

Newmont Boddington Gold

MS971 Annual Compliance Report January to December 2019

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	1 of 31

ACN: 101 199 731

MS971 Annual Compliance Report 2019



CONTENTS

1	INTRODUCTION	3
2	CURRENT IMPLEMENTATION STATUS	3
3	CURRENT COMPLIANCE STATUS	4
3.1	Ministerial Statement 971, June 2014 – Current	7
3.2	Audit Tables and Summaries of Compliance	19
4	DECLARED COMPLIANCE STATUS - MANAGEMENT PLANS	20
4.1	Weed and Disease Monitoring and Management Plan	20
4.2 Plar	Groundwater and Groundwater Dependent Vegetation Monitoring and 24	Management
4.3	Bibbulmun Track Management Plan	26
4.4	Land Offset Management Plan	26
5	OTHER INFORMATION – SUPPORTING EVIDENCE	27
5.1	Compliance Report Figures	27
6	Appendices	31
6.1	Appendix A	31

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	2 of 31

ACN: 101 199 731

MS971 Annual Compliance Report 2019



1 INTRODUCTION

This Compliance Assessment Report (CAR) has been prepared by Newmont Boddington Gold Pty Ltd (Newmont) for the Newmont Boddington Gold Life of Mine Extension Project (NBG) approved under Ministerial Statement 971 (MS 971).

MS 971 replaced the previously approved Ministerial Statement 591 (MS 591) and authorises the continued mining and processing operations as well as extension (deepening and widening) of Wandoo North and South Pits and construction of new Waste Rock Dumps, residue disposal areas and associated infrastructure.

State Environmental approval for the project extension was granted by the Minister for the Environment on 12 June 2014. Federal environmental approval for the project was granted under the EPBC Act (EPBC 2012/6370) with approval granted on 19 May 2014.

This CAR addresses the compliance status of the project for the period commencing 01 January 2018 – 31 December 2019. This report has been prepared in accordance with Office of the Environmental Protection Authority Post Assessment Guideline 3 (PAG 3; August 2012) for *Preparing a Compliance Assessment Report* and in accordance with the Compliance Assessment Plan approved by the EPA in January 2015.

The Report covers;

- A summary of the proposals implementation status;
- A statement of compliance with the requirements of the statement;
- Details of declared compliance status; and
- Information/documentation which support/verifies declarations of compliance status.

2 CURRENT IMPLEMENTATION STATUS

NBG is an active mining project that originally commenced operations in the 1980's. Since this time, the project has operated non-continuously under a variety of environmental approvals, the most recent being MS 591, which was superseded by MS 971 in 2014.

The Life of Mine Extension Project approves the widening and expansion of the Wandoo North and South Pits, construction of new Waste Rock Dumps, a second Residue Disposal Area (RDA) and associated infrastructure.

Works related to MS 971 commenced in Q1 2016 with the commencement of clearing activities to the south of the existing operation for Waste Rock Dumps 10 and 11 and associated water management infrastructure. Dumping of waste rock onto the area prepared for WRD11 commenced in 2017 with WRD10 dumping commencing in April 2018.

With a revised mine plan now anticipating a mine life to 2033, life of mine tailings deposition requirements are under review and site has begun preparing approval applications for a second RDA.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	3 of 31

ACN: 101 199 731

MS971 Annual Compliance Report 2019



3 **CURRENT COMPLIANCE STATUS**

During the reporting period NBG was compliant with all elements of MS 971 except for the timeframe for implementation of Condition 10-1 Legacy Offset.

Non-compliance/potential non-compliance 10-1	No	on-com	pliance/	potential	non-com	pliance	10-1
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Which implementation condition or procedure was non-compliant or poten	tially non-compliant?			
10-1: Legacy Offset				
Was the implementation condition or procedure non-compliant or potentia	lly non-compliant?			
The Legacy Offset originated in 2002 as required by the then MS591 (Condition 12). In March 006 NBG submitted a proposal under which land of comparable conservation value (Lot part of ot 420 on Deposited Plan 50652 being the land comprised in Certificate of Title Volume 2638 olio 145) would be transferred to the State. In November 2009 the Department confirmed that the proposal met the commitments set out by Condition 12.				
n June 2014 the Minister approved the NBG expansion project which included a Legacy Offset of transfer the requirement of Condition 12 of MS591 into the ratified MS971 (Condition 10). NBG is currently outside of the two year timeframe provided in MS971 for the implementation of the Legacy Offset. Whilst the offset has been progressed, delays in finalising the land swap have occurred due administrative issues with numerous third parties which in part has been driven by the northern part of the Excision Area (1006 ha) being situated in the Worsley State Agreement Area (bauxite exploration and mining activities).				
On what date(s) did the non-compliance or potential non-compliance occu	ır (if applicable)?			
Legacy Offset should have been implemented by June 2016.				
Was this non-compliance or potential non-compliance reported to the ChDWER?	nief Executive Officer,			
✓ Yes☐ Reported to DWER verbally Date☑ Reported to DWER in writing Date 29/06/2016	□No			
What are the details of the non-compliance or potential non-compliance are extent of and impacts associated with the non-compliance or potential nor				
There has been no environmental impact as a result of the delay in fina Offset as the land remains excised from the Mining Operation. NBG have conumerous government agencies and third parties in an attempt to finalist NBG is currently facilitating the transfer of the new Certificates of Title to the	continued to liaise with se the Legacy Offset.			
What is the precise location where the non-compliance or potential non-coapplicable)? (please provide this information as a map or GIS co-ordinates				
See Figure 4. (Part of Lot 420 on Deposited Plan 50652 being the land co of Title Volume 2638 Folio 145)	omprised in Certificate			
What was the cause(s) of the non-compliance or potential non-compliance	e?			
See letter from June 2016.				

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	4 of 31

ACN: 101 199 731

MS971 Annual Compliance Report 2019



Administrative issues relating to stamp duty, third party rights and Landgate administrative requirements present ongoing difficulties in completing the transfer of the northern component of Lot 420 (the **Transfer Land**).

In 2018, the subdivision of Lot 420 was completed with a new certificate of title (CT) issued to Newmont for the Transfer Land. However, this CT is in the name of AngloGold Ashanti Australia Limited (AGAAL) and Newmont because at the time of subdivision the Office of State Revenue had not completed duty assessment on the 2009 purchase by Newmont of AGAAL's interest in the Boddington Gold Mine. In early 2018, the stamp duty endorsement was issued by the Office of State Revenue (OSR) the duty endorsement enables the completion of registration of the relevant land. Completion of this transfer is necessary before the land can be transferred to the State. However, in order to register these transfers with Landgate Newmont AGAAL must comply with a new verification of identity procedure. Given the time it has now taken the State to assess the transfers, both AGAAL and Newmont will need to resign the transfers pursuant to the VOI procedures and represent the transfers for duty endorsement. Once this is completed then Newmont will need to address third party rights on the land in order for the caveats to be lifted to allow the land to be transferred to the State. Newmont is working with third parties to progress the completion of the transfers, the lifting of caveats and removal of third party rights. It anticipates that this will be finalised in the next 6 months. Both NBG and the then DPaW acknowledged through a MOU that the Legacy Offset (Excision Area) is subject to the approval of third parties, including the Conservation Commission and the Parliament of Western Australia, therefore, whilst the Department intends to progress this transaction the outcome is uncertain and not within the control of the Department.

What remedial and/or corrective action(s), if any, were taken or are proposed to be taken in response to the non-compliance or potential non-compliance?

As described above, Newmont is continuing to navigate the complexity of completing the transfers within the requirements of the changed WA laws relating to registration of title and given third party rights. Newmont has engaged with the third parties to progress resolution of the transfer requirements.

What measures, if any, were in place to prevent the non-compliance or potential non-compliance before it occurred? What, if any, amendments have been made to those measures to prevent re-occurrence?

NBG engaged with the OSR over many years to progress the duty assessment of the AGAAL transaction given the length of time to finalise this has impacted Newmont in many areas including the compliance with the Ministerial Statement. NBG has over many years worked with the third party rights holder to secure the relevant consents to remove caveats and progress the transaction. Newmont has recently increased engagement with the third party to get their support to complete this transaction.

Please provide information/documentation collected and recorded in relation to this implementation condition or procedure:

- in the reporting period addressed in this Statement of Compliance; and
- as outlined in the approved Compliance Assessment Plan for the Statement addressed in this Statement of Compliance.

(the above information may be provided as an attachment to this Statement of Compliance)

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	5 of 31

ACN: 101 199 731

MS971 Annual Compliance Report 2019



A declaration of compliance status has been included below as specific within the OEPA's Post Assessment Form for a Statement of Compliance.

In accordance within Condition 4-3 of MS 971 "The proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 4-1", a summary of the compliance status has been provided within the audit table. Additional information on the implementation and compliance status of required management plans has been included within section 4.

The audit table contains each Ministerial condition separated into audit elements for auditing purposes as specific within Office of the Environmental Protection Authority Post Assessment Guideline 1 (PAG 1) for *Preparing an Audit Table*.

The audit table contains the following elements:

- Audit Code: Alphanumeric code given to each implementation condition, procedure or commitment
- Subject: The environmental subject/issue
- Requirement: Copy of the wording of the relevant implementation condition, procedure or commitment
- How: The way the requirement must be undertaken
- Evidence: Information of data required to verify compliance
- Phase: Project phase applicable to the audit element
- Timeframe: Specific timing and/or location
- Status: Describes the current stage of implementation of each requirement, including notes about fulfilment compliance
- Further Information: Links to source of further detail

Proponent Declaration - Compliance Status

declare that I am authorised on behalf of Newmont Boddington Gold Pty Ltd (being the person responsible for the proposal) to submit this form and that the information contained in this form is true and not misleading.

- 9	<i>УС</i> Date: 7/712020
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Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	6 of 31



3.1 Ministerial Statement 971, June 2014 - Current

Note: This audit table has been prepared in accordance with OEPA Post Assessment Guidelines for Preparing an Audit Table (February 2012). As such the following abbreviations have been used for compliance status: C = Compliant, CLD - Completed, PNC - Potentially Non-compliant, NR = Not Required at this stage, NA = Not Auditable, IP = In Progress.

