

# Statement to Inquiry into koala populations and habitat in New South Wales

Portfolio Committee No 7

Lyn Orrego representing the Nambucca Valley Conservation Association (1) February 4<sup>th</sup> 2020

Speaking to my submission, I wish to draw to the committee's attention 3 main points:

1. "The NSW upper mid-north coast and hinterland supports Koala populations of national importance."(2)
2. The last 20 years of increasingly intensive and near clearfell logging across public native forests (State Forests) in our region has seriously impacted these populations – even before the fires of this season – as witnessed by the estimated 50% decline in their numbers over this time.(3)
3. Urgent action to halt the continued intensive logging of koala habitat is needed now more than ever, beginning with that within the bounds of the proposed Great Koala National Park. We are calling for bipartisan support for declaring the proposed Great Koala National Park (GKNP)

Three maps (below) support these points. All based on state government data.

## Map 1 – Great Koala National Park – Koala Habitat

Map 1 shows spatially the nationally important koala populations within the proposed GKNP

- A.) The Department of Primary Industry and Environment's latest Koala Habitat Suitability Model (KHSM) shows there are 114,914 hectares of the 2 highest classes of koala habitat within the proposed Great Koala National Park (all of which is public land) That's **36% of the proposed GKNP is high quality koala habitat.** (State Forests accounts for 25% and National Parks for 11%). (See notes re KHSM p 10 )
- B.) The Office of Environment and Heritage released last year maps of Areas of Regional Koala Significance (ARKS) and Koala Hubs. **There are 3 Areas of Regional Koala Significance that coincide with the proposal.**
- C.) **There are 6,729 hectares of koala hubs** within the proposal area, that's 2% of the area. **Koala Hubs are specific known, occupied koala habit.** These are most important. More will be found with further study. **Precious spots indeed.** (State Forests account for 1.6% and National Parks for 0.4%)
- D.) The map also shows many hundreds of actual koala records - in high density in places.

Such is the rich koala heritage inherent to this area.

## Map 2 – Great Koala National Park – Logging and Burning

- A.) Map 2 shows where logging has taken place over the last 20 years. Much of it so intensive as to be virtual clear fells even up to 110 hectares in size (pers comm EPA 2015)

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Ironically the style of logging is termed "Single Tree Selection". It was illegal until just last year when it was legalised in the Coastal Integrated Forestry Operations Approval (CIFOA) across 140,000 hectares of State Forests in north east NSW.

However, while unauthorised (between 2006-2016) across the Lower North East region, 74,906 hectares was near clearfelled in this way. And 23,742 ha (32%) of that was high quality Koala habitat with 717 Koala records. (4)

Koalas evolved with eucalypt forests of mixed age and species . Remove the trees and the koalas are removed also. .. as shown by their recent decline.

It's disgraceful that at least 42,299 ha (53% ) of the likely Koala habitat and 2,506 ha (50%) of Koala Hubs on State Forests in the GKNP have been logged in the past 20 years.

It is also shocking to realise that another 13,060 hectares (an additional 16% chunk) of likely koala habitat on State Forests in the GKNP and another 1,164ha (an extra 23%) of koala Hubs in SFs is currently being logged or is planned to be logged this year.

Do we really want to raise the stakes from destroying half the koala values on these public lands in the last 20 years to destroying nearly three quarters of them by the end of this year?

B.) Terms of Reference (TOR) 1 (b) (i) .. impacts of the Coastal Integrated Forestry Operations Approval (CIFOA) Koala Feed tree retention prescription:

A quick word on the logging rule that requires some koala feed trees to be left in some places.

Retained trees are allowed to be as small as 20 cm diameter at breast height (DBH) but Koalas are known to favour larger trees (>30cm diameter) (as feed trees and for shelter).

Renowned Koala expert, Dr Steve Phillips (5) , commenting on the current logging rule that allows small trees to be retained as koala feed trees (as small as 20cm diameter at breast height) explains the problem:

"To protect themselves, the smaller size-class trees use their free carbon to create anti-feedants and so make themselves unpalatable to koalas".

