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17 November 2023

24000605

M Mining Millennium Mine
Millennium Mine
Poitrel Mine Road,
Coppabella QLD
4741

Attention: Francis Kuranchie, Environmental Superintendent, Millennium Mine.

Subject: 2023 Weed Control at Wotonga Offset, in accordance with the Wotonga Offset Weed Control Plan
Millennium Mine, Coppabella.

1 INTRODUCTION

Millennium Mine engaged Kleinfelder to undertake Weed Control at its Wotonga Offset. Weed Control works were completed in accordance with the Wotonga Offset Weed Control Plan (WCP). Works targeted *Opuntia tomentosa* (Velvety Tree Pear), *Opuntia* seedlings and *Harrisia martinii* (Harrisia Cactus) within the active management area. Velvety Tree Pear, *Opuntia* seedlings and *Harrisia Cactus* are restricted matter under the *Queensland Biosecurity Act 2014*. Works prioritised any mature individuals, reducing the risk of further seeding and germination of restricted species over the coming years. Works were undertaken in line with the methodology outlined in the WCP and with consideration of the current climate and immediate local context.

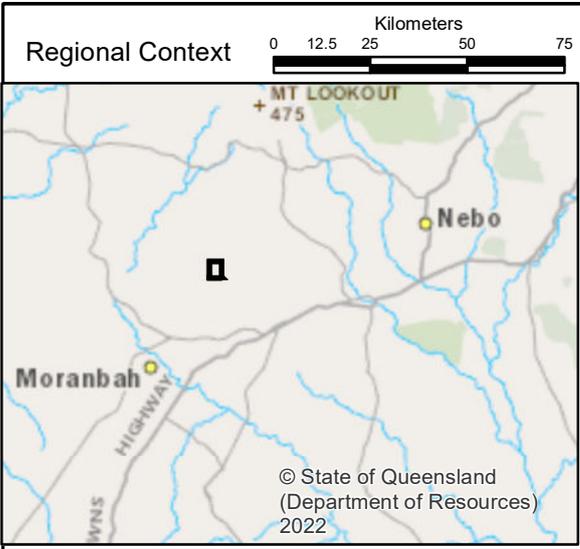
2 WEED CONTROL COMPLETED

Two Kleinfelder technicians completed weed control at the Wotonga Offset on the 17th of May 2023. Weather conditions on the day of weed control were dry with a minimum temperature of 10.8 and a maximum temperature of 27.4 recorded at the Bureau of Meteorology Moranbah Airport weather station.

