

Beyondie Sulphate of Potash Project

EPBC 2017/8088

Prepared by Kalium Lakes



Proponent contact details:

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## **Declaration of Accuracy**

Declaration of accuracy In making this declaration, I am aware that sections 490 and 491 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed Clair Wilson

Signed Court Volume

Full name (please print) CLAIR WILSON

Position (please print) ENVIRONMENTAL AND COMPLIANCE OFFICER

Organisaton (please print including ABN/CAN if applicable) Kalium Lakes Limited 98 613 656 643

Date 13/01/2021



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## 1. Description of Activities

Kalium Lakes Limited is a public company, based in Western Australia (WA) with tenements located the eastern margin of the East Pilbara Region of WA (Figure 1). The company is focused on developing the Beyondie Sulphate of Potash Project (the Project) in WA to produce Sulphate of Potash (SOP) and by-product salts for sale domestically and internationally

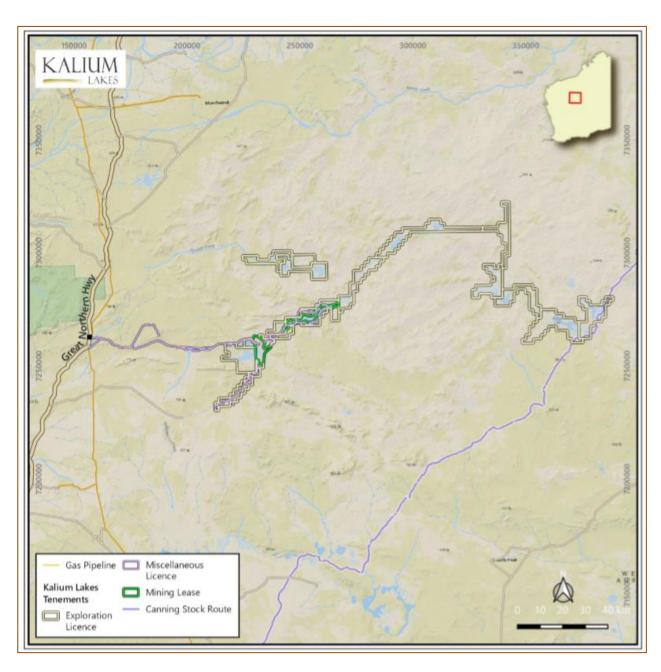
The Project comprises of the development of a sub-surface brine deposit to produce 90 kilotonne per annum (ktpa) of SOP product and includes the development of evaporation and crystalliser ponds, installation of production bores, trenches, pumps, pipelines, purification facility, access road upgrades, natural gas pipeline, and expansion of accommodation village, buildings, services and utilities, disposal of excess salt.

A six-month delay in the overall project timetable was suffered due to the voluntary suspension and optimisation period. Kalium is currently progressing with construction activities, with production anticipated in Quarter 3, 2021.

The action was assessed under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* and approved 18<sup>th</sup> January 2019 [EPBC 2017/8088].

Condition 10 of EPBC approval requires the preparation and submission of an annual compliance report within three months of every 12-month anniversary of the commencement of the action. The action commenced on the  $19^{th}$  September 2019. This is Kalium's first annual compliance report to be submitted since the commencement of the action.





**Figure 1 Project Location** 



## 2. EPBC approval conditions and the compliance table

In accordance with the Annual Compliance Report Guideline, Table 1 has been prepared to demonstrate Kalium's compliance with the EPBC 2017/8088 approval conditions.

During the reporting period, two administrative non-compliances were recorded. In accordance with Condition 4, Kalium Lakes was required to notify the Department at the commencement of the action, however due to an administrative oversite this was not issued. The second non-compliance was recorded in accordance with condition 11, requiring Kalium Lakes to notify the Department of any non-compliance with the conditions. Condition 4 non-compliance was only identified when preparing this report. It is Kalium's intent that this report suffices as notice.

No non-compliance with the Night Parrot Monitoring and Management Plan or Ground Water Monitoring and Management Plan were recorded.



