

1st February 2023

MG Pastoral

Attention: Marshall Dennis

By email – marshall.dennis@denniscorp.com.au

Dear Marshall,

**RE: ROKEWOOD OFFSET SITE
 MANAGEMENT ADVICE
 PROJECT NUMBER 22192.02**

The following outlines the findings of an overview audit of the condition of native vegetation, threats to biodiversity, and adaptive management actions recommended to be implemented in addition to those stipulated in the approved Offset Management Plan,

Rokewood

Site A – Condition

All zones dominated by Kangaroo Grass with Narrow Plantain and Blue Devil also common. Low herb diversity with limited inter-tussock spaces. Weed cover primarily due to high density of Toowoomba Canary-grass surrounding and intruding, with Onion Grass also prevalent. Easternmost regions of Zone 2, 12, 14 overrun with Toowoomba Canary-grass (dominant in adjacent paddock) and native vegetation extent reduced. Areas of NTGVVP still qualify.

Population of Spiny Rice-flower in Zone 20 very good. None detected in Zone 24 and 30. Areas designated as NTGVVP still qualify.

Table 1: Main native components of Rokewood Site A

Common name	Scientific name
Blue Devil	<i>Eryngium ovinum</i>
Bluebells	<i>Wahlenbergia</i> spp.
Crane's Bill	<i>Geranium</i> sp.
Kangaroo Grass	<i>Themeda triandra</i>
Lemon Beauty-heads	<i>Calocephalus citreus</i>
Narrow Plantain	<i>Plantago gaudichaudii</i>
Native Flax	<i>Linum marginale</i>
Prickfoot	<i>Eryngium vesiculosum</i>
Sheep's Burr	<i>Acaena</i> × <i>ovina</i>
Slender Speedwell	<i>Veronica gracilis</i>
Spear Grasses	<i>Austrostipa</i> spp.
Spiny Rice-flower	<i>Pimelea spinescens</i> subsp. <i>spinescens</i>

Common name	Scientific name
Tussock Grasses	<i>Poa</i> spp.
Wallaby Grasses	<i>Rytidosperma</i> spp.

Table 2: Main weed components of Rokewood Site A

Common name	Scientific name
Flatweed	<i>Hypochaeris radicata</i>
Onion Grass	<i>Romulea rosea</i>
Ox-tongue	<i>Helminthotheca echioides</i>
Small Quaking-grass	<i>Briza minor</i>
Spear Thistle	<i>Cirsium vulgare</i>
Toowoomba Canary-grass	<i>Phalaris aquatica</i>
Wild Oat	<i>Avena</i> sp.
Yorkshire Fog	<i>Holcus lanata</i>



Zone 20: Spiny Rice-flower with Narrow Plantain in dense biomass including Toowoomba Canary-grass and Onion Grass.



Zone 31: Very high cover of weeds including Toowoomba Canary-grass, Onion Grass and Flatweed.



Zone 40: Toowoomba Canary-grass and Onion Grass encroaching.

Site A – Recommendations: 1-year adaptive management actions

- Conduct controlled burn (mosaic for larger zones) in autumn to manage Toowoomba Canary-grass and reduce biomass in Zone 20, 24, 28, 31, 345, 36–38, 40 and 41. Spot spray individual Toowoomba Canary-grass carefully in other zones. Slash or burn surrounding areas of high Toowoomba Canary-grass infestation to create at least 20m buffer around zones.
- Follow up with careful spot spraying of emergent weeds, with particular attention to Flatweed, Ox-tongue and Spear Thistle.

- Treat for control of Onion Grass (with metsulfuron-methyl herbicide and an appropriate surfactant, using a wiping application method) in late winter/early spring, 6-8 weeks after emergence of growth from new corms. Treatment will be ineffective if applied too late (such as when the tips of leaves begin to show discoloration/browning from fungal infection).
- Pulse grazing with sheep in early to mid-spring to prevent seed set of annual introduced grasses.
- Ensure no grazing by sheep through summer to limit dispersal of Onion Grass seeds.

Site B – Condition

All zones dominated by Kangaroo Grass with Narrow Plantain and Blue Devil also common. Low herb diversity with limited inter-tussock spaces. Weed cover primarily due to high density of Toowoomba Canary-grass surrounding and intruding, with Onion Grass also over-abundant. Easternmost regions of Zone 2, 12, 14 overrun with Toowoomba Canary-grass (dominant in adjacent paddock) and native vegetation extent reduced. Most areas still qualify as NTGVVP.

Table 3: Main native components of Rokewood Site B

Common name	Scientific name
Blue Devil	<i>Eryngium ovinum</i>
Kangaroo Grass	<i>Themeda triandra</i>
Narrow Plantain	<i>Plantago gaudichaudii</i>
Sheep's Burr	<i>Acaena × ovina</i>
Sundew	<i>Drosera</i> sp.
Tussock Grasses	<i>Poa</i> spp.

Table 4: Main weed components of Rokewood Site B

Common name	Scientific name
Annual grasses	
Onion Grass	<i>Romulea rosea</i>
Rough Sow-thistle	<i>Sonchus aspera</i>
Small Quaking-grass	<i>Briza minor</i>
Toowoomba Canary-grass	<i>Phalaris aquatica</i>



Zone 14, dominated by Kangaroo Grass and Toowoomba Canary-grass, the latter also surrounding and encroaching. Onion Grass cover also high.

Site B – Recommendations: 1-year adaptive management actions

- Conduct controlled burn in autumn to manage Toowoomba Canary-grass. Surrounding vegetation should also be created and maintained by slashing or burning to create a buffer of at least 20 metres so that ongoing re-infestation is reduced.
- Follow up with careful spot spraying of emergent weeds.
- Treat for control of Onion Grass (with metsulfuron-methyl herbicide and an appropriate surfactant, using a wiping application method) in late winter/early spring, 6–8 weeks after emergence of growth from new corms. Treatment will be ineffective if applied too late (such as when the tips of leaves begin to show discoloration/browning from fungal infection).
- No grazing.

I trust the above provides suitable initial guidance for remedial actions for the next year, after which time a more thorough assessment should be undertaken. Please contact me if you have any questions or comments.

Yours sincerely,

Chris Dunk

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