

**MOOLARBEN COAL OPERATIONS - COMMUNITY CONSULTATIVE COMMITTEE
MEETING No. 55**

Date: Monday 7 December 2020
Time: 4:05pm
Location: Moolarben Coal Training Room
Attendance: Independent Chairperson
Lisa Andrews (LA)

Community Members

Dr Julia Imrie (JI)
Helen Ungaro (HU)
Bev Smiles (BS)
Cr John O'Neil (JO)
Stephen Alcorn (SAlc)

Moolarben Coal Operations

Graham Chase (GC)
Steve Archinal (SA)
Trent Cini (TC)
Ashley Tones (AT) {Minute taker}

Apologies

David Stokes (DS)
Mat Croake (MC)
Aleisha Lonsdale (AL)
Cr Des Kennedy (DK)

Meeting 55 Agenda and Presentation and Meeting 54 Minutes were provided to all meeting attendees.

1. Introduction and Welcome

Lisa Andrews (LA) opened meeting and welcomed all attendees to the Moolarben Coal Operations (MCO) CCC. LA thanked attendees for accommodating change to initial meeting date.

2. Apologies

David Stokes (DS)
Aleisha Lonsdale (AL)
Mat Croake (MC)

3. Declarations

LA advised that there were no changes to her usual declaration. Approved Independent Chairperson and engaged by Yancoal to chair this CCC. Stephen Alcorn (SAlc) nominated that the MCO sponsored the Mudgee Chamber of Commerce Magnificent Mudgee Business Awards 2020. No changes to members' previous declarations.

4. Business Arising from Previous Finalised Minutes

LA confirmed previous meeting minutes finalised and distributed on 9 October 2020.

LA discussed previous actions items being:

1. *EL6288 exploration location to be provided* – included in presentation
2. *Provide information on LFA monitoring.* – included in presentation
3. *Inform CCC when GWMP and SWMP are approved and on MCO's website* – Notification provided 12 November 2020
4. *Provide detail on Koala feed tree species being planted* – included in presentation

No further actions from CCC Meeting 54.

Julia Imrie (JI) referred to previous question regarding anomalous data at PZ179. GC confirmed PZ179 Vibrating Wire Piezometer (VWP) removed from the program due to anomalous data, erroneously showing water above ground level.

Correspondence

Correspondence to the CCC since meeting 54 included the following:

- 28/9/20 – Draft minutes sent to CCC for review (comments received back & incorporated into minutes).
- 9/10/20 - Finalised minutes sent to CCC members.
- 15/10/20 – Email from MWRC advising of Council's representatives for the next 12 months; Cr John O'Neill, Cr Paul Cavalier & Mayor Cr Des Kennedy.
- 28/10/20 – Email to members proposing date change for next CCC to 8/12/20.
- 30/10/20 – Email to members changing date for next CCC to 7/12/20.
- 12/11/20 – Email to members advising that the Groundwater and Surface Water Management Plans has been approved by the Department of Industry and Environment.
- 28/11/20 – Email to members with the Meeting Notice & Agenda for this meeting with Correspondence Report.
- 1/12/20 – Email from JI requesting water data. Email forwarded on to MCO for action.
- 2/12/20 – Email from MCO with the COVID Health Assessment sheet and information about attending the site for the CCC. This was sent to all members.

Statement

LA raised for discussion with CCC attendees' ways to improve future meetings, reminding attendees of NSW Government Community Consultation Committee Guidelines (dated 2019) and reiterated the Chairpersons commitment to ensure information is provided to community members in accordance with the Guidelines. LA suggested improvements by trialling inviting guest speakers to meetings to discuss specific topics, undertaking yearly site visits and putting forward topics for discussion on heritage, business chambers etc. LA encouraged feedback and comments from attendees. JI suggested Resource Regulator as a guest speaker and presentation from the consultants undertaking the Independent Water Quality Study.

LA also advised that in putting forward community questions, two weeks' notice is to be provided.

JI queried the opportunity for future meetings to be held via video conference. General discussion commenced on preference and value of face to face meeting, however recognised the possibility of undertaking video conference meetings if requested.

CCC Update Presentation

GC provided an update on COVID-19 management actions. GC thanked attendees for following the COVID controls. GC advised that Yancoal has amended controls to allow visitors to site with GM approval.

GC provided an update on the Community Support Program (CSP). GC outlined the policy and governance processes associated with the CSP, and informed the CCC that 2021 applications were now closed with applications undergoing a review and approval process.

TC provided an operational update. JI asked about the sequence of mining (being UG4 before UG2) and timing between UG surface construction works and UG operations. TC confirmed sequence of underground mining being UG1 followed by UG4 then UG2. GC advised that UG4 longwall mining is planned to commence in 2022.

Bev Smiles (BS) asked about the remediation works being undertaken for spontaneous combustion onsite and impacts of recent rainfall. TC discussed the processes of cooling and capping, and the measured approach being undertaken to minimise the area exposed at any one time. JI asked if the position of the spontaneous combustion is near the highwall remediation adjacent to the ridges. GC advised it is not adjacent to the highwall and described the controls that are in place for material placement adjacent to the highwall.

TC provided an update on MCO's exploration drilling program. BS asked about the number of holes in the northern area (EL6288) with TC confirming the current program includes 2 sites. BS asked if the EL has been renewed and reduced in area. GC confirmed it is pending renewal and a reduced area has been proposed.

TC provided an update on monitoring MCO water releases. TC explained that releases are based on site requirements. JI asked about periods with limited releases. GC described that stocks had been reduced and MCO released on a campaign basis.

BS asked about Bowden's Silver Mine and how any water sharing would impact operations. GC advised MCO operational requirements would need to be considered first.

JI advised of observations of a red stain in the river water flow through her downstream property and suggested it indicated elevated iron and/or manganese. BS asked if it is a requirement to monitor these metals and where are the results reported. JI referred to the importance of understanding the quality of water discharged into the river on downstream ecosystems. GC advised that monitoring is undertaken and results are reported in accordance with MCO's Environment Protection Licence and Surface Water Management Plan. [ACTION] Treated release water quality data to be provided.

Jl referred to the Australian and New Zealand Environment and Conservation Council (ANZECC) water quality guidelines, the [MCO] MOD 14 Controlled release report and the water release limits. Jl expressed opinion that design limits set for dissolved metals in MCO SWMP Table 25b for discharge water were substantially higher than MCO sampling data of upstream water quality (SW12). Jl asked that since ANZECC advises trigger points should be based on site specific monitoring why the levels did not reflect MCO own upstream water monitoring data as reported in MOD14 Impact Assessment? GC outlined the government assessment and approval process undertaken relating to the approved release criteria, and that the criteria is reflected in the [MCO] Water Management Plan. Jl expressed concern relating to the timely reporting and access of mine discharge water quality data to downstream landowners

TC presented the surface water quality data. Jl referred to upstream monitoring point SW12 and the extent of sampling being undertaken up and downstream as part of the requirements and Terms of Reference for the Independent Water Quality Study. LA confirmed Jl's question is on notice relating to water quality monitoring.

TC presented the noise and air quality data and MCO community complaints.

TC presented the rehabilitation and offset management update with general discussion commencing on monitoring. BS asked if the regulators have come out and assessed the rehabilitation. TC confirmed that rehabilitated areas are monitored and assessed through the annual review, 3 yearly independent audit and Resource Regulator inspections.

TC outlined rehabilitation monitoring at MCO including Ecosystem Function Analysis (EFA) and Landscape Function Analysis (LFA) and presented results. TC explained general trends, seasonal variability and the use of analogue sites. A general rehabilitation monitoring discussion followed.

Jl provided the observation the presence of exotic species such as Saffron Thistle and Patterson's Curse in both modified pastures and along the flood level on the river following the drought, in comparison to very little weed growth present in the undisturbed natural open woodlands areas. General discussion on weeds and response to rainfall.

TC provided an update on Biodiversity Offset management. LA asked whether plants are propagated onsite. TC confirmed propagation is undertaken by a nursery engaged by MCO from seed collected from MCO owned lands, or other suppliers where required. BS asked about the Koala tree species planted onsite. GC advised species are within the rehabilitation and offset planting areas included *Angophora floribunda*, *Eucalyptus albens*, *E. blakelyi*; *E. crebra*, *E. melliodora* and *E. moluccana*.