Table 1 Compliance with EPBC 2017/8088 Conditions

No.	Condition	Compliance Comments/Evidence						
A	Conditions specific to the action	•						
11	•		•	Project Disturbance at July 2020 is 750.29ha				
				Approved On ground Disturbance (ha) Disturbance (h	a)			
				Bring Access	219ha			
	For the protection of protected matters, the approval holder must not			Development:	525ha			
1	a. clear more than 1150 ha of vegetation from the project area b. abstract more than 15 gigalitres of groundwater (fresh and hypesaline) per annum	Compliant		Fresh water Development 40	0ha			
				Salt Lake Development 323 6	5.29ha			
				Total abstraction for the project during the reporting period was Volume of Brine abstracted during reporting period = 1,463,658  Volume of Fresh water abstracted during reporting period= 111,934				
	To avoid and mitigate potential impacts to the Night Parrot (Pezoporus occidentalis), the approval holder must submit a Night Parrot Management Plan (NPMP) for the Minister's approval. If the Minister approves the NPMP then the approved NPMP must be implemented.			Kalium Lakes Night Parrot Management Plan was approved on (Appendix 1) and has been implemented.	1 2 July 2019			
	The approval holder must not clear suitable Night Parrot breeding and/or nesting habitat unless the Minister has approved the NPMP in writing.			The NPMP is consistent with the Departments Guidelines.  Evidence of compliance with the NPMP has been provided in T	able 4.			
	The NPMP must be consistent with the Department's Environmental Management Plan Guidelines, and must include:  a. the NPMP environmental objectives and a reference to EPBC Act approval conditions to which the NPMP refers;  b. table of commitments made in the NPMP to achieve the objectives, and a reference to where the commitments are detailed in the NPMP  c. reporting and review mechanisms, and documentation standards to demonstrate compliance with the NPM							
2	d. an assessment of risks to achieving NPMP environmental objectives and risk management strategies that will be applied	Compliant	•					
	<ul> <li>e. impact avoidance, mitigation and/or repair measures, including;</li> <li>i. a procedure for conducting pre-clearance listening surveys of suitable Night Parrot breeding and/or nesting habitat within seven days prior to the commencement of clearing; detailing methodology, timing and locations</li> <li>ii. a vegetation clearance procedure; detailing methodology, timing and location</li> <li>iii. management measures to be implemented if any Night Parrot is/are detected in the project area; detailing avoidance and mitigation of any potential impact/s</li> <li>iv. review mechanisms for any management measures adopted to avoid and/or mitigate potential impacts to the Night Parrot; detailing frequency, duration and reporting of activities and results</li> </ul>							
	v. details of project area fencing design and justification of how the design will avoid or minimise impacts to Night Parrot							



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3	To avoid and mitigate potential groundwater drawdown impacts to food resources for the Greater Bilby (Macrotis lagotis), the approval holder must submit a Groundwater Monitoring and Management Plan (GMMP) for the Minister's approval. If the Minister approves the GMMP then the approved GMMP must be implemented.  The approval holder must not commence groundwater abstraction unless the Minister has approved the GMMP in writing.  The GMMP must be consistent with the Department's Environmental Management Plan Guidelines, and must include; details of the groundwater system(s) potentially impacted by the action, including detailed mapping  a. a description and quantification of baseline values and actual and/or predicted impacts to groundwater system (the groundwater monitoring network, including the number, locations and types of control and monitoring bores to be used  b. measurable performance indicators, including the volume of groundwater abstracted  c. the timing and frequency of monitoring to detect trigger values and changes in the performance indicators  d. trigger values for corrective actions;	Complaint	•	Kalium Lakes Groundwater Monitoring and Management Plan was approved on 4 June 2019 (Appendix 2) and has been implemented.  The GGMP is consistent with the Department Guidelines.  Evidence of compliance with the GMMP has been provided in Table 5.
	<ul> <li>e. a process of implementing appropriate contingency measures in the event a trigger value is exceeded</li> <li>f. mechanisms to avoid, mitigate and manage exceedances of triggers; and cease to pump rules and mitigation</li> <li>g. measures should the flow rate from the paleochannel below Ten Mile Lake and Sunshine Lake be less than 30 L/s</li> <li>h. in more than three consecutive months; and</li> <li>i. timeframes for when mitigation or management measures for exceedances of triggers will be implemented and timeframes for reporting to the Department the effectiveness of the mitigation measures</li> </ul>			
В	Standard administrative conditions			
4	The approval holder must notify the Department in writing of the date of commencement of the action within 10 business days after the date of commencement of the action	Non-Compliant	•	There is no evidence Kalium Lakes provided written confirmation to the Department of the proposed commencement of the action.  It is Kalium's intent that this report will remedy the non-compliance.
5	If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister	Compliant	•	The action has commenced.  Mining Approval was granted in September 2019 at which time the Project could commence construction and mining activities.
6	The approval holder must maintain accurate and complete compliance records	Compliant	•	Compliance records will be retained in Kalium's Document Management System.
7	If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request	Compliant	•	The Department did not make any requested for copies of compliance records during the reporting period.
8	The approval holder must:  a. submit plans electronically to the Department for approval by the Minister;  b. Publish each plan on the website within 20 business days of the date the plan is approved by the Minister or of the date a revised action management plan is submitted to the Minister, unless otherwise agreed to in writing by the Minister;  c. exclude or redact sensitive ecological data from plans published on the website or provided to a member of the public; and  d. keep plans published on the website until the end date of this approval	Compliant	•	Night Parrot Monitoring and Management Plan and Ground Water Monitoring and Management Plan are publicly available on Kalium Lakes website.
9	The approval holder must ensure that any monitoring data (including sensitive ecological data), surveys, maps, and other spatial and metadata required under conditions of this approval, is prepared in accordance with the Department's Guidelines for biological survey and mapped data (2018) and submitted electronically to the Department within 12 months of being collected.	Compliant	•	Copies of monitoring data and Surveys will be supplied as part of the submission of this Annual Compliance Report.
10	The approval holder must prepare a compliance report for each 12 month period following the date of commencement of the action, or as otherwise agreed to in writing by the Minister. The approval holder must  a. publish each compliance report on the website within 60 business days following the relevant 12 month period b. notify the Department by email that a compliance report has been published on the website within five business days of the date of publication  c. keep all compliance reports publicly available on the website until this approval expires  d. exclude or redact sensitive ecological data from compliance reports published on the website; and  e. where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication.	Compliant	•	This Annual Compliance Report is the Kalium's first submission to the Department and covers the period September 2019- September 2020.  Kalium does not intend to publish the compliance report on the company website due the commercially sensitive information  Kalium will report on the dates of publication and correspondence with the Department in the 2020-2021 Report.
11	The approval holder must notify the Department in writing of any: incident; non-compliance with the conditions; or non-compliance with the commitments made in plans. The notification must be given as soon as practicable, and no later than two business days after becoming aware of the incident or non-compliance. The notification must specify  a. the condition which is or may be in breach; and  b. a short description of the incident and/or non-compliance.	Non-Compliant	•	During the preparation of this Compliance Report, it was noted that Kalium did not have on record notice to the Minister advising of the commencement of the action in accordance with Condition 4.