Table 3-1: Summary of MS971 Conditions and Compliance Status

Topic	Audit Code	Requirement	Status	Comment
Proposal Implementation	MS971:1.1	When implementing the proposal, the proponent shall not exceed the authorised extent of the proposal as defined in Column 3 of Table 2 in Schedule 1, unless amendments to the proposal and the authorised extent of the Proposal has been approved under the EP Act.	С	The authorised extent outlined in Schedule 1 has not been exceeded. As of 31 Dec 2019.
Contact Details	MS971:2.1	The Proponent shall notify the CEO of any change of its name, physical address or postal address for the serving of notices or other correspondence within twenty-eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.	С	On 3 March 2020, Newmont Goldcorp Boddington Pty Ltd changed its name to Newmont Boddington Gold Pty Ltd. The ABN and ACN remained unchanged.
Time Limit for Proposal Implementation	MS971:3.1	The proponent shall not commence implementation of the proposal after the expiration of five (5) years from the date of this statement, and any commencement, within this five (5) year period, must be substantial.	NR	Implementation of the proposal commenced in February 2016 with the commencement of the waste rock dump expansion works (WRDs 10 and 11) which included: primary/secondary/tertiary harvesting activities, clearing and grubbing activities, establishment of drainage infrastructure and transport corridors, stockpiling of rehabilitation material, harvesting of bauxite and site preparation.
	MS971:3.2	Any commencement of implementation of the proposal, within five (5) years from the date of this statement, must be demonstrated as substantial by providing the CEO with written evidence, on or before the expiration of five (5) years from the date of this statement.	С	Approximately 299.5 ha associated with the 1755ha of native vegetation approved to be cleared to date under MS971. This clearing was primarily associated with the footprint required for future waste rock dumps 10 and 11 (and includes access roads, drainage and mine water storage). (Figure 1) The 2016 report stated approximately 330ha of native vegetation had been cleared since the 2014 approval, however, upon review this had included clearing of cleared pastoral land or highly degraded vegetation on Hotham Farm which was not included in the 1755 ha of native vegetation. An additional 0.97 ha of vegetation was cleared in 2018 in preparation for the expansion on the SO9 pit cut back (Wandoo South Pit) and the installation of sumps around the F1 RDA. Other minor clearing works have included the establishment of new fire breaks within the development envelope. No further clearing was completed in 2019.
Compliance Reporting	MS971:4.1	The proponent shall prepare and maintain a compliance assessment plan to the satisfaction of the CEO.	С	Compliance Assessment Plan submitted to the CEO in December 2014 with approval received in January 2015.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	7 of 31



Topic	Audit Code	Requirement	Status	Comment
	MS971:4.2	The proponent shall submit to the CEO the Compliance Assessment Plan required by condition 4-1 at least six (6) months prior to the first Compliance Assessment Report required by condition 4-6, or prior to implementation, whichever is sooner. The compliance assessment plan shall indicate: 1) the frequency of compliance reporting; 2) the approach and timing of compliance assessments; 3) the retention of compliance assessments; 4) the method of reporting of potential non-compliances and corrective actions taken; 5) the table of contents of compliance assessment reports; and public availability of compliance assessment reports.	С	Compliance Assessment Plan submitted to the CEO in December 2014 with approval received in January 2015.
	MS971:4.3	The proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 4-1.	С	Compliance Assessment Reports (CARs) have been submitted annually since the acceptance of the Compliance Assessment Plan. The 2016 and 2017 MS971 CARs formed part of the NBG Annual Environmental Report. A decision was made in 2018 to remove the MS971 CAR from the AER and submit as a separate document to the EPA. This compliance assessment report provides updates for the 2019 calendar year.
	MS971:4.4	The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 4-1 and shall make those reports available when requested by the CEO.	NR	All compliance assessments will be maintained within NBG's document and records management system.
	MS971:4.5	The proponent shall advise the CEO of any potential non-compliance within seven (7) days of that non-compliance being known.	С	There have been no potential non compliances with MS 971 that have not been reported.
	MS971:4.6	The proponent shall submit to the CEO the first Compliance Assessment Report by June 2015 addressing the twelve (12) month period from the date of issue of this Statement and then annually from the date of submission of the first compliance assessment report. The Compliance Assessment Report shall: 1) be endorsed by the proponent's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf; 2) include a statement as to whether the proponent has complied with the conditions; 3) identify all potential non-compliances and describe corrective and preventative actions taken; 4) be made publicly available in accordance with the approved compliance assessment plan; and 5) indicate any proposed changes to the Compliance Assessment Plan required by condition 4-1.	С	CAR submissions were incorporated into the NBG Annual Environmental Report (AER) in 2016 and 2017. The AER is required to be submitted to the Department of Mines, Industry Regulation and Safety (DMIRS) and Department of Water and Environmental Regulation (DWER) by June 30 annually. Copies of the AER are supplied to all members of the Boddington Gold Mine Environmental Management Liaison Group (BGMEMLG). The OEPA forms part of this group. A review of SER content was conducted in Q1 2018 and as a result a decision was made to remove the CAR from the AER and make a separate CAR submission to the OEPA. This compliance assessment report provides updates for the 2019 calendar year.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	8 of 31



Topic	Audit Code	Requirement	Status	Comment
Public Availability of Data	MS971:5.1	Subject to condition 5-2, within a reasonable time period approved by the CEO of the issue of this Statement and for the remainder of the life of the proposal the proponent shall make publicly available, in a manner approved by the CEO, all validated environmental data (including sampling design, sampling methodologies, empirical data and derived information products (e.g. maps)) relevant to the assessment of this proposal and implementation of this Statement.	С	This CAR will be made publically available on www.newmont.com following receipt of approval from the CEO.
	MS971:5.2	If any data referred to in condition 5-1 contains particulars of: 1) a secret formula or process; or 2) confidential commercially sensitive information; the proponent may submit a request for approval from the CEO to not make this data publically available. In making such a request the proponent shall provide the CEO with an explanation and reasons why the data should not be made publicly available.	NR	To date NBG have made no requests to the CEO to exclude any information from the Compliance Assessment Report.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	9 of 31



Topic	Audit Code	Requirement	Status	Comment
		The proponent shall ensure that there is no increase in the spread of diseases, no establishment of new environmental weed taxa and no		The 'NBG Weed and Disease Management Plan' was approved by oEPA in 2016 (approval letter dated 15/09/2016).
	more than 15% inci or increase in perce levels described in	more than 15% increase in the area occupied by environmental weeds or increase in percentage cover in infested areas above the baseline levels described in the Public Environmental Review document (2013) and associated appendices which is attributable to implementation of proposal.		The 2019 triennial forest disease assessment was complete by Terratree. In total, 734.75 ha were assessed for Dieback occurrence, accounting for 135.5 km of tracks, roads and gullies. A further 135.9 ha of vegetation was assessed in the Hotham Farm Area. Terratree undertook a comparison of the Dieback occurrence mapping between the 2016 and 2019 triennial assessments. The results of the comparison identified the following changes in Dieback occurrence:
Flora and Vegetation	MS971:6.1		С	Two new spot infestation were recorded with positive results for <i>P. cinnamomi</i> : One along a main track on the western side of the RDA (sample N19S01) on the edge of the forest area; and Another along the main disturbance boundary track on the west side of the pit at the edge of the forest area (N19S20). An infestation on the western side of the pit, emanating from the boundary track has increased in size by 1.8 ha due to autonomous spread of the pathogen.
				There have been small autonomous increases in disease spread in areas that have been previously mapped as Infested. The two spot infestations on the western side of the assessment area can be attributed to Dieback spreading into uninfested forest vegetation from infested unsealed tracks.
				The following limitations were encountered in undertaking the comparison between the 2016 and 2019 Dieback assessments which meant it wasn't possible the quantify the spread in percentage terms:
				 There was limited overlap between the two surveys. For example, there was no previous assessment of the proposed RDA or the Hotham Farm revegetation area. The scope for the linear assessment was for a 50m corridor (25m either side of roads and tracks) so the scope doesn't allow to assess beyond this for spread of pre-existing infestations.
	MS971:6.2	The proponent shall prepare a Weed and Disease Monitoring and Management Plan in consultation with the Department of Parks and Wildlife to the requirements of the CEO for the proposal area, within	CLD	NBG submitted a Weed and Disease Management Plan in December 2014 within the timeframe specified by the condition. The plan was approved by oEPA (approval letter dated 15/09/2016).
		six (6) months of this statement being issued.		This management plan will continue to be reviewed and updated as required.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	10 of 31



Topic	Audit Code	Requirement	Status	Comment
		The Weed and Disease Management Plan required pursuant to condition 6-2 shall: 1) when implemented, substantiate whether condition 6-1 is being met; 2) detail the monitoring methodology, proposed frequency and timing of monitoring, and location of monitoring sites which, when implemented, verify that condition 6-1 is being met; 3) identify criteria to trigger implementation of management and/or contingency measures to prevent the spread of weeds and diseases; 4) identify management and/or contingency measures to be implemented in the event that criteria identified pursuant to condition 6-3(3) have been exceeded.	С	NBG submitted a Weed and Disease Management Plan in December 2014 within the timeframe specified by the condition. The plan was approved by oEPA (approval letter dated 15/09/2016). This management plan was reviewed in 2019 and no changes were made.
	MS971:.4	The proponent shall implement the approved Weed and Disease Management Plan until otherwise agreed by the CEO	С	The approved plan is currently being implemented.
	MS971:6.5	In the event that monitoring pursuant to condition 6-3(2) indicates criteria defined pursuant to condition 6-3(3) are not being met, the proponent shall: 1) immediately implement management and/or contingency measures identified pursuant to condition 6-3(4) until criteria pursuant to condition 6-3(3) are being met, or until advised otherwise by the CEO; and 2) investigate the likely cause(s) of the criteria defined pursuant to condition 6-3(3) not being met; and 3) submit the findings of the investigation required pursuant to condition 6-5(2) to the CEO within twenty-eight (28) days of identification of the criteria defined pursuant to condition 6-3(3) not being met.	С	Contingency measures have been established within the weed and disease management plan. To date these measures have not been required to be implemented. As a result no investigations or submission of findings to the CEO have been made or required.
	MS971:6.6	The proponent may review and revise the Weed and Disease Management Plan to the requirements of the CEO.	NR	There have been no requests to review the management plan.
	MS971:6.7	The proponent shall review and revise the Weed and Disease Management Plan as and when directed by the CEO	NR	There have been no requests to review the management plan.
	MS971:6.8	The proponent shall implement the revisions of the Weed and Disease Management Plan required by conditions 6-6 and 6-7.	NR	There have been no requests to review the management plan.
Hydrological Processes	MS971:7.1	The proponent shall ensure that the dewatering drawdown associated with the proposal does not cause long term adverse impact to the health and abundance of groundwater dependent vegetation.	С	Groundwater drawdown continues to be monitored. To date monitoring has not shown that localised dewatering is having a long term adverse impact to the environment. Monitoring is guided by the Groundwater and Groundwater Dependent Vegetation monitoring and management plan. The plan was submitted to the oEPA in May 2015.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	11 of 31