GC provided an update on employment, training and awards. GC thanks all attendees for their participation this year and provided well wishes to all members and their families for a Merry Christmas and safe and prosperous New Year.

5. General Business

LA asked about the market considering current political situation with China. Steve Archinal (SA) explained Yancoal are in the same position as other companies relating to coal sales to China.

Queries from the CCC

GC referred to questions submitted by Jl to the Chairperson:

1. *When is MCO groundwater model (Hydro-simulations 2017) next audit due?*

The next groundwater model audit and recalibration is due to be completed by 2022.

2. *Was the riparian vegetation community along the river corridor assessed as a Terrestrial GDE?*

GDE's were assessed as part of the Stage 1 and 2 Environmental Assessments which included Terrestrial, Base Flow and Wetland GDE's. The assessment of riparian vegetation did not indicate any specific riparian plant communities, which could be considered groundwater dependent. The DPE concluded that apart for the regionally significant Drip, there are no GDEs of significance within the project area.

A discussion commenced on GDE's. GC confirmed reports can be provided to LA. JI questioned the lack of identification of GDE's along the riparian zone of the Goulburn River, and noted observation of the vegetation communities including large Angophora trees indicated Terrestrial groundwater dependence and vulnerability to general lowering of groundwater levels. BS commented on the dependence on these areas on surface water and concern about when mine releases cease.

3. *Why has SWL trigger for Triassic bore PZ105C been lowered? The river channel adjacent to PZ105c (150 m away) is ~373mAHD. A decline in groundwater at PZ105c to 367.3mAHD would reverse the groundwater flow direction (hydraulic gradient) away from the river. Note: Both river base flow and nearby Private bore PB49 are likely to be seriously compromised if the Triassic GWLs are allowed to fall as far as 367.3mAHD.*

GC advised that the approved Groundwater Management Plan was prepared with input from suitably qualified and experienced experts approved by the Department of Planning, Industry and the Environment (DPIE). The triggers have been established on the basis of advice from the suitably qualified and experienced expert in consideration of the Aquifer Interference Policy and trigger values are set at the 50% of the minimum saturated bore depth of the designated groundwater trigger monitoring bores to enable detection of any significant adverse mining related impacts to other groundwater users.

JI asked it be noted that it was her opinion that these lower trigger levels could not provide sufficient early warning to prevent serious mining impacts to the bore on her property and river baseflow. GC noted the requirements for MCO to review groundwater monitoring, trends and management and adhere to government approvals process including for the UG4 Extraction Plan.

[ACTION] LA stated a link be send to the [MCO] GWMP. LA noted MCO must operate in accordance with approval conditions and report to the Regulator if required.

4. *EC for PZ101c is 610-810 (95th%tile is 655 μ S/cm) i.e. it is potable water but has been placed in category as marginal potable? - (Table 9 - EC >800 <2,350 μ S/cm). It should be labelled as potable.*

Discussion on the Beneficial Use Category (Table A-6 of [MCO] GWMP) and link to trigger levels. GC clarified the median EC at PZ101 C is 655 μ S/cm and TC confirmed the EC trigger for PZ101c is 810 μ S/cm and is based on the 95%ile rather than the upper limit of the marginally potable beneficial use category.

Discussion on UG1 water take with GC advising dewatering from all underground was approximately 95 litres per second, including water supply, inflows and recirculation. JI queried UG4 mining timing with GC confirming that first workings are in progress, that UG4 longwall mining is scheduled to commence in 2022 and that surface construction works are planned to commence early in the new year.

Discussion on Independent Water Quality Study (IWQS) data collection and ongoing monitoring. GC advised monitoring is on-going at the EPA endorse upstream monitoring location and that ecotoxicology will occur in 2021. JI noted that upstream and downstream results should be looked at. GC confirmed the scope included that monitoring of upstream sites, determining background quality and water discharge criteria in accordance with the ANZECC guidelines. JI asked when the IWQS would be completed with GC confirming at the end of 2021.

General discussion relating to the market and port export. BS queried raiing capacity with SA advising that rail has not impacted MCO. BS queried Yancoal's position considering recent company profitability and redundancies in the industry. SA noted that each operation will be different with MCO's operations partially shutting down over the

Christmas to New Year period, with essential services and statutory positions as required. JI queried if discharges will occur during that period with SA stating that discharges will occur as required.

LA proposed 2021 CCC meeting schedule dates being Tuesdays at 4pm:

- 9 March with site tour.
- 8 June
- 7 September
- 30 November

6. Next Meeting: 9 March 2021

Meeting Closed at 5:30pm with LA thanking all members for their contributions throughout the year and wishing them all the best for the festive season and a much better 2021.

Action Items:

Item	Action	Responsibility
1	Water quality release data to be provided	MCO
2	Link to MCO Ground Water Management Plan to be provided to CCC members	LA

Community Consultative Committee Update

December 2020

Moolarben Coal Operations



COVID – 19 Update

- Proactively managing the situation to safeguard the health and safety of our people.
- No confirmed COVID-19 Cases.
- Yancoal continues to monitor the situation and health advice.
- Site access restrictions.
- Screening people on entry (Thermal Cameras).
- Implementation of social distancing and reinforcement of hygiene practices.
- Enhanced cleaning.
- Community support focused on COVID response and health.



Community Support Program (CSP)

- A total of 55 CSP applications were received in 2020.
- 46 applications were successful.
- 15 events or programs were impacted as a result of Covid-19 restrictions.



Community Support Program (CSP)

2021 Community Support Program

- Applications closed
- Good response with over 40 applicants
- Applications being reviewed
- Successful applicants announced in January



NEED FUNDING TO HELP IMPROVE OUR LOCAL COMMUNITY?

Yancoal Community Support Program call for applications

Moolarben Coal Operations is a proud and active member of the local community. Yancoal's 2021 Community Support Program offers community groups the opportunity to apply for funding to support projects, events and initiatives that help make a genuine positive difference to the Mid-Western Region.

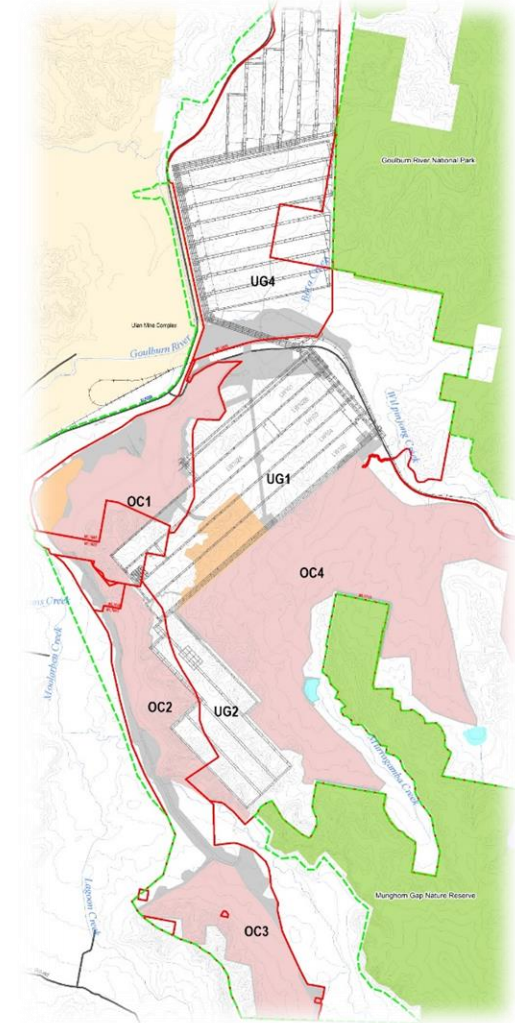
If you have a project or idea with the potential to benefit others across the areas of health, community, environment, arts, culture, education or training, please visit: www.moolarbencoal.com.au