12	The approval holder must provide to the Department the details of any incident or non- compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance, specifying;  a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate	Not applicable	•	No incident or non-compliance with the conditions or commitments made in the Management Plans were recorded during the reporting period.
12	future; b. the potential impacts of the incident or non-compliance; and c. the method and timing of any remedial action that will be undertaken by the approval holder  The approval holder must ensure that independent audits of compliance with the conditions are conducted as requested in	Not applicable		The Minster did not request independent audits of compliance during the
13	writing by the Minister.	Not applicable	•	reporting period.
14	For each independent audit, the approval holder must  a. provide the name and qualifications of the independent auditor and the draft audit criteria to the Department;  b. only commence the independent audit once the audit criteria have been approved in writing by the Department; and  c. submit an audit report to the Department within the timeframe specified in the approved audit criteria	Not applicable	•	The Minster did not request independent audits of compliance during the reporting period.
15	The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on the website until the end date of this approval	Not applicable	•	The Minster did not request independent audits of compliance during the reporting period.
16	The approval holder may, at any time, apply to the Minister for a variation to an action management plan approved by the Minister under condition 2 or 3 or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the EPBC Act. If the Minister approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management plan.	Not applicable	•	Kalium did not apply to the Minister for a variation to either the Night Parrot Management Plan or Groundwater Monitoring and Management Plan during the reporting period.
17	The approval holder may choose to revise an action management plan approved by the Minister under condition 2 or 3, or as subsequently revised in accordance with these conditions, without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the RAMP would not be likely to have a new or increased impact	Not applicable	•	Kalium did not revise either the Night Parrot Management Plan or Groundwater Monitoring and Management Plan during the reporting period.
18	If the approval holder makes the choice under condition 17 to revise an action management plan without submitting it for approval, the approval holder must  a. notify the Department in writing that the approved action management plan has been revised and provide the Department with  i. an electronic copy of the RAMP;  ii. an electronic copy of the RAMP marked up with track changes to show the differences between the approved action management plan and the RAMP  iii. an explanation of the differences between the approved action management plan and the RAMP  iv. the reasons the approval holder considers that taking the action in accordance with the RAMP would not be likely to have a new or increased impact; and  v. written notice of the date on which the approval holder will implement the RAMP (RAMP implementation date), being at least 20 business days after the date of providing notice of the revision of the action management plan, or a date agreed to in writing with the Department  b. subject to condition 16, implement the RAMP from the RAMP implementation date.	Not applicable	•	No revisions were made to the Management Plans during the reporting period.
19	The approval holder may revoke their choice to implement a RAMP under condition 17 at any time by giving written notice to the Department. If the approval holder revokes the choice under condition 17, the approval holder must implement the previous action management plan approved by the Minister	Not applicable	•	No revisions were made to the Management Plans during the reporting period.
20	If the Minister gives a notice to the approval holder that the Minister is satisfied that the taking of the action in accordance with the RAMP would be likely to have a new or increased impact, then  a. condition 17 does not apply, or ceases to apply, in relation to the RAMP; an  b. the approval holder must implement the action management plan specified by the Minister in the notice	Not applicable	•	No revisions were made to the Management Plans during the reporting period.
21	At the time of giving the notice under condition 20, the Minister may also notify that for a specified period of time, condition 17 does not apply for one or more specified action management plans	Not applicable	•	No revisions were made to the Management Plans during the reporting period.
22	Within 30 days after the completion of the action, the approval holder must notify the Department in writing-and provide completion data	Not applicable	•	The action has not been completed