Topic	Audit Code	Requirement	Status	Comment
	MS971:7.2	The proponent shall prepare a Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan to the requirements of the CEO within twelve (12) months of this statement being issued.	ΙP	NBG received feedback on the Plan from the oEPA in May 2017. Prior to this NBG had assessed the existing monitoring program and identified opportunities for improvement. In 2018/19 significant work was completed on the development of the numerical predictive groundwater model. NBG submitted a revised Groundwater and Groundwater Dependent Vegetation Management Plan to the oEPA on the 30th November 2018. oEPA reviewed the plan and provided feedback that the plan needed to be reduced to fit within modified oEPA management plan guidelines. The plan has since been modified to fit within these guidelines and incorporate the results of the regional groundwater model developed in 2018/19. The revised plan was submitted to the oEPA 29 August 2019, however no feedback has been received to date.
	MS971:7.3	The Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan required pursuant to condition 7-2 shall: 1) when implemented, substantiate whether condition 7-1 is being met; 2) identify all Groundwater Dependant Vegetation in the area with the potential to be impacted by the proposal, including the riparian vegetation associated with the Hotham River; 3) when implemented, verify that the Groundwater model prepared for the Public Environmental Review (2013) and described in Schlumberger 2013 reflects observed conditions and expected outcomes/impacts; 4) detail the monitoring methodology, proposed frequency and timing of monitoring, location of monitoring sites etc which, when implemented, verify that condition 6-1 is being met; 5) identify criteria associated with groundwater levels and groundwater dependent vegetation health to trigger implementation of management and/or contingency measures to prevent impacts to groundwater dependent vegetation; and 6) identify management and/or contingency measures to be implemented in the event that criteria identified pursuant to condition 7 -3(5) are exceeded.	ΙP	The Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan includes all elements as required by MS971:7.3
	MS971:7.4	The proponent shall implement the approved Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan until otherwise agreed by the CEO.	С	A revised plan was submitted to the oEPA 29 August 2019, however no feedback has been received to date. NBG is implementing the monitoring program as per the revised plan.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	12 of 31



Topic	Audit Code	Requirement	Status	Comment
	MS971:7.5	In the event that monitoring pursuant to condition 7-3 indicates criteria pursuant to condition 7-3(5) have been exceeded the proponent shall: 1) immediately implement management and/or contingency measures, identified pursuant to condition 7 -3(6) and continue implementation until criteria pursuant to condition 7 -3(5) are being met, or until otherwise agreed by the CEO; and 2) submit details of management and/or contingency measures implemented pursuant to condition 7-5(1) to the CEO within twenty-eight (28) days of identification that criteria pursuant to condition 7-3(5) have been exceeded	С	Contingency measures are established within the revised Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan. Exceedance of the criteria will trigger the implementation of the management and/or contingency measures. To date monitoring has not indicated the need to implement any of the contingency measures included in the current plan.
	MS971:7.9	The proponent may review and revise the Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan to the requirements of the CEO;	NR	There have been no requests to review the management plan.
	MS971:7.10	The proponent shall review and revise the Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan as and when directed by the CEO.	NR	There have been no requests to review the management plan.
	MS971:7.11	The proponent shall implement the revisions of the Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan required by conditions 7-9 and 7-10.	NR	There have been no requests to review the management plan.
Bibbulmun Track	MS971:8.1	The proponent shall ensure that there are no adverse impacts to the recreational values of the Bibbulmun Track as a result of the implementation of the proposal.	NR	Within the Public Environmental Review Waste Rock Dump 12 (WRD 12) was identified as having potential to impact on the recreational values of the Bibbulmun track. Clearing and/or construction within the WRD 12 boundary is not a component of the current NBG business plan. If future business plans were to include WRD 12 then condition 8.2 will be actioned. As a platinum sponsor of the track, NBG maintains scheduled contact with the Bibbulmun Track Foundation and provides funding to sponsor the volunteer program and maintenance activities. If WRD12 was to proceed NBG would ensure appropriate consultation with all relevant parties including DBCA, Bibbulmun Track Foundation and Alcoa in order to plan an appropriate relocation.
	MS971:8.2	The proponent shall prepare a Bibbulmun Track Management Plan to the requirements of the CEO, on the advice of the Department of Parks and Wildlife, pursuant to the requirements of condition 8-1. This plan is to be submitted no later than 18 months prior to the planned commencement of construction of Waste Rock Dump 12.	NR	As the current mine plan excludes the construction of WRD 12 there is no requirement to submit the Bibbulmun Track Management Plan.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	13 of 31



Topic	Audit Code	Requirement	Status	Comment
	MS971:8.3	 The Bibbulmun Track Management Plan required pursuant to condition 8-2 shall: when implemented, substantiate whether condition 8-1 is being met; identify in consultation with stakeholders the route of any planned track diversion; identify appropriate noise and amenity criteria for areas along the track in proximity to operations and Mount Well's Hut; identify planned investigations for noise and amenity impacts to the Bibbulmun Track and Mount Wells Hut to verify that condition 8-1 will be met; identify management and contingency measures, including realignment of the Bibbulmun Track and (if required) relocation of the Mount Wells Hut, to be implemented in the event that investigations pursuant to condition 8-3(4) indicate that criteria identified pursuant to condition 8-3(3) are likely to be exceeded; and identify arrangements to meet all costs associated with any diversion of the Bibbulmun Track and if required, relocation of Mt Wells Hut in consultation with the Department of Parks and Wildlife; 		If required, the Bibbulmun Track Management Plan will be written to include these elements. Refer to MS971:8.2.
	MS971:8.4	Prior to commencement of the construction of Waste Rock Dump 12 (Figure 1) the proponent shall implement the approved Bibbulmun Track Management Plan and continue implementation until rehabilitation earthworks associated with Waste Rock Dump 12 have been completed or until otherwise approved by the CEO.		If required, the Bibbulmun Track Management Plan will be implemented once approved.
	MS971:8.5	The proponent may review and revise the Bibbulmun Track Management Plan to the requirements of the CEO, on the advice of the Department of Parks and Wildlife.		The management plan is currently not required.
	MS971:8.6	The proponent shall review and revise the Bibbulmun Track Management Plan as and when directed by the CEO, on the advice of the Department of Parks and Wildlife.		The management plan is currently not required.
	MS971:8.7	The proponent shall implement the revisions of the Bibbulmun Track Monitoring Plan required by conditions 8-5 and 8-6.	NR	The management plan is currently not required.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	14 of 31

ACN: 101 199 731



Topic	Audit Code	Requirement	Status	Comment
Offsets	MS971:9.1	To offset the significant residual impact to 1, 755 ha of native vegetation which includes: Calyptorhynchus latirostris (Carnaby's Cockatoo) and Calyptorhynchus banksii naso (Forest Red-tailed Black Cockatoo) foraging and breeding habitat, Calyptorhynchus baudinii (Baudin's Black Cockatoo) foraging habitat; fragmentation of Bettongia penicillata ogilbyi (Woylie) and Dasyurus geoffroii (Chuditch) habitat; and loss of 618 ha of forest with conservation values currently vested in the Conservation Commission, the proponent shall undertake an offset program in accordance with conditions 9-2 to 9-12.	IP	Newmont is in the process of reviewing the Land Offset Management Plan. The revision will include a phased approach to offset implementation with certain offsets triggered as clearing requirements increase as a result of evolving mine plans. The revised plan will still address impacts to habitat of the three species of Black Cockatoos, Woylie and Chuditch.
	MS971:9.2	Within one (1) year of the date of this Statement, the Proponent shall prepare a Land Offset Plan to the requirements of the CEO on advice of the Department of Mines and Petroleum.		Newmont has submitted a Land Offset Management Plan, however, review and approval was paused as Newmont would like to review the plan and re-submit with the phased clearing and associated offset approach. Under the phased approach the 470ha restoration offset will be progressed initially. Once the native vegetation clearing exceeds 450ha of native vegetation (as part of the 1755ha approved under MS971 and EPBC 2012/6370), the 2000ha conservation covenant option will be implemented. The revised Offset Land Management Plan is anticipated to be submitted to the oEPA in 2020.
	MS971:9.3	The land subject to the Land Offset Plan identified in condition 9-2 shall contain at least 2,000 hectares of native vegetation in similar condition to the vegetation being impacted by the proposal, or as otherwise agreed by the CEO.		The land contained within the Land Offset Plan will contain at least 2,000ha. This detail will be contained within the Land Offset Management Plan. NBG is currently revising the Land Offset Management Plan to implement a phased offset approach (as discussed above for Condition 9.2). At present, NBG will implement this offset once it is clear that there will be more than 450ha of native vegetation clearing required for the expanded operations from commencement of the approval of MS971 (to date approximately 300ha of native vegetation clearing has occurred since the 2014 approval). See Figure 1 showing clearing since 2014. Note: native vegetation clearing under MS971 and EPBC 2012/6370 differs from the operational footprint approved via Mining Proposal under the WA Mining Act. The operational footprint includes disturbance on Hotham Farm pastoral land that was not considered as native vegetation clearing under environmental approvals.
	MS971:9.4	The Plan identified in condition 9-2 shall: 1) identify the area to be protected and managed for conservation; 2) if any of the vegetation in the area identified is in a degraded condition, identify improvement actions and a timeframe for the actions to be undertaken to improve the condition of native vegetation in that area; 3) demonstrate that individual land parcels are at least 90 hectares in area; 4) be located within fifty (50) kilometres of the proposal development envelope unless otherwise agreed by the CEO;	IP	The revised Land Offset Management Plan will include all elements outlined within MS971:9.4 and other relevant conditions and requirements within Section 9 of the approval. Review and approval of the documentation by external parties will verify the plan contains the required elements outlined within this condition.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	15 of 31

