Cumberland Plain Conservation Plan

Findings of 2023 koala monitoring

The Department of Planning, Housing and Infrastructure and the NSW Koala Strategy team within the NSW Department of Climate Change, Energy, the Environment and Water, have jointly developed a 3-tiered program that will assess and monitor key koala outcomes from the Cumberland Plain Conservation Plan.

The tables below provide a summary of the 2023 surveys and associated findings, carried out under this program:

- **Table 1- Findings of the 2023 regional koala survey**. This is a regional survey of south-west Sydney koala distribution and their relative abundance.
- **Table 2 - Findings of the 2023 koala disease survey.** This is a survey on the chlamydia status of Campbelltown-Wollondilly area koalas.

Findings of the density survey in the Georges River corridor are expected to be finalised soon.

Table 1– Findings of the 2023 regional koala survey

2023 south-west Sydney Regional survey	
Survey details	<u>Duration</u> • 6 weeks (September-October 2023) <u>Methods</u> • Acoustic surveys of 53 plots to estimate koala occupancy • Drone surveys of 46 plots to estimate koala relative abundance <u>Locations</u> • A range of habitats including intact, fragmented, higher and lower quality koala habitats, and nearby cleared areas
Findings	**Sound records** • koalas were detected at 35 of the 52 plots surveyed • koalas were mainly found in intact habitats across south-west Sydney on the western edge of the Woronora Plateau but also in fragmented corridors in Greater Macarthur growth area. **Drones** • detected koalas at 20 of the 46 plots in broadly the same distribution pattern as recorded by sound recorders • multiple koalas were detected at some plots • detected highest numbers of koalas between Kentlyn and Wedderburn, and in the Upper Nepean State Conservation Area • Detected moderate number of koalas in intact habitat on the western edge of the Woronora Plateau. Future surveys will incorporate replicate surveys of plots to improve koala detection. This will help provide more accurate numbers and ensure the results more reliable.

Table 2– Findings of the 2023 koala disease survey

2023 Koala disease survey	
Survey details	<u>Duration</u> • 15 days (May-June 2023) <u>Methods</u> • 9 survey plots (average 140 hectares each) between Long Point and Picton Road, Wilton <u>Locations</u> • Non-invasive, using fresh koala scat to determine the presence of chlamydia that were located using thermal drones and spotlighting

Findings	• 138 koalas were detected, and 129 scat samples collected
	• Scat samples were not collected from every koala detected and some scat collected did not pass DNA quality control tests
	• Analysis of scat that passed DNA quality control tests identified 96 unique koalas - 46 males and 50 females
	• The higher female to male ratio suggests a healthy population.
	• Chlamydia results:
	  ○ 86 koalas tested negative
	  ○ 10 koalas tested positive (mostly males)
	  ○ Slight increase in chlamydia cases from 2021 (10.4% in 2023 versus 7% in 2021)
	  ○ Infections were limited to south of Appin Road
	• Active management is needed to stop chlamydia from spreading from southern to northern koalas in south-west Sydney
	• Koala experts from the Department of Climate Change, Energy, the Environment and Water and the University of Sydney are considering management actions
	• Monitoring is crucial to detect any spread of chlamydia north from Appin Road.