"The forestry prescription that enables removal of all food trees > 200 mm is, in my opinion, it's a crime against biodiversity which will invariably result in the complete absence of koalas from forests where these prescriptions are applied."

There is no denying that the loss of the larger trees Koalas prefer (>30cm diameter) has significantly reduced Koala populations (ie Smith 2014, EPA 2016). With less food there are less Koalas

C.) Map 2 also shows the extent and location of the 2019 firegrounds: 57% of the proposed GKNP has burnt (to varying degrees) making action to protect and restore koala habitat all the more urgent.

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### Map 3 – Great Koala National Park - Koala Habitat Log and Burnt

Finally, Map 3 is an amalgam of Maps 1 and 2 that shows the location of the unburnt and not recently logged likely koala habitat (shown in green).

Conclusion:

The koala is of international concern now – money is pouring in to koala hospitals. What could be more valuable than koalas being rescued and cared for? ... The answer? Wild koala populations living in their natural habitat - the native forests they evolved in - the native forests that we have stopped destroying – that's what's most valuable and what's urgently needed. We urge the committee to begin by recommending the declaration of the GKNP.

At a minimum The Portfolio Committee 7 has the chance and must urgently call for a moratorium on all the logging operations planned for 2020 (list of compartments quantified below and can be emailed or accessed on NSWFC website ) both in the unburnt forest and the burnt forest.

**Thank you**

*Lyn Orrego*

Lyn Orrego (On behalf of NVCA)

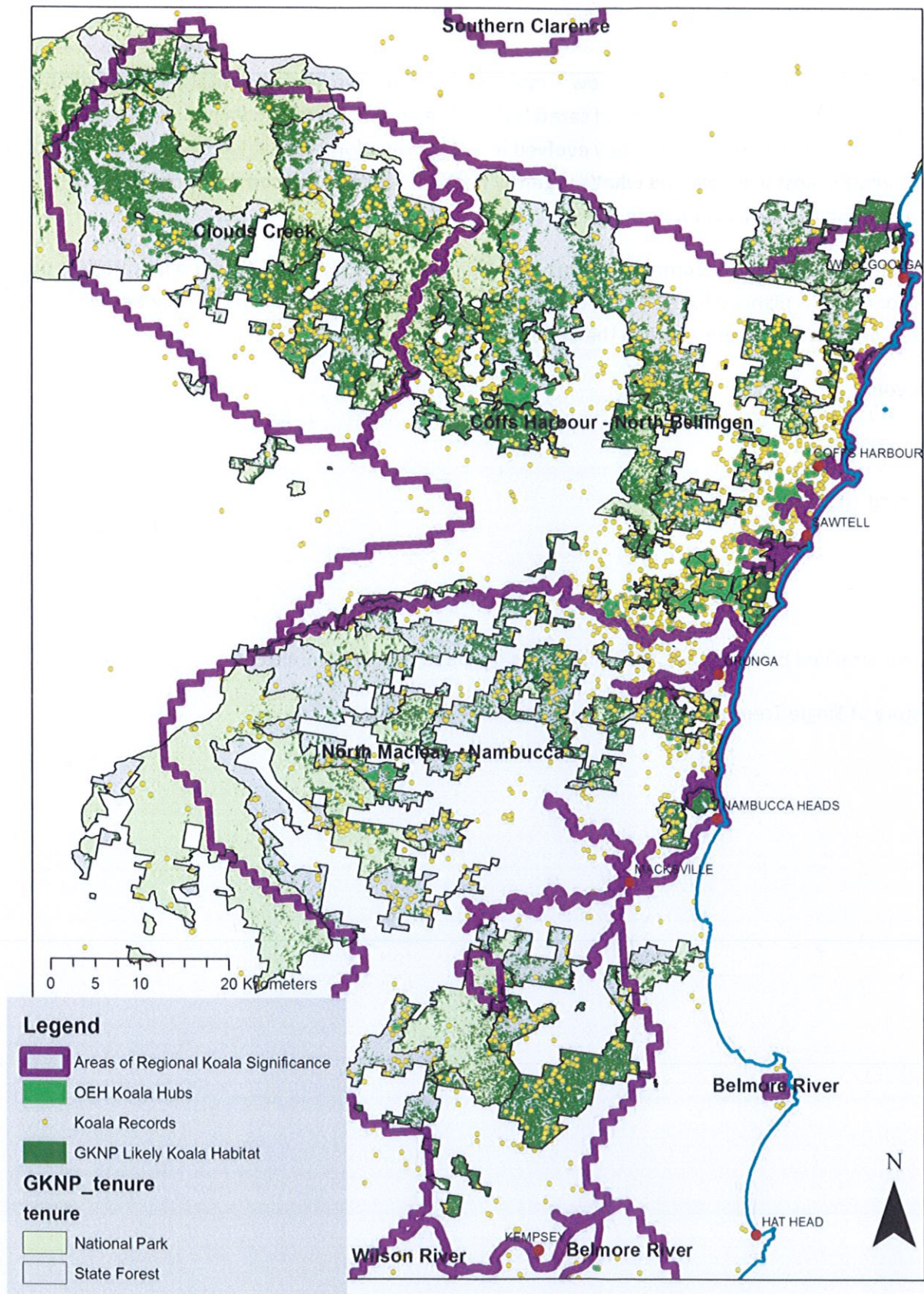
Maps are attached below with notes - and copies provided for the committee

"The story of Single Tree Selection" has been provided to the Chair



# MAP 1

## Great Koala National Park - Koala Habitat





# Map 1 GKNP – Koala Habitat

## Koalas and likely Koala habitat within the proposed

### Great Koala National Park (GKNP) - at a glance

This is the evidence base of the undoubted presence of Koalas and likely Koala habitat within the public native forests in the bounds of the proposed GKNP – which are being steadily eroded by ongoing, increasingly intense logging, including near clearfells of large hectares (now legal under the Coastal Integrated Forestry Operations Approval (CIFOA)) and which have now been impacted by fire.

Now more than ever it's time to save what's left of the wild koala populations of national and international importance on the NSW mid north coast.

This “at a glance” map, is based on NSW State Government databases. It justifies our request that Portfolio Committee 7 recommend the immediate cessation of logging in the 175,746 hectares of public native forest (State Forests) AND the declaration of the Great Koala National Park – to protect what's left of the wild koala populations hanging on in this area.

#### Notes on the Legend:

Purple lines show the boundaries of the Office of Environment and Heritage's (OEH) 3 Areas of Regional Koala Significance (ARKS):

1. Clouds Creek,
2. Coffs Harbour-North Bellingen and
3. North Macleay-Nambucca

within which these 175,746 hectares of State Forests occur that are proposed to be added to the existing National Parks to create the 315,263 hectare GKNP network of National Parks.

Grey areas show the 175,746 hectares of State Forests proposed to be reserved as part of the GKNP

Dark Green areas shown the highest classes of Koala Habitat (KHSM) across the 315,263 hectare area proposed to form the GKNP network of National Parks

Note: The KHSM for the north-east NSW region is used. Classes 4 and 5 (the highest two classes of koala habitat) are converted into a shape file from the KHSM tiff file. **Note: These classes appear to correspond to the mapping in the new Koala State Environmental Planning Policy (SEPP) which is described as 'highly suitable koala habitat ... likely to be occupied by koalas'** This category is called “likely” and is the current regulatory map . FCNSW are of course exempt from the new SEPP

Bright green shows the Office of Environment and Heritage Koala Hubs (areas of known Koala occupancy)

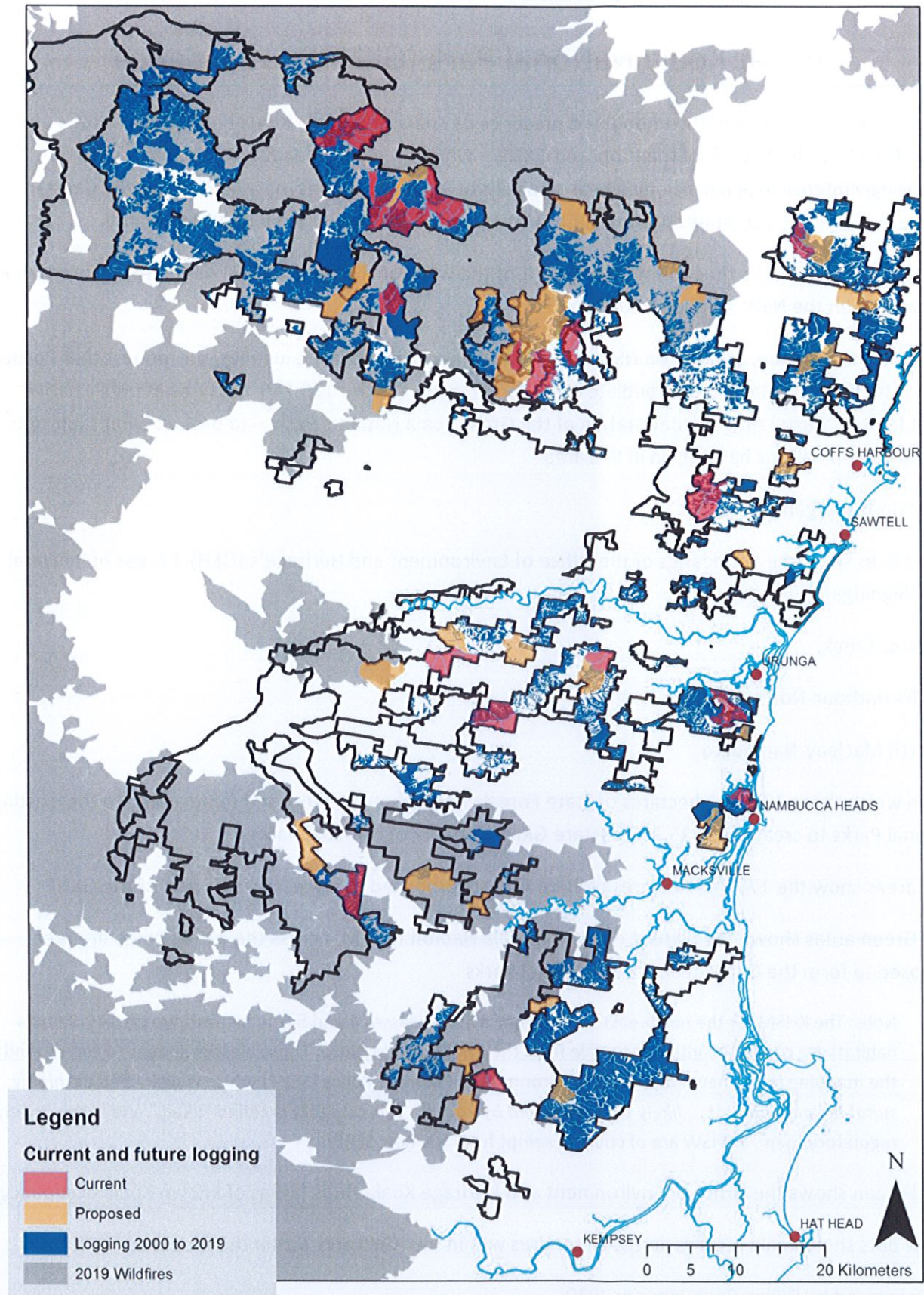
Yellow dots show Koala records across all tenures within the ARKS and within the Proposed GKNP

Map prepared by Dailan Pugh January 2020



## MAP 2

### Great Koala National Park - Logging and Burning





## Map 2 GKNP – Logging and Burning

### 20 year logging history, current and proposed logging this year within the proposed Great Koala National Park (GKNP) overlaid on area burnt in 2019 - at a glance

Against the grey background of the 2019 fire ground, covering 179,427 hectares (57% of the proposed GKNP), the 20 year logging history can be seen (in blue). This is the net area logged in NSW Forestry Corporations Forest Records Events Database (FRED) since 2000. The current logging operations are shown (in dark pink) and the logging planned for 2020 (in light brown). Only the white patches are both unburnt in the 2019 fires and not logged either within the last 20 years, not being logged at the moment or will not be logged this year.

It's disgraceful that at least 42,299 ha (53% ) of the likely Koala habitat and 2,506 ha (50%) of Koala Hubs on State Forests in the GKNP have been logged in the past 20 years, greatly reducing the abundance of the large (>30cm diameter) feed-trees Koalas need. With less food there are less Koalas.

It is also shocking to realise that another 13,060 hectares (another 16% chunk) of likely koala habitat on State Forests in the GKNP and another 1,164ha (another 23%) of koala Hubs in the SFs is currently being logged or is planned to be logged this year.

**Do we really want to raise the stakes from destroying half the koala values on these public lands in the last 20 years to destroying three quarters of them by the end of this year?**

The destruction of the koala life support system; intact, mature, mixed species native forests with which koalas evolved is continuing apace. There is no denying that the loss of the larger trees Koalas prefer has significantly reduced Koala populations (ie Smith 2014, EPA 2016).

To compound this, the fires in 2019 burnt out 29% of likely Koala habitat in the GKNP and 32% of Koala Hubs. This has had some impact on the loss of feed trees in State Forests, though of most concern is that it has caused the death of most Koalas in the burnt forests whether State Forests or National Parks.

**It is evident that logging of likely and known Koala habitat in the proposed Great Koala NP, some of the most significant known of in NSW, has significantly reduced the numbers of Koalas the forest can support.**

It is evident that those Koalas on the Dorrigo plateau (most notably the Clouds Creek ARKS) are now in crisis by the extensive logging and burning. Any further habitat degradation (logging or clearing) could endanger this population.

**While likely Koala habitat in the lower elevation forests has been extensively degraded by past logging, it is of the utmost importance that the surviving unburnt populations in the Coffs Harbour-North Bellingen and North Macleay-Nambucca ARKS not be further threatened by loss of feed trees.**

We submit this history of logging and now the unprecedented scale of the fire impacts make the declaration of the proposed Great Koala National Park even more important and urgent.

At a minimum The Portfolio Committee 7 has the chance and must urgently call for **a moratorium on all the logging operations planned for 2020** (list of compartments quantified below and can be emailed) both in the unburnt forest and the burnt forest.

## **Annual Plan of Operations** (accessed 24/1/2020)

Map 2 shows compartments identified on FCNSW website as current logging (active, suspended) and proposed for logging in next 12 months (approved, scheduled, planning), within GKNP. Logging operations are temporarily suspended for various reasons, though these are still effectively active operations. Also note that, unlike Forests Records and Events Datatabase (FRED), this data is for whole compartments and therefore includes exclusion areas - it is gross not net. All in hectares:

### **Current Logging (active, suspended)**

GKNP Area: 13,664

GKNP Area likely Koala habitat: 5,966

GKNP Area Koala Hub: 388

### **Proposed Logging (approved, scheduled, planning)**

GKNP Area: 17,656

GKNP Area likely habitat: 7,094

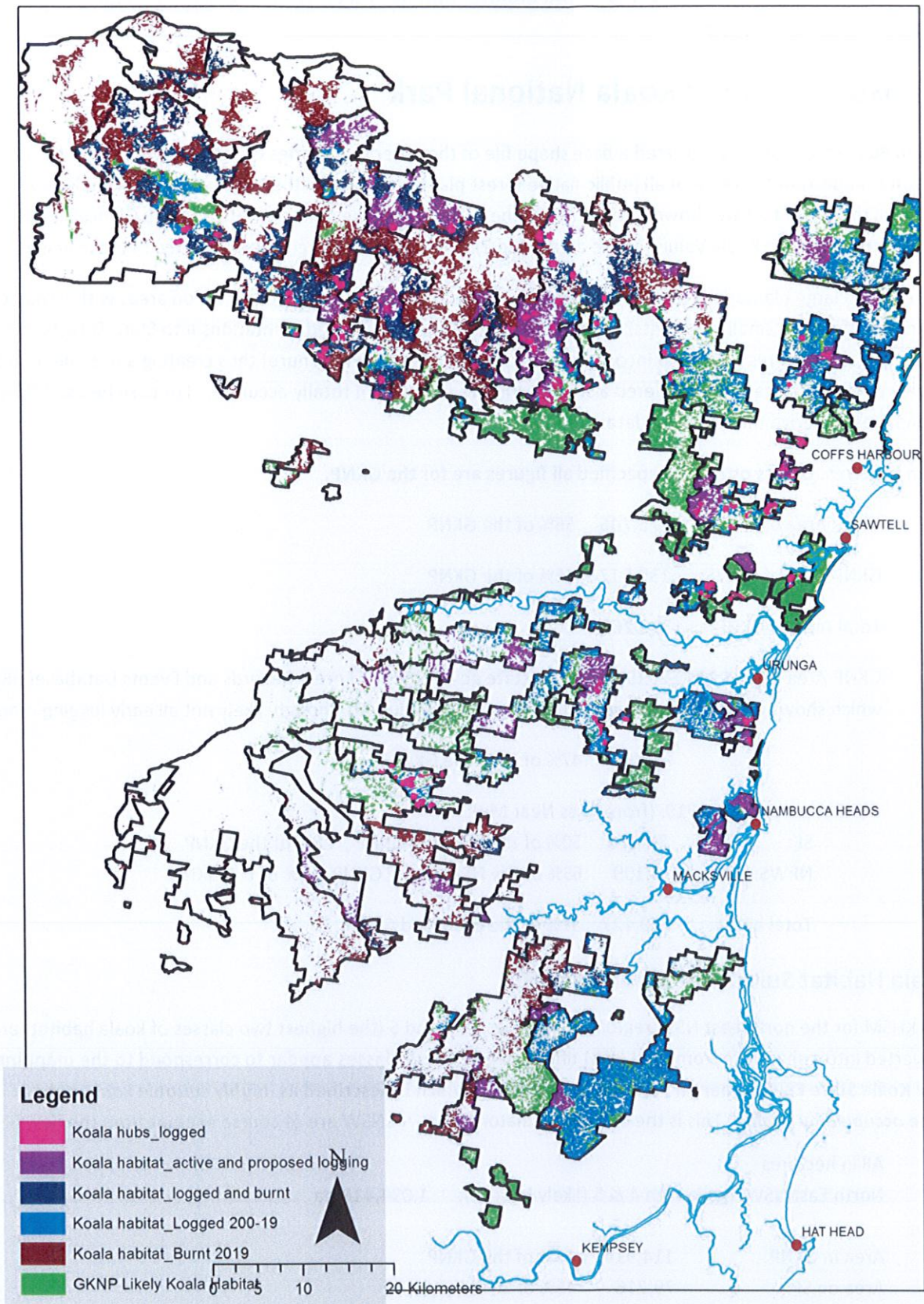
GKNP Area Koala Hub: 776

The list of compartments quantified above can be emailed to the Committee or accessed on NSWFC website.



### MAP 3

#### Great Koala National Park - Koala Habitat Log and Burnt



## Map 3 – Great Koala National Park

### Koala Habitat Log and Burnt – at a glance

Map 3 is an amalgam of Maps 1 and 2. The unburnt and not recently logged areas of high quality koala habitat are shown in green.

### Statistics on Great Koala National Park

Dailan Pugh in January 2020 created a base shape file of the outer boundaries of the proposed Great Koala National Park. It is important to note that all public native forest plantations within these boundaries are excluded from the proposal though not all are shown as excluded in the maps due to the aim to create an “At a Glance” graphic representation of the Koala Values of the area (Map 1) and Impacts of logging and burning on those values (Map 2).

He removed large plantations (Forest Management Zone 5) and the network of exclusion areas within (mostly riparian buffers and small fragments); incorporated small and fragmented plantations into State Forests; removed most road and river reserves (and incorporated them into the adjacent tenure) thus creating a useable map for display purposes. It can be considered a sound estimate rather than totally accurate. For ease he used these boundaries to derive the following data.