ACN: 101 199 731



Topic	Audit Code	Requirement	Status	Comment
		 5) identify the environmental attributes of the land to be acquired which must contain: a) known foraging and breeding habitat for Calyptorhynchus latirostris (Carnaby's Cockatoo), Calyptorhynchus banksii nasa (Forest red-tailed Black Cockatoo), and foraging habitat for Calyptorhynchus baudinii (Baudin's Black Cockatoo) within 6 kilometres of permanent drinking water; b) habitat for Bettongia penicillata ogilbyi (Woylie) and foraging and breeding habitat for Dasyurus geoffroii (Chuditch); 6) detail: a) the conservation activities identified in 9-4(2)that will be undertaken, with associated completion criteria; b) funding arrangements and timing of funding for conservation activities identified in condition 9-4(6a); c) monitoring requirements for activities identified in condition 9-4(6a); d) timing arrangements including an agreed end point for protection of land identified in condition 9-3; and e) the role of the proponent. 		
	MS971:9.5	In the event that condition 9-3 is unable to be implemented within the timeframe identified in condition 9-4(6d) the proponent shall identify a similar conservation benefit for the species identified in condition 9-1 as provided by the offset in condition 9-3 to be implemented and update the plan identified in condition 9-2 to the satisfaction of the CEO within three (3) months of the end of the timeframe identified in 9-4(6d).		This condition is not applicable at this time.
	MS971:9.6	The area identified in the approved Land Offset Plan shall be placed under a conservation covenant in consultation with the Department of Parks and Wildlife to the satisfaction of the CEO		The process for triggering this offset will be outlined in the revised Land Offset Management Plan.
	MS971:9.7	The proponent shall implement the approved Land Offset Plan identified in condition 9-2 until the CEO advises implementation may cease.		The Land Offset Plan will be implemented once developed and approved.
	MS971:9.8	Within two (2) years of the date of this statement, or at a date as agreed by the CEO, the Proponent shall ensure 470 hectares of Hotham Farm is protected in perpetuity by an instrument or instruments approved by the CEO.		The implementation of this offset has commenced. Discussions with the Parks and Wildlife Branch of the Department of Biodiversity Conservation and Attractions (DBCA) indicate that the conservation covenant cannot be progressed until agreed completion criteria have been met for the area. Therefore, NBG is unable to place an instrument of protection over this land. However, NBG holds mining tenements over most of the 470ha covered by the restoration area and owns the land. This will remain in place until the Conservation Covenant can be placed. NBG wrote to the CEO in October 2019 requesting feedback on the use of a soil conservation covenant over the site in accordance with s30B of the Soil and Land Conservation Act 1945. This was due to the corresponding condition for this offset

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	16 of 31



Topic	Audit Code	Requirement	Status	Comment
				under EPBC2012/6370 specifically requiring a conservation covenant under the PAW program. NBG has not yet received a response from the CEO.
				Greening Australia was awarded a 3-year contract in 2016 to complete the initial habitat restoration works over a 470ha parcel of pastoral land. This contract has expired but Greening is continuing the routine maintenance and inspections of the restoration site in 2020. The implementation plan has been supplied to oEPA to demonstrate progress on this offset.
				The following works have been completed in relation to this offset:
				 Fencing of the 470ha completed in 2017 to prevent damage to establishing vegetation from herbivores. Removal of herbivores from the fenced facility. Seeding and initial planting throughout Autumn/Winter 2017 and 2018. In total 265ha of the 300ha of cleared pastoral land was seeded in 2017 and the remainder in 2018. Approximately 135 species of plants were seeded over the area with the majority of seed being sourced within a 50km radius of the site. Planting of 9900 plants of recalcitrant species (10 species). Site pre-seeding weed management. Post-seeding weed management with a focus on declared weed species (i.e. cotton bush). Targeted control of declared weeds and/or weeds of significant threat; Remnant vegetation weed control and general site maintenance; Routine inspections and reporting; Development and third party review of the long term completion criteria and monitoring program. Implementation of the Completion Criteria Monitoring Programme via establishment and monitoring of analogue vegetation plots in order to provide baseline information for reference sites. The 2019 Annual Report from Greening Australia is included as Appendix A. 2020 Planned works includes: On-going inspections and weed management. On-going monitoring. Baseline soil monitoring. Development of three year re-work and infill planting improvement plan. Note monitoring against the long-term completion criteria will be postponed for a 2-3
				year period whilst the 3-year improvement program is being implemented. NBG will liaise with the PaW Branch of DBCA when credible data is available to demonstrate the conservation value of this area in order to apply for a protective mechanism for this offset.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	17 of 31



Topic	Audit Code	Requirement		Comment
	MS971:9.9	The Proponent shall manage the land identified in condition 9-8 in accordance with the Newmont Boddington Gold Overarching Offset Strategy dated 15 November 2013.		Newmont will manage the Hotham Farm offset in accordance with the Land Offset Management Plan.
	MS971:9.10	The proponent shall implement the offset identified in condition 9-8 until the CEO advises implementation may cease.		The Hotham Farm Offset is currently being implemented and will continue to be implemented until the CEO advises implementation may cease. Refer to comments made for Condition 9.8.
Offsets	MS971:9.11	Within twelve (12) months of the date of this Statement, the proponent shall prepare a Land Exchange Plan, for the approval of the CEO on advice of the Director General of the Department of Parks and Wildlife. The Land Exchange Plan shall include: 1) details of land to be ceded to the State for incorporation into the conservation reserve system and vesting in the Conservation Commission of Western Australia; 2) total amount of land to be ceded; 3) a requirement that the total area to be ceded be based on providing an equivalent value to the forest area vested in the Conservation Commission being removed, with a minimum of at least 618 hectares; and 4) a proposed timeframe for the ceding of land to occur.		Information on this land exchange plan was included in the Land Offset Plan provided to oEPA in 2015. While this plan had been under review, land has been identified for the purpose of the offset. Newmont is still progressing the offset.
	MS971:9.12	The proponent shall implement the approved Land Exchange Plan identified in condition 10-1.		The Land Exchange will be progressed.
Legacy Offset	MS971:10.1	The proponent shall implement the offset previously committed to in the now superseded Statement 591 (provide land to the State) as described in Schedule 3 of this Statement to the satisfaction of the CEO within two years of this statement being issued.		The issue of the transfers still needs to be resolved. This is now complicated by the age of the transaction and the introduction of the new verification of identity requirements at Landgate. Newmont is currently progressing arrangements with third parties to close out the remaining registration issues which would enable the transfer to the State to be finalised.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	18 of 31



3.2 Audit Tables and Summaries of Compliance

3.2.1 Attachment 1 to Ministerial Statement 971 (17 May 2019)

Change to proposal approved under section 45C of the Environmental Protection Act 1986

This attachment replaces Schedule 1 of Ministerial Statement 971

Proposal: Newmont Boddington Gold

Proponent: Newmont Boddington Gold Pty Ltd

Table 1: Summary of the proposal

Proposal Title	Newmont Boddington Gold Life of Mine Expansion			
Short Description	The proposal is for the continuation of the existing operations and for an expansion of the existing operations at the Newmont Boddington Goldmine and includes:			
	 Pit expansion (widening and deepening); Increased ore production resulting in increased waste quantities; Increase to existing stockpiles and development of ancillary infrastructure; Expansion of waste rock dumps; Construction of a new residue disposal area; and Construction of new water storage areas. The regional location is shown in Figure 1 of Attachment 1 to Ministerial Statement 971. 			

Table 2: Location and authorised extent of the physical and operational elements

Element	Location	Previously Authorised Extent	Authorised Extent						
Physical Elements									
Development Envelope		11,712 ha	12,856 ha						
Disturbance Footprint	Fig. 1. 4. 1	Clearing of no more than 6,850ha of vegetation within the 11,712ha development envelope	Clearing of no more than 6,850ha of vegetation within the 12,856 ha development envelope						
Clearing of Native Vegetation	Figure 1 of Attachment 1 to Ministerial Statement 971	Clearing of no more than 5,435ha of native vegetation within the 11,712 ha development envelope.	Clearing of no more than 5,435ha of native vegetation within the 12,856 ha development envelope.						
Waste Rock Dumps		1 ,500 Mt over life of proposal	1 ,500 Mt over life of proposal						
Mine Activities		Open cut basement mining to approximately -252 AHD for the north pit and -432 AHD south pit	Open cut basement mining to approximately -252 AHD for the north pit and -432 AHD south pit						
Operational Elements									
Mine Life	NA	Continued Operations until 2041	Continued Operations until 2041						
Water Use	NA	47 ML/day	47 ML/day						

Note: Text in **Bold** in Table 2 indicated a change to the proposal

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	19 of 31



3.2.2 Ministerial Statement 971 - Schedule 3: Legacy Offset June 2014

Legacy Offset

- 1. The proponent shall identify in consultation with the Department of Parks and Wildlife and provide to the State, for incorporation into the conservation reserve system:
 - Preferably land of comparable conservation value and approximately equal to the area of State Forest
 affected by BGM mining (North Pit and South Pit as shown in Figure 1 of Schedule 1 of this statement)
 and the F1 Residue Disposal Area as shown in Figure 1 of Schedule 1 of this statement, or
 - Land of comparable conservation value and approximately equal to the area of State Forest affected by the F1 Residue Disposal Area as shown in Figure 1 of Schedule 1 of this statement.

4 DECLARED COMPLIANCE STATUS - MANAGEMENT PLANS

4.1 Weed and Disease Monitoring and Management Plan

Following acceptance of the Weed and Disease Management by the OEPA in September 2016, Newmont have implemented the plan in its current format.

The primary objectives of the management plan are aligned to those criteria outlined within condition 6-3 (1-4) of MS 971 (Table 1). In addition 1 primary objective has been established associated with the proposed monitoring program.

Table 4-1: NBG Compliance with Weed and Disease Monitoring and Management Plan

Condition	Key Requirement/Objective	Compliance Status
Sec 4		Non-Compliant (due to expansion of D1 infestation boundary – see below)
	Management of forest disease spread	The 2016 triennial survey was conducted over 156.2 km of potential tracks and roads, 4.5km of potential drill hole access routes, and 11.5 km of gully area. In addition to the linear mapping, an additional 63.4ha of infested areas within the operational mine area was rechecked and demarcated.
	Target - No increase in spread of forest disease area attributable to mining operations.	13 infestations were identified with 11 of these having been being previously identified. Both of the new infestations were found in areas previously unsurveyed and one of these new areas exists outside of the development envelope.
		Some expansion of the disease boundary around D1 dam was observed (associated with the high water level during high rainfall events and maximising storage capacity in this facility).

