

REHABILITATION

Industry Principles & Commitments



Upper Hunter
Mining Dialogue

2018 Results & Insights

Since 2012, the Upper Hunter Mining Dialogue has been collecting annual rehabilitation data and information from mining operations across the Upper Hunter to provide information to the community regarding the amount of progressive rehabilitation being undertaken. The project supports two of the Dialogue's primary land management goals:

1. To decrease the time that disturbed areas are left without final or temporary cover, recognising that different mining operations are at different points in rehabilitation.
2. To achieve a consistent level of best practice, quality, integrated rehabilitation – both within the industry and with future land uses - across the Upper Hunter and to be a responsible steward of the land.

REHABILITATION PRINCIPLES AND COMMITMENTS

All Dialogue member companies have agreed to a set of common principles, developed by the Joint Environment Working Group, to drive improvements in the speed of rehabilitation and to provide aggregate data to the community about total land disturbed and rehabilitated. The Principles are as follows.

- Principle 1** Include rehabilitation planning in mine planning;
- Principle 2** Undertake progressive rehabilitation;
- Principle 3** Minimise time that disturbed areas are left without vegetation;
- Principle 4** Prioritise areas of rehabilitation and temporary cover to reduce impacts;
- Principle 5** Meet target for rehabilitation progress identified in the Mining Operations Plan; and
- Principle 6** Set quality targets for rehabilitation in the Mining Operations Plan and implement a monitoring program to measure performance.

Rehabilitation	2018 Result
A: Total land area disturbed and not yet rehabilitated at the beginning of the reporting period	21,816 ha
B: Total amount of land newly disturbed within the reporting period	1,666 ha
C: Total amount of land newly rehabilitated within the reporting period	1,071 ha
D: Total land area disturbed and not yet rehabilitated at the end of the reporting period (D=A+B-C)	22,411 ha
E: Total area of rehabilitation at all operations at the end of the reporting period	12,714 ha
F: Annual rehabilitation to disturbance ratio (C:B)	0.64
G: Overall proportion of disturbed land rehabilitated	36.2%
Estimate of total land held as biodiversity offsets	41,139 ha
Estimate of the total area of land managed for agricultural use (e.g. grazing, cropping, viticulture)	59,212 ha
Estimate of the total amount of buffer land	47,064 ha

Local Government Area Sizes	
Muswellbrook LGA	340,500 ha
Singleton LGA	489,300 ha
Total	829,800 ha
Mining Land Use	
Total mining rehabilitation completed	12,714 ha
Total disturbed land awaiting rehabilitation	22,411 ha
Total disturbance across Upper Hunter LGAs	35,125 ha
Other Land Use	
Total agricultural land use	243,200 ha
Total protected areas (incl. National Parks)	310,600 ha
Total urban area (Residential, Business and Industrial)	2,700 ha

To find out more, visit miningdialogue.com.au

Industry rehabilitation data for 2018 was kindly provided for this project by Glencore, Yancoal, The Bloomfield Group, BHP, Muswellbrook Coal Company, Peabody Energy, Mount Pleasant Operation, Bengalla Mining Company and Malabar Coal. Contextual information has been sourced from the NSW Department of Primary Industries, Australian Bureau of Statistics, Singleton City Council and Muswellbrook Shire Council.

