



# Mining Rehabilitation Fund

YEARLY REPORT 2018-19

## Highlights of 2018-19

This sixth yearly report, as a supplement to the Department of Mines, Industry Regulation and Safety's (DMIRS) Annual Report, showcases the Mining Rehabilitation Fund (MRF) and its associated Abandoned Mines Program (AMP).

Industry compliance with the reporting obligations of the *Mining Rehabilitation Fund Act 2012* (MRF Act) continues to be high, with total contributions of \$32.3 million assessed for the 2018-19 financial year. As at 30 June 2019, money in the fund totalled \$150 million, including \$2.9 million in net interest earned.

Compliance assessment of the reported disturbance data submitted by companies ensures the integrity of the information received and corresponding payments to the fund. Throughout 2018-19, DMIRS assessed 2268 tenements of which 181 tenements required amendment. This identified \$411,000 of misreported levies. The MRF compliance program highlighted the most common reporting errors which were transport or service infrastructure corridors not being reported or underreported, and significant landforms being incorrectly reported as Land Under Rehabilitation.

During the 2018-19 financial year, the third iteration of the Mining Rehabilitation Advisory Panel (MRAP) commenced with a new membership being appointed for a three-year term. The former panel concluded its term in March 2019.

The department's AMP continues to manage Western Australia's historic abandoned mine features. The 2018-19 financial year marked a number of actions, including:

- The completion of the AMP's second pilot project with the finalisation of works at Pro-Force near Coolgardie, which revoked its declaration as an abandoned mine site.
- Preliminary site investigations commenced at the Bulong and Elverdton pilot project sites, the final two of the four original pilot sites.
- The AMP continued its management of the Ellendale Diamond Mine, with an Expression of Interest process to award tenure over Ellendale to a new tenement holder initiated during 2018-19.

The Abandoned Mines Team's risk assessment of legacy abandoned features has identified shafts and open stopes presenting significant safety risks as the next priority for remediation efforts, commencing in 2019-20.

## Background

The introduction of the MRF in 2013 ensures the Western Australian community does not pay for the rehabilitation of mining operations that are abandoned. In addition, interest earned on the fund can be used to rehabilitate historical abandoned mine sites in Western Australia. The MRF was the State's first dedicated and perpetual fund for the rehabilitation and management of historical abandoned mine sites.

Under the MRF Act, holders of mining tenements granted under the *Mining Act 1978* (Mining Act) contribute an annual levy to a pooled fund. The levy is calculated according to the environmental disturbance on tenements. The money in the pooled fund can be used to rehabilitate abandoned mines after all efforts to recover funds from the tenement holder/operator have been exhausted.

The previous system of applying Unconditional Performance Bonds against tenements as security for compliance with environmental obligations has largely been replaced by the MRF. However, bonds may still be imposed or retained in cases where DMIRS considers there is a high risk that a tenement holder's rehabilitation liability could revert to the State.

Given the MRF is a special purpose account under the *Financial Management Act 2006* (FM Act), funds must be spent in accordance with the purposes stated in the MRF Act. Under the provisions of the FM Act, the Director General of DMIRS is accountable for the management of the MRF.

DMIRS reports on the management of the fund in its Annual Report. In addition, the State Government considers and approves the projected revenue and expenditure for the MRF through the State Budget each year.

This more detailed, supplementary report presents the activities and achievements of the MRF in 2018–19, as well as providing an indication of future plans.

## Activities of the Mining Rehabilitation Advisory Panel

The MRAP was first established in 2013 as prescribed in the Mining Rehabilitation Fund Regulations 2013. Its primary purpose is to provide advice to the Director General of DMIRS on matters relating to the fