



Lockyer Uplands Catchments Inc
... caring for native habitats

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Presentation to Lockyer Valley Koala Forum

18th May, 2023

LUCI background and approach

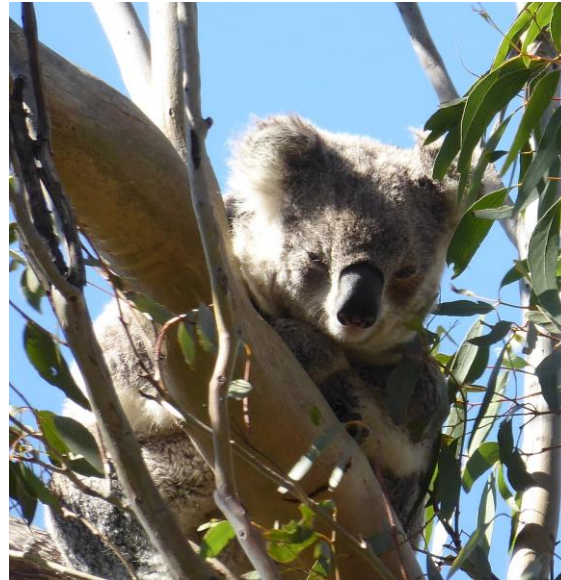
- Started in 2015 as Friends of Dwyers Scrub (FoDS)
- The health of the park depends on enhancing and restoring natural **connections** in the landscape
- Connectivity conservation - connect and conserve → LUCI
 - Partner in the Great Eastern Ranges Initiative



LUCI landscape– part of a larger ecological network



Connecting landholders and landscape via flagship species and projects



BIRDS OF THE LOCKYER UPLANDS
caring for habitats....keeping the birds here

Prospectus
2023



Eastern Yellow Robin (E. S. Mermel)

Community and partners working to protect
birds and their habitats across the Main Range
to Helidon Hills Corridor