Applications close on 6th November 2020



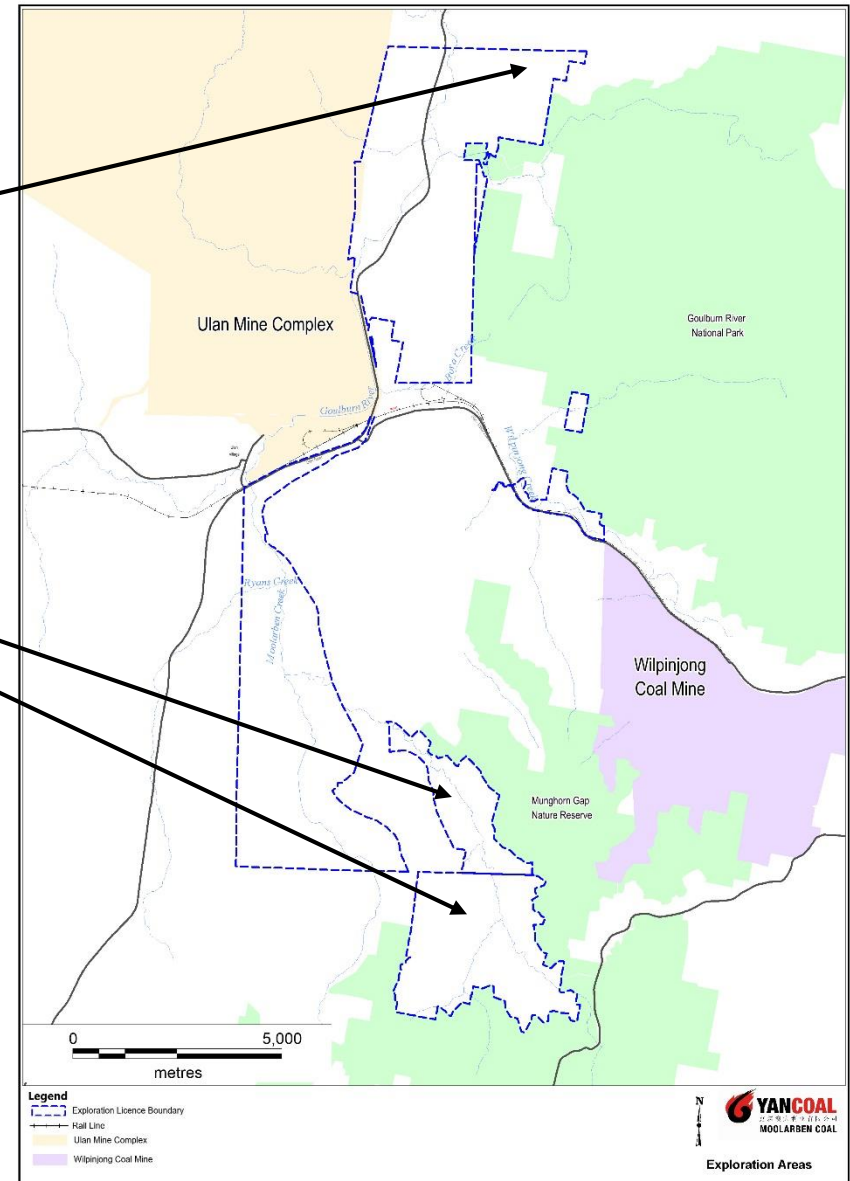
Operational Update

- Ongoing open cut operations in OC2, OC3 & OC4.
- Underground operations in longwall LW104 and development.
- UG4 construction to commence in early 2021.
- Water Treatment Plant operations continue as required.
- Remediation of heating within overburden areas has continued as required.



Exploration Update

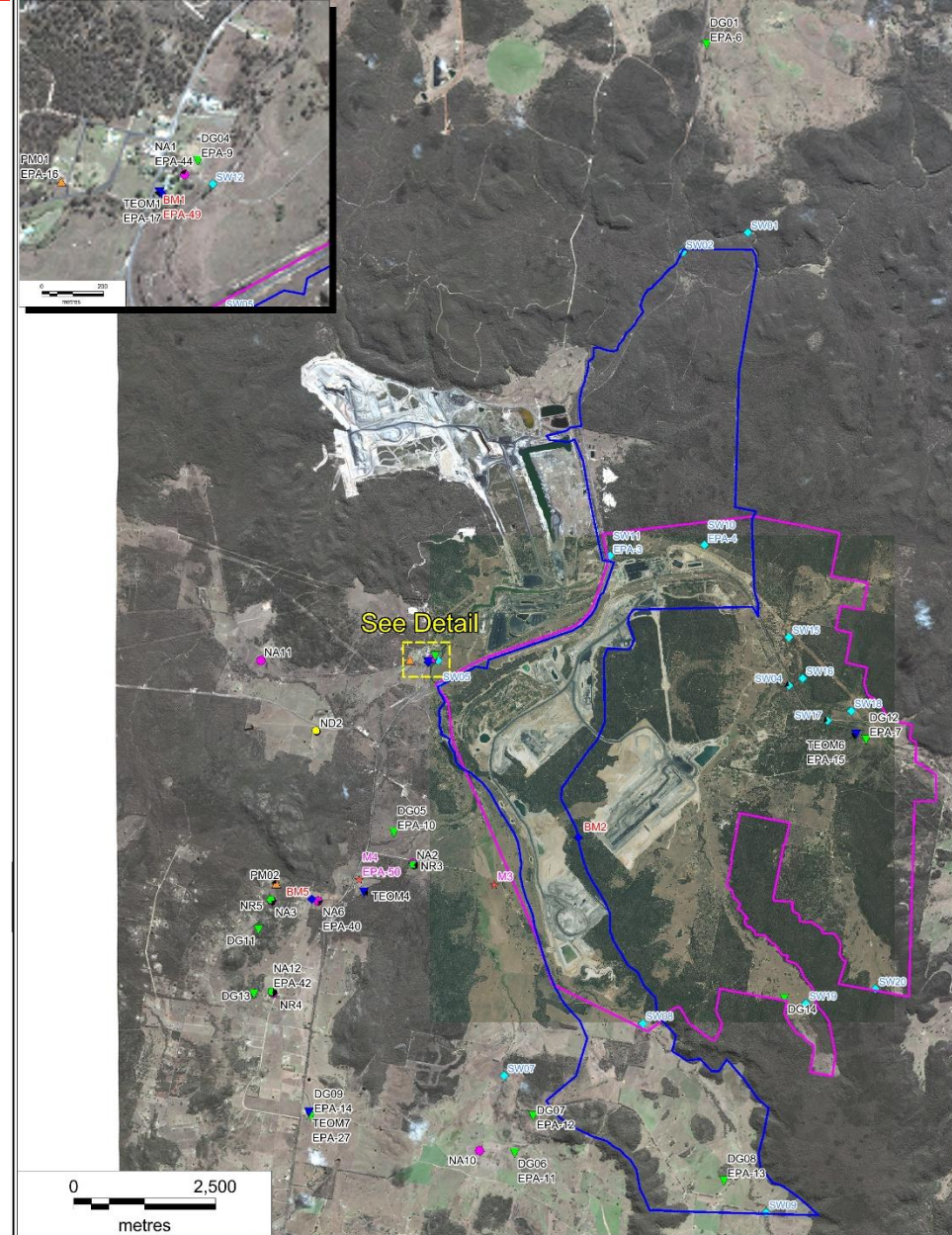
- Drilling programs currently underway in the northern areas of EL6288.
- Future drilling programs planned for EL6288 south and EL7073.
- Rehabilitation, relinquishment, and monitoring activities have continued during the period.