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	20 of 31



Condition	Key Requirement/Objective	Compliance Status
		The Wells Terminal infestation had spread up to 20m. The Wells Terminal infestation lies outside of the Development Envelope but is monitored as it is located within Mining Tenements held by Newmont.
		The 2019 triennial forest disease assessment was complete by Terratree. In total, 734.75 ha were assessed for Dieback occurrence, accounting for 135.5 km of tracks, roads and gullies. A further 135.9 ha of vegetation was assessed in the Hotham Farm Area. Terratree undertook a comparison of the Dieback occurrence mapping between the 2016 and 2019 triennial assessments. The results of the comparison identified the following changes in Dieback occurrence:
		-Two new spot infestation were recorded with positive results for P. cinnamomi;
		-One along a main track on the western side of the RDA (sample N19S01) on the edge of the forest area;
		-Another along the main disturbance boundary track on the west side of the pit at the edge of the forest area (N19S20); and
		-An infestation on the western side of the pit, emanating from the boundary track has increased in size by 1.8 ha due to autonomous spread of the pathogen.
		As is expected, there have been small autonomous increases in disease spread in areas that have been previously mapped as infested. The two spot infestations on the western side of the assessment area can be attributed to Dieback spreading into uninfested forest vegetation from infested unsealed tracks.
		The following limitations were encountered in undertaking the

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	21 of 31



Condition	Key Requirement/Objective	Compliance Status
		comparison between the 2016 and 2019 Dieback assessments which meant it wasn't possible the quantify the spread in percentage terms: -There was limited overlap between
		the two surveys. For example, there was no previous assessment of the proposed RDA or the Hotham Farm revegetation area.
		-The scope for the linear assessment was for a 50m corridor (25m either side of roads and tracks) so the scope doesn't allow to assess beyond this for spread of pre-existing infestations.
		Figure 2 shows the current forest disease status at NBG.
		Compliant
		At the end of the reporting period there has been no increase in weed species impact area attributable to mining operations within the Development Envelope.
	Management of all Weed Species	Known historical declared species infestations (primarily Cotton Bush) were inspected and managed as required inside the operational footprint during 2019.
	Target - No more than a 15% increase in the area impacted by all weed species	Weed management efforts were ongoing on the Hotham Farm Restoration Area in 2019.
		The Weed and Disease Management and Monitoring Plan is currently under review. This will involve improved records keeping for weed management activities, review of the weed GIS layer to separate declared weeds and improved planning with the weed management calendar.
		See Figure 3 for current known weed infestations on site.
	Declared Weed Species Management	Compliant
	Target - Reduction in area impacted by Declared Weed species.	NBG has undertaken weed management activities focused on the management of Narrow Leaf

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	22 of 31

ACN: 101 199 731



Condition	Key Requirement/Objective	Compliance Status	
		Cotton Bush during 2019. Management areas have focused on known populations around the South Pit, South Clear Water Pond and the R4 area.	
		Management of this declared weed species was also a focus area for the Hotham Farm restoration site which sits outside of the Development Envelope.	
	Declared Wood Charica Management	Compliant	
	Target - Report all declared weed species to nominated authority	No new weed populations were identified during the reporting period that required reporting to a nominated authority.	
		Compliant	
	Communication of Management success	Communication is made regarding weed and forest disease	
Target - Annual updates provided to BGMEMLG members		management activities within BGMEMLG meetings and via annual compliance reporting.	

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	23 of 31

ACN: 101 199 731

MS971 Annual Compliance Report 2019



4.2 Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan

NBG commissioned an external contractor in 2015 to undertake a Groundwater Dependent Vegetation Monitoring Program, associated with the NBG Groundwater and Groundwater Dependent Vegetation Monitoring and Management Plan (MP). Both the monitoring program and plan were developed and submitted in 2015 to meet requirements under Condition 7 of MS971.

Whilst awaiting feedback on the draft MP, NBG completed monitoring per the draft MP monitoring schedule during 2015 to March 2017. The purpose of the monitoring was to measure a set of parameters related to Groundwater Dependent Vegetation (GDV) in order to obtain a baseline understanding of current condition and health of the vegetation following both summer and winter seasons. The baseline was to be used to update the MP, detect any future spatial and temporary changes to the vegetation and identify contingencies and management strategies to reduce impacts to groundwater drawdown at NBG.

The March 2017 monitoring report identified opportunities for improving the MP and an internal decision was made to review the entire program with an external third party. During this time feedback on the MP was also received from the OEPA which aligned with the findings from the third party review. Both the OEPA and the external third party highlighted significant rework was required which could not be completed by the OEPA's required resubmission date of 31 July 2017. Following consultation with the OEPA, submission of the amended MP was extended. NBG submitted a revised MP 30 November 2018.

Following review of the revised MP by the OEPA, additional amendments were required due to the general shift of the OEPA from larger management plans to more succinct plans that clearly identify trigger, threshold and actions. Additionally due to the ongoing development of the Regional Groundwater Model the OEPA were in agreement that it would be advantageous to await the outcomes of the model and to amend the MP accordingly with the model predictions. The Regional Groundwater Model Report was finalised in June 2019 with the results incorporated into a revised version of the MP. The revised MP was submitted to the EPA 29 August 2019.

In 2019 GDV monitoring continued to meet the requirements of the revised MP. Aerial imagery of the site was taken in March 2019. Analysis of vegetation health using Plant Cell Density (PCD) analysis was completed on the aerial imagery by an external consultant. The analysis determined no areas were displaying symptoms of groundwater drawdown related stress.

Multispectral imagery capture was again completed in March 2020. Development of a change detection image following the 2020 image capture will provide a definitive assessment of change in foliage health and cover over the intervening 12 months. This will allow for further investigation (GDV field and groundwater level monitoring) in 2020 should any areas of GDV within the operational influence of NBG show symptoms of decline that are not mirrored in more remote areas.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	24 of 31

ACN: 101 199 731

MS971 Annual Compliance Report 2019



Table 3. NBG Compliance with Groundwater and Groundwater Dependent Vegetation Monitoring Plan

Condition	Key Requirement/Objective	Compliance Status
Sec 7.1	Obtain sufficient data relating to the health and condition of GDV at predetermined locations within the Boddington Gold Mine and surrounding catchments to enable assessment of compliance with Condition 7 of Ministerial Statement No. 971	Compliant The groundwater monitoring program has been designed to determine if NBG operations are impacting on Groundwater and Groundwater Dependent Vegetation outside that predicted within the model submitted with the PER.
		Initial monitoring events targeted both control and impact sites and intend to establish a baseline level for a variety of parameters at each location.
		The program has been designed to differentiate between environmental impacts and those attributable to the mine where possible.
		Opportunities for improvement to the plan have been identified and the revised GGDVMMP was submitted to the EPA 29 August 2019. NBG is currently waiting for feedback on this revised plan.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	25 of 31

ACN: 101 199 731

MS971 Annual Compliance Report 2019



4.3 Bibbulmun Track Management Plan

In order to offset potential impacts to the Bibbulmun Track, condition 8-2 specifies that NBG is required to prepare a Bibbulmun track Management Plan to the requirements of the CEO on advice from Department of Biodiversity, Conservation and Attractions (Previously DPaW).

The requirement for submission of the Bibbulmun Track Management Plan is triggered 18 months prior to construction of Waste Rock Dump 12 (WRD 12). As the construction of WRD 12 is not included within the current NBG LOM business plan the management plan has not been prepared or submitted.

4.4 Land Offset Management Plan

The Land Offset Plan (LOP) was submitted to the OEPA for review and approval in June 2015. Following a review of the mine plan in 2015/16 the expected mine life of the operation was anticipated to be 2029 (current anticipated mine life is 2032). As a result of the reduced mine plan review it was identified that the extent of clearing that would be required would be greatly reduced from what was approved under the LOM Extension Public Environmental Report (MS971). Discussions were held with the OEPA to seek guidance on the pathway for approving a phased offset approach (i.e. offsets would be implemented for the first phase of clearing required for waste rock dump expansion and associated infrastructure and if mine life was to increase again and further clearing required, the remaining offsets required under MS971 would be implemented). It was agreed that the oEPA would hold off on approval of the Land Offset Management Plan until a resolution had been agreed.

Resolution on a path forward was agreed in March 2017 following advice from the oEPA. NBG is currently working on a revised Land Offset Management Plan that will satisfy the requirements of MS971 and EPBC 2012/6370.

Current compliance with the Offset Conditions specified in MS971 is provided in Table 3-1.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	26 of 31



5 OTHER INFORMATION – SUPPORTING EVIDENCE

The following sub sections provide evidence of NBG's compliance with relevant conditions of MS 971.

5.1 Compliance Report Figures

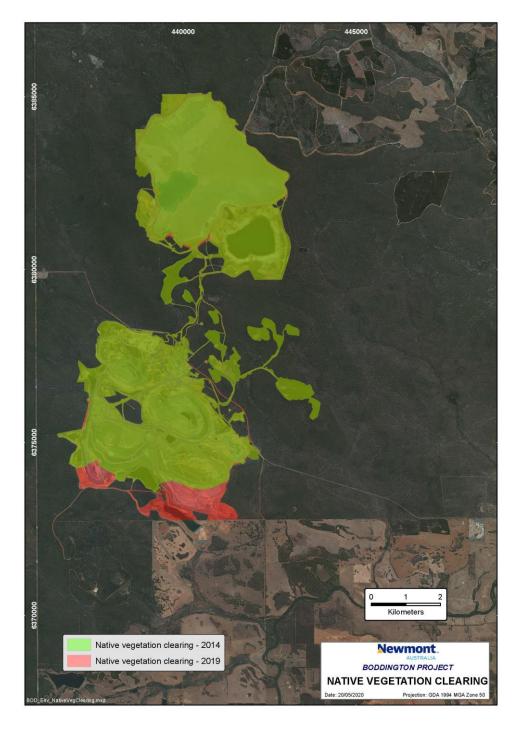


Figure 1: Extent of Native Vegetation Clearing that has occurred since MS971 approval.

