



CENTRAL WEST COUNCILS
ENVIRONMENT
& WATERWAYS
A L L I A N C E

**Attachments for RFQ 2019/RR/0027
Creating Homes for Threatened Species
Artificial Chainsaw Hollow & Nest Box
Installation**



MAPS

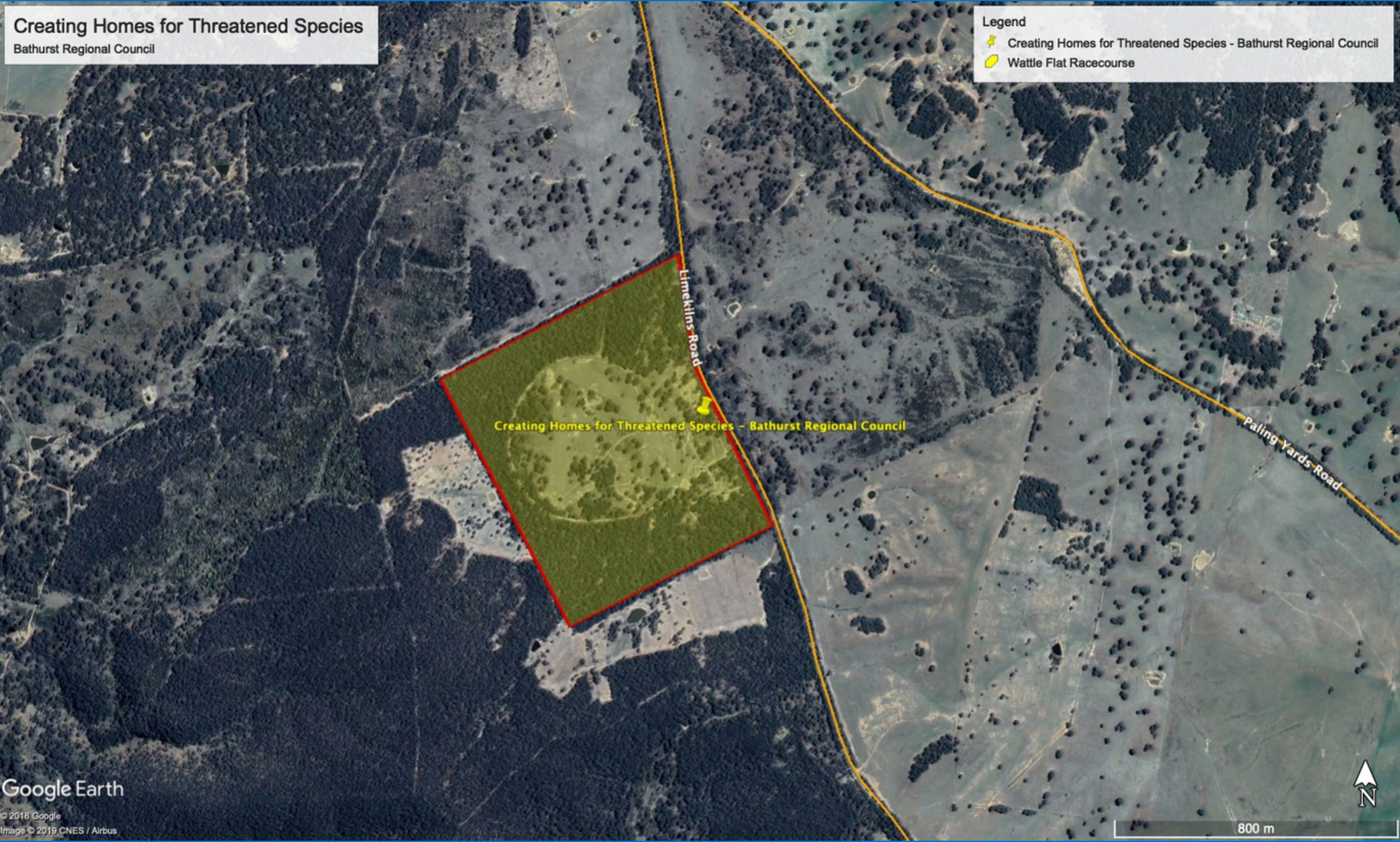
Project Component 1: Southern Region

Creating Homes for Threatened Species

Bathurst Regional Council

Legend

- 📍 Creating Homes for Threatened Species - Bathurst Regional Council
- 🏎️ Wattle Flat Racecourse

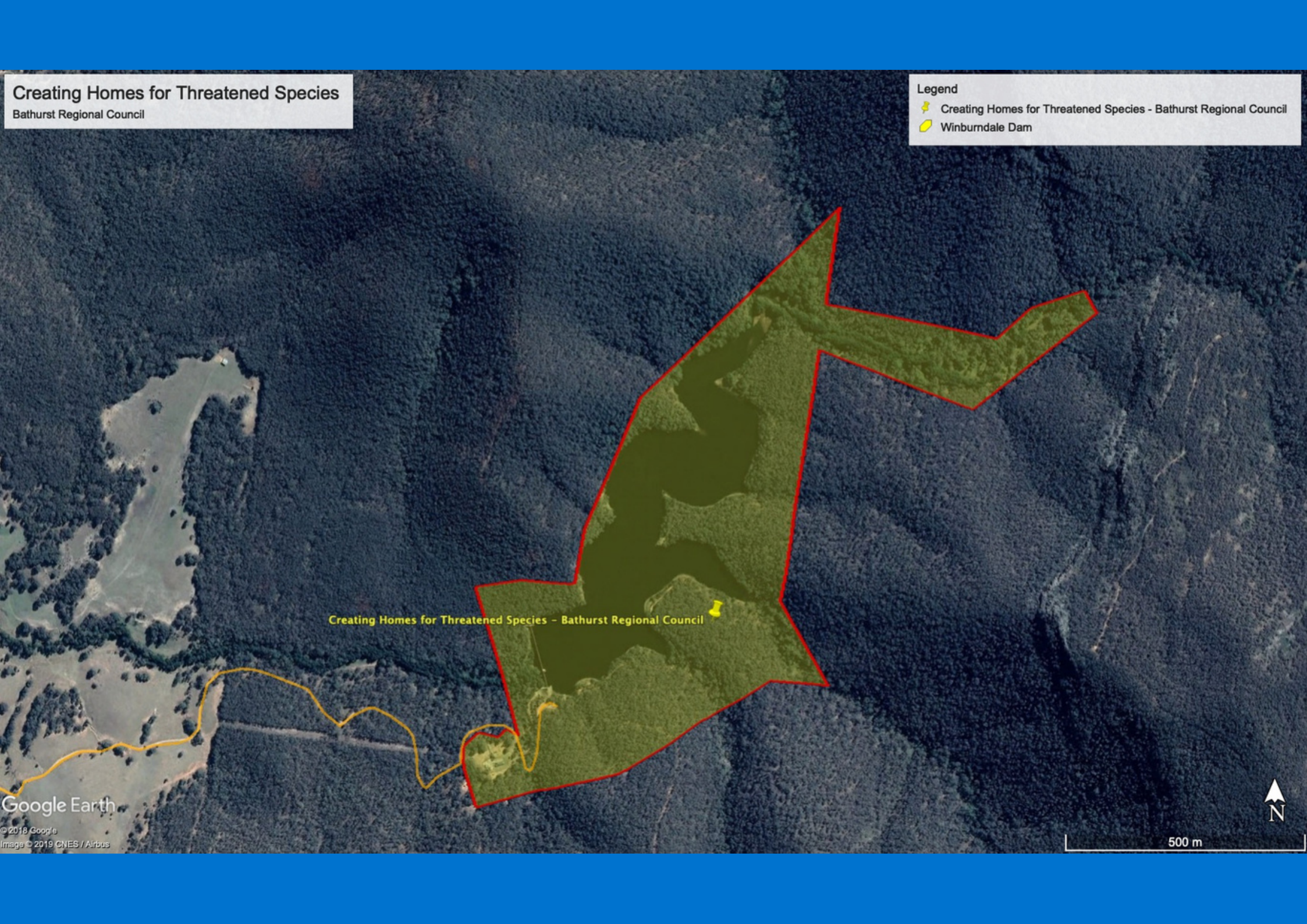


Creating Homes for Threatened Species

Bathurst Regional Council

Legend

- 📍 Creating Homes for Threatened Species - Bathurst Regional Council
- 📍 Winburndale Dam





Creating Homes for Threatened Species - Bathurst Regional Council

Creating Homes for Threatened Species

Blayney Shire Council

Legend

-  Creating Homes for Threatened Species - Blayney Shire Council
-  Lyndhurst Cemetery



