UPPER HUNTER REHABILITATION 2024



Rehabilitation Principles - Analysis and Trends

Since 2012, the Upper Hunter Mining Dialogue has been collecting and reporting on annual rehabilitation data from Upper Hunter mining operations. This information is provided annually to the community to improve transparency and awareness of the aggregated amount of progressive rehabilitation and disturbance across the region.

Mining operators report on a set of common rehabilitation principles and commitments to drive improvements to rehabilitation. These principles aim to decrease the periods of time that disturbed areas are left without temporary or final cover to minimise the impacts on the landscape and air quality.

Similar to 2023, the rehabilitation data for 2024 has been collected from the Rehabilitation Annual Reports which are provided by industry to the Resources Regulator.

The 2024 results include data from one additional site that has resumed mining operations after a period in care and maintenance.

In 2024, a further 749 hectares of previously disturbed land was newly rehabilitated, taking the total amount of land under rehabilitation to 15,080 hectares. This equates to over 35 % of all land disturbed by mining in the Upper Hunter being rehabilitated.

There was an increase by 150 hectares of newly disturbed land compared to 2023, which reflects the development underway at Mount Pleasant and Hunter Valley Operations.

The annual rehabilitation to disturbance ratio for 2024 was 0.42, meaning that for every hectare of land disturbed in 2024, 0.42 hectares of rehabilitation was undertaken. This is lower than the 5 year average of 0.77 and is reflective of the increase in land disturbed in 2024.

At the end of the reporting period, a total of 27,609 hectares of disturbed land is awaiting rehabilitation.

For more information:

miningdialogue.com.au

2024 Rehabilitation Snapshot

New rehabilitation

749 ha

Last Year (2023)

962 ha

Five-year average

758 ha

New disturbance

1,749 ha

Last Year (2023)

1,599 ha

Five-year average

1,184 ha

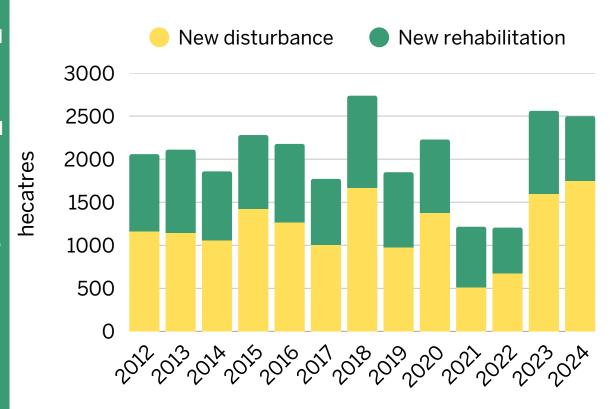


Figure 1: Comparison of annual new rehabilitation and disturbance

Total disturbed land under rehabilitation*

15,080 ha

Total disturbed land awaiting rehabilitation*

27,609 ha

*at the end of the reporting period



Over 35% of land disturbed by mining in the Upper Hunter is under active rehabilitation

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Figure 2: Comparison of annual new disturbance to new rehabilitation, with trendlines (2012 to 2024)