## 3. Environmental Management Plan Compliance

## 3.1. Night Parrot Management Plan

#### 3.1.1.0verview

The Night Parrot Management Plan (NPMP) (Preston & Phoenix 2019), has been prepared to satisfy Condition 2 of EPBC 2017/8088 and approved by the department 2 July 2019. The purpose of the NPMP is "to avoid and mitigate potential impacts to the Night Parrot (*Pezoporus occidentalis*)".

The Night Parrot, is a predominantly ground dwelling, essentially nocturnal and is most likely to be heard calling in a few hours around dawn and dusk. Favouring old unburnt spinifex for roosting or breeding and salt lake margins and areas of salt bush for feeding. The species is listed as Endangered under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and Critically Endangered under the Biodiversity Conservation Act 2016 (BC Act).

Pre disturbance survey efforts included approximately 1,224 hours of recordings, based on a 12 hours per night. A single 'possible at best' call was detected during the survey, an additional survey was undertaken and no additional "possible" calls where detected. Due to the extensive audio recording undertaken and lack of evidence of presence, the nature and scale of the Project no listening survey was undertaken.

Field and desktop surveys assessing suitable Night Parrot breeding and/or nesting habitat was undertaken. Suitable habitat has been identified as "clumps of dense vegetation, primarily old and large spinifex (Triodia spp.) clumps (often unburnt for more than 50 years), especially in hummocks that are ring forming".

During baseline terrestrial fauna surveys, foxes and feral cats were recorded on numerous occasions, suggesting one of the principal threats to the Night Parrot is well established in the vicinity of the project.

#### 3.1.2.Compliance

No non compliances with the Night Parrot Management Plan were recorded during the reporting period Table 4 outlines Kalium's key Monitoring and Management checklist and overall compliance.

In accordance with the NPMP, the following have been implemented and attached as Appendices

- GPD system, including a Ground Disturbance Procedure and Permit (Appendix 3)
- Vegetation Clearing Procedure (Appendix 4)
- Night Parrot Habitat Assessment Procedure (Appendix 5)

As part of the GDP process, a GIS review of the proposed disturbance is undertaken to determine if the works are within mapped Night Parrot habitat. If proposed works are within mapped habitat, a survey is undertaken by a competent zoologist. During the reporting period, 3 preclearing surveys were undertaken for works within mapped Night Parrot Habitat.

The surveys were undertaken by Phoenix Environmental Sciences in accordance with the Night Parrot Assessment Procedure. The first two surveys were completed in May 2019 (Airstrip) and June 2019 (road widening) (Appendix 6). In June 2020, to support the construction of the Gas Pipeline adjacent to the Beyondie Access road a third survey was undertaken (Appendix 7). The outcome of the surveys concluded that the proposed disturbance did not contain suitable habitat. All sites failed assessment criteria at Step 3 (burnt in the past 20 years) or step 4 (areas are dominated by shrubs or trees resulting classification as shrubland or woodland).