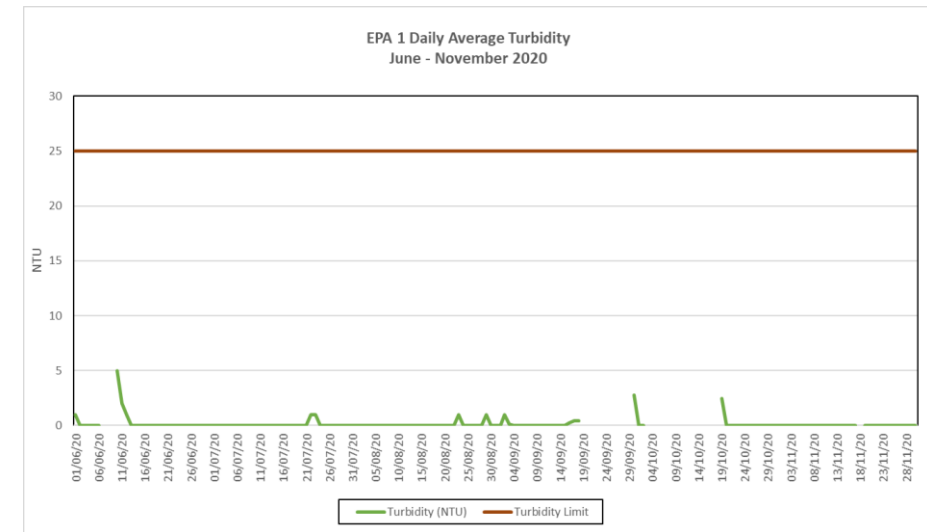
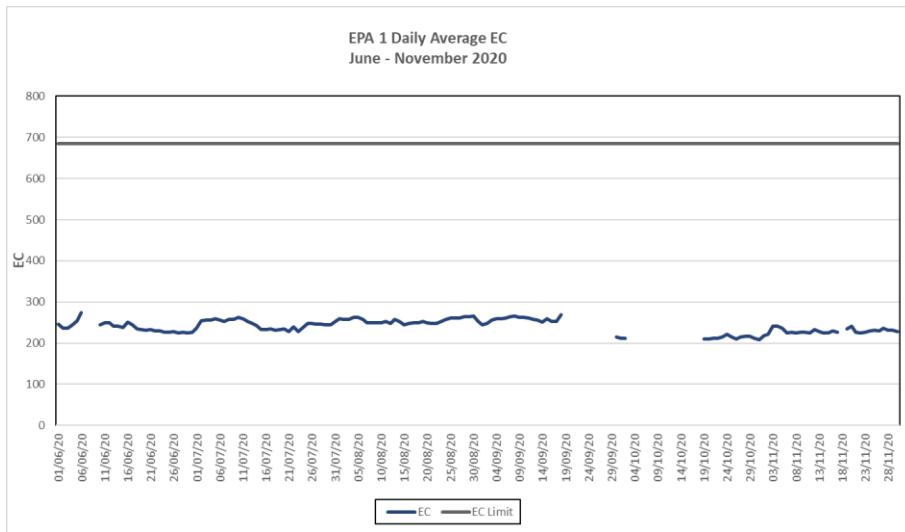
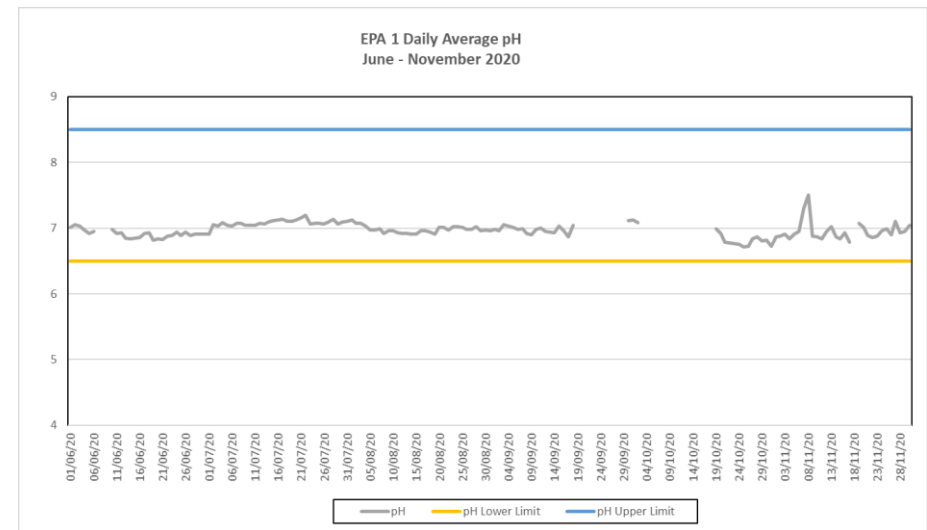
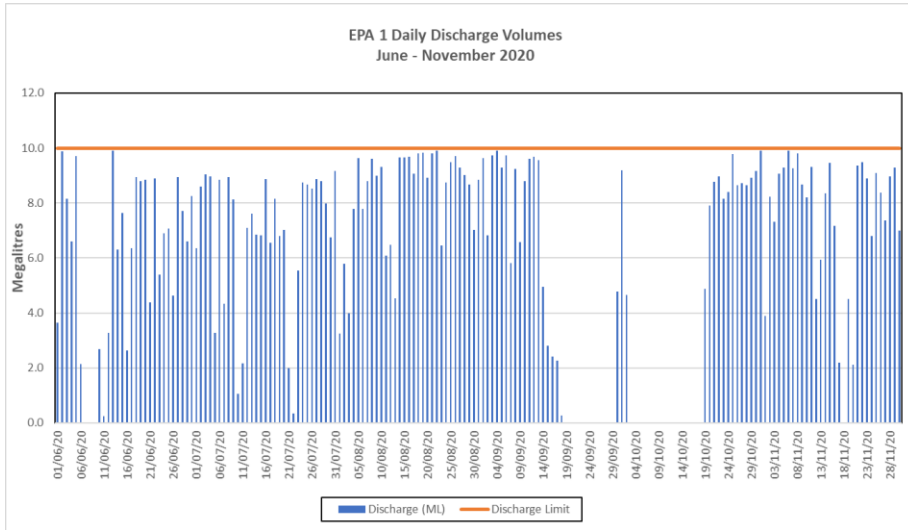
Environmental Monitoring

Monitoring network

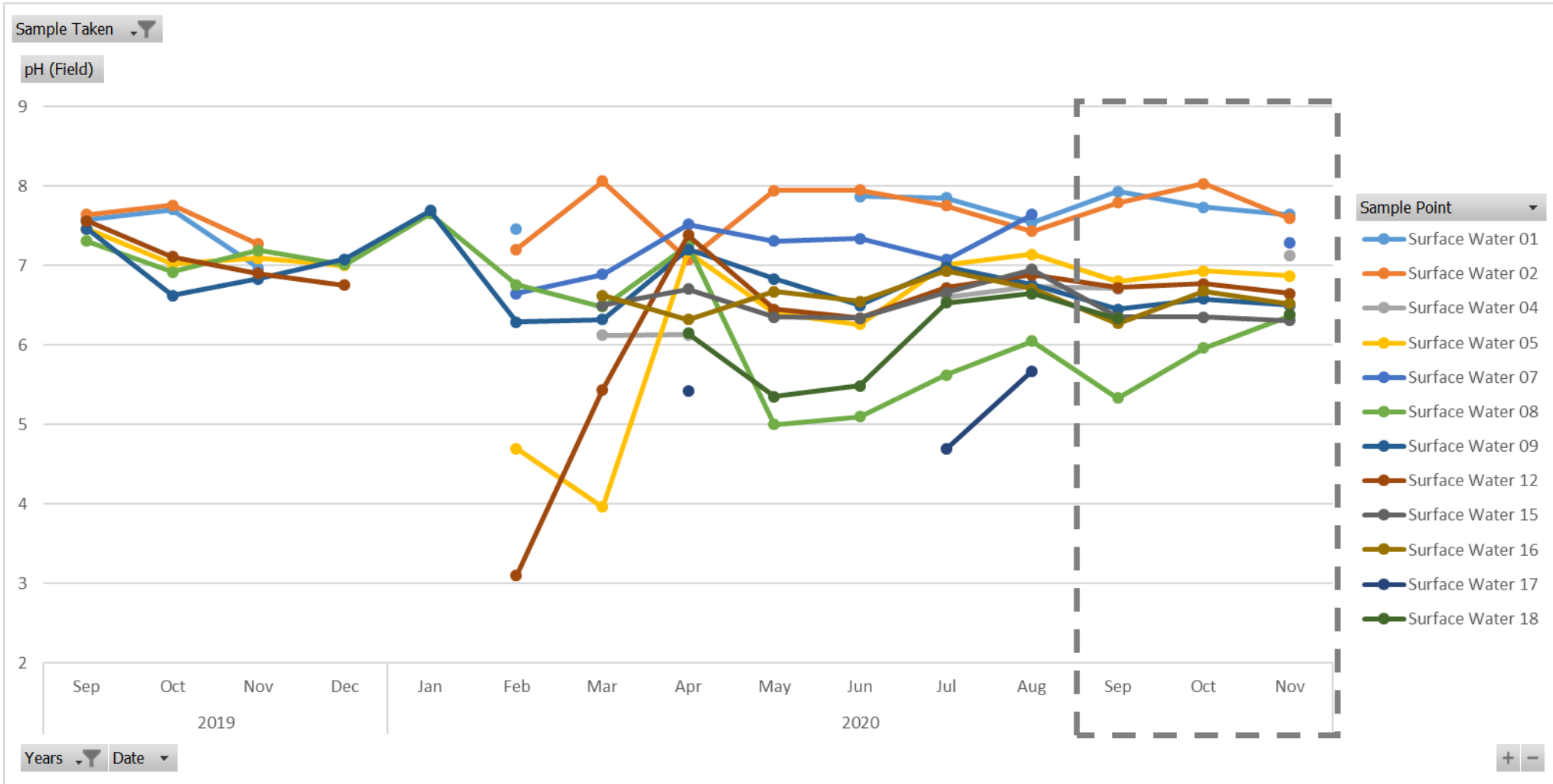
- Water;
- Air Quality;
- Blasting;
- Noise;
- Meteorology.