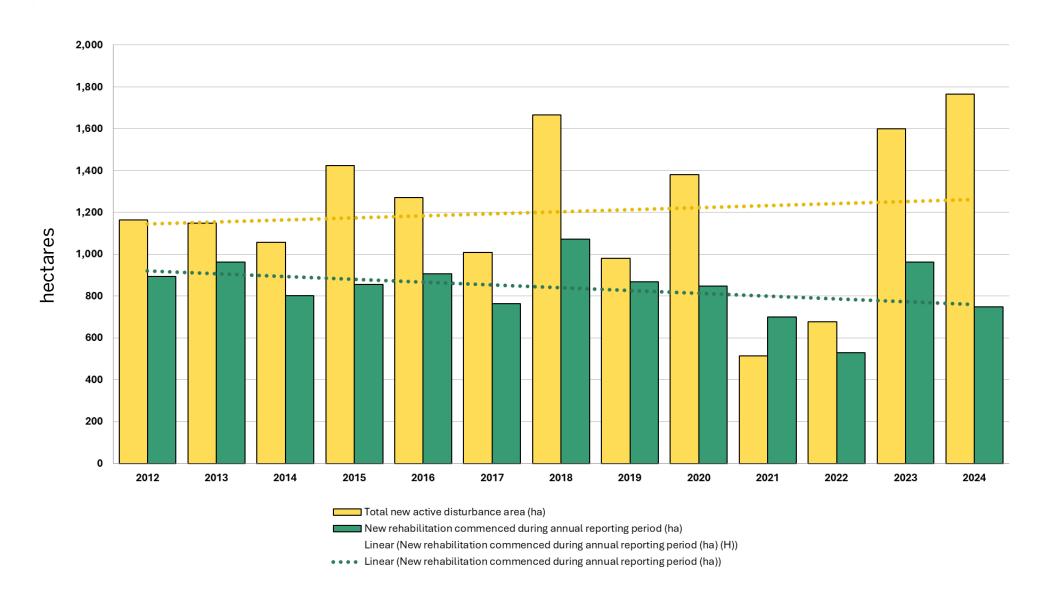
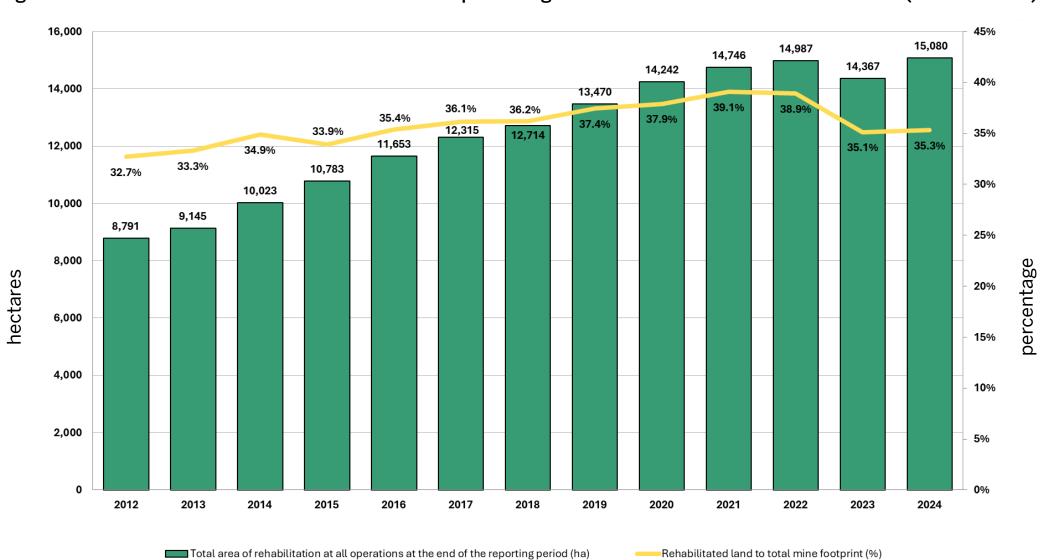


Figure 3: Total area of land under rehabilitation and percentage of disturbed land under rehabilitation (2012 to 2024)



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Rehabilitation Principles - Progress Table

Rehabilitation Progress Table	Opening Figure	Five-Year Average	Last Five Years				
Rehabilitation [1]	2012	2020-2024 [7]	2020 [8]	2021 [9]	2022 [10]	2023 [11]	2024 [12]
A: Disturbed land awaiting rehabilitation - Start amount (ha) [2]	17,830	24,377	22,726	23,245	23,425	25,882	26,609
B: Total land newly disturbed within the reporting period (ha)	1,163	1,184	1,380	514	676	1,599	1,749
C: Total land newly rehabilitated within the reporting period (ha)	782	758	848	701	529	962	749
D: Disturbed land awaiting rehabilitation - End amount (ha) (D=A+B-C)	18,098	24,804	23,259	23,061	23,572	26,519	27,609
E: Total land under rehabilitation at all operations (ha) [3]	8,791	14,684	14,242	14,746	14,987	14,367	15,080
F: Annual ratio of rehabilitation to disturbance (C:B) [4]	0.77	0.77	0.61	1.36	0.78	0.66	0.42
G: Overall proportion of disturbed land rehabilitated	32.7%	37.3%	37.9%	39.1%	38.9%	35.1%	35.3%
Other Managed Land [5]	2012	2020-2024	2020	2021	2022	2023	2024
Estimate of total biodiversity offset land (ha)	10,973	43,917	43,689	41,034	44,109	46,073	44,681
Estimate of total managed agricultural land (ha)	N/A	40,996	46,057	39,542	38,158	38,265	42,958
Estimate of total buffer land (ha) [6]	N/A	44,675	47,063	47,179	48,175	44,976	43,550

Note: Please see over the page for Contextual Notes that provide further information to the table and figures presented.