Creating Homes for Threatened Species - Blayney Shire Council



Creating Homes for Threatened Species

Blayney Shire Council

Legend



-  Carcoar Cemetery
-  Creating Homes for Threatened Species - Blayney Shire Council



Creating Homes for Threatened Species

Cabonne Council

Legend

-  Boomey Cemetery
-  Creating Homes for Threatened Species - Cabonne Council



Creating Homes for Threatened Species - Cabonne Council

Boomey School Road

Euchareena Road

Whiteleys Road

Creating Homes for Threatened Species

Cowra Shire Council

Legend

- Adjacent to Lachlan River
- Creating Homes for Threatened Species - Cowra Council






Creating Homes for Threatened Species - Cowra Council

Creating Homes for Threatened Species

Forbes Shire Council

Legend

-  Creating Homes for Threatened Species - Forbes Shire Council
-  Forbes Wetlands

Creating Homes for Threatened Species - Forbes Shire Council 

Greens Road

Warrul Road

Newell Highway

Wirrinnya Road

Creating Homes for Threatened Species

Lachlan Shire Council

Legend

- Creating Homes for Threatened Species - Lachlan Shire Council
- Gum Bend Lake Reserve

Creating Homes for Threatened Species - Lachlan Shire Council

Gum Bend Road

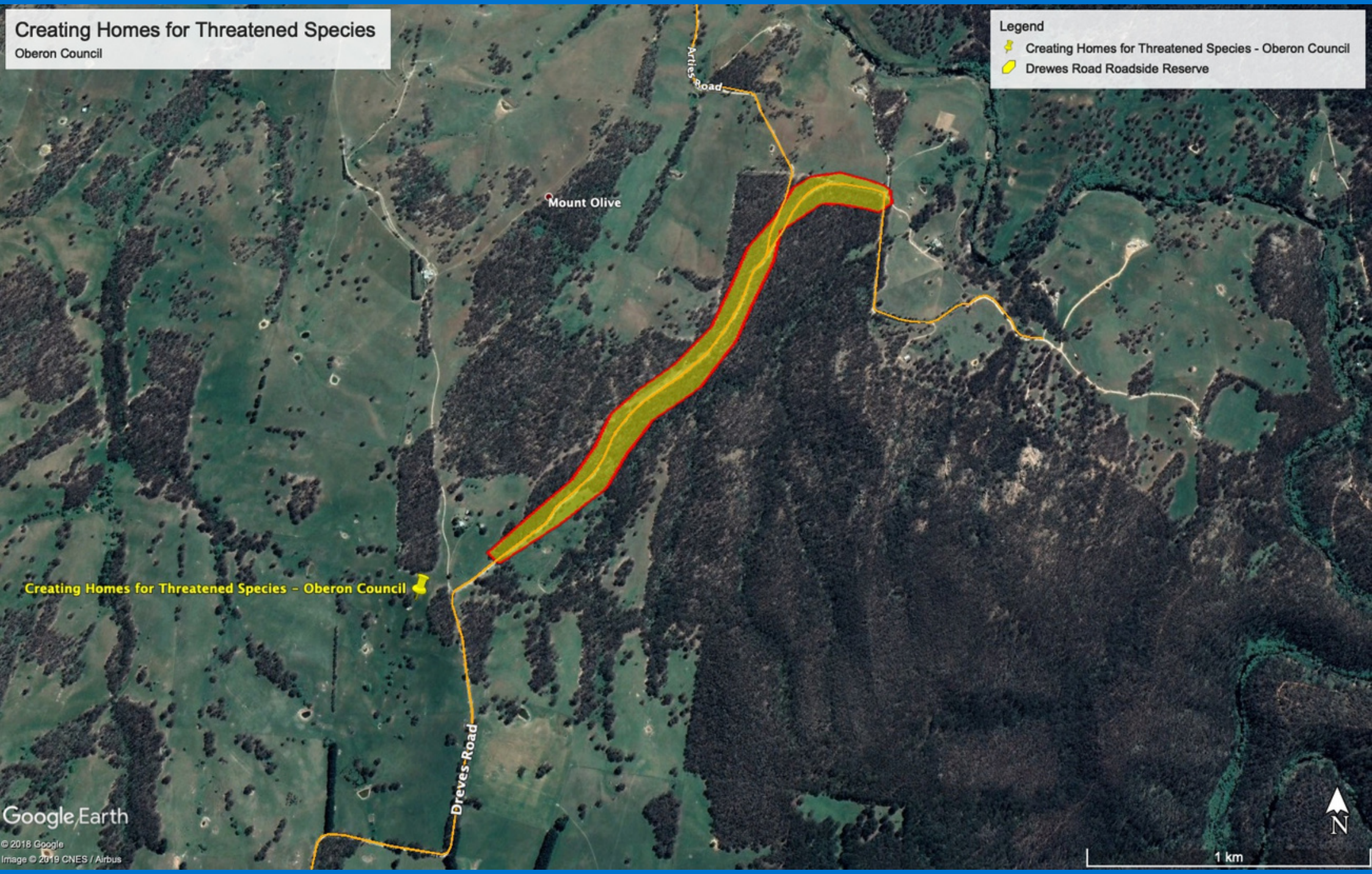


Creating Homes for Threatened Species

Oberon Council

Legend

- Creating Homes for Threatened Species - Oberon Council
- Dreves Road Roadside Reserve



Mount Olive

Artes Road

Dreves Road

Creating Homes for Threatened Species - Oberon Council

Google Earth

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1 km



Creating Homes for Threatened Species

Oberon Council

Legend

-  Creating Homes for Threatened Species - Oberon Council
-  Mount Olive, The Meadows



Google Earth

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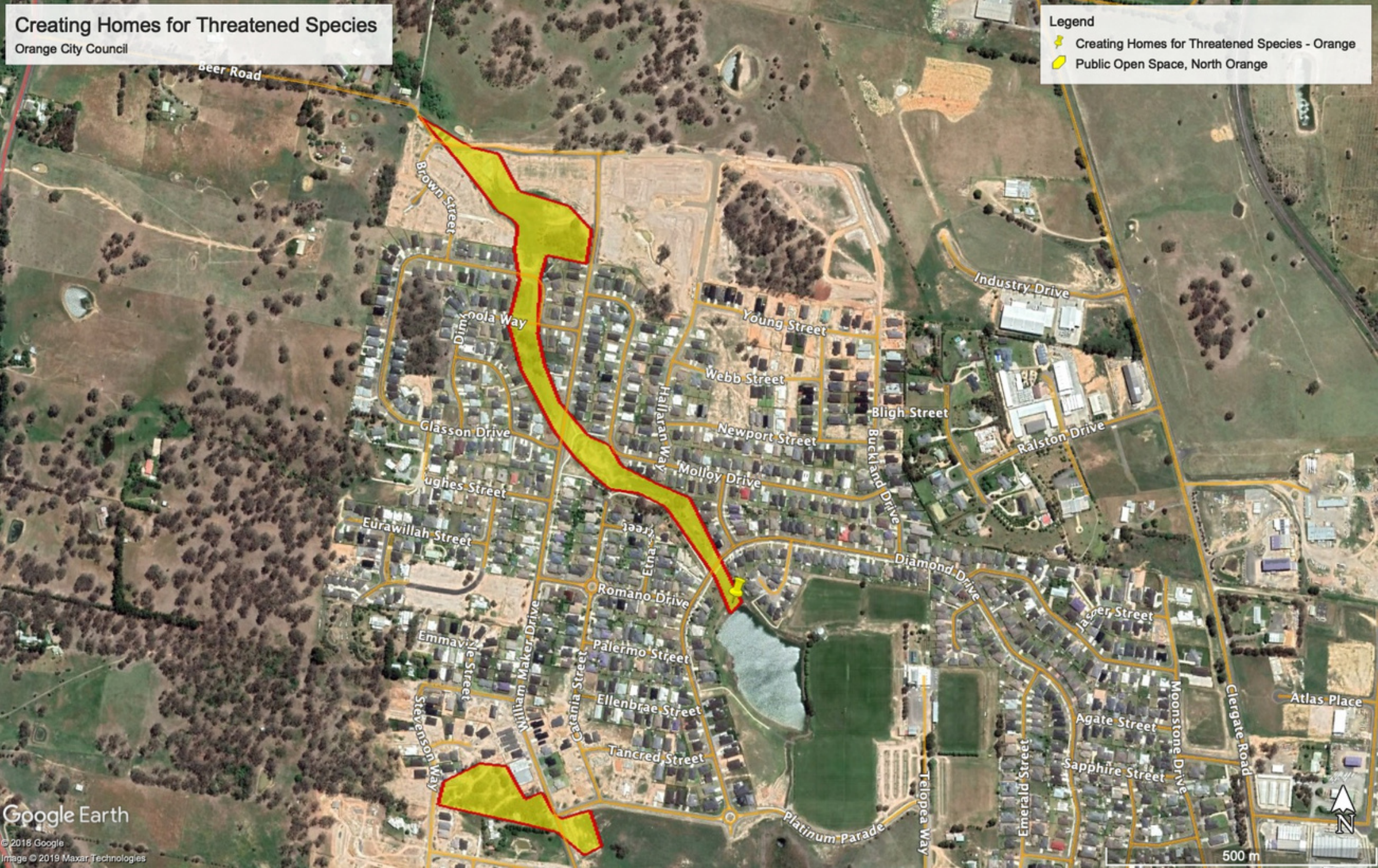
600 m