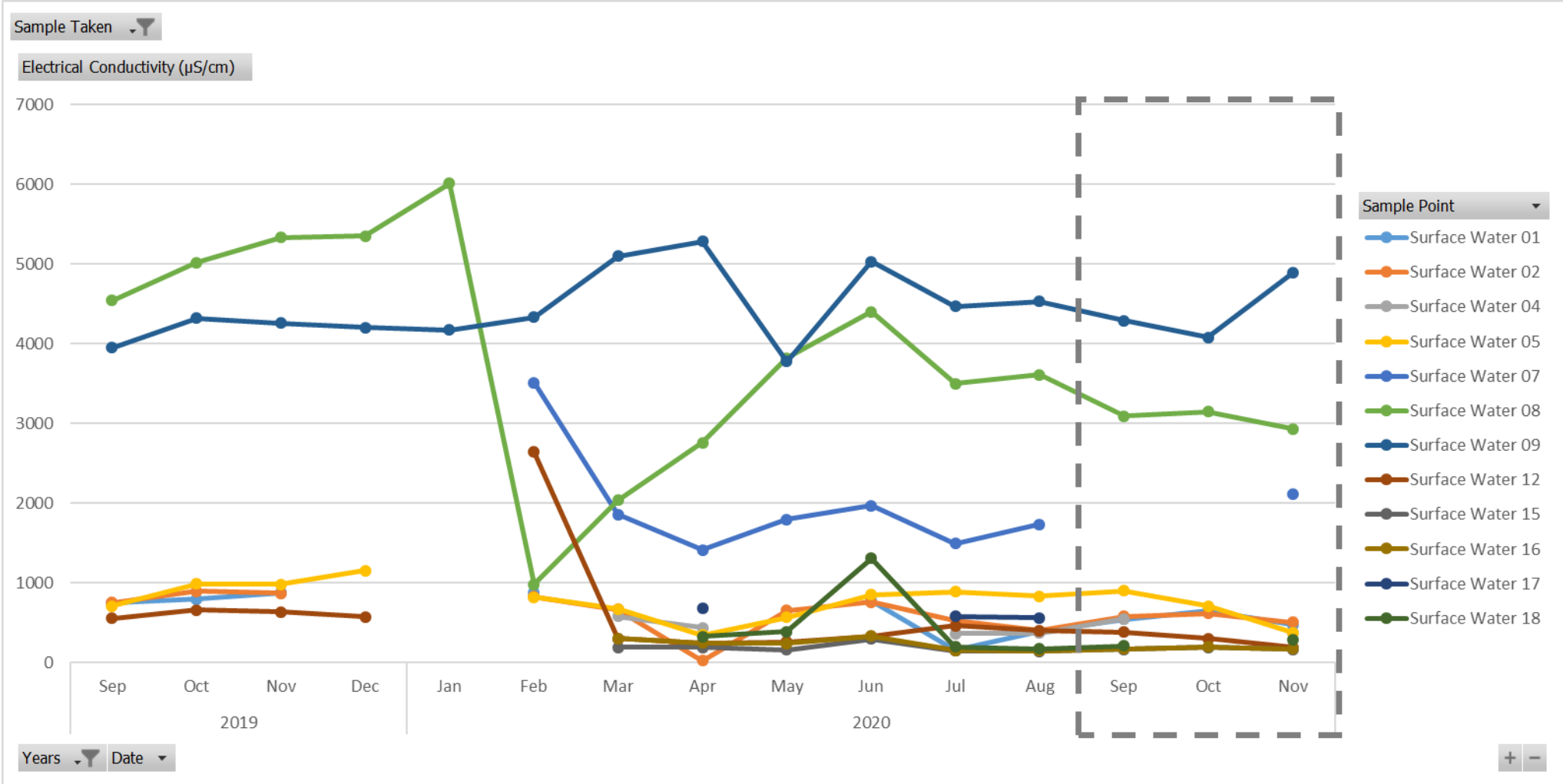
Water Release



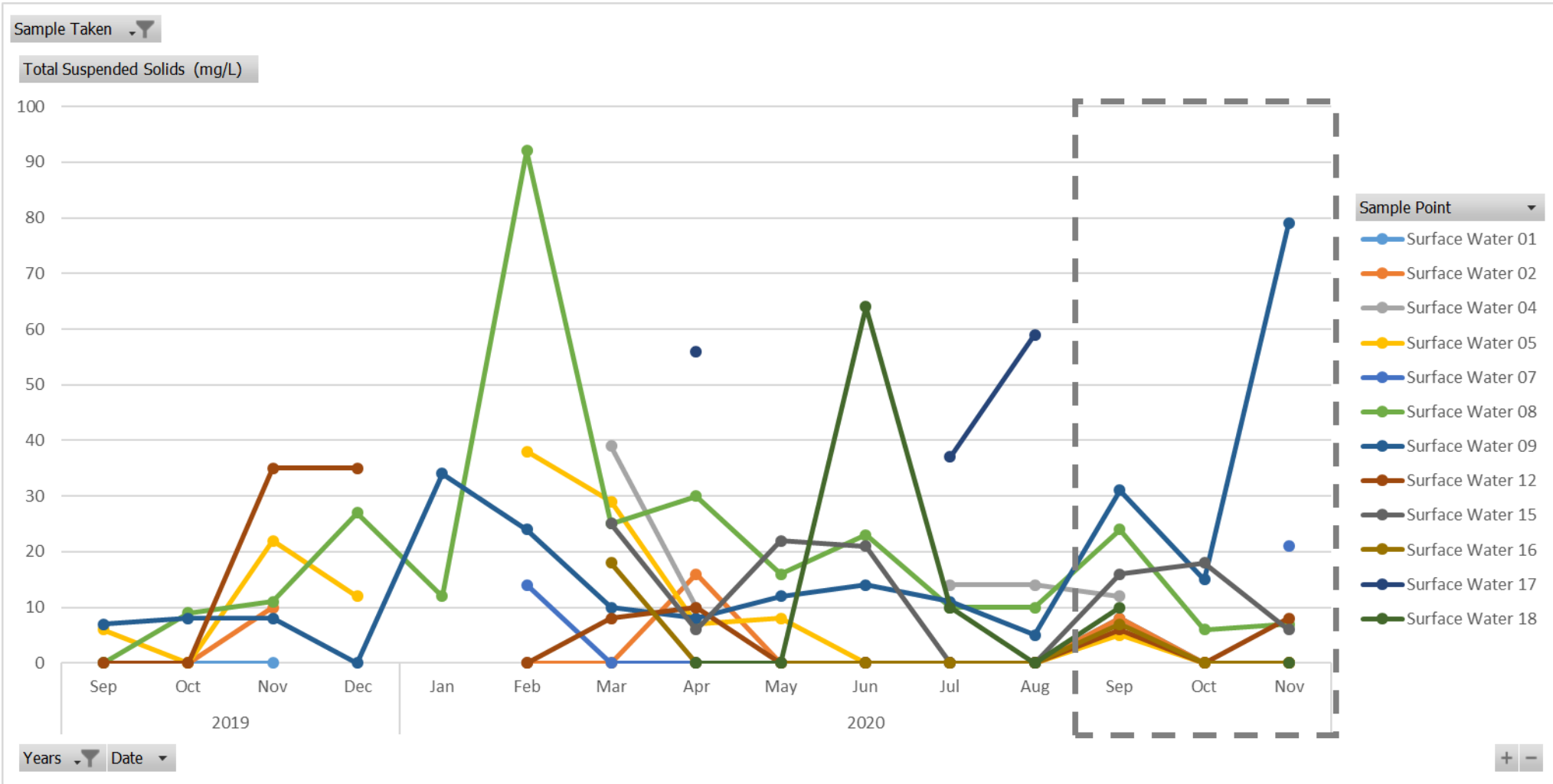
Water Quality - pH



Water Quality - EC



Water Quality - TSS



Air Quality

Site	October 2019 PM10 Annual Average ($\mu\text{g}/\text{m}^3$)	October 2020 PM10 Annual Average ($\mu\text{g}/\text{m}^3$)	Air Quality PM10 Annual Average Criteria ($\mu\text{g}/\text{m}^3$)
TEOM 01	16.1	16	25.0
TEOM 07	15.6	11.4	25.0
TEOM 04	19.5	14.9	25.0

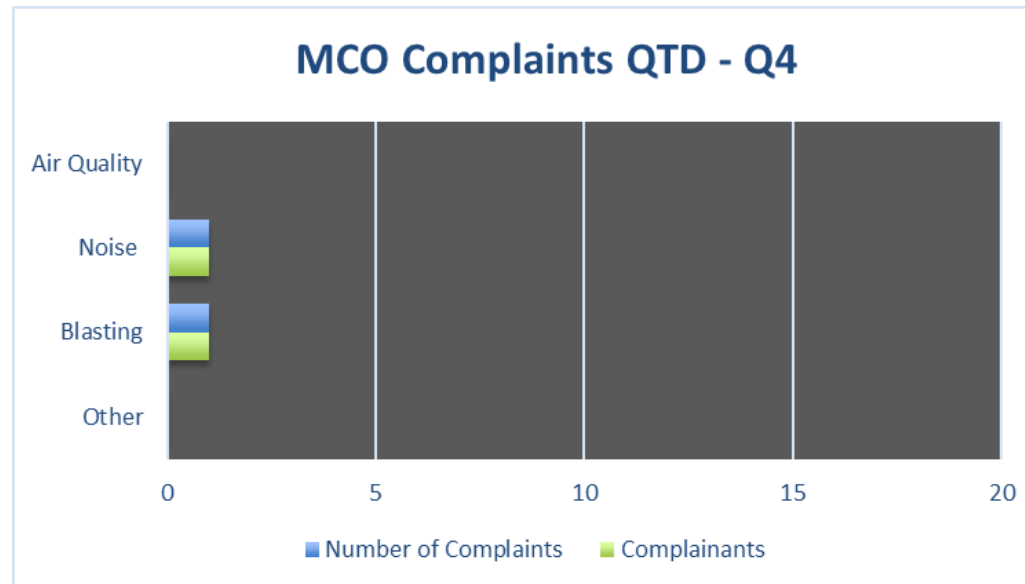
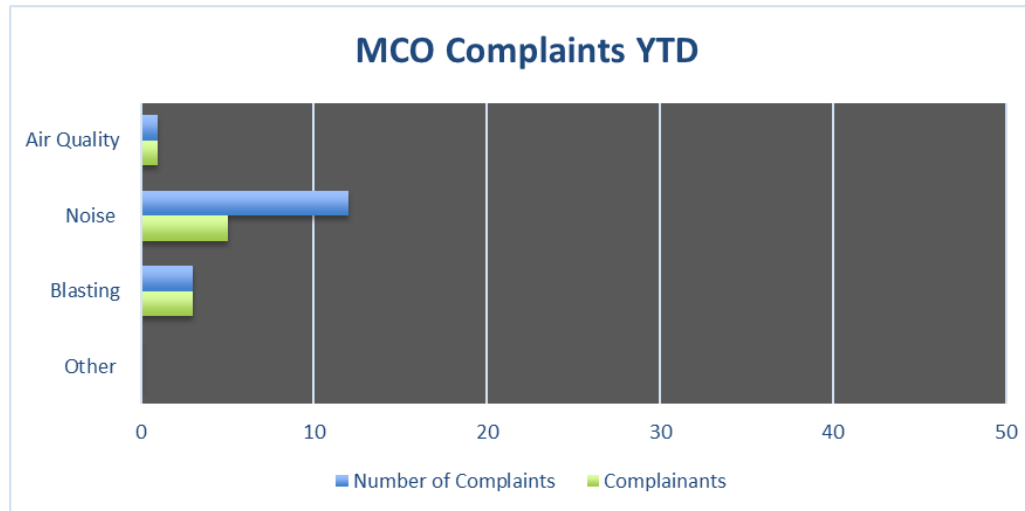
