

## Introduction

Bulletin has made a number of avoidance and mitigation measures to minimise the impact of proposed actions on the environment to that originally described in Native Vegetation Clearing Permit (NVCP) application CPS 7949/1.

The note provides:

1. outline of amendments made to the original application (including any additional mitigation measures, and
2. a summary of flora, vegetation and fauna survey impacts within the reduced area of NVCP application.

A shapefile of the revised NVCP Project area is attached (RHS figure 1).

### 1. Outline of amendments

The revised Proposal involves a decrease in the proposed maximum disturbance footprint from 7 ha to 2.3 ha (a 67% decrease) within a NVCP application area reduced from 222 ha to 22 ha (a 90% decrease). The disturbance area north of Phillips River, located in proximity to a significant Carnaby's breeding area, has been removed, and the proponent has committed to not conducting clearing or drilling activities whilst Carnaby cockatoos are breeding in the area.

A summary of amendments made to the original NVCP application are provided in Figure 1 and Table 1.

Bulletin is also conducting works to further refine the 2.3 ha disturbance footprint. Works include high definition survey of Carnaby Foraging Habitat, characterisation of vegetation and previously cleared areas within the Project Area in order to further define clearing areas and avoid/mitigate environmental impacts.

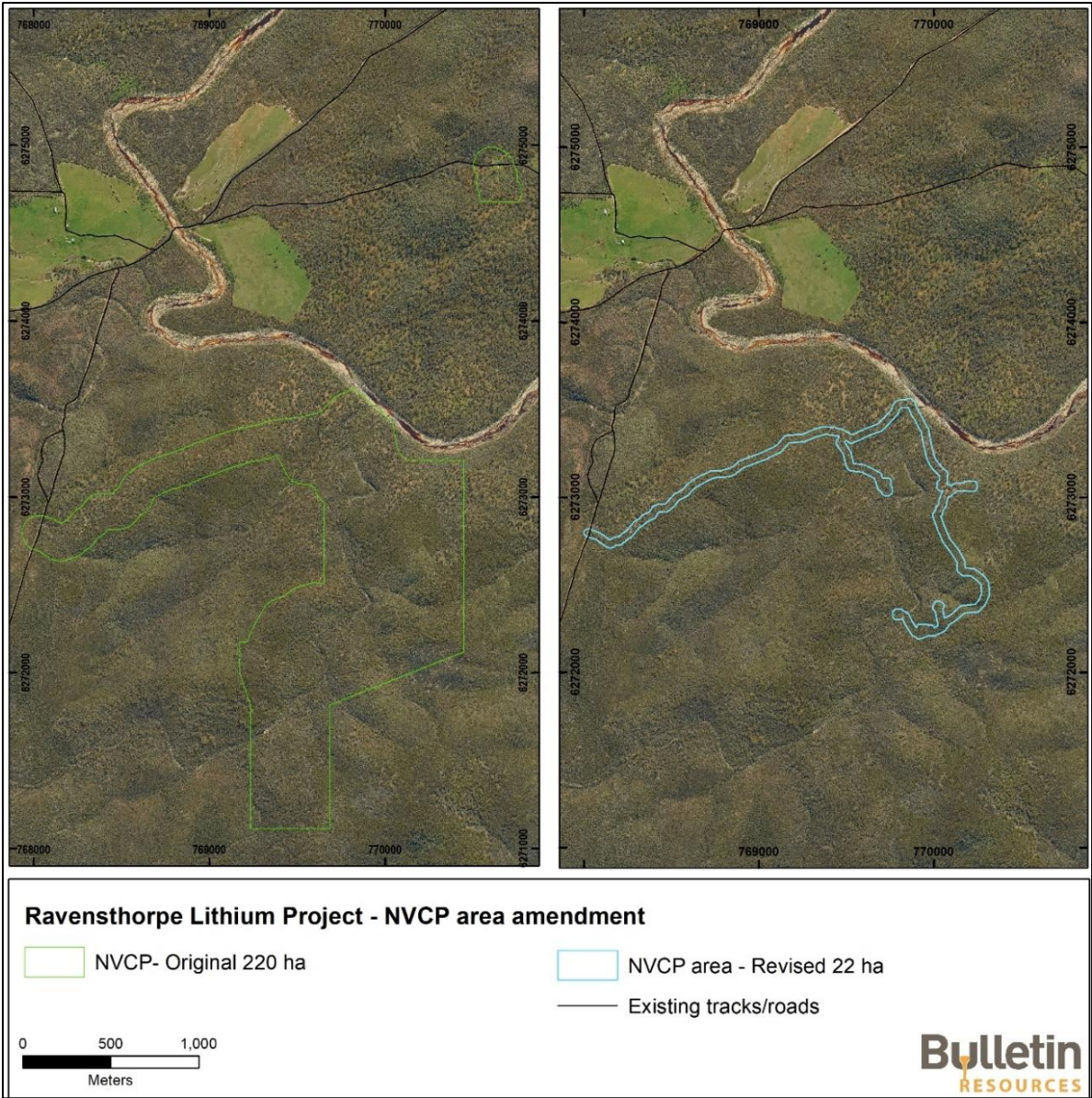


Figure 1: Project Area amendment to NVCP 9749/1

Table 1: Summary of changes to NVCP 9749/1

Element	Proposed Extent	
	Original Proposal	Proposed Change
NVCP Project area footprint	222 ha	22 ha
	Two areas – northern and southern area	Only southern area remains in proposal
Total area of clearing proposed	No more than 7 ha	No more than 2.3 ha
Maximum Project Life	2 years (excluding monitoring/ rehabilitation)	1 year (excluding monitoring/ rehabilitation)
Timing of Proposed Action activities	1/9/2022 – 31/3/2023	1/2/2024 – 30/5/2024
	Where possible, clearing activities will be limited during key times in the breeding cycle, informed through consultation with DBCA.	Clearing, drilling and mechanical rehabilitation will be conducted after Carnaby Cockatoo breeding season, nominally February to May.
Flora, Vegetation and Fauna surveys	Surveys proposed	Surveys completed. Reports provided to DMIRS 15/12/2022. It is noted the revised area is substantially smaller than the survey envelope and subsequent report discussion contents.