Creating Homes for Threatened Species

Orange City Council

Legend



-  Creating Homes for Threatened Species - Orange
-  Public Open Space, North Orange



Creating Homes for Threatened Species

Parkes Shire Council

Legend

-  Creating Homes for Threatened Species - Parkes Shire Council
-  East Cookeys Plains State Forest, Black Range Road

Yarabandal Road

Creating Homes for Threatened Species - Parkes Shire Council

Google Earth

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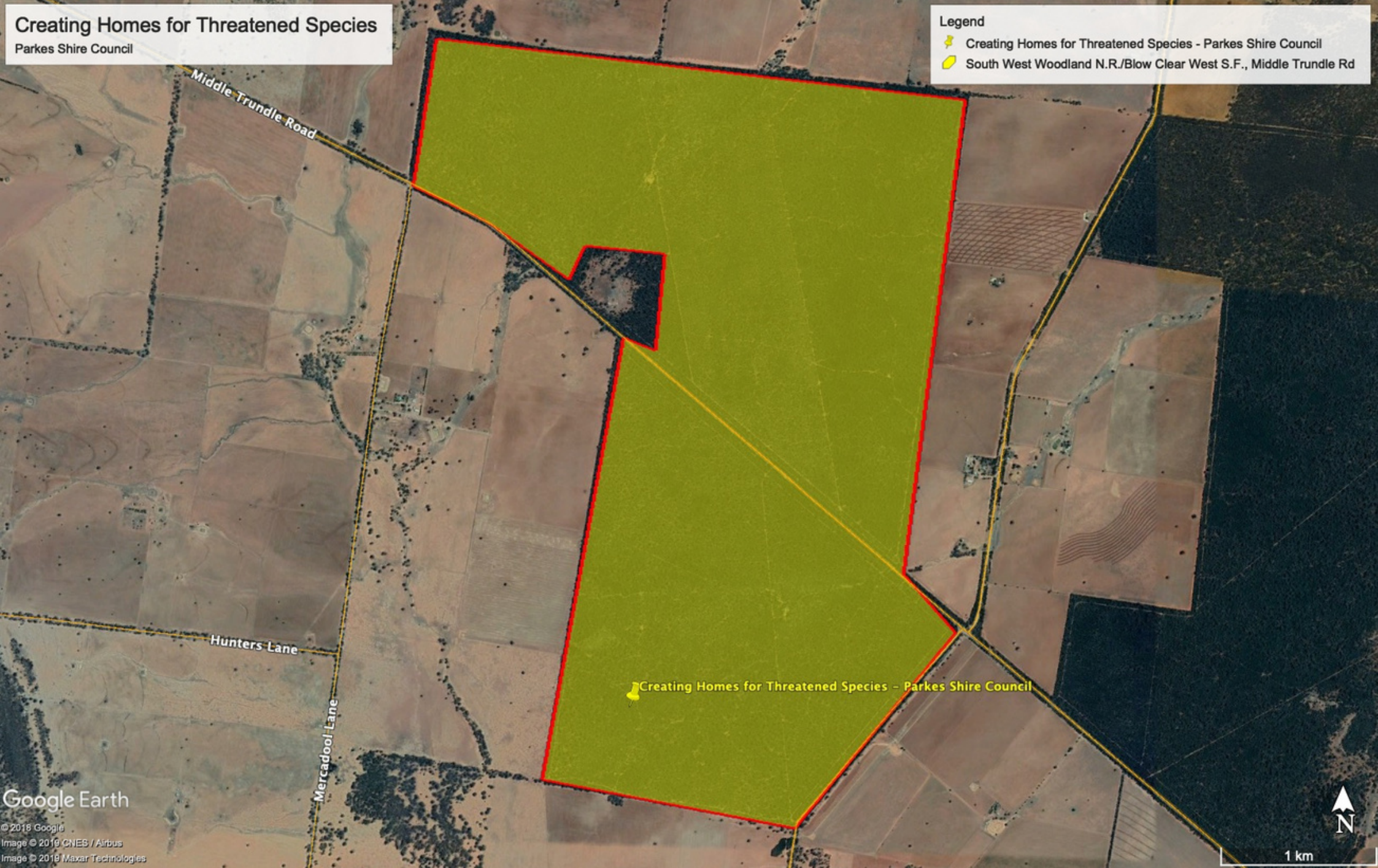
3 km

Creating Homes for Threatened Species

Parkes Shire Council

Legend

-  Creating Homes for Threatened Species - Parkes Shire Council
-  South West Woodland N.R./Blow Clear West S.F., Middle Trundle Rd



Creating Homes for Threatened Species - Parkes Shire Council

Google Earth

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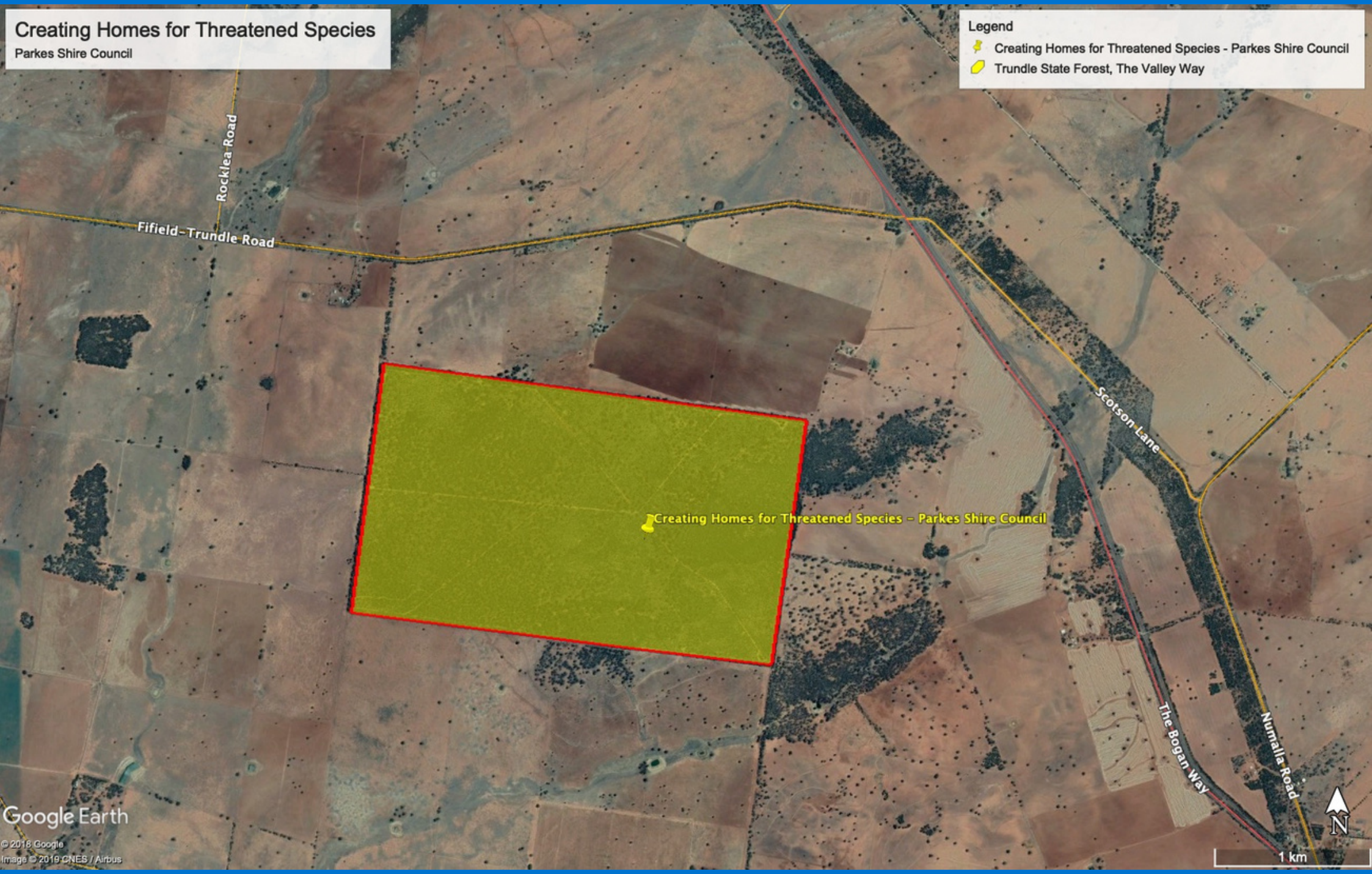
1 km