REHABILITATION

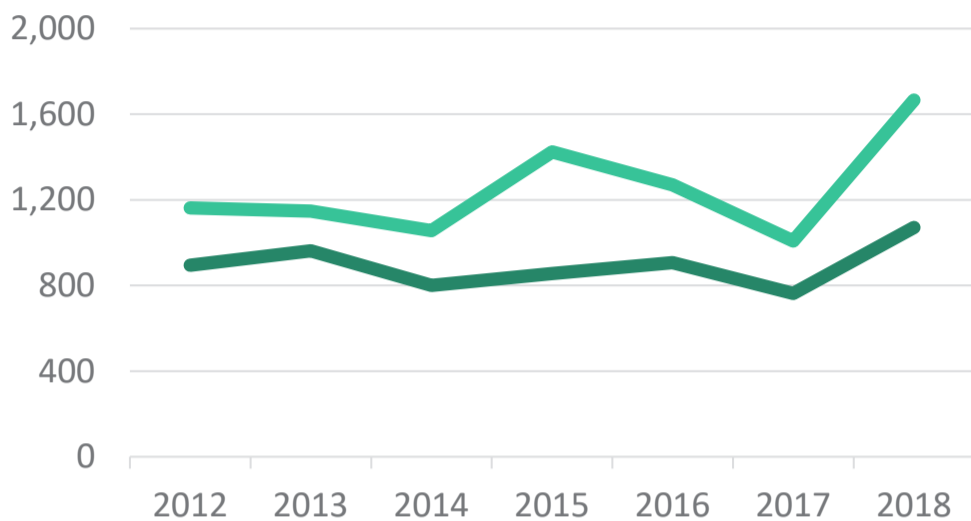
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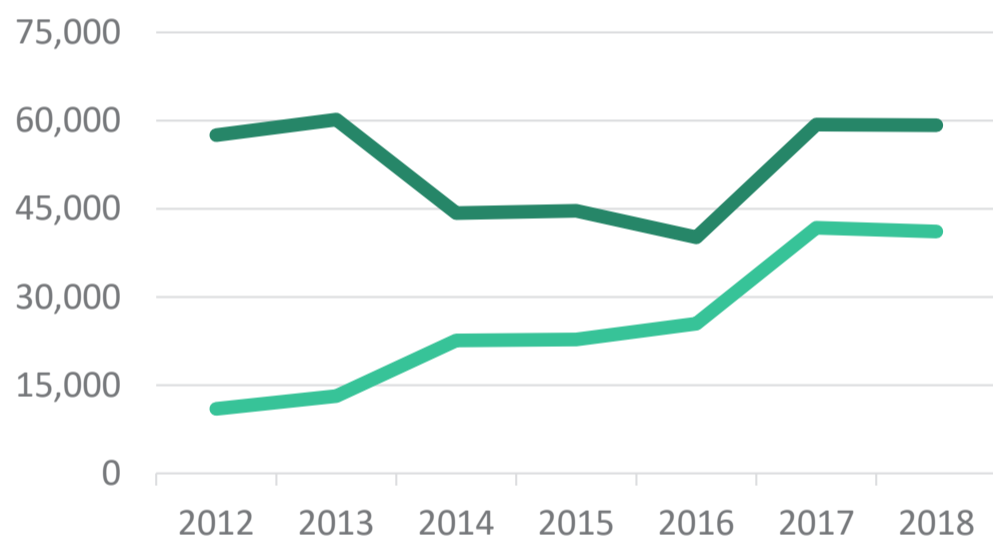
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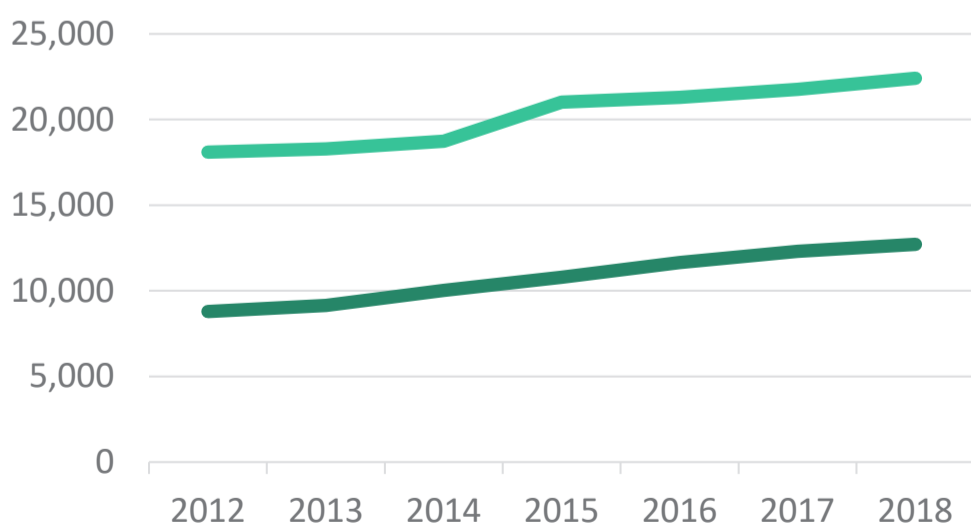
Land newly rehabilitated vs. Land newly disturbed (hectares)