For more information:

Thanks to the NSW Resources Regulator and all Upper Hunter Mining Dialogue industry members (Bengalla Mining Company, BHP, Bloomfield Group, Dartbrook, Glencore, MACH Energy Mount Pleasant Operation, Malabar Resources, Muswellbrook Coal Company, Peabody Energy, and Yancoal) for supplying rehabilitation and disturbance data for this project.

miningdialogue.com.au

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Rehabilitation Principles - Notes

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Contextual Information to the Rehabilitation Progress Table				
1	Rehabilitation is defined by the Mining Act 1992 as the treatment or management of disturbed land or water for the purpose of establishing a safe and stable environment.			
2	Row 'A' (Year) may not necessarily equal Row 'D' (Year - 1) as several companies reconcile their previously reported figures and have provided corrections over time which are incorporated into the subsequent year's reporting.			
3	Row 'E' figures for the current reporting year are generally calculated by adding the new rehabilitation 'C' amount from the current reporting year to the total land under rehabilitation 'E' amount from the previous reporting year. This is not always a straightforward calculation, as several companies may report re-disturbance to areas previously rehabilitated (rather than creating new disturbance). Previously rehabilitated land is excluded from the total area under rehabilitation of all operations at the end of the reporting period.			
4	Row 'F' is the annual rehabilitation to disturbance ratio which indicates how many hectares of land is rehabilitated for each hectare of land disturbed during the year. A ratio of 1 would indicate that the total area of new rehabilitation and new disturbance in that year are the same.			
5	The Dialogue collects and reports on a number of 'other managed land' including biodiversity offsets, and total managed agricultural land. Substantial changes in the amount of 'Other Land Managed' were identified between 2013 and 2014 because: (i) significant increases in additional offset areas have been established, and (ii) because some of the land previously identified as being used for agriculture is now being used for mining purposes or biodiversity offsets.			
6	The Dialogue introduced a new reporting category as part of the 2018 results, where the total amount of buffer land owned by the mining companies operating in the Upper Hunter is now being reported. The total amount is also broken down into various categories (e.g. agricultural, residential, commercial, recreational, or vacant land not suitable for use). There will be a doubling up between some managed land and the buffer land results in most years due to some managed agricultural land being included in the buffer land figure.			
7	The reporting table has been condensed and does not show each year from the projects inception in 2012. A number of previous contextual notes have been removed as they relate to data no longer shown in the table, however are important to note in other graphs produced by the Dialogue in association with this project. In 2015, there was an increase in newly disturbed land, which was predominantly due to the establishment of the Bulga Optimisation project. In 2017, Mount Pleasant Operation commenced operation, and a larger amount of new disturbance was recorded that year due to this project's initial stages. As the mine develops, progressive rehabilitation is conducted and much of the initial disturbance is rehabilitated.			
8	2020 result notes: As per note [2], differences in the opening and closing figures between years were recorded due to sites amending their figures between reporting years following internal accuracy reviews. As per note [3], the 2020 Row 'E' figure is impacted by the disturbance of previously rehabilitated areas across two operations for dump space, resulting in a lower aggregate rehabilition total in 2020. Further, as the United Wambo Joint Venture (UWJV) commenced on 1 December 2020, data for the site is now reported individually by Glencore and Peabody for respective sections of responsibility as per new arrangements. Given this transition, there may be minor impacts on the total results reported (e.g. opening 'A' and previous closing 'D' figures, which should generally align).			
9	2021 result notes: The total figure for biodiversity offset land decreased slightly in 2021, due to a revision and correction of this data from Mount Pleasant Operation following an internal review for accuracy. Further, the figures for managed agricultural land and buffer land both decreased by a significant amount in the 2021 reporting year with Glencore advising they no longer include offset lands in this figure, and BHP advising of an increase in active mining area and the construction of the new Edderton Rd.			
10	2022 result notes: As per note [2], differences in the opening 2022 'A' and closing 2021 'D' figures between years were recorded due to sites amending their figures between reporting years following internal accuracy reviews.			
11	2023 result notes: Rehabilitation data for 2023 was sourced from the Annual Rehabilitation Report and Forward Program which are submitted by mining companies directly to the NSW Resources Regulator annually. This is a change in the data source compared to previous years where data was obtained directly from industry. Comparisons of the data previously reported by the Dialogue and data provided to the NSW Resources Regulator has been undertaken and showed minimal variance. The increase in total land newly disturbed is attributed to the continued construction of the Maxwell Underground Mine and construction and further development of open cut mining operations at Mount Pleasant. The data source for the Other Managed Land section remains the same and was sourced directly from industry.			
12	2024 result notes: Similar to 2023, the data for 2024 was sourced from the Annual Rehabilitation Report and Forward Program which are submitted by mining companies directly to the NSW Resources Regulator annually. The 2024 data includes rehabilitation and disturbance data for one additional site which has recommenced exercising following a period in care and maintenance. A correction has been applied to the			

for one additional site which has re-commenced operations following a period in care and maintenance. A correction has been applied to the 2020–2024 estimate of land managed for agricultural use to account for overlap with land designated as biodiversity offsets. The increase in

total land newly disturbed is correlated with further development at both the Mount Pleasant and Hunter Valley Operation sites.