Creating Homes for Threatened Species

Parkes Shire Council

Legend



-  Creating Homes for Threatened Species - Parkes Shire Council
-  Trundle State Forest, The Valley Way

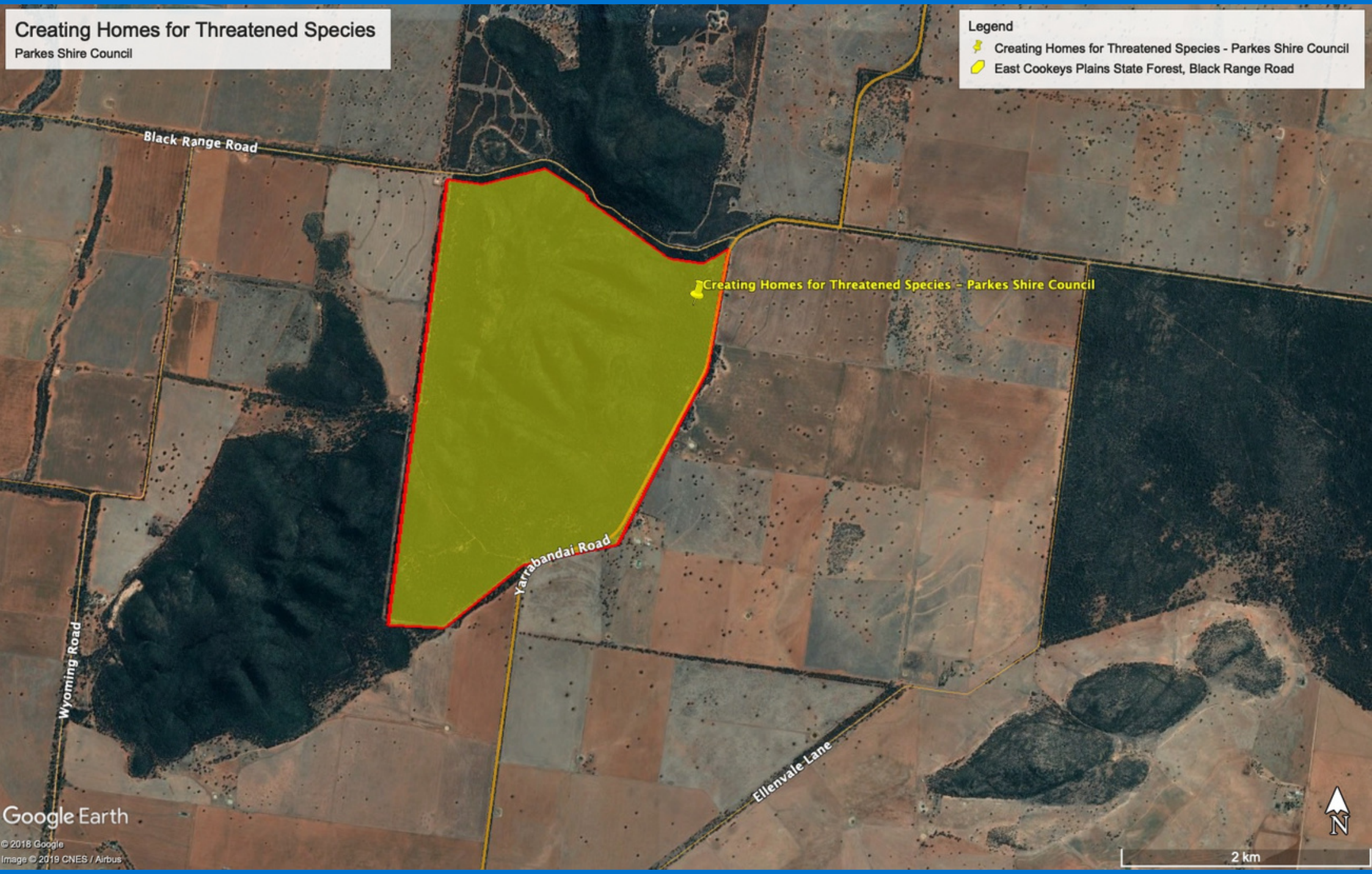


Creating Homes for Threatened Species

Parkes Shire Council

Legend

-  Creating Homes for Threatened Species - Parkes Shire Council
-  East Cookeys Plains State Forest, Black Range Road



Creating Homes for Threatened Species - Parkes Shire Council

Black Range Road

Yarrabandai Road

Ellenvale Lane

Wyoming Road

Google Earth

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2 km





MAPS

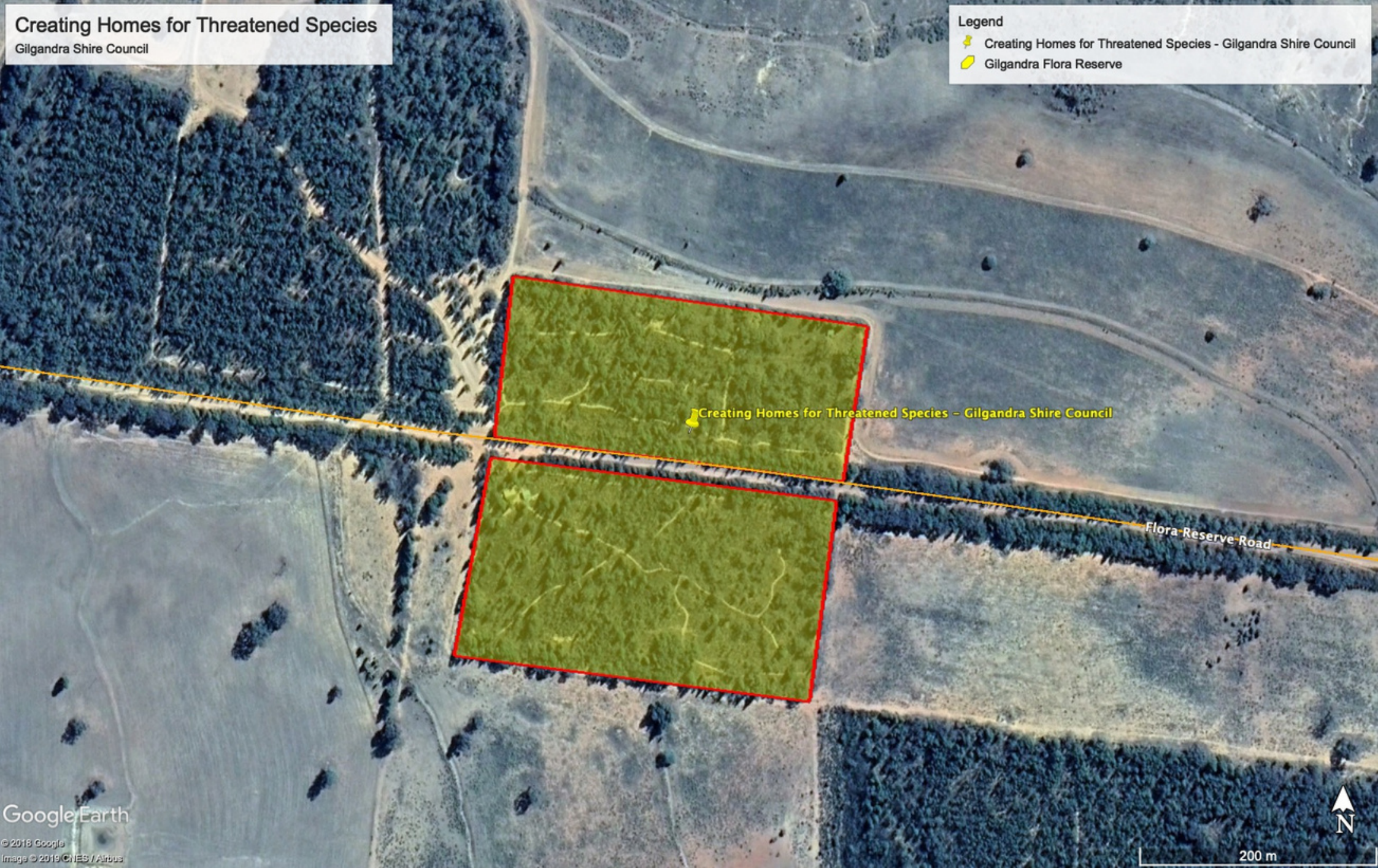
Project Component 2: North East Region

Creating Homes for Threatened Species

Gilgandra Shire Council

Legend



- Creating Homes for Threatened Species - Gilgandra Shire Council
- Gilgandra Flora Reserve