Site	October 2019 PM2.5 Annual Average ($\mu\text{g}/\text{m}^3$)	October 2020 PM2.5 Annual Average ($\mu\text{g}/\text{m}^3$)	Air Quality PM2.5 Annual Average Criteria ($\mu\text{g}/\text{m}^3$)
TEOM 07	N/A*	5.5	8.0

*less than 12 months of data

Monthly monitoring reports are available on our website:

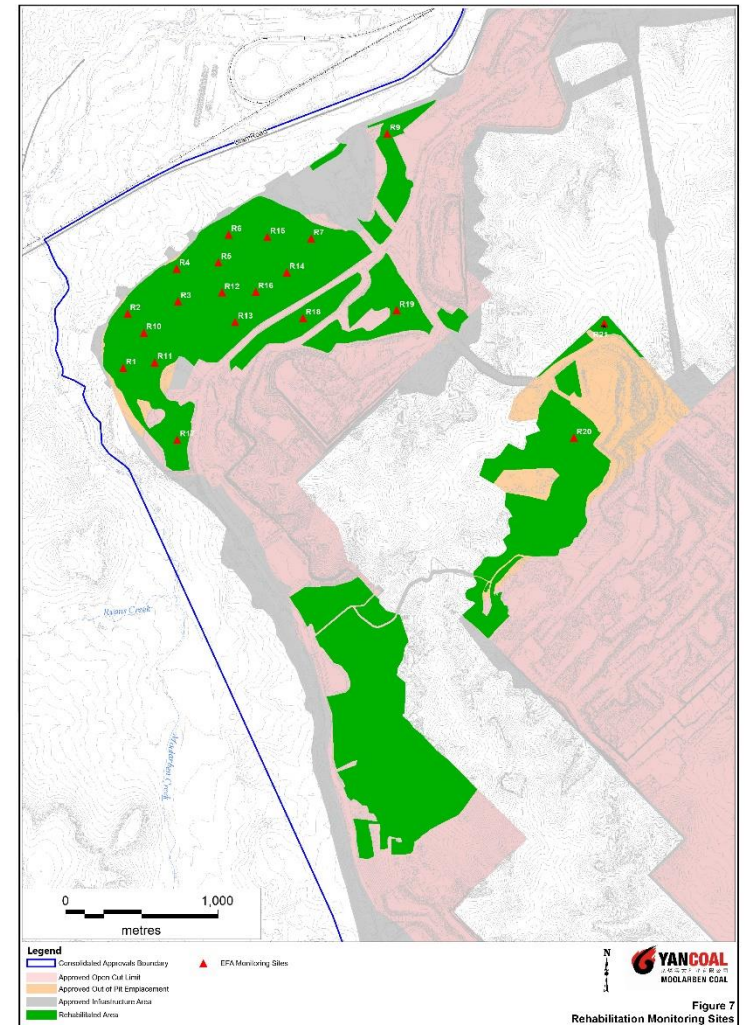
www.moolarbencoal.com.au/environment-and-community/monitoring-results/

Community Complaints



Rehabilitation Update

- Rehabilitation maintenance works are continuing.
- Rehabilitation monitoring in progress.