**All in hectares. Unless otherwise specified all figures are for the GKNP.**

GKNP Area of SF: 175,746 56% of the GKNP

GKNP Area of NPWS: 139,517 44% of the GKNP

Total Area of GKNP: 315,263

GKNP Area logged 2000-2019 (using the state government’s Forest Records and Events Database( FRED) which shows the actual area logged (exclusions are excluded), though likely not all early logging mapped:

81,957 47% of SF in the GKNP

GKNP Area burnt in 2019: (from Fires Near Me):

SF: 88,318 50% of the SF in the GKNP , 28% of the GKNP

NPWS: 91,109 65% of the NPks in the GKNP, 29% of the GKNP

Total burnt 179,427 57% of the proposed GKNP

### Koala Habitat Suitability Model (KHSM)

The KHSM for the north-east NSW region is used. Classes 4 and 5 (the highest two classes of koala habitat) are converted into a shape file from the KHSM tiff file. **Note: These classes appear to correspond to the mapping in the new Koala State Environmental Planning Policy (SEPP) which is described as 'highly suitable koala habitat ... likely to be occupied by koalas'** This is the current regulatory map . FCNSW are of course exempt from the new SEPP.

All in hectares

North East NSW, Koala high 4 & 5 (likely habitat): 1,094,418 ha

Area in GKNP: 114,914 36% of the GKNP

Area on SF: 79,216 45% of SF in the GKNP



|  |        |                                     |  |
|--|--------|-------------------------------------|--|
|  |        | 25% of the GKNP                     |  |
| Area in NPWS:                                  | 35,698 | 26% % of NPKS in the GKNP           |  |
|  |        | 11% of the GKNP                     |  |
| GKNP Area logged since 2000:                   | 42,299 | 24% on SF                           |  |
|  |        | 13% of the GKNP                     |  |
| GKNP Area burnt in 2019:                       | 33,734 | 29% of the GKNP                     |  |
| GKNP Area logged since 2000 and burnt in 2019: | 17,401 | 15% of the likely K habitat in GKNP |  |

## Koala Hubs.

The Office of Environment and Heritage (OEH) has analysed Koala records *"to delineate highly significant local scale areas of koala occupancy currently known for protection"*, which they term Koala Hubs. These still have not been made public, though are known occupied key Koala areas and therefore important. They are only some of such lands. With full surveys many more would be identified. **All in hectares**

### Koala Hubs NE NSW (OEH 2017)

|                  |        |
|------------------|--------|
| North East area: | 49,916 |
| Koala Hubs NP:   | 6,536  |
| Koala Hubs SF:   | 8,700  |

### Koala Hubs GKNP

|   |       |                   |
|---|-------|-------------------|
| Area in GKNP:                           |       |                   |
| SF:                                     | 5,052 |                   |
| NPWS:                                   | 1,677 |                   |
| Total hectares of K Hubs in GKNP:       | 6,729 |                   |
| K Hubs in GKNP logged since 2000:       | 2,506 | 37% K Hubs logged |
| Hectares of K Hubs unlogged since 2000: | 4,223 |                   |
| K Hubs in GKNP burnt 2019:              |       |                   |
| SF:                                     | 1,962 |                   |
| NPWS:                                   | 176   |                   |
| Tot in GKNP:                            | 2,138 | 32% K Hubs burnt  |

## References

- (1) Also VP of North East Forest Alliance and NSW Nature Conservation Council northern representative on the Ecologically Sustainable Forest Management (ESFM) Working Group during the Comprehensive Regional Assessment (CRA) process during the late 1990's. My personal submission of August 2019 has since been endorsed by the NVCA committee as NVCAs submission.
- (2) Conserving Koala populations of the New South Wales upper mid-north coast: Preliminary mapping of populations as a basis for further survey, research and planning. By David Scotts for North Coast Environment Council, Bellingen Environment Centre, Clarence Environment Centre, Nambucca Valley Conservation Association and NSW National Parks Association. January 2013
- (3) NSW Chief Scientist Report
- (4) Clearing Koalas Away DailanPugh 2014 pps 9-23 [www.nefa.org.au](http://www.nefa.org.au)
- (5) Steve Phillips: an independent scientist with the NSW Koala Recovery Team with over 35 years experience with koalas is an internationally acknowledged authority on the ecology, conservation and management of the species and pers comm Jan 2019.