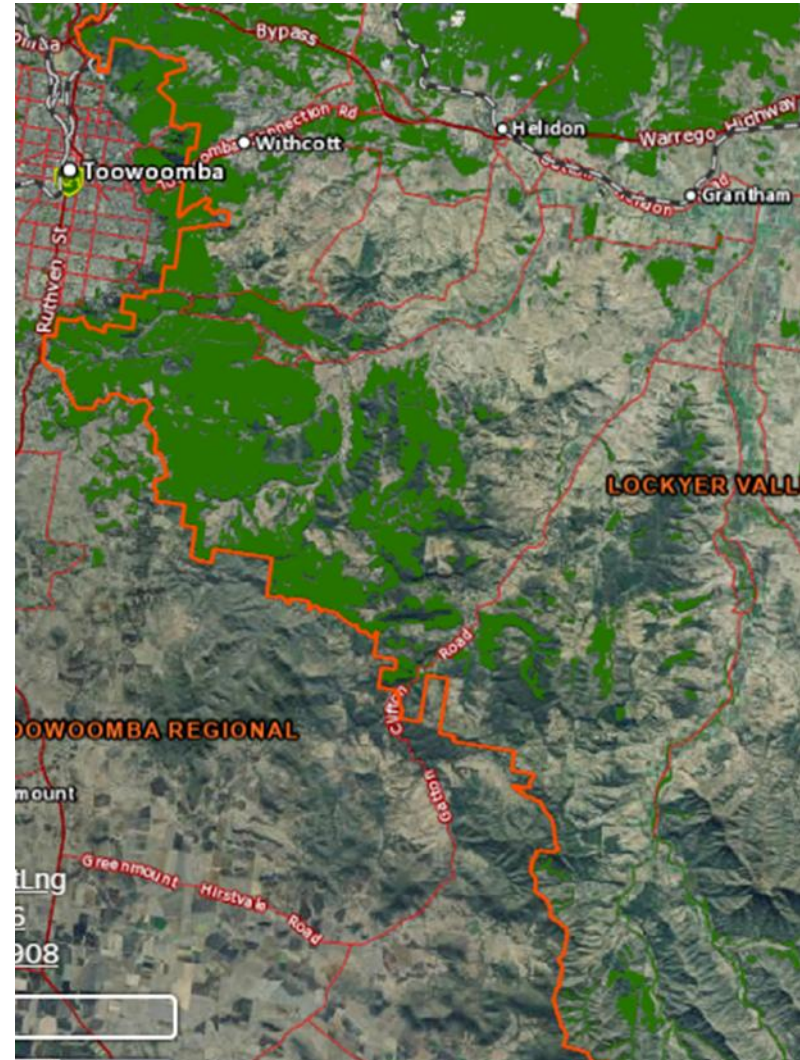
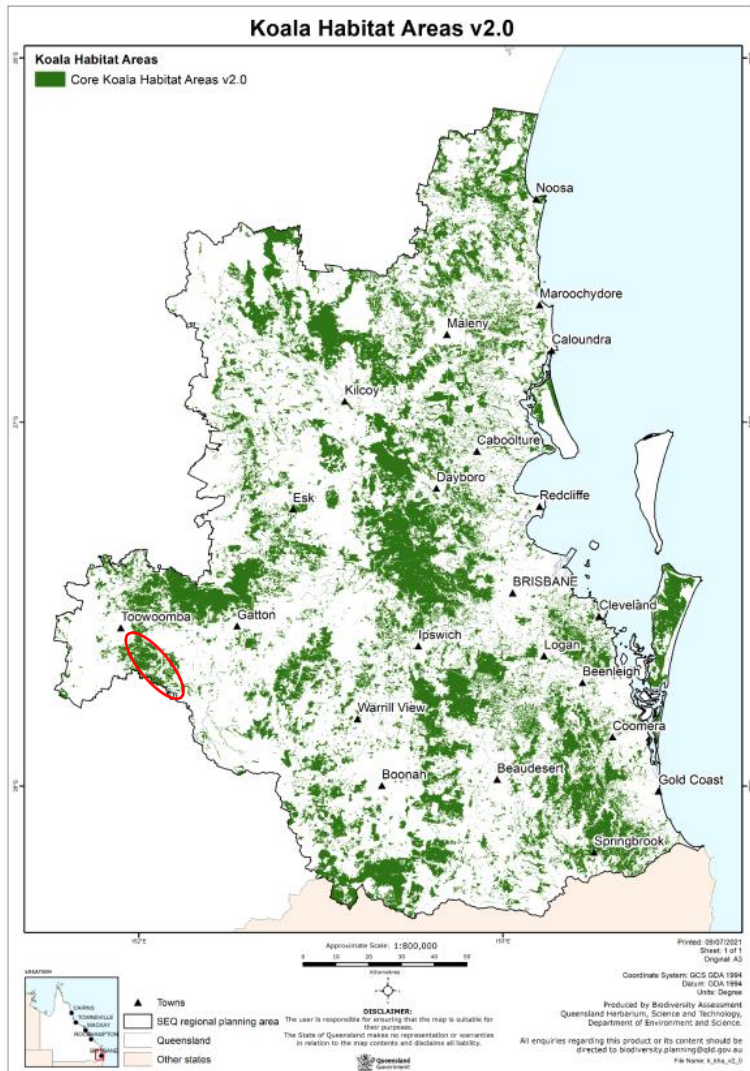
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birdlife
australia