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	27 of 31



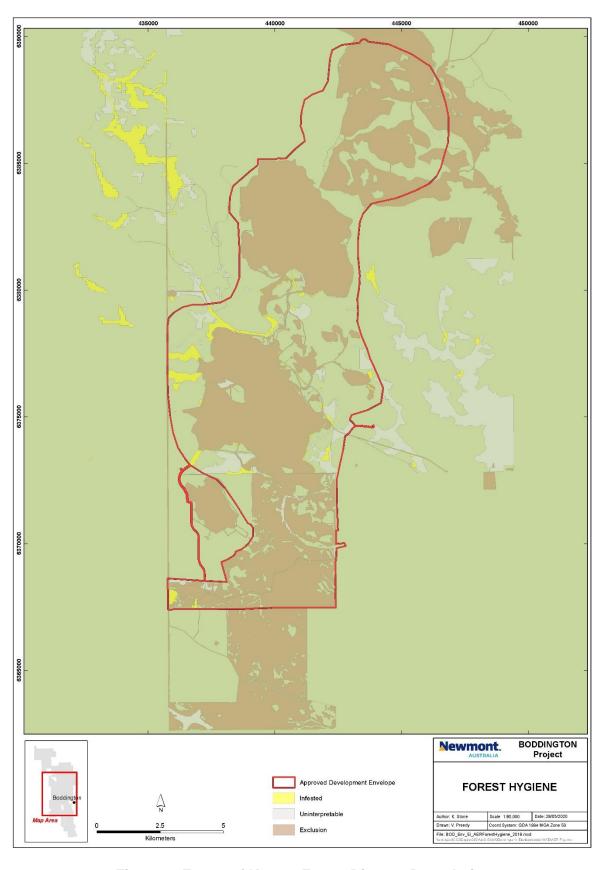


Figure 2: Extent of Known Forest Disease Boundaries

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	28 of 31



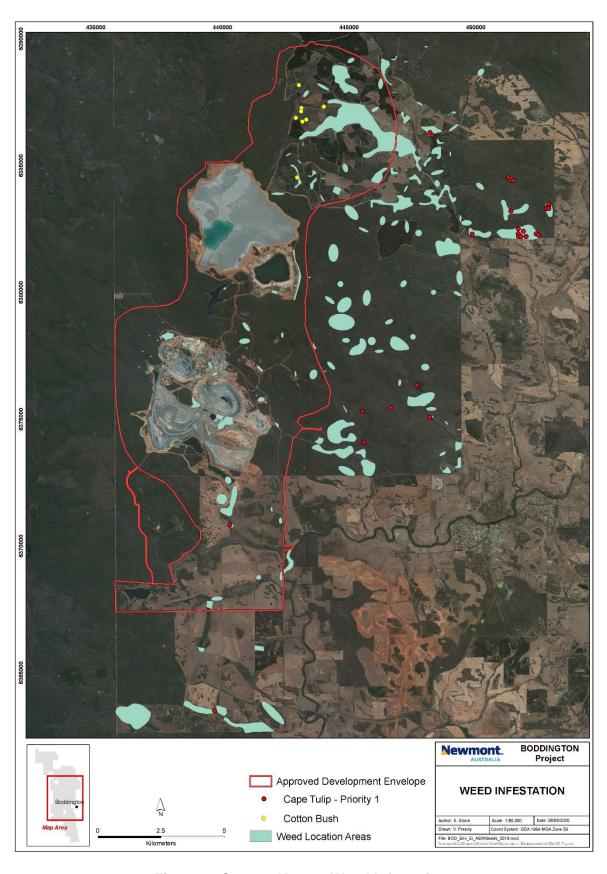


Figure 3: Current Known Weed Infestations

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	29 of 31



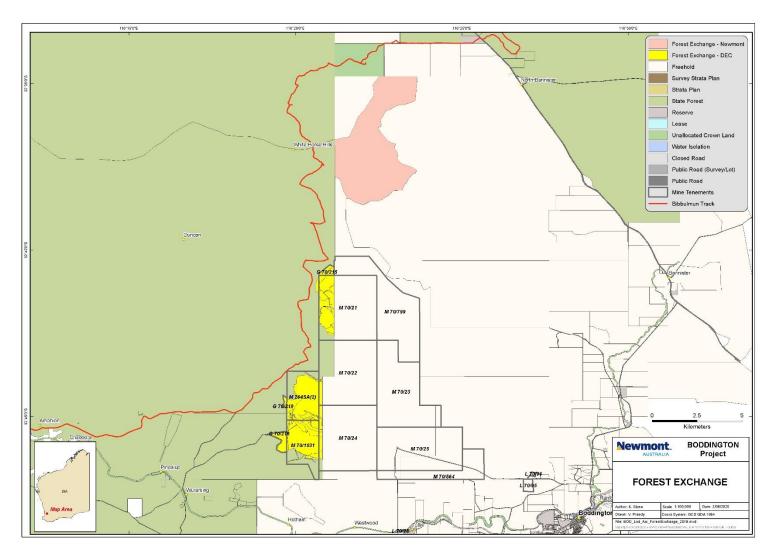


Figure 4. Showing Legacy Offset Location (shown here as Forest Exchange Area)

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	30 of 31



6 Appendices

6.1 Appendix A

Annual Report, February 2019 Hotham Farm Biodiversity Offset Restoration Program (Greening Australia)

Document Reference	Author	Date	Page
MS971 Annual Compliance Report 2019	NBG SER Department	22 June 2020	31 of 31



Hotham Farm Biodiversity Offset Restoration Program

Annual Report, January 2020

Prepared for Newmont Goldcorp Boddington



Executive Summary

In April 2019 Newmont Goldcorp Boddington (NGB) commissioned Greening Australia Ltd. (GAL) to undertake a maintenance programme across the Hotham Farm Restoration Project site.

This report outlines the activities undertaken in April to December 2019 which include:

- Targeted control of declared weeds and/or weeds of significant threat;
- Remnant vegetation weed control and general site maintenance;
- Routine inspections and reporting; and
- Completion of the 2019 Annual Report.

GAL will be continuing the maintenance programme between January and April 2020, as per the current scope of works. Targeted weed control in the revegetation areas and remnant vegetation will continue as well as routine inspections and reporting. A proposal for the extension of the maintenance programme until April 2021 was also submitted to NGB in December 2019. The focus of the next maintenance programme will be on preparing the site for infill planting in 2021.

GAL is looking forward to receiving the monitoring data to quantify restoration success at the Hotham Farm site and believe the restoration efforts to date are consistent with the trajectory outlined within the PEP. We look forward to sustaining a strong and collaborative partnership with Newmont Goldcorp Boddington to deliver management actions at the Hotham Farm Site into the future.



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This disclaimer shall apply notwithstanding that the report may be made available to other persons for an application for permission or approval to fulfil a legal requirement.

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Revision Schedule

Rev No	Date	Description	Signature or Typed Name (documentation on file)			
No			Prepared by	Checked by	Reviewed by	Approved by
1.0	14/01/20	First Draft	AV	JM	JM	
2.0	17/01/20	Final Draft	AV	JM	JM	TS
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Table of Contents

E	xecuti	ve Summary	1
T	able o	f Contents	3
	List of	Tables	4
	List of	Figures	4
	List of	Plates	4
	List of	Abbreviations	5
1	Int	oduction	6
	1.1	Background	6
	1.2	Purpose	6
2	Sur	nmary of Works	8
3	We	ed and Insect Control	8
	3.1	Broadacre Weed Control	8
	3.2	Targeted Weed Control – Revegetation Areas	9
	3.3	Targeted Weed Control – Remnant Vegetation1	0
	3.4	Weed Threats1	0
	3.4.	1 Gomphocarpus fruticosus (Narrow leaf cotton bush)1	0
	3.4.	2 Lupinus angustifolius (Blue lupin)1	2
	3.4.	3 Moraea flaccida (Cape tulip)1	3
	3.4.	4 Juncus acutus (Spiny rush)1	4
	3.4.	5 Lavendula stoechas (French lavender) 1	4
4	Dir	ect Seeded Areas1	5
5	Mo	nitoring and Inspection1	6
	5.1	Progress Reporting	6
	5.2	Pest Fauna Observations	6
	5.3	Fence Inspections	.7
	5.4	Erosion Monitoring1	9
6	Sch	eduled Works 2	0
7	Ref	erences	0
8	Арі	pendix 1 – Mapping Figures 2	1



Appendix 2 – Recommended Management Actions for Maintenance Programme 2020.
 30

LIST OF TABLES
Table 1: Summary of Works – April to December 2019
Table 2: Summary of Broadacre Weed Control Activities between April and December 2019
Table 3: Summary of Targeted Weed Control Activities between April and December 2019 in the
Revegetation Areas
Table 4: Summary of Targeted Weed Control Activities between April and December 2019 in the
Remnant Vegetation
LIST OF FIGURES
Figure 1: Hotham farm project site location
Figure 2: Grass and insect selective broadacre weed control, September 2019 21
Figure 3: Gomphocarpus fruticosus (Narrow leaf cotton bush) control 201922
Figure 5: Targeted weed control, September 2019
Figure 7: Location of Lavendula stoechas and Juncus acutis Control, October 2019 24
Figure 8: Broadacre control on Internal Tracks and Firebreaks, September 201925
Figure 9: Position of LMU areas seeded at Hotham Farm, June 2018
Figure 10: Position of Gastralobium calycinum thickets in the Hotham Farm Landscape27
Figure 11: Position of Significant Erosion Features at Hotham Farm, December 201928
Figure 12: Examples of flowering and seeding species across Hotham Farm, 2019
LIST OF PLATES
Plate 1: Extent of Gompholobium fruticosus infestation on the boundary of the Wandoo area and
drainage line, April 2019
Plate 2: Gompholobium fruticosus (Cotton Bush) observed in the remnant vegetation, April 2019 12
Plate 3: Central Lupinus angustifolius (Blue Lupin) population (untreated), August 2019 13
Plate 4: Central Lupinus angustifolius (Blue Lupin) population (treated), September 2019
Plate 5: Moraea flaccida (One-leaf Cape Tulip) in the revegetation area, August 2019 14
Plate 6: Lavendula stoechas occurring along margins of western wetland, October 2019 15
Plate 7: Signs of herbivory on <i>Anigozanthos manglesii</i> seedling, September 2019
Plate 8: Fence breach reported in the south-eastern corner of the site, April 2019
Plate 9: Example of rill erosion undercutting rabbit mesh on southern fence line, October 2019 18
Plate 10: Rill erosion on causeway between north-east paddock and greater restoration area, April
0040



LIST OF ABBREVIATIONS

DBCA - Department of Biodiversity, Conservation and Attractions

EPBC Act - Environmental Protection and Biodiversity Conservation Act 1999

EP Act - Environmental Protection Act 198

FISEM - Feral Invasive Species Eradication Management

GAL - Greening Australia Ltd.

LMU – Land Mapping Unit

LOM - Life of Mine

NGB - Newmont Goldcorp Boddington

NSS - Nindethana Seed Service

PEP - Project Execution Plan

RDA - Residue Disposal Area

WRD - Waste Rock Dump



1 Introduction

1.1 BACKGROUND

Newmont Goldcorp Boddington (NGB) commissioned Greening Australia Ltd. (GAL) in April 2019 to undertake the maintenance programme over the 470 ha Hotham Farm Restoration Project site (the Project Area) (Figure 1).

Hotham Farm is located approximately 110 km southeast of Perth and 10 km south of the Boddington Gold Mine, in the Southwest of Western Australia (**Figure 1**).

The Hotham Farm Restoration Program (the Restoration Program) forms one component of a land offset strategy required under NGB's Life of Mine (LOM) Extension Project Approval Conditions under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) 2012/6370 and Ministerial Statement 971 (MS 971) under the WA *Environmental Protection Act 1986* (EP Act) for the clearing of land associated with Waste Rock Dump (WRD) expansions and construction of a second Residue Disposal Area (RDA) at the Boddington Gold Mine.

NGB proposed a staged strategy for the implementation of offset requirements to coincide with the execution of components associated with the LOM Extension Project which commenced in August 2015.