## **Avoidance and Mitigation measures (original and amended)**

Original Environmental Management Measures are provided below with additional avoidance and mitigation measures beyond the original NVCP application *italicised*.

Exploration activities will be implemented in accordance with an Exploration Environmental Management Plan (EEMP) prepared prior to implementation of the Proposal. The EEMP will include management actions to control the potential environmental effects of the proposal such as;

### **Pre Exploration:**

- Demarcation of approved clearing areas in accordance with an internal 'Ground Disturbance Permit' procedure
- Avoid clearing by utilising existing disturbed or open areas
- Local topography will be reviewed to inform track design and alignment to avoid or reduce the need for cut and fill construction methods, while ensuring safe and stable tracks and pads for exploration activities
- Demarcation of avoidance areas such as significant flora and large habitat trees
- Operator personnel will be familiarised with demarcated areas prior to clearing works commencing to ensure no clearing beyond demarcated clearing zones
- Inspection of all vehicles and equipment prior to site arrival to ensure they are 'clean' of soil sods and weed seeds in accordance with hygiene procedures Local topography will be reviewed to inform track design and alignment to avoid or reduce the need for cut and fill construction methods, while ensuring safe and stable tracks and pads for exploration activities
- *Refinement of exploration design resulting in the removal of tracks and pads to reduce clearing*
- *Additional targeted flora surveys will be undertaken, if required, should other avoidance measures require tracks to be diverted.*
- *No stripping or direct removal of topsoil*
- Avoid clearing by utilising existing disturbed or open areas
- *Proposed drill tracks have been modified, with the assistance of suitably qualified scientists, to avoid and minimise impacts to known or potential habitat, including foraging habitat for Protected Matters. This included avoidance of all potential habitat trees (>300 mm diameter at breast height (DBH)) for Carnaby's Cockatoo, and the three recorded inactive Malleefowl mounds as well as pre-clearing site inspection to minimise clearing of vegetation*
- *Removal of the north-east area from the Proposal*
- *Establishment and demarcation of avoidance areas (locations of priority flora, and significant trees (DBH >300 mm))*