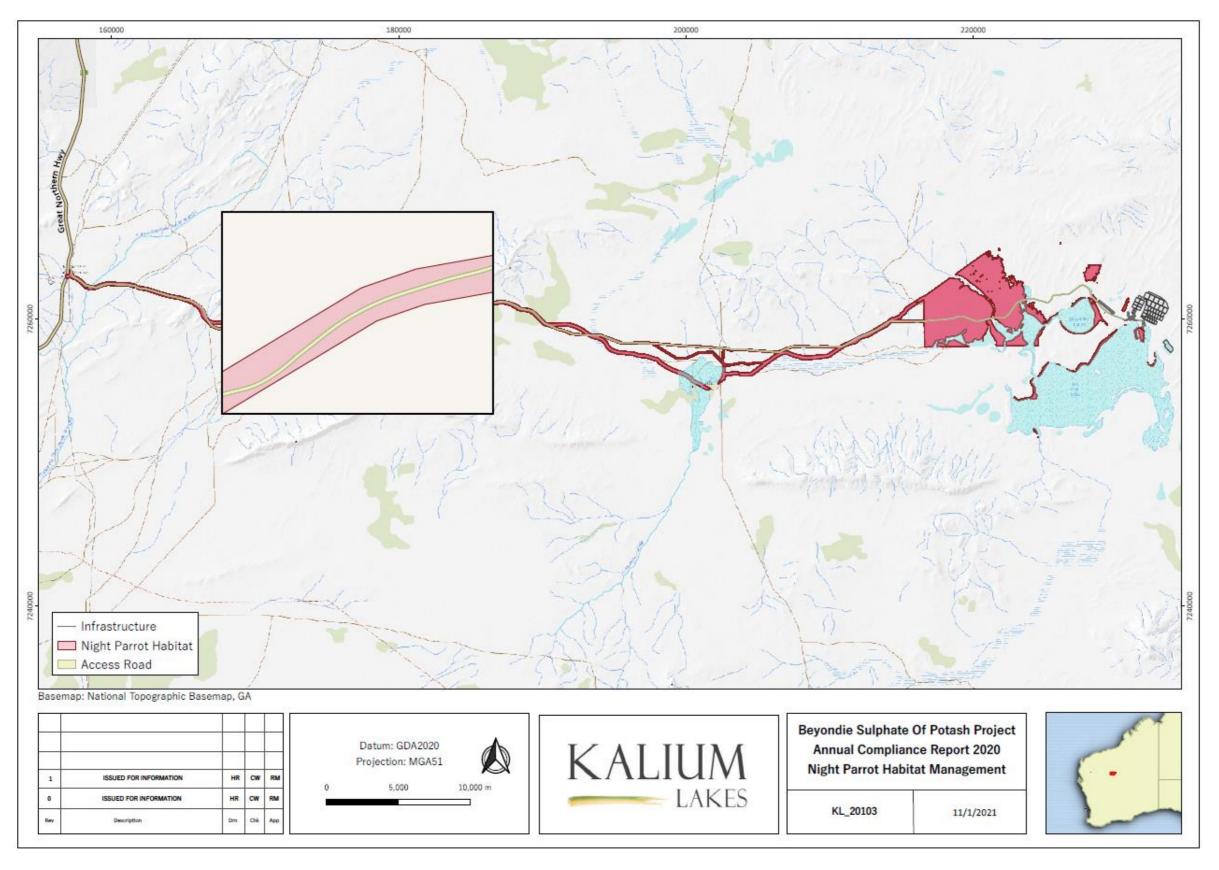


Figure 2 Night Parrot habitat within project footprint



## 3.2. Groundwater Monitoring and Management Plan

#### 3.2.1.0verview

A Groundwater Monitoring and Management Plan (GMMP) has been prepared to satisfy Condition 3 of EPBC 2017/8088. The purpose of the GMMP is to avoid and mitigate potential groundwater drawdown impacts to food resources, particularly the Bush Onion/Yalka (*Cyperus bulbosus*) for the Greater Bilby (*Macrotis lagotis*).

Pre disturbance surveys efforts included target searches/ foraging for evidence of significant vertebrate fauna, including 10 systematic trapping sites and 36 opportunistic sites. Additionally, a helicopter flying at low altitude (<50m) and low speed to search dune faces was used to search for Greater Bilby burrows. During the ariel survey seven secondary evidence burrows were identified and remote trigger cameras were installed. Two burros showed signs of recent activity; however no individuals or recent tracts were observed. The remaining five burrows showed evidence of predatory activity (fox/wild dog) around entrances, indicating predatory presence within the project vicinity.

Bilby have a large range is has been considered that they are frequent inhabitants to the BSOPP area, specifically the sand plains and sand dune habitats supporting grassland and shrubland.

The bilby is a threatened species under State and Commonwealth legislation. In Western Australia, the species is listed as Vulnerable fauna under the Biodiversity Conservation Act 2016. Nationally it is also listed as Vulnerable under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

#### 3.2.2.Compliance

No non compliances with the Ground Water Management Plan were recorded during the reporting period Table 4 outlines Kalium's key Monitoring and Management checklist and overall compliance.

