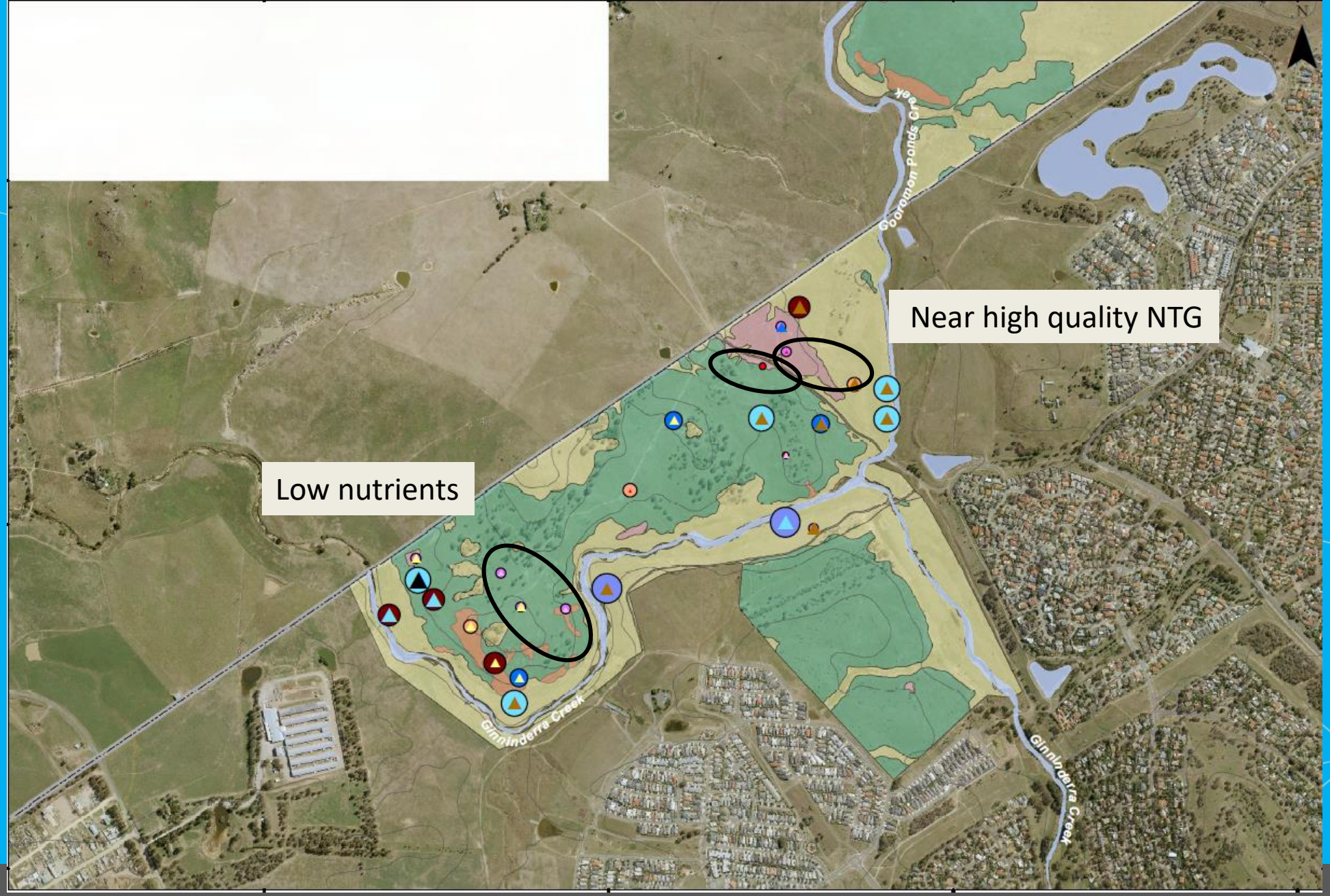
C4 NTG Weed Control
C4 NTG GSM Biomass Weed Control
GSM Biomass Asset Protection Weed control
C3 NTG GSM Habitat
Chilean Needle Grass Modified GSM Habitat
Triangle West 6.773ha
Triangle East 31.832ha
GSM Biomass Asset Protection Weed Control
Chilean Needle Grass Modified GSM Habitat Major Erosion
Paddock 1 22.738ha
Paddock 2 16.732ha
Paddock 3 20.331ha
Riparian 1 12.251ha
Riparian 2 10.445ha
Ex Sewerage Works 5.992ha
BNT 5.606ha
GSM Biomass Asset Protection Weed Control
Quarantine 1.75ha
Ginninderra Creek
Ginninderra Creek
Gooromon Ponds Creek
6810 00m E
6103 00m N