Creating Homes for Threatened Species

Gilgandra Shire Council

Legend

-  Creating Homes for Threatened Species - Gilgandra Shire Council
-  Gilgandra Racecourse



Google Earth

© 2018 Google
Image © 2019 CNES / Airbus

600 m

Creating Homes for Threatened Species

Gilgandra Shire Council

Legend

- ★ Creating Homes for Threatened Species - Gilgandra Shire Council
- 📍 Gilgandra Showground

Creating Homes for Threatened Species - Gilgandra Shire Council 📍

Naden Drive

Collison Drive

Pines Drive

Hargraves Lane

Enterprise Drive

Railway Street

Castlereagh Street

Wamboin Street

Mierr Street

Gumble Street

Mullion Street

Warrie Street

Waugan Street

Deri Street

Willie Street

Warren Road



Myrtle Street



Creating Homes for Threatened Species

Mid-Western Regional Council

Legend

-  Creating Homes for Threatened Species - Mid-Western Regional Council
-  Putta Bucca Wetlands



Creating Homes for Threatened Species - Mid-Western Regional Council

Wilbetree Road

Castlereagh Highway

Putta Bucca Road

Google Earth

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300 m



Creating Homes for Threatened Species

Warrumbungle Shire Council

Legend

-  Coolah Common
-  Creating Homes for Threatened Species - Warrumbungles Shire Council



Creating Homes for Threatened Species - Warrumbungle Shire Council

200 m



MAPS

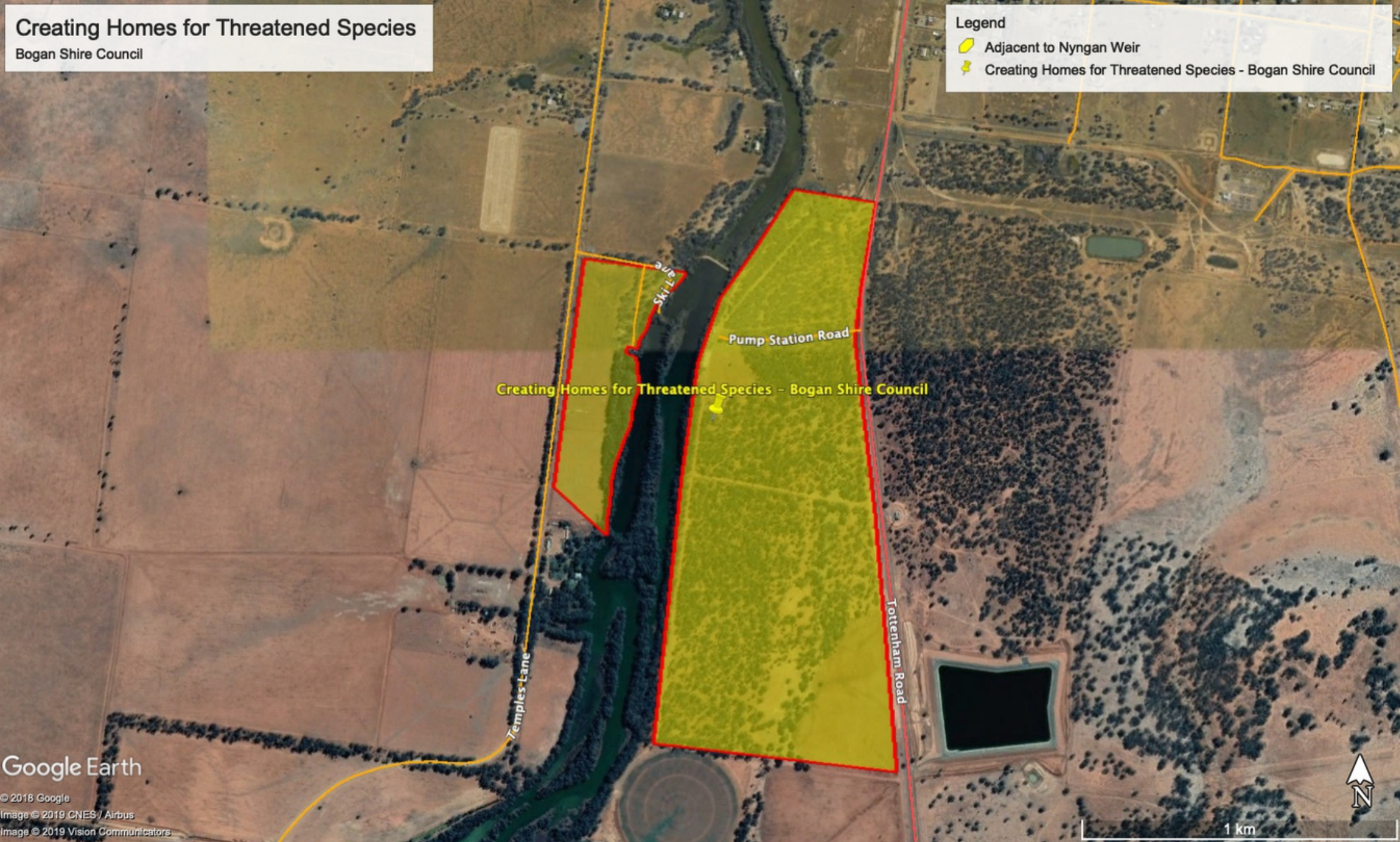
Project Component 3: North West Region

Creating Homes for Threatened Species

Bogan Shire Council

Legend

- Adjacent to Nyngan Weir
- Creating Homes for Threatened Species - Bogan Shire Council