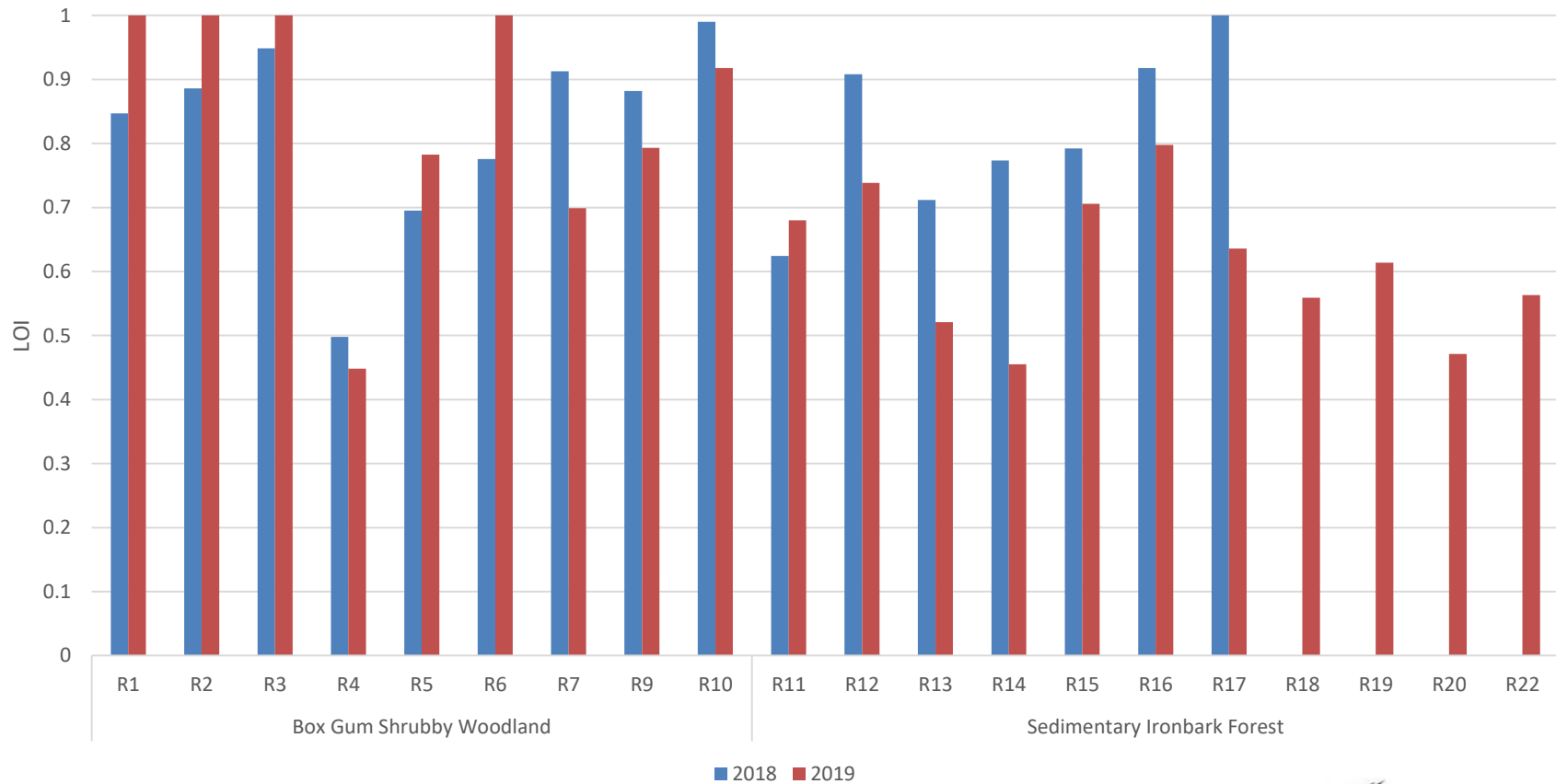


Rehabilitation Monitoring

- MCO's Rehabilitation Monitoring Program is undertaken to:
 - measure rehabilitation progress;
 - inform the continuous improvement and adaptive management.
- Ecosystem Function Analysis (EFA) methodology is currently used to monitor MCO's rehabilitation.
- Landscape Function Analysis (LFA) is the primary component of the EFA monitoring methodology.
- LFA assesses ecosystem functionality at the soil landscape level.

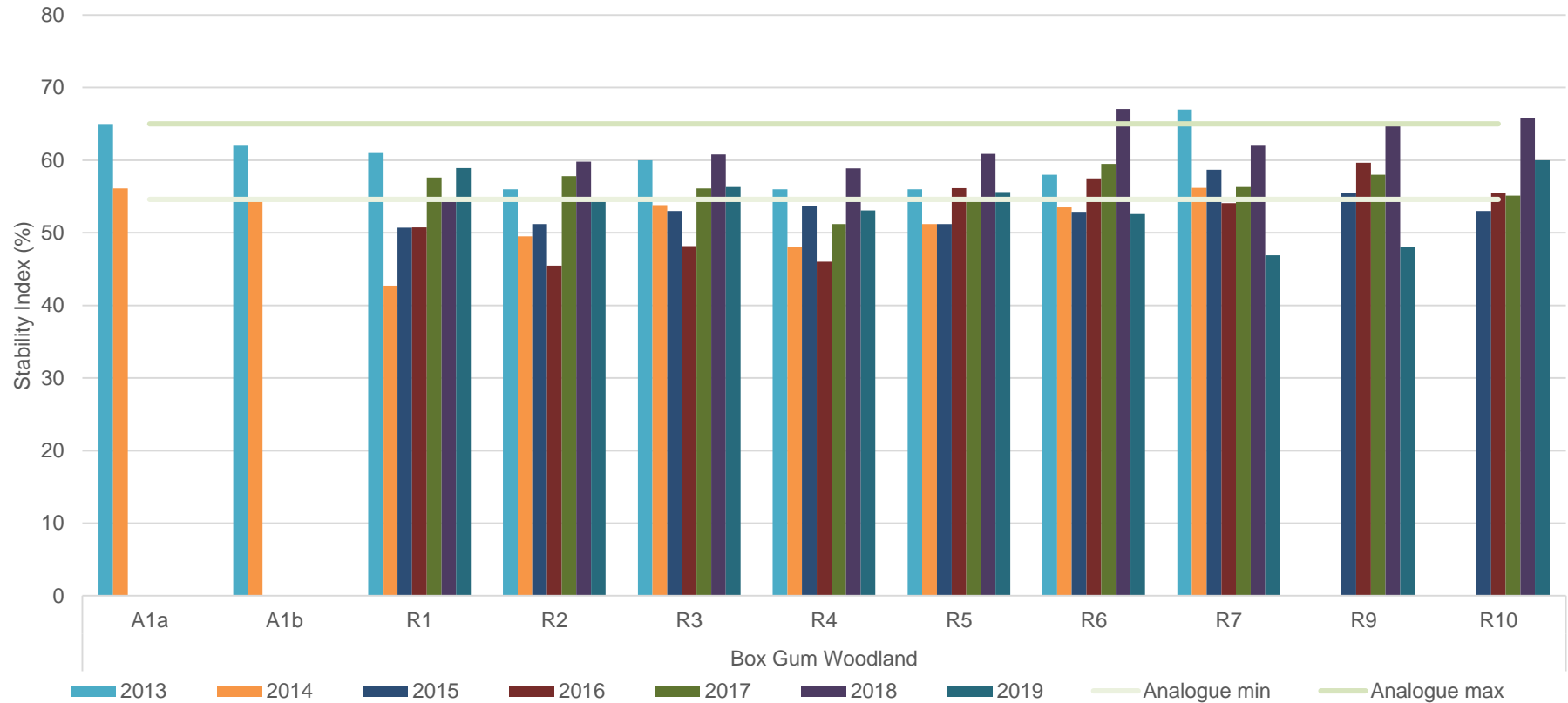
Rehabilitation Monitoring

Landscape Organisation Index (LOI)