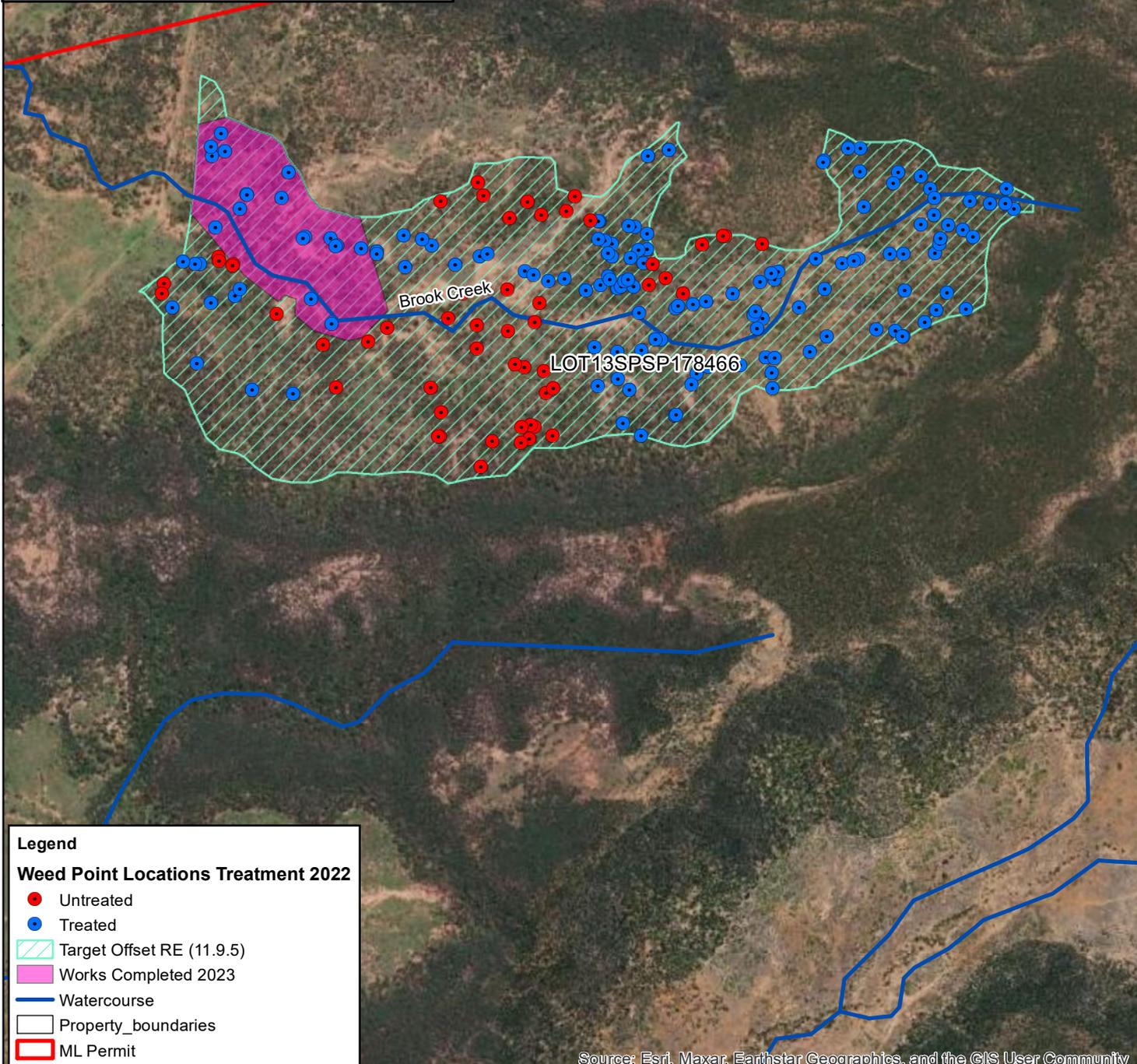
Kleinfelder Bush Regeneration Technicians commenced weed control in the northwest of the active management area, working through the creek line and surrounding vegetation (**Figure 1**). Works targeted mature Velvety-tree Pear that was proving resistant to herbicide control, and seedlings and cladodes which had taken root since the 2022 weed control campaign.

Manual removal of smaller individuals involved digging them out with the aid of mattock and shovel, taking care to ensure all fragments were removed and hung from a tree or placed on a rock. Larger individuals were removed by digging out with the aid of mattock and shovel and left to rot. It is expected these larger cacti will require follow up including rolling of the mature stem and removal of dropped cladodes that have taken root.

All work was undertaken by trained staff proficient in weed identification and control techniques.



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Legend

Weed Point Locations Treatment 2022

- Untreated
- Treated
- Target Offset RE (11.9.5)
- Works Completed 2023
- Watercourse
- Property boundaries
- ML Permit

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Metres

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PROJECT REFERENCE: 20226098

DATE DRAWN: 11/18/2023 Version 1

DRAWN BY: JMark

DATA SOURCE:
M Mining - 2021
Queensland Spatial

Weed Control Completed 2023

M Mining
Wotonga Offset Weed Control 2023

FIGURE:

1



3 CONCLUSION AND RECOMMENDATIONS

Works during 2023 primarily consisted of follow up control of larger individuals resistant to herbicide control efforts, and control of seedlings from dropped cladodes and seed. The density of cacti within the offset have been significantly reduced since the inception of the WCP with only a scattered density of cacti remaining. Ongoing maintenance will continue to reduce the population density. The offset is tracking towards the objective of cacti eradication with these works and should continue.

It is very important that follow up control is completed over the next 12-18 months to manage any reshooting individuals, particularly some of the larger specimens. Cacti species are known for their resilience, slow growth rate during stress and ability to reshoot from small fragments. For these reasons they are well adapted to resisting herbicide and manual removal control and require careful follow up control.

Installation of additional fencing has been undertaken in the last 12 months and effective cattle exclusion during key times of the year will decrease the exotic grass extent and density throughout the offset. Discussions with the landholder should be had to determine appropriate timing and stocking rate of cattle within the offset to decrease exotic grass cover and fuel load. Generally cattle should be excluded during spring to allow for seed set of native species with controlled pulse grazing occurring after the wet season, were cattle selectively graze the more palatable exotic pasture grasses, reducing fuel load and competition with native species.

If you require additional information or clarification, please contact the undersigned on 0451 148 780.

Sincerely,

Kleinfelder Australia Pty Ltd

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