Abstraction from Ten Mile brine Borefield commenced in October 2019. Production bores were progressively installed and ramped up. The trench pumps were installed in February 2020. Annual abstraction volumes are recorded in **Error! Reference source not found.** Table 2

Water levels in the surficial aquifer at Ten Mile have reacted to pumping of the trench network and recharge from rainfall and runoff. Water levels increased during January, February and March 2020 by approximately 0.3m around the lake as a result of groundwater recharge from heavy rainfall and associated runoff from two ex-tropical cyclones. Water levels have since decreased at a slow rate due to natural variation on the lake surface. The trenches during operations have seen approximately 2m of drawdown, which recover quickly when pumps are turned off.

Shallow borefield monitoring bores (M2 bores) have exhibited approximately 0.5m of drawdown since pumping commenced in the confined aquifer, leading to the conclusion that there is a minor amount of leakage between the aquifers. Some water level records appear to be erroneous when highly fluctuating measurements are recorded. This is a result of the poor accuracy of conductivity dip meters when measuring hypersaline brine water levels.



#### **Table 2 BSOPP Abstraction Volumes**

Borefield	Abstraction Point	Aquifer	2019-2020 Abstraction (kL)	GWL No.	2019 - 2020 Abstraction by Licence (kL)	Licensed Volume (kL)
	TMTP01	Lake Surface	222,117	GWL	339,262	
	TMTP02	Lake Surface	117,145	203056(1)	337,202	10,000,000
	TMPB07	Palaeochannel	290,803			
	ТМРВ09	Palaeochannel	64,123			
	WB10	Palaeochannel	27,743			
	WB12	Palaeochannel	168,307			
	TMPB12	Palaeochannel	79,337	GWL 203055(1)	828,026	10,000,000
Ten Mile	TMPB13	Palaeochannel	70,175			
	TMPB14	Palaeochannel	49,873			
	TMPB16	Palaeochannel	15,936			
	TMPB18	Palaeochannel	61,728			
	TMPB02	Bedrock	11,535			
	TMPB15	Bedrock	73,230	GWL	296,370	10,000,000
	TMPB23	Bedrock	177,387	203054(1)	270,370	10,000,000
	TMPB26	Bedrock	34,217			



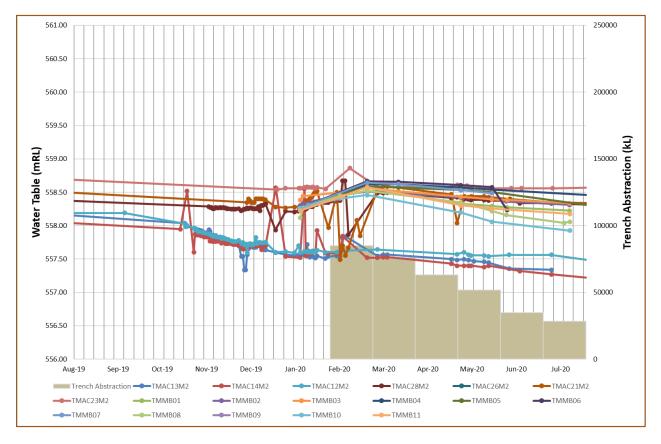


Figure 3 Ten Mile Surficial Aquifer Water Levels



The bilby habitat intermediate monitoring bore (TMAC27M2) and the two-installed habitat monitoring bores (TMMB16 and TMMB20) are being used as health indicators for the habitat region. Table 3 shows the bilby habitat management triggers verses actual.

Water quality results from TMMB16 and 20 show that groundwater in the area where this habitat has been mapped is hypersaline (127,000 to 232,000 mg/L TDS) at the water table, between 3 and 4m below surface. This would indicate that the mapped vegetation (including Cyperus bulbosus) is not groundwater dependent and more dependent on surface moisture for survival.

Table 3 Bilby Habitat Management Triggers vs Actual

Sampling point	Management Trigger	Stop Pumping Trigger	Current Drawdown	Management Trigger	Stop Pumping Trigger	Current Drawdown	Status	
Sampling point	Drawdown Rate (m/yr)	Drawdown Rate (m/yr)	(m/yr)	Total Drawdown (m)	Total Drawdow n (m)	(m)	Status	
Bilby Intermediate MB (TMAC27M2)	0.4	0.5	0	1.0	1.5	0	•	
Habitat Monitoring Bores	>0.4	TMMB16 = 0 TMMB20 = 0.01	n/a	>1.2	>1.5	TMMB16 = 0 TMMB20 = 0.03	•	