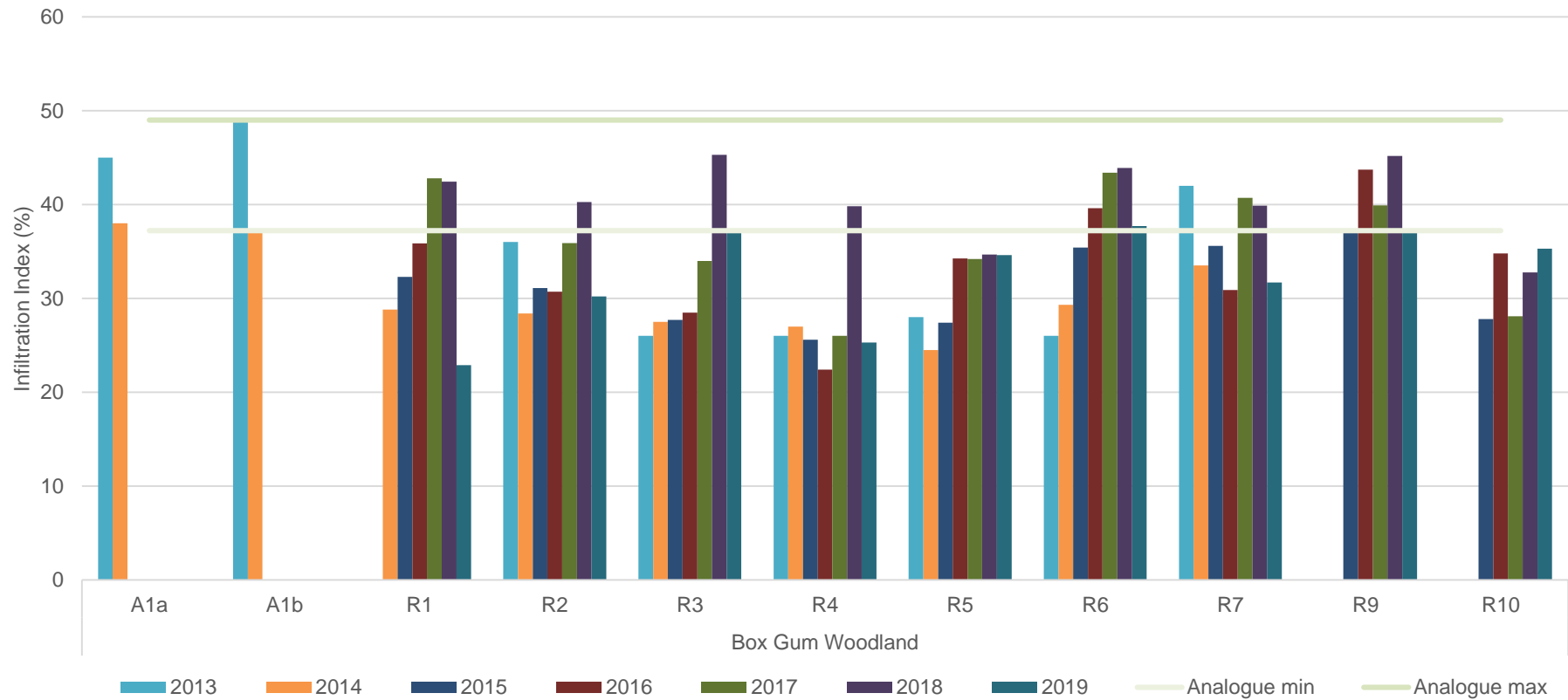
Rehabilitation Monitoring

Stability Index



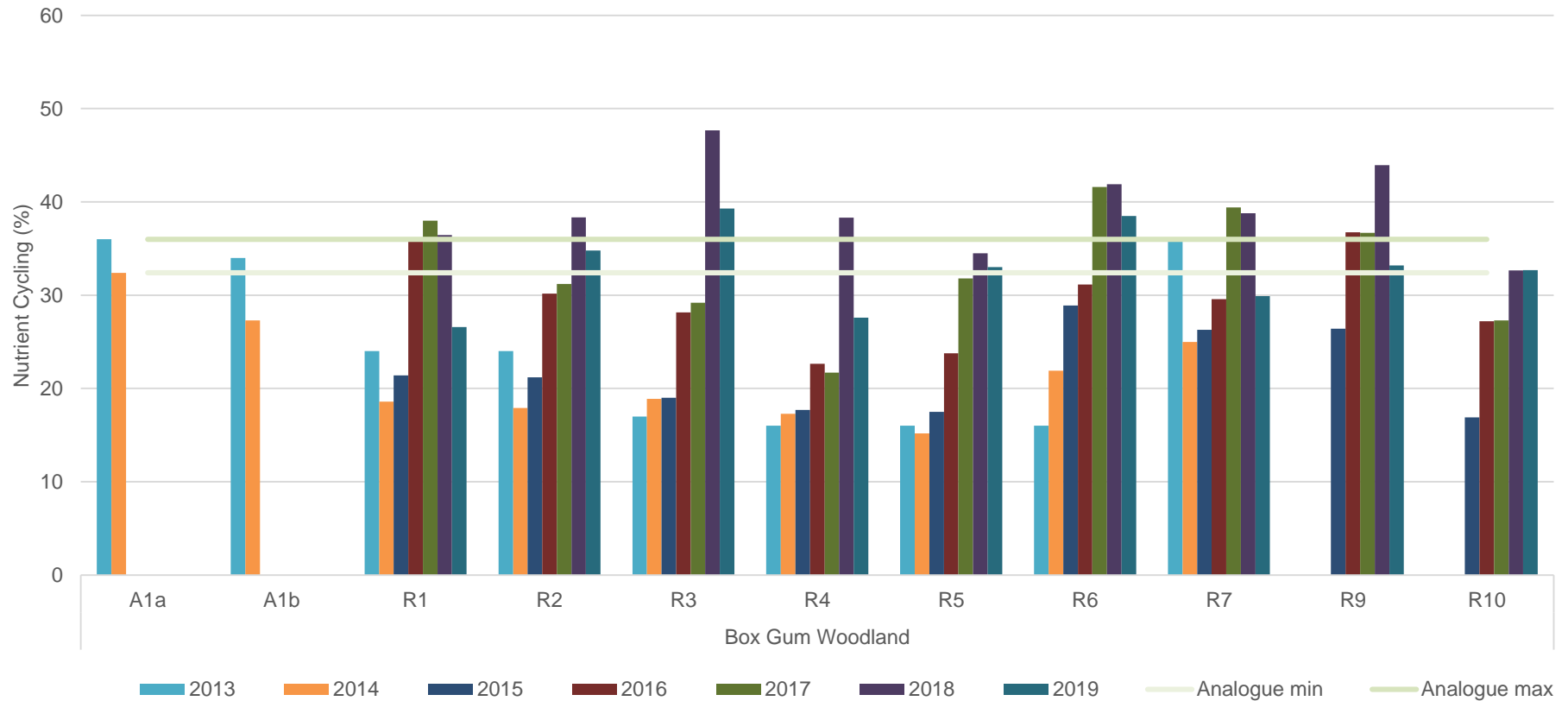
Rehabilitation Monitoring

Infiltration Index



Rehabilitation Monitoring

Nutrient Cycling



Biodiversity Offset Management

- Offset planting works completed for 2020
- Over 70,000 trees planted across the Bobadeen, Ulan 18, and Property five BOA's
- Spring biodiversity monitoring is continuing



Employment Update

Current Traineeships

- 8 Underground
- 2 Land Conservation

Apprentices

- Currently 4 Underground, 14 Open Cut and 4 at the CHPP

General

- 6 UG Trainees and 4 apprentices starting early February 2021



ON BEHALF OF MOOLARBEN
WE WISH YOU AND YOUR FAMILIES
A MERRY CHRISTMAS
AND A SAFE AND PROSPEROUS
NEW YEAR