Implementation of the offset requirement is embodied within a proposed restoration programme on primarily cleared agricultural land ('the Project', to be undertaken by Greening Australia Ltd.).

The bulk of the baseline data and assessments were completed in 2016 with preparation of the PEP in October 2017. Seed procurement, site preparation, weed and pest management and revegetation activities commenced during winter 2017, culminating in the completion of approximately 85 % of the revegetation seeding. Following a re-scope in April 2018, GAL completed the seeding programme and continued site maintenance until December 2018. GAL were then contracted in April 2019 to continue the maintenance programme until April 2020.

The following report details activities undertaken at the Hotham Farm site during 2019.

1.2 PURPOSE

The purpose of this report is to provide a summary of project work undertaken in 2019. Actions are in accordance with the scope of work for the twelve-month maintenance programme from 2019 and 2020.

GAL have submitted a proposal to NGB for the maintenance programme Extension from April 2020 to 2021 outlines recommended management actions after April 2020.



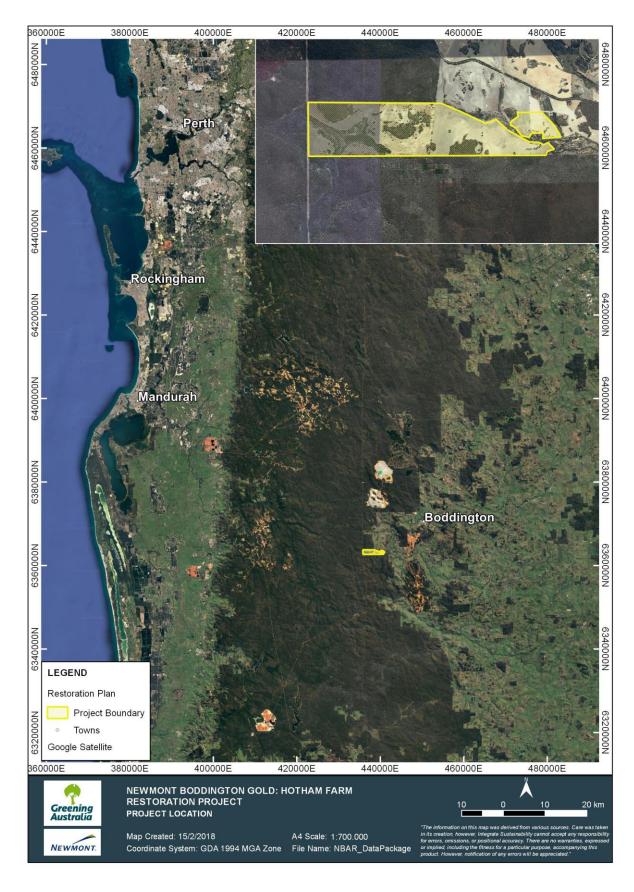


Figure 1: Hotham farm project site location.



2 Summary of Works

The following sections summarise activities undertaken between April and December 2019 as part of the 2019 to 2020 Hotham farm maintenance programme. The main tasks included in the maintenance programme are summarised in **Table 1** below.

Table 1: Summary of Works - April to December 2019.

Activity/Task	Month
Broadacre Weed and Insect Control	August and September
Targeted Weed Control – Remnant Vegetation	May, September and October
Targeted Weed Control – Revegetation Areas	May, July, August, September and December
Routine monitoring and Inspection	Monthly
Quarterly Report	June, September and December

3 Weed and Insect Control

3.1 BROADACRE WEED CONTROL

A selective weed control event was conducted in late August 2019 across all areas direct seeded in 2018 (**Figure 2**). This treatment targeted grass species and any insects, following winter in order to reduce competitive pressure on seedlings and impact from insects. The internal tracks and firebreaks were also treated using a non-selective method in September 2019 (**Figure 6**). The treatments applied are summarised in **Table 2** below.

Table 2: Summary of Broadacre Weed Control Activities between April and December 2019.

Date of application	Target	Treatment used	Method	Application Rate	Total Area Treated (ha)
August & September	Grass and Insect Selective Weed Control	 Leopard 200 @ 195 mL/100L Talsta 250 @ 40 mL/100L MSO with LECI-TECH @ 500mL/100L 	Boom Spray	100 L/ha	35
September	Internal Tracks and Firebreaks – Non-selective weed control	Glyphosate 450 @ 1.5 L/100L Metsulfuron @ 4 g/100L	Boom Spray	100 L/ha	All Internal Tracks

No further selective weed control is included in the maintenance programme as grass species and insects no longer pose a significant threat to the revegetation in the 2018 direct seeded areas.



It is also anticipated that the revegetation in these areas will have grown to a height where a boom application of chemicals is no longer possible. Internal tracks and firebreaks will need another treatment event which is currently scheduled for April 2020.

3.2 TARGETED WEED CONTROL - REVEGETATION AREAS

Targeted weed control in the revegetation areas focused on *Gomphocarpus fruticosus* (Cotton Bush) in summer and *Lupinus angustifolius* (Blue Iupin) and *Moraea flaccida* (One Leaf Cape Tulip) in spring 2019. Population sizes of each of these species remained consistent with previous years and no spread was observed during inspections and control events. An initial treatment of *Eucalyptus accedens* was also carried out in May 2019 and NGB have decided that no follow-up treatments will occur in 2020 as removal of this species has been deemed unnecessary. **Table 3** summarises the targeted weed control activities in 2019 and Figure shows the areas treated for each target.

Table 3: Summary of Targeted Weed Control Activities between April and December 2019 in the Revegetation Areas.

Date of application	Target	Treatment used	Method	Application Rate	Total Area Treated (ha)
May	Gomphocarpus fruticosus (Cotton Bush)		Brushcutting	N/A	2.04
May	Eucalyptus accedens	Fightback @ 1L/60L of Diesel	Basal bark spraying	N/A	2.36
September	Lupinus angustifolius (Sandplain lupin) and Malvaceae sp. control	 Triasulfuron 750 WG @ 12.5 g/100 L Brushwet @ 250 mL/100L Envirodye (Red) @ 300 mL/100 L 	Quickspray Line Spray	N/A	0.46
September	Moraea flaccida (One Leaf Cape Tulip) control	 Chlorsulfuron @ 2 g/100L Glyphosate 450 @ 1 L/100L Brushwet @ 250 mL/100L Envirodye (Red) @ 300 mL/100 L 	Quickspray Line Spray	N/A	0.33
July, August, December	Gomphocarpus fruticosus (Cotton Bush)	Hand Pulling	Opportunistic	N/A	N/A

Continued *Gomphocarpus fruticosus* (Cotton bush) control will occur opportunistically between January and April 2020. All other weed threats will require further control in spring/summer 2020/2021 and their control has been included in GAL's proposal for the 2020 to 2021 maintenance programme.



3.3 TARGETED WEED CONTROL - REMNANT VEGETATION

Targeted weed control in the remnant vegetation focused on *Juncus acutus* (Spiny rush) and *Lavendula stoechas* (French lavender) primarily in spring/summer 2019. Populations of *Gomphocarpus fruticosus* (Cotton bush), *Lupinus angustifolius* (Sandplain lupin) and *Moraea flaccida* (One leaf cape tulip) bordering the revegetation areas were also control during the events detailed in **Table 3**. **Table 4** provides a summary of timing of works, targets and treatment for the observed environmental weeds during 2019.

Table 4: Summary of Targeted Weed Control Activities between April and December 2019 in the Remnant Vegetation.

Date of application (2018)	Target	Treatment used	Method	Application Rate	Total Area Treated (ha)
May	Gomphocarpus fruticosus (Cotton bush)		Brushcutter	NA	2.7 ha
September	Moraea flaccida (Cape tulip)	Chlorsulfuron @ 5g/100LBrushwet @ 250mL/100L	Spot Spraying	NA	0.19ha
September	Lupinus angustifolius (Sandplain lupin)	Metsulfuron methyl 10g/100L Brushwet @ 250mL/100L	Spot Spraying	NA	3.5 ha
October	Juncus acutus (Spiny rush)	Glyphosate (Roundup Bioactive) @ 200ml/100L	Spot Spraying	NA	0.18 ha
October	Lavendula stoechas (French lavender)	Fightback 200ml/10L	Spot Spraying	NA	1.2 ha

A follow-up control event for *Juncus acutus* (Spiny rush) and *Lavendula stoechas* (French lavender) will occur in February 2020 and another event may be required before April 2020 depending on observations during inspections.

3.4 WEED THREATS

3.4.1 Gomphocarpus fruticosus (Narrow leaf cotton bush)

Control for *Gompholobium fruticosus* was undertaken in May, July, August and December 2019 (**Plate** 1 and **Figure 3**) and will require ongoing management beyond the current scope of works. This is due to its long seed viability. Isolated plants continue to be observed across the entire project site during routine inspections and have been brushcut and hand pulled as a management control. The Woodman Environmental monitoring report also identified some populations that have since been controlled. It is assumed that areas of known infestation will continue to germinate and further spread due to the presence of a viable seed bank in the soil profile. This area will require annual control until revegetation



gains competitive advantage (Figure 3: Gomphocarpus fruticosus (Narrow leaf cotton bush) control 2019.Figure 3).



Plate 1: Extent of *Gompholobium fruticosus* infestation on the boundary of the Wandoo area and drainage line, April 2019.

A significant population of *Gompholobium fruticosus* was observed during an inspection in December 2018 along the creek zone between the two M (Wandoo) Land Management Units (**Plate 2** and **Figure 3**). Officially, this area is outside of the management scope but the area along the boundary of the revegetation area was controlled during the April 2019 control event to prevent spread. This population will require further treatment in order to control the entire population in time. This area is included in the proposal GAL provided NGB for the 2020 to 2021 maintenance programme.





Plate 2: Gompholobium fruticosus (Cotton Bush) observed in the remnant vegetation, April 2019.

3.4.2 Lupinus angustifolius (Blue lupin)

Populations of *Lupinus angustifolius* were treated in the revegetation and remnant vegetation areas in September 2019 (**Plate 3**, **Plate 4** and **Figure 4**). All recorded populations were consistent with previously treated populations with no significant spread being observed. The Blue lupin is not a declared weed species, however it can proliferate if untreated. With timely and scheduled weed control management of the species is easily achieved. Future control of this weed species will be required due to the long seed viability in the soil seedbank as suggested in the proposal GAL has provided NGB for the 2020 to 2021 Maintenance Programme.





Plate 3: Central Lupinus angustifolius (Blue Lupin) population (untreated), August 2019.



Plate 4: Central Lupinus angustifolius (Blue Lupin) population (treated), September 2019.