Creating Homes for Threatened Species - Bogan Shire Council

Pump Station Road

Tottenham Road

Temples Lane

Stirling

Google Earth

© 2018 Google
Image © 2019 CNES / Airbus
Image © 2019 Vision Communicators



1 km

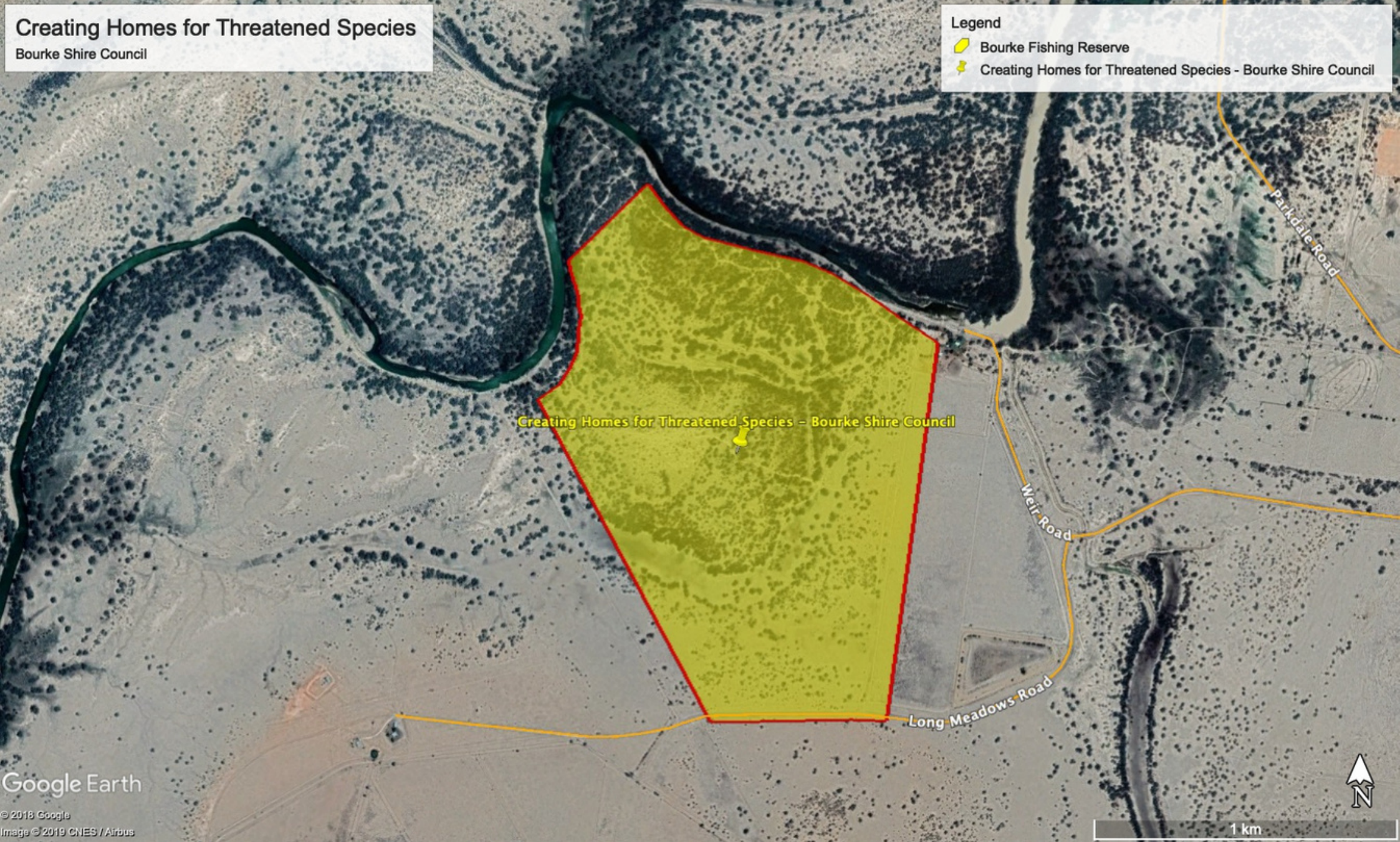


Creating Homes for Threatened Species

Bourke Shire Council

Legend

-  Bourke Fishing Reserve
-  Creating Homes for Threatened Species - Bourke Shire Council



Google Earth

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Image © 2019 CNES / Airbus





1 km

Creating Homes for Threatened Species

Coonamble Shire Council

Legend



-  Creating Homes for Threatened Species - Coonamble Shire Council
-  Warrena Weir Reserve



Creating Homes for Threatened Species

Narromine Shire Council

Legend

-  Creating Homes for Threatened Species - Narromine Shire Council
-  Macquarie River – Burroway Road

Creating Homes for Threatened Species - Narromine Shire Council

Burroway Road



Creating Homes for Threatened Species

Warren Shire Council

Legend

- 📍 Creating Homes for Threatened Species - Warren
- 🟡 Macquarie River



Google Earth

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Image © 2019 CNES / Airbus

600 m



DATA COLLECTION SHEETS

Chainsaw Hollows Data Sheet

INSTRUCTIONS FOR COMPLETING DATA SHEETS

MONITORING EQUIPMENT REQUIRED

Diameter Tape - essential piece of kit for measuring the DBH of trees, and diameter at which hollows are installed in trunks/limbs

Tree Form Classification Table - included in data sheets

GPS - either a stand alone GPS unit or suitable phone app that can give reliable coordinates

Target Species Fact Sheets - used to understand hollow and habitat requirements of target species

Tape Measures - large tape measure (~30m) for measuring hollow height and small tape measure (~3m) for measuring internal hollow

Camera - either a stand alone camera or phone camera capable of taking high resolution images

INSTRUCTIONS FOR COMPLETING TREE INFORMATION DATA MONITORING SHEETS

New data sheets are to be completed each day with date and location included on each sheet

Site code created for each site i.e. Puttabucca Wetlands = PW, and hollow number installed. Hollow 1 would be PW-01

Trees should be identified to species level where possible, or where dead, listed as such

Tree health is based on the Tree Form Classification Table provided, choose from 1-8 based on the images and description

Latitude and longitude recorded at the base of the tree to aid in mapping and ongoing monitoring of the created hollows

Each tree is to be photographed in portrait format showing the whole tree in order to provide ongoing monitoring of tree health

Chainsaw Hollows Data Sheet

INSTRUCTIONS FOR COMPLETING DATA SHEETS

INSTRUCTIONS FOR COMPLETING HOLLOW INFORMATION DATA MONITORING SHEETS

New data sheets are to be completed each day with date and location included on each sheet

Hollow ID should correspond with the information on page 1. - Tree Information

Target species is the animal that the hollow is being created for - refer to Target Species Fact Sheets

Height to be recorded is the height from the ground to the middle of the created hollow entrance

Aspect is the angle in degrees in which the hollow entrance is facing - in the case of a top entrance it should be recorded as V (vertical)

Hollow dimensions to be recorded in mm in order: Depth / Width / Height (in horizontal limbs Height will likely be less than width)

Entrance hole diameter to be recorded - if not a neat hole (such as plunge cut entrance), record height and width

Each hollow is to be photographed

INSTRUCTIONS FOR COMPLETING CAMERA INFORMATION DATA MONITORING SHEETS

New data sheets are to be completed each day with date and location included on each sheet

Hollow ID should correspond with the information on page 1. - Tree Information and page 2. - Hollow Information

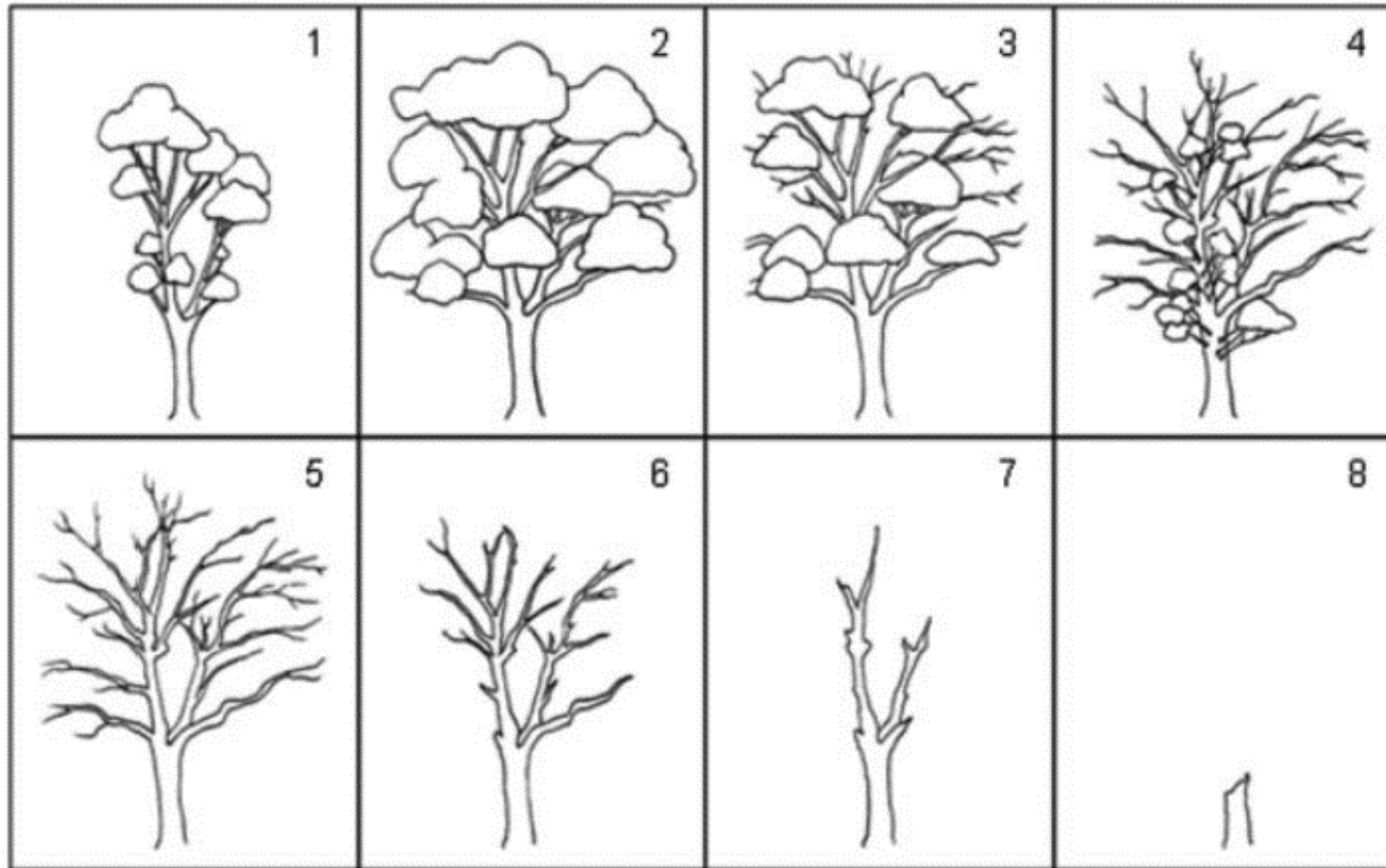
Camera type to be recorded, including model no. where available

Record camera number - the number will be recorded on the camera in permanent marker or similar

Record SD Card number - the number will be recorded on the SD Card in permanent marker or similar