#### Table 4 Night Parrot Monitoring and Management Plan Compliance Checklist

Potential Impact	Associated Project Activities	Controls	Timing	Performance Targets	Compliance		Comments/Evidence			
	,	Develop and Implement a GDP system and procedure	Prior to vegetation clearing	GDP system developed GDP procedure signed as final	Compliant	•	KLL-EN-PR-001_0 Ground Disturbing Procedure was implemented in May 2018.			
Clearing of "suitable Night Parrot breeding and/or nesting habitat" resulting in impacts	Vegetation clearing for Project	Conduct all vegetation clearing in accordance with an approved GDP	During vegetation clearing	No clearing without approved GDP No clearing outside areas approved in GDP	Compliant	•	Vegetation clearing has been undertaken with an approved GDP.			
to resident Night Parrot(s)	construction	Conduct pre-clearance Night Parrot assessments in accordance with the Night Parrot Procedure	Prior to vegetation clearing	No non-compliance with Night Parrot Procedure	Compliant	•	The GDP map identifies Night Parrot habitat, if present the NP assessment is implemented			
		Implement vegetation clearing as per the Vegetation Clearing Procedure	During vegetation clearing	No non-compliance with Vegetation Clearing procedure	Compliant	•	Vegetation is cleared in accordance with KLL-EN-PR-004_0 Vegetation Clearing Procedure approved March 2019.			
		Develop and Implement a GDP system and procedure	Prior to vegetation clearing	GDP system developed GDP procedure signed as final	Compliant	•	KLL-EN-PR-001_0 Ground Disturbing Procedure was implemented in May 2018			
Clearing of "suitable Night Parrot breeding and/or nesting habitat"	Vegetation clearing for Project	Conduct all vegetation clearing in accordance with an approved GDP	During vegetation clearing	No clearing without approved GDP No clearing outside areas approved in GDP	Compliant	•	Vegetation clearing has been undertaken with an approved GDP.			
resulting in injury or mortality of Night Parrot			· ·	construction	Conduct pre-clearance Night Parrot assessments in accordance with the Night Parrot Procedure	prior to vegetation clearing	No non-compliance with Night Parrot Procedure	Compliant	•	When assessing the GDP Night Parrot habitat is assessed to determine if it is present in the proposed clearing boundary. Where NP habitat is present, further review and consideration is undertaken in accordance with the Night Parrot Assessment procedure.
		Implement vegetation clearing as per the Vegetation Clearing Procedure	During vegetation clearing	No non-compliance with Vegetation Clearing procedure	Compliant	•	Vegetation is cleared in accordance with KLL-EN-PR-004_0 Vegetation Clearing Procedure			
				If Night Parrot is located within Development Envelope, cease any clearing in Night Parrot habitat until NPMP is revised and accepted or alternative is agreed in writing between Kalium Lakes and DotEE	Immediately following incident	Clearing ceased immediately following incident	Not Applicable	•	No night parrot sightings were observed during the reporting period. No confirmed sightings within 40km of the project were identified.	
Evidence of a Night	Vegetation	Report to DotEE and DBCA within 24 hours (if sighting or evidence is within Kalium Lakes Development Envelope)	Within 24 hours of incident	Report within 24hrs	Not Applicable	•	No Incidents were recorded during the reporting period			
Parrot identified within 50 km of Development	clearing for Project construction or	Revise NPMP if a Night Parrot sighting is recorded within 40 km of Development Envelope	Following notification by DBCA or DotEE	Revised NPMP accepted by DotEE following revision	Not Applicable	•	No night parrot sightings were observed during the reporting period. No confirmed sightings within 40km of the project were identified.			
Envelope	ongoing activities	Seek expert advice to establish relevant interim controls to protect Night Parrot	Immediately following reporting	Interim controls adopted Expert advice received and acted upon	Not Applicable	•	No night parrot sightings were observed during the reporting period. No confirmed sightings within 40km of the project were identified.			
		Review NPMP, resubmit to DotEE for approval	Within time frame agreed with DotEE following reporting	Revised NPMP accepted by DotEE following revision	Not Applicable	•	No night parrot sightings were observed during the reporting period. No confirmed sightings within 40km of the project were identified.			