### **During Exploration:**

- Clearing will be conducted progressively so only those areas absolutely required for operations are disturbed

- Vegetation removal and separate stockpiling for rehabilitation
- Fire control equipment and chemical/hydrocarbon spill response equipment stored on-site
- Dangerous goods (e.g., hydrocarbon fuels) stored in bunded areas
- Wastes contained and disposal at a local licensed facility, site clean-up at the end of each day
- *Drilling multiple bore holes on single pads to reduce overall number of pads/clearing*
- *No subsurface disturbance (cut and fill or sumps) will be undertaken within 10 m of significant trees (DBH >300 mm)*
- *Raised blade clearing at least 150 mm above ground level*
- *Limited cut and fill will be required in certain locations to ensure the safety and stability of the drill pads. No stripping or direct removal of topsoil, excluding drill pads, sumps and cut and fill, topsoil to be replaced.*
- *Operator personnel will be familiarised with demarcated areas prior to clearing works commencing to ensure no clearing beyond demarcated clearing zones*
- *A qualified environmental practitioner will be present during the clearing to undertake/supervise*
  - *the implementation of the Proposal to ensure environmental mitigation measures are implemented and disturbance beyond the approved footprint is avoided.*
  - *clearing to ensure flora taxa of significance are avoided during clearing.*
- *Limit vehicle speed in Activity Area to 40km/h to reduce potential of fauna strike*
- *Vehicle traffic will be confined to the defined disturbance footprint*
- *Inspection of all vehicles and equipment prior to site arrival to ensure they are 'clean' of soil sods and weed seeds in accordance with hygiene procedures.*
- *Avoidance of areas containing known introduced species*
- *Implementation of the Dieback Management Plan*
- *Clearing activities would not be undertaken when fire danger ratings are severe or catastrophic*
- *Vehicle/harvest movement bans will be observed*
- *Firefighting equipment will be located around the site and in vehicles. Fire response procedures and personnel training, including site inductions on fire prevention and management, will also be provided.*
- *Machinery with noise mitigation fitted, or suitable machinery with the lowest noise emissions will be procured to ensure best practice is applied.*

#### **Post-Exploration:**

Rehabilitation of drill pads and tracks by –

- Removal of all rubbish (including drill sample bags) for off-site disposal
- Re-contouring of land surfaces and on-contour ripping of compacted ground
- Re-spreading of stockpiled soil and vegetation material
- *Following completion of the drilling program, all disturbed areas will be subject to rehabilitation. Rehabilitation will be undertaken per DMIRS guidelines and include the following:*



- All drill holes are capped, and 'made safe' to prevent fauna ingress after drilling each hole
- Cut and fill drill pads and access tracks to be re-profiled back into the natural hillside/terrain
- Any sumps will be backfilled with excavated material and covered with topsoil and cleared vegetation
- Disturbed areas will be reseeded with native species. Topsoil and all cleared vegetative material to be spread over disturbed surfaces,
- Rehabilitation measures are to be completed no later than six months after exploration concludes unless otherwise approved by DMIRS.
- Disturbed areas will be reseeded with native species.

Monitoring of rehabilitation (photographic records) to confirm successful rehabilitation

- Rehabilitated areas will be monitored on an annual basis

## 2.0 Summary of flora, vegetation and fauna survey impacts in reduced area

No summary of impacts from the 2022 flora, vegetation and fauna surveys have been provided to DMIRS previously. A summary of impacts between the original and revised proposal are listed below in Table 2.

Table 2: Summary of flora, vegetation and fauna survey impacts in reduced area

Environmental Factor	Environmental Matter	Original Project Area	Revised Project Area	Change
Flora and Vegetation	Native vegetation	222 ha	22 ha	-198 ha
	TEC or PEC	0	0	0
	Priority 1 Taxa (confirmed or otherwise)	3	2	-1
Terrestrial Fauna	Significant trees DBH>300mm (total)	166	73	-93
	Carnaby Cockatoo active nest	1	0	-1
	Malleefowl mounds (inactive)	3	0	-3