Record camera position - generally will be above the hollow, but may be on adjacent branch or tree

Check that camera is set images and not video, then turn camera on



Tree form classification
 based on growth and
 projective foliage cover
 followed by increasing
 degree of senescence and
 branch loss (Rayner et. al.
 2014)

- 1 Immature tree, branches primarily upright
- 2 Mature tree, branches spread and intact with healthy crown (>70% foliage cover)
- 3 Mature tree with signs of senescence, some large dead or broken branches, crown thinning (20-70%)
- 4 Live adult tree, largely bare, but with small patches of crown (<20%) or areas of regrowth
- 5 Stag with majority (>70%) of branches intact
- 6 Stag with some (<70%) branches remaining
- 7 Upright stag with no major branches remaining
- 8 Broken or cut stump



SPECIES DATA SHEETS

Full set to be supplied to successful contractor



BROWN TREECREEPER

Climacteris picumnus

PROFILE

Wing: 89 – 101 mm
Bill: 16 – 20 mm
Weight: 21 – 42 g

Plain brown upperparts including rump, blackish subterminal tail-band, light brown underparts with coarse white streaks narrowly bordered black, pale (usually off-white) supercilium, varying grey-brown streaking on ear-coverts [1]

RANGE



CONSERVATION STATUS

Commonwealth: Not listed

NSW: Vulnerable

DIET

Up to 80% of the diet is comprised of ants; other invertebrates (including spiders, insects larvae, moths, beetles, flies, hemipteran bugs, cockroaches, termites, and lacewings) [2].

ENTRANCE HOLE

Entrance hole for brown treecreeper should be 60 mm [3].

Height of Entrance Hole

Height above ground should be 3 to 5 metres, with installation at 5 metres making nest predation by cats less likely [3].

Nests are from one or two metres, up to twelve metres or more above the ground depending on the size of available hollow trees [4].

HOLLOW DIMENSIONS

The Nestbox Book [3]

Depth: 150 mm Width: 150 mm Height: 150 mm
Entrance Hole Diameter: 60 mm

Australian birds their nests and eggs [4]

Nest is constructed in the bottom of a vertical or sloping, usually steeply sloping, hollow in the trunk or a large limb of a tree, or in a hollow in a stump or post. Nests are usually from 0.4 metres to one metre in from the entrance to the hollow.

AUGMENTED HOLLOW REQUIREMENTS

Internal depth and width: 150 mm
Internal height: 400 to 1,000 mm (preferably at the upper end)
Entrance diameter: 60 mm
Entrance aspect: North-East preferable but not critical

Hollow height: 1 to 12 metres

Live or Dead Trees – must be *Eucalyptus* species

ADDITIONAL NOTES [5]

- Cooperative breeding species with breeding groups formed through delayed dispersal of male offspring.
- Multiple territories are often associated, forming a 'supergroup' in which all males are related and help feed offspring at each other's nests.
- Brown Treecreepers are more successful reproductively in areas with low density of shrubs, moderate levels of groundcover, and large amounts of foraging substrate that create a greater invertebrate biomass.

REFERENCES

1. Menkhurst, P., et al., *The Australian bird guide*. 2017, Clayton South: CSIRO Publishing.
2. *Brown Treecreeper (eastern subspecies) - profile*. [cited 2019; Available from: <https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10171>].
3. Shanahan, B., et al., *The Nestbox Book*, ed. B. Shanahan, et al. 2008, Melbourne: Wilkinson Publishing Pty Ltd.
4. Beruldsen, G., *Australian birds their nests and eggs*. 2003, Kenmore Hills, Qld: G. Beruldsen.
5. Doerr, V.A.J., E.D. Doerr, and S.H. Jenkins, *Habitat selection in two Australasian treecreepers: what cues should they use?* *Emu - Austral Ornithology*, 2006. **106**(2): p. 93-103.





LITTLE LORIKEET

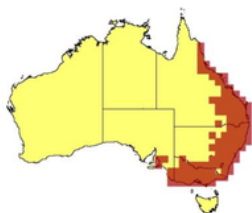
Glossopsitta pusilla

PROFILE

Wing: 95 - 106 mm
Bill: 10 - 11 mm
Weight: 30 - 50 g

The smallest Aus. Lorikeet, bright green with red face mask that does not extend behind eye and includes chin and throat; no blue tones; broad yellow-brown patch on mantle; green underwing coverts contrast with dark grey flight feathers; red in undertail apparent when tail spread [1].

RANGE



CONSERVATION STATUS

Commonwealth: Not listed

NSW: Vulnerable

DIET

Feeds mostly on nectar and pollen, occasionally on native fruits such as mistletoe, and only rarely in orchards [2].

ENTRANCE HOLE

Entrance is small in size at 3 cm, most typically selects hollows in the limb or trunk of smooth-barked Eucalypts [2]. Recorded little lorikeet nest entrances were 27 x 31 mm, 29 x 32 mm and 32 x 39 mm [3].

Height of Entrance Hole

Entrance is usually high above the ground (2 - 15 m). Riparian trees are often chosen, including species like *Allocasuarina* [2]. Nest hollows are usually at moderate heights in living Eucalypts often near water [4]. Nest-holes of Little Lorikeets have been recorded from 2.4 to 15.2 metres above the ground [3].

HOLLOW DIMENSIONS

Tree Hollows [5]

A relatively small hollow, such as one that may be used by a Little Lorikeet *Glossopsitta pusilla*, can take upwards of 60 years to form through slow fungal decay.

Breeding habits and Conservation status of the musk lorikeet *Glossopsitta concinna* and little lorikeet *G. pusilla* in Northern New South Wales [3]

Of recorded little lorikeet nest hollows, the first had a 55 cm shaft leading to a chamber ~ 10 x 15 cm in diameter. Two other nest chambers were 36 and 55 cm in diameter with one ~ 30 cm down the shaft.

AUGMENTED HOLLOW REQUIREMENTS

Internal depth and width: 175 mm
Internal height: 175 mm
Entrance diameter: 30 mm with a 400 mm entrance shaft of 50 mm ϕ .
Entrance aspect: North-East preferable but not critical

Hollow height: > 4 m - increased height preferable up to 15 m, with this species preferring to be in the treetops.

Live or Dead Trees - preferably in riparian areas - preference for smooth barked Eucalypts.

Entrance hole should be in live tissue, not cut into the faceplate.

ADDITIONAL NOTES [3]

- Breeds only when White Box is flowering within a ~ 2 km radius of nest site (in Northern NSW). In years when White Box fails to flower, a single (sometimes late season) brood is reared on Yellow Box blossom.
- Little Lorikeets lay and hatch their first clutch of eggs in winter with nestlings in August, September, November and December.
- Of 48 nest-holes observed 40% were in Manna Gum, 25% in Blakely's Red Gum, 10% in Tumbledown Gum, 10% in dead trees. Small numbers of nests were also observed in Box and Stringybark species, but within the smooth-barked sections of the trees.
- Hollow entrances were 2.4 - 15.2 m above the ground (mean 6.8 m) with 67% in the trunk, 20% in live limbs, 9% in dead spouts on live limbs, and 4% in dead limbs.
- Entrances are small knotholes, maintained to a precise size by regularly biting the living bark around the rim. Hollow maintenance is observed throughout the year.
- Will nest in semi-colonial situations with multiple hollows being used in a single tree, or group of trees. Will also nest in interspecific situations in close proximity to Musk Lorikeets.

REFERENCES

1. Menkhorst, P., et al., *The Australian bird guide*. 2017, Clayton South: CSIRO Publishing.
2. Little Lorikeet - profile. [cited 2019; Available from: <https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20111>].
3. Courtney, J. and S. Debus, *Breeding habits and Conservation status of the musk lorikeet *Glossopsitta concinna* and little lorikeet *G. pusilla* in Northern New South Wales*. *Australian Field Ornithology*, 2006. 23(3): p. 109-124.
4. McNaughton, M., *Australian Parrots and Finches*. 2004, Seaford, Victoria, Australia: Bluestone Press.
5. Davis, A., *Tree hollows*. *Nature New South Wales*, 2014. 58(3): p. 48-49.





SQUIRREL GLIDER

Petaurus norfolcensis

PROFILE

Head and Body Length: 180-230 mm
Tail Length: 220-300 mm
Weight: 200-260 g

Similar to Sugar Glider (*Petaurus breviceps*) but with a longer and more pointed face, lengthier and narrower ears and a much bushier, softly furred tail; facial markings are often more distinct. Belly usually a rich white or creamy white. Molar teeth much larger than in *P. breviceps* [1]

RANGE



CONSERVATION STATUS

Commonwealth: Not listed

NSW: Vulnerable

DIET

Varies seasonally and consists of Acacia gum, *Eucalyptus* sap, nectar, honeydew and manna, with invertebrates and pollen providing protein[2]

ENTRANCE HOLE

Dens with entrances of 3-5 diameter were the most frequently used by squirrel gliders [3].