Table 5 Groundwater Monitoring and Management Plan Compliance Checklist

	Associated Project							
<b>Potential Impact</b>	Activities	Controls	Timing	Performance Targets	Compliance		Comments	
		Maintain the natural range of groundwater levels within Greater Bilby records and the surrounding dune habitat. This is to be maintained by monitoring and managing drawdown if required (refer below).		Groundwater drawdown at the intermediate monitoring bore does not exceed 1.5 m in total or 0.5 m per year as predicted by the model. Available groundwater abstraction rates from the palaeochannel aquifer do not fall below 30 L/s due to a lack of resource.	Compliant	•	No draw down has been recorded	
Drawdown causes	Abstraction of brine	Limit brine groundwater abstraction from the Ten Mile Lake surficial aquifer to a maximum of 10 GL/yr	For the duration of groundwater abstraction.	9.5 GL/yr trigger level. 10 GL/yr limit not to be exceeded.	Compliant	•	No Trigger levels exceeded	
an acceleration of seepage of rainfall in sandy vegetated areas, resulting in less available	groundwater from the surficial aquifer from	Limit brine groundwater abstraction from the Ten Mile Lake confined palaeochannel aquifer to a maximum of 10 GL/yr		9.5 GL/yr trigger level. 10 GL/yr limit not to be exceeded.	Compliant	ompliant No Trig	No Trigger levels exceeded	
water retained in the upper soils for use by vegetation.	of brine groundwater from the palaeochannel from bores around Ten Mile Lake.	Limit combined brine groundwater abstraction from the surficial and palaeochannel aquifers to a maximum of 15 GL/yr.		14 GL/yr trigger level. 15 GL/yr limit not to be exceeded.	Compliant		No Trigger levels exceeded	
		Verify groundwater drawdown model to ensure drawdown zone predictions are of high confidence.	During the first 6 month period of groundwater abstraction.	Verification monitoring results do not exceed 20% of model predictions	Compliant	•	No draw down has been recorded	
		Compare groundwater levels at the intermediate monitoring bore against model predictions.	Ongoing on a monthly basis during groundwater abstraction	Groundwater drawdown at the intermediate monitoring bore does not exceed 1.5 m in total or 0.5 m per year as predicted by the model.	Compliant	•	No draw down has been recorded	
		Maintain the natural range of groundwater levels within recorded Cyperus bulbosus locations. This is to be maintained by monitoring and managed drawdown if required (refer below)		Groundwater drawdown at the intermediate monitoring bore does not exceed 1.5 m in total or 0.5 m per year as predicted by the model. Groundwater abstraction rates from the palaeochannel aquifer do not fall below 30 L/s due to a lack of resource.	Compliant	•	No draw down has been recorded	
	Abstraction of brine	Limit brine groundwater abstraction from the Ten Mile Lake surficial aquifer to a maximum of 10 GL/yr.	For the duration of groundwater abstraction.	9.5 GL/yr trigger level. 10 GL/yr limit not to be exceeded.	Compliant	•	No Trigger levels exceeded	
Drawdown results in a loss of groundwater source for	groundwater from the surficial aquifer from trenches on the surface of Ten Mile Lake Abstraction	Limit brine groundwater abstraction from the Ten Mile Lake confined palaeochannel aquifer to a maximum of 10 GL/yr.		9.5 GL/yr trigger level. 10 GL/yr limit not to be exceeded.	yr trigger level.	No Trigger levels exceeded		
vegetation food sources.	of brine groundwater from the palaeochannel from bores around Ten Mile Lake.	Limit combined brine groundwater abstraction from the surficial and palaeochannel aquifers to a maximum of 15 GL/yr.		14 GL/yr trigger level. 15 GL/yr limit not to be exceeded.	Compliant	•	No Trigger levels exceeded	
		Verify groundwater drawdown model to ensure drawdown zone predictions are of high confidence.	During the first 6 month period of groundwater abstraction.	Verification monitoring results do not exceed 20% of model predictions	Compliant	•	No Trigger levels exceeded	
		Compare groundwater levels at the intermediate monitoring bore against model predictions.	Ongoing on a monthly basis during groundwater abstraction	Groundwater drawdown at the intermediate monitoring bore does not exceed 1.5 m in total or 0.5 m per year as predicted by the model.	Compliant	•	No draw down has been recorded	



## 4. Correcting non-compliances

Whilst preparing this annual compliance report it was identified there was no evidence that Kalium Lakes notified the Department at the commencement of this action. It is Kalium Lakes intention that this report will suffice as notice commencement.

INX software is currently being implemented to assist Kalium Lakes in managing obligations and stakeholders. It will provide a tool to measure compliance, schedule monitoring and reporting and record stakeholder interactions. INX will assist in mitigating administrative non-compliances such as this.

## 5. New Environmental Risks

No new environmental risks were identified during the reporting period.



# **Appendices**

**Appendix 1 Night Parrot Management Plan** 

**Appendix 2 Ground Water Management Plan** 

**Appendix 3 Ground Disturbance Permit Procedure** 

**Appendix 4 Vegetation Clearing Procedure** 

**Appendix 5 Night Parrot Habitat Assessment Procedure** 

Appendix 6 Night Parrot Assessment- Pre Clearing Survey 2019

Appendix 7 Night Parrot Assessment- Pre Clearing Survey 2020