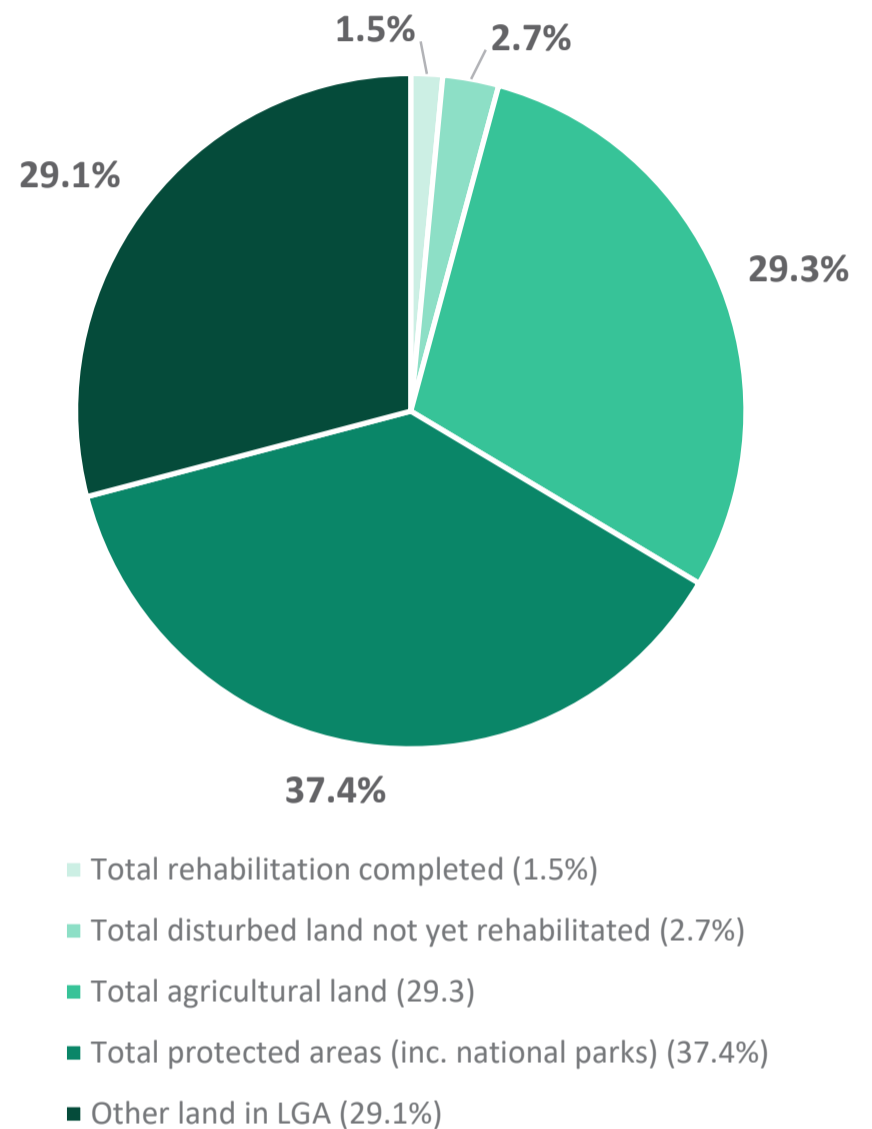
Total managed land vs. Total biodiversity offsets (hectares)



Total land rehabilitated vs. Total land disturbed and not yet rehabilitated (hectares)



Land Use in the Upper Hunter (Muswellbrook and Singleton LGAs)



Key Land Uses

Total rehabilitation completed	12,714 ha
Total disturbed land not yet rehabilitated	22,411 ha
Total agricultural land	243,200 ha
Total protected areas (including national parks)	310,600 ha
Other land in LGA (includes land uses such as residential, business, industrial, biodiversity offsets, industry managed land)	240,875 ha

Total Muswellbrook & Singleton LGA area **829,800 ha**

Note: The figures above are presented using available NSW Government data and industry rehabilitation data. Figures may overlap between the land uses.

Just **2.7%** of all land in the Upper Hunter was actively disturbed by mining in 2018

Over **36%** of all disturbed mining land in the Upper Hunter is under rehabilitation

Since 2012, **45%** more new rehabilitation has been undertaken in the Upper Hunter

There is almost **4** times the amount of biodiversity offsets in 2018 compared to 2012

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