Low Nutrient
High Nutrient
Ginninderra Creek
Ginninderra Creek

SITE TRIAGE

- Soil
- Vegetation Monitoring
- Disturbance History
- Weeds
- Patch Size
- Corridor Connectivity


Near high quality NTG
Low nutrients
Ginninderra Creek
Ginninderra Creek

Using the Weed Burner

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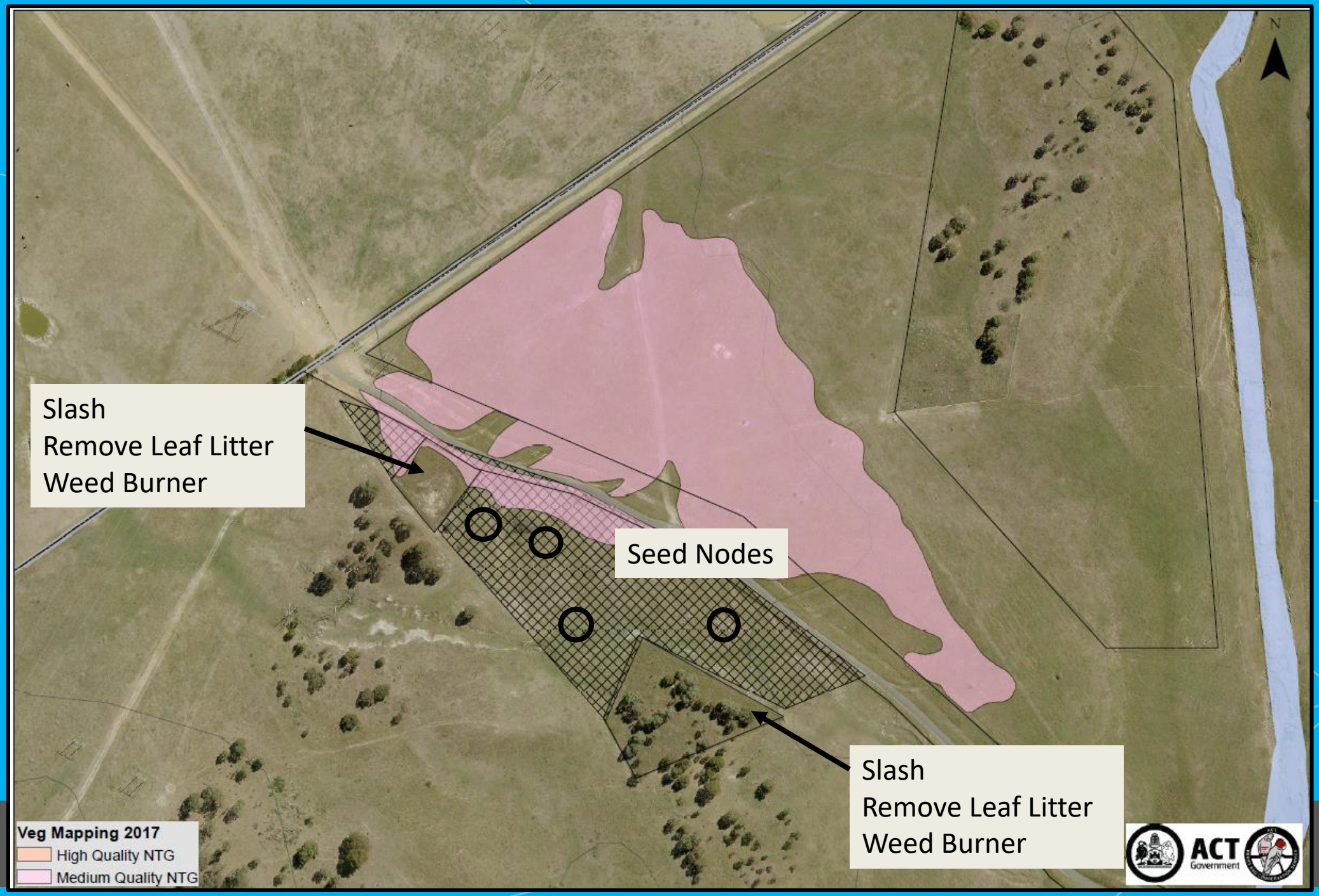
Slash
Remove Leaf Litter
Weed Burner
Seed Nodes
Slash
Remove Leaf Litter
Weed Burner
Veg Mapping 2017
High Quality NTG
Medium Quality NTG
N
ACT Government

What have we learnt about solving complex restoration puzzles?