3.4.3 Moraea flaccida (Cape tulip)

Control of this species occurred in September 2019 and was timed well with flowering and the period of corm exhaustion (**Plate 5** and **Figure 4**). Follow up inspections at the infested sites and the wider area will be required as dormant corms can remain beneath soil for up to eight years (Moore *et al*, 2008 and Parsons *et al*, 2000). Individual plants treated in 2018 and 2019 may only represent a portion of that which currently persists in the soil seed bank. Future control will be required as suggested in the proposal GAL has provided NGB for the 2020 to 2021 Maintenance Programme.





Plate 5: Moraea flaccida (One-leaf Cape Tulip) in the revegetation area, August 2019.

3.4.4 Juncus acutus (Spiny rush)

Control of *Juncus acutus* is confined to the north eastern edge of the western wetland (**Figure 5**). This effort represents the third annual treatment for this species at Hotham Farm. Dead individuals for 2018 provide evidence of previous spray applications with the October 2019 treatment targeting new growth and isolated individuals. Complete eradication of this species is not yet evident, and this species requires further management beyond 2019 as suggested in the proposal GAL has provided NGB for the 2020 to 2021 maintenance programme.

3.4.5 Lavendula stoechas (French lavender)

The October 2019 weed control effort targeting *Lavendula stoechas* represents the fifth year targeting this species. Control events have seen a significant reduction in the *Lavendula* populations occurring along the north eastern edge of the western wetland (**Figure 5**). Control success has been measured by observing dead individuals presenting no new basal shoots (**Plate 6**). Successive herbicide applications have resulted in population control and reduced further recruitment. Seedlings do continue to germinate but these have been treated sporadically.



It is recommended that monitoring continue in this area and continued management may be required as seed can remain dormant in the soil. Continued control of this species has also been included in the GAL's proposal for the 2020 to 2021 maintenance programme.



Plate 6: Lavendula stoechas occurring along margins of western wetland, October 2019.

4 Direct Seeded Areas

The areas direct seeded in 2017 appear healthy and have continued to establish over approximately 246 ha. There has been prolific flowering and setting seed across the site, most notably from *Acacia* species, throughout 2019 (Error! Reference source not found.). Other flowering species noted were (but not limited to); *Hovea, Hakea, Melaleuca, Grevillea, Kennedia, Petrophile, Calothamnus, Anigozanthos, Gastrolobium, Lechenaultia* and *Viminaria*. Areas seeded in 2018 are indicating mixed results but there has been further germination and growth observed since December 2018, with some *Acacia* species flowering as well. Both the western and eastern *Gastrolobium* areas have grown well over 2019 with some currently above 60 cm tall. The larger central thicket indicates a mixed result with variation evident between the rows. There has been low germination observed in the L LMU's (Semi-Wet) areas and in the western S-SP Shallow Gravel. However, the seedlings that are present have grown well likely due to the rainfall received over winter 2018/2019 or both. Good germination and growth have been observed in all S-SP, Loamy Gravel areas direct seeded in 2018. The same has also been observed in the L-M, Semi-wet areas with some wetter areas being more variable. For reference **Figure 7** details the areas direct seeded in 2018 excluding the *Gastrolobium sp*. Thickets which are detailed in **Figure 8**.



Infill will be required in 2021 across most of the areas direct seeded in 2018 as well as some of poorer performing areas 2017 areas (e.g. S-SP Shallow Gravel). Seedling survival over summer 2019/2020 may also have an influence on which areas require seedlings. Following the completion of the monitoring report by Greg Woodman, GAL can develop a plan for the infill effort.

5 Monitoring and Inspection

Routine inspections were conducted onsite between May – December 2019. Observations parameters included:

- Pest fauna activity;
- Third party access and damage;
- Erosion assessment;
 - Known points of erosion are revisited and new points are recorded;
- Declared or significant weed outbreaks;
 - Species and locations are recorded;
 - o Remedial actions recommended;
- · Vegetation health:
 - Insect and/ or plant pathogen related damage or mortality; and
 - Qualitative assessments of scalp lines, soil moisture, plant size, density, diversity and health (colour, wilting).

5.1 PROGRESS REPORTING

Two formal Quarterly progress reports have been submitted to NGB in 2019. These reports have detailed project status in relation to contract milestones, scheduled activities, completed activities, key project issues and project budget. Reports included summarised observations, photographs and maps from monthly routine inspections and monitoring observation

5.2 PEST FAUNA OBSERVATIONS

No significant observations of pests were made in 2019. Kangaroo sightings have been regular and of roughly the same number suggesting the population is not increasing. There has been some observations of herbivory in the areas direct seeded in 2018 especially on the more palatable species such as *Anigozanthos manglesii* (**Plate 7**).





Plate 7: Signs of herbivory on Anigozanthos manglesii seedling, September 2019.

5.3 FENCE INSPECTIONS

Routine fence inspection for third party damage/ access to the Hotham Farm access were completed as part of routine inspections and overall the fence remains in good condition. GAL has reported minor maintenance concerns within formal progress reports. In April a fence breach was reported where a tree limb had fallen during high winds and landed on the fence (**Plate 8**). This was repaired and no other breaches were observed in 2019. There is however still a rill present on the southern fence line that has formed under the rabbit proof skirting. This rill hasn't worsened during the maintenance programme but may require addressing (**Plate 9**).





Plate 8: Fence breach reported in the south-eastern corner of the site, April 2019.



Plate 9: Example of rill erosion undercutting rabbit mesh on southern fence line, October 2019.



5.4 EROSION MONITORING

Erosion has decreased in paddock areas which may be attributed to the deflection of water by vegetation and seeding rows aligned to contours. Fire breaks and internal tracks running directly downslope continue to channel water, but observations indicate that rills have not worsened since April 2019. An observable no change may be resulting from stability provided by neighbouring vegetation. **Figure 9** details the locations of areas where significant erosion has been observed.



Plate 10: Rill erosion on causeway between north-east paddock and greater restoration area, April 2019



6 Scheduled Works

Task	Activity	Month
Broadacre Weed and Insect Control	Internal Tracks and Firebreaks	March
Targeted Weed Control – Remnant Vegetation	Juncus acutus (Spiny rush) Lavendula stoechas (French lavender)	February, April
Remnant vegetation	Gomphocarpus fruticosus (Cotton Bush)	Opportunistic
Targeted Weed Control – Revegetation Areas	Gomphocarpus fruticosus (Cotton Bush)	Opportunistic
Monitoring	Routine Inspection	Monthly
Reporting	Quarterly Progress Report (Final)	March

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8 Appendix 1 – Mapping Figures

Broadacre Weed Control 2019 Newmont Goldcorp Boddington: Hotham Farm Restoration Project **Broadacre Weed Control - September 2019** Greening Australia Map Created: 17/01/2020 hwills File Name: NGB_SeptQrt2019
Coordinate System: GDA 1994 MGA Zone 50 44 Scale: 1.18,359

Figure 2: Grass and insect selective broadacre weed control, September 2019.



Figure 3: Gomphocarpus fruticosus (Narrow leaf cotton bush) control 2019.



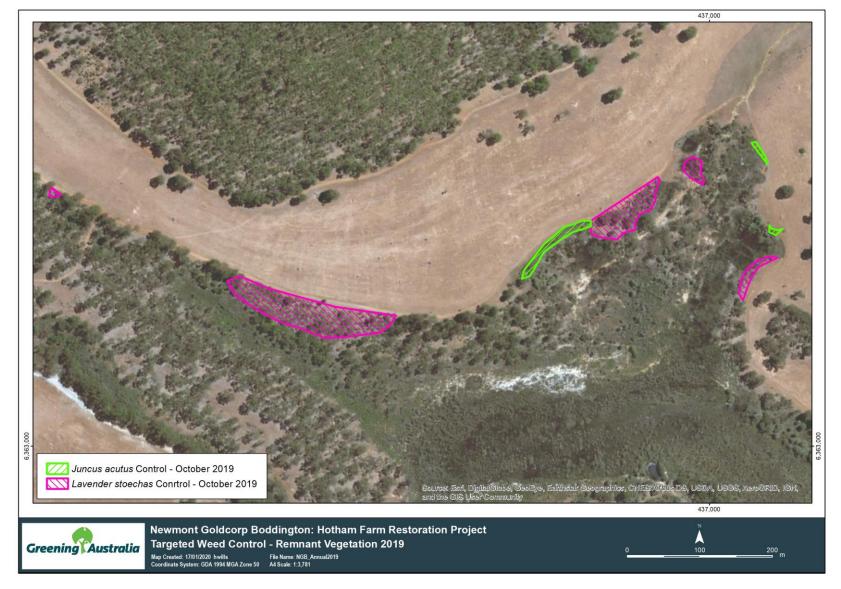




Figure 4: Targeted weed control, September 2019.



Figure 5: Location of Lavendula stoechas and Juncus acutus Control, October 2019.





438,000 436,000 439,000 441,000 Internal Track & Firebreak Management 2019 436,000 441,000 440,000 Newmont Goldcorp Boddington: Hotham Farm Restoration Project Internal Track and Firebreak Management - September 2019 Greening Australia 1,000 m Map Created: 24/09/2019 avear Coordinate System: GDA 1994 MGA Zone 50 File Name: NGB_SeptQrt2019 A4 Scale: 1:18,658

Figure 6: Broadacre control on Internal Tracks and Firebreaks, September 2019.



Figure 7: Position of LMU areas seeded at Hotham Farm, June 2018.





Figure 8: Position of *Gastrolobium calycinum* thickets in the Hotham Farm Landscape.



27



Figure 9: Position of Significant Erosion Features at Hotham Farm, December 2019.





Figure 10: Examples of flowering and seeding species across Hotham Farm, 2019.



29



9 Appendix 2 – Recommended Management Actions for Maintenance Programme 2020.

Task	Action	Location	Timing
Routine Inspections	Inspection to inform ongoing management requirements for the term of revised scope.	Whole Site	Monthly
Vertebrate Pest Control	Kangaroo cull across Hotham Farm site to reduce herbivory on 2018 direct seeded areas.	Whole Site	Summer
Broadacre Weed and Insect Control	Track and Firebreak Maintenance	Internal tracks, fence lines and margins of remanent bushland	April, informed by routine inspections
Targeted Weed Control	Priority targets include: • Gomphocarpus fruticosus (Narrowleafed cotton bush)	Known locations and new infestations	Ongoing, informed by routine inspections
Remanent Vegetation Management	Priority Targets include: • Lavendula stoechas • (French lavender) • Juncus acutus (Spiny Rush)	Known locations and new infestations	February, informed by routine inspections