Height of Entrance Hole

Den entrance height averaged 6.8 ± 1.2 m in QLD and 11.9 ± 1.3 m in NSW. These values are influenced by tree height with 46% of squirrel glider dens in north-eastern Victoria being ≤ 3 m above ground reflecting a greater availability of hollows in that height range. These observations suggest that the height of hollow entrances is not important in den selection by squirrel gliders [3]. Other work suggests that a height of < 3.5 m is preferable [4]. Of 29 known den entrances, 18 faced north or east [3].

HOLLOW DIMENSIONS

Build Your Own Wildlife Nestbox Book [5]

Depth: 223mm Width: 196mm Height: 380mm front, 400mm back
Entrance Hole Diameter: 40mm

The characteristics of squirrel glider (*Petaurus norfolcensis*) den trees in subtropical Australia [3]

Fissures in the trunk and holes in branches were the most common of six hollow types used. Entrance size of hollows appears to be the hollow attribute most important to squirrel gliders. No non-eucalypts are used as refuge trees.

AUGMENTED HOLLOW REQUIREMENTS

Internal depth and width: 225 mm
Internal height: 400 mm
Entrance diameter: 40 mm
Entrance aspect: North-East preferable but not critical
Hollow height: > 3 m – increased height preferable

Live or Dead Trees – must be *Eucalyptus* species and prefers dead trees or living *E. microcarpa* where available. Preference also shown for larger trees (but this may be due to hollow availability) [4, 6]. Preference is for hollows located on slopes, rather than flat areas [7].

REFERENCES

1. The Australian Museum complete book of Australian mammals : the National Photographic Index of Australian Wildlife. Complete book of Australian mammals, ed. R. Strahan. 1983, Sydney: Angus & Robertson.
2. Squirrel Glider - Profile. 1/12/17 [cited 2019 26/4/19]; Available from: <https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10604>.
3. Beyer, G.L., R.L. Goldingay, and D.J. Sharpe, *The characteristics of squirrel glider (*Petaurus norfolcensis*) den trees in subtropical Australia*. Australian Journal of Zoology, 2008. **56**(1): p. 13-21.
4. Durant, R., G.W. Luck, and A. Matthews, *Nest-box use by arboreal mammals in a peri-urban landscape*. Wildlife Research, 2009. **36**(7): p. 565-573.
5. Ridgeway, P., *Build Your Own Wildlife Nest Box: A guide for Central West NSW*. 2015: Greater Sydney Local Land Services.
6. Crane, M.J., et al., *The characteristics of den trees used by the squirrel glider (*Petaurus norfolcensis*) in temperate Australian woodlands*. Wildlife Research, 2008. **35**(7): p. 663-675.
7. Crane, M.J., D.B. Lindenmayer, and R.B. Cunningham, *The use of den trees by the squirrel glider (*Petaurus norfolcensis*) in temperate Australian woodlands*. Australian Journal of Zoology, 2010. **58**(1): p. 39-49.





PROFILE

Wing: 109 - 119 mm
Bill: 10 - 12 mm
Weight: 35 - 48 g

Bright green above; bright yellow below with iridescent blue face and forehead. ♂ Clearly two-toned blue shoulder patch in folded wing bordered behind by shorter brick-red shoulder stripe. ♀ Lacks red shoulder-stripe and has reduced blue in face [1].

RANGE



CONSERVATION STATUS

Commonwealth: Not listed

NSW: Vulnerable

DIET

Prefers to feed in the shade of a tree and spends most of the day on the ground searching for the seeds or grasses and herbaceous plants, or browsing on vegetable matter [2].

TURQUOISE PARROT

Neophema pulchella

ENTRANCE HOLE

Entrance hole should be 80 mm [3].

Height of Entrance Hole

Nests in tree hollows, logs or posts, from August to December [4]. Nests are seldom higher than eight or ten metres, usually much less [5].

HOLLOW DIMENSIONS

Australian birds their nests and eggs [5]

Any suitable hollow in a tree, usually a Eucalypt, often a dead tree or a dead limb of a green tree. Also nests in hollows in stumps, sometimes fence posts or logs lying on the ground.

Australian Parrots and Finches [4]

The nesting hollows they choose vary considerably. Sometimes a hollow will be only 30 cm from the ground in a decayed stump or in a limb or trunk of a fallen tree. On other occasions it will be at heights up to 15 m. Hollow fence posts have been occupied at times.

Turquoise Parrot – SWIFFT Website [3]

Nest box dimensions are 120 mm x 120 mm x 800 mm with an 80 mm hole at the top.

Australian Parrots in Field and Aviary [6]

Hollow limb or hole in a tree, or in a log or fallen tree, usually a eucalypt, sometimes a casuarina.

AUGMENTED HOLLOW REQUIREMENTS

Internal depth and width: 120 mm

Internal height: 800 mm

Entrance diameter: 80 mm

Entrance aspect: vertical preferably, but may also be any aspect

Hollow height: 1 to 10 metres – preferably at the lower end of this scale.

Dead tree or stump, or dead branch in a living tree. Preferably a eucalypt, but may also be a casuarina.

REFERENCES

1. Menkhorst, P., et al., *The Australian bird guide*. 2017, Clayton South: CSIRO Publishing.
2. *Turquoise Parrot - profile*. [cited 2019; Available from: <https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10555>.
3. *Turquoise Parrot*. Threatened Species Profiles 2019 [cited 2019; Available from: https://www.swiff.net.au/cb_pages/sp_turquoise_parrot.php.
4. McNaughton, M., *Australian Parrots and Finches*. 2004, Seaford, Victoria, Australia: Bluestone Press.
5. Beruldsen, G., *Australian birds their nests and eggs*. 2003, Kenmore Hills, Qld: G. Beruldsen.
6. Cayley, N.W., *Australian parrots in field and aviary*. [Rev. ed.] / extensively revised and rewritten by Alan H. Lendon ed. Australian parrots, ed. A.H. Lendon. 1973, Sydney: Angus and Robertson.





YELLOW-BELLIED SHEATHTAIL-BAT

Saccolaimus flaviventris

PROFILE

Head & Body Length: 76 – 87 (83) mm
Tail Length: 20 – 35 (29) mm
Forearm Length: 74 – 80 (76) mm
Weight: 30 - 60 g [1]

Distinctive, large, insectivorous bat. It has long, narrow wings, a glossy, jet-black back, and a white to yellow belly extending to the shoulders and just behind the ear. Characteristically, it has a flattened head and sharply-pointed muzzle. Males have a prominent throat pouch; females have a patch of bare skin in the same place [2].

RANGE



CONSERVATION STATUS

Commonwealth: Not listed
NSW: Vulnerable

DIET

Flies swiftly above the canopy at night to feed on insects [3].

ENTRANCE HOLE

Roost entrance diameter averages 12.7 +/- 1.6 cm (n = 17) in White Box trees (*Eucalyptus albens*). For Narrow-leaved Ironbark trees (*Eucalyptus crebra*) the average entrance diameter was 11.0 +/- 4.0 cm (n= 2) [4].

Height of Entrance Hole

The mean entrance height in White Box trees was 9.3 m with minimum of 6.0 m and maximum of 16.0 m (tree heights ranged from 8 – 20 m). In Narrow-leaved Ironbark the recorded entrance heights were 5.0 m in a 6.0 m tall tree, and 8.0 m in a 12.0 m tall tree [4].

HOLLOW DIMENSIONS

A Field Guide to the Mammals of Australia [5]

Roosts singly or in small groups in tree hollows; in treeless areas known to roost in burrows of terrestrial mammals.

Observations on roost use by the yellow-bellied sheath-tail-bat (*Saccolaimus flaviventris*) in northern New South Wales, Australia [4]

Internal hollow dimensions are not provided, however, from the images and descriptions, it can be assumed that the hollow chambers extend into the limb, and chamber diameter is larger than the entrance size.

AUGMENTED HOLLOW REQUIREMENTS

Internal depth and width: 150 mm
Internal height (length of hollow): 800 mm +
Entrance diameter: 125 mm at end of a dead branch
Entrance aspect: not critical

Hollow height: 9 m – hollow should be created as high as possible within the tree

Live or Dead Trees – preferably large live White Box trees showing signs of senescence.

Yellow-bellied Sheath-tail Bats are impacted by habitat fragmentation, so hollows should be targeted to larger bushland remnants [6].

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Image and Distribution Map: allaboutbats.org.au





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