THE GREAT
EASTERN RANGES
connecting people...connecting lands

TOOWOOMBA
BIRD OBSERVERS

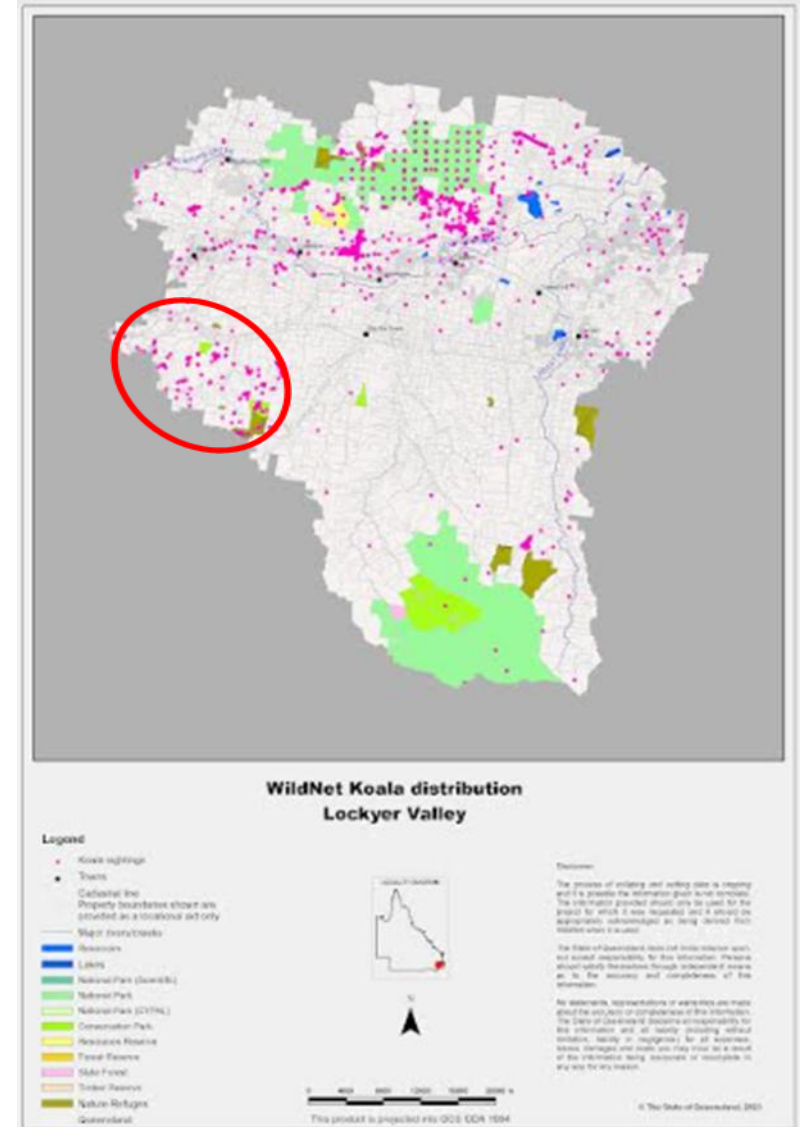
LUCI landscape – core koala habitat



Map 1: Extent of core koala habitat areas (remnant and regrowth combined).

Koala presence in the Lockyer Valley

- WildNet records contributed by various groups/individuals
- Opportunistic and survey records
- Lockyer Uplands - indicative but not representative



LUCI's koala project on members' properties

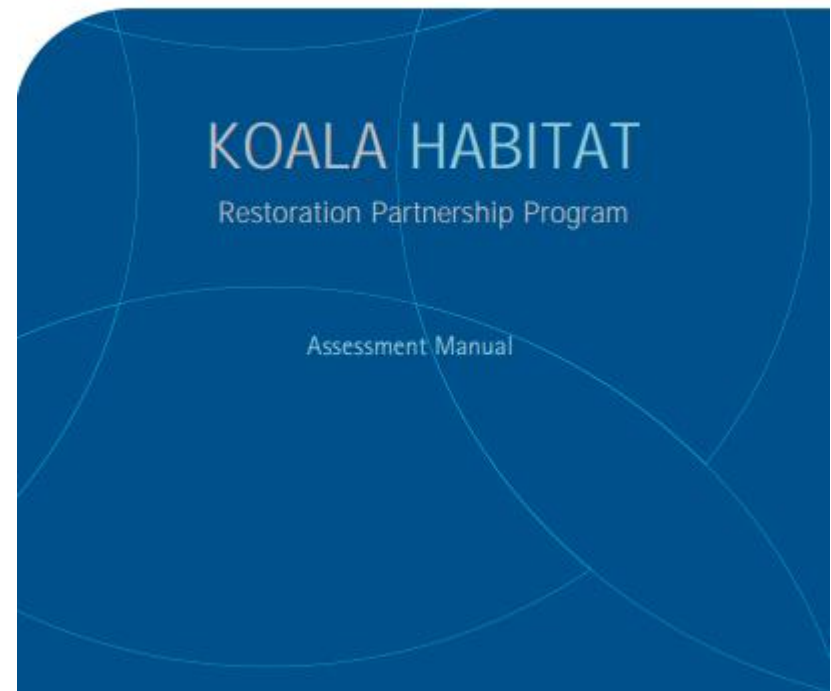
- Historical/anecdotal accounts
- **Primary goal - confirm presence**
- Koala monitoring on members' properties commenced 2017
 - 16 properties surveyed > 1
 - Property size 30-1200 acres
- Targeted scat walk survey and/or SAT surveys (Phillips & Callaghan, 2011¹)
 - 16 targeted scat walk surveys
 - 6 SAT surveys
- Koala presence established on 13 properties

¹[Phillips and Callaghan 2011 Spot Assessment Technique](#)



LUCI's koala project on members' properties

- **Second goal**
 - assess habitat condition
 - provide landholders with feedback
 - inform LUCI's conservation action
- Using KHRPP Manual
- Same 16 properties
- 6 of 16 properties surveyed
- Questions
 - utility of information to LUCI and landholder
 - generalizability of bioregional benchmarks



The Koala Habitat Restoration Partnership Program is a 5-year, \$1.96 million project funded by the Queensland Government to restore koala habitat in strategic areas of southeast Queensland

Bioregional vs finer scale attributes of KUA

Questions re generalisability of bioregional benchmarks at finer scales... (ANU report 2021 *A review of koala habitat assessment criteria and methods*)

REGIONAL ECOSYSTEM & BENCHMARK VALUES:

Habitat description: _____ _____	
Regional Ecosystem: _____	Benchmark large eucalypt tree DBH threshold: _____
Benchmark # large trees/ha: _____	Benchmark tree canopy height: _____
Benchmark canopy cover (%): _____	Benchmark average tree stem density/ha (T1): _____

KOALA SPECIFIC BENCHMARK VALUES:

Primary koala food tree species listed in RE benchmark: _____ _____
Secondary koala food tree species listed in RE benchmark: _____ _____

Lockyer	<i>E. tereticornis</i> ssp. <i>tereticornis</i>	<i>E. exserta</i> <i>E. major</i> <i>E. melliodora</i> <i>E. moluccana</i>
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Localised Koala Habitat Assessment Tool (LKHAT)

Criteria for LKHAT...

- Based on grounded knowledge on known koala use areas (n=16)
- Utility in land management at the property scale
- Inform LUCI's conservation planning at the landscape scale

LKHAT is...

- Applied on 25m radius circle plot
 - emphasis on presence and recruitment of 7 tree species
 - height and condition of canopy
 - type and extent of non-native vegetation
- Includes a modified SPOT survey – 30 trees yes/no scat and species record

Two trial runs with aim for a pilot project

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Local Koala Habitat Assessment Tool - Field Data Sheet

Date: Observer(s):

Property address:

Lot/plan:

Habitat description (canopy, mid- and ground levels):

Regional Ecosystem: Tick the following best description:
 Remnant vegetation High value regrowth Cleared/disturbed vegetation

Assessment plot 25m radius circle - Attributes

GPS coordinates for centre tree in plot:

Circle which of the following tree species are present:

Ironbark (if possible indicate which of the following species of Ironbark)
 Eucalyptus crebra
 Eucalyptus fibrosa
 Eucalyptus sideroxyloides

Yellow Box *Eucalyptus melliodora*
 Grey Gum *Eucalyptus major*
 Blue Gum *Eucalyptus tereticornis*
 Other trees species of notes

The ones you've circled make up what proportion of trees in the plot (tick one)?
 less than 10% between 10% - 50% more than 50%

Indicate if there is any recruitment of the above trees in the plot by ticking which of the following are present:
 a tree less than 1m high (at ground level) a tree 1m - 5m high (mid-storey level) a tree over 5m high (canopy level)

What is the average height of the trees in the canopy level?

Describe the average condition of the tree crowns in the canopy level (tick one)?
 less than 10% have dead branches 10% - 50% have dead branches more than 50% have dead branches

Describe any non-native vegetation in the plot:

Indicate the extent of the non-native vegetation cover in the plot (tick one)?
 less than 10% cover between 10% - 50% cover more than 50% cover

Next steps for LUCI's koala project...



Monitor

- Extend presence database in corridor
- Trial the utility of the LKHAT with landholders
- Invite other parties to investigate questions around koala population and population viability in our landscape



Conserve

- Assist with management of weeds, weeds, weeds
- Seek expert input into koala conservation action planning



Educate

- Promote attributes of local koala use areas with land managers and relevant agencies
- Promote importance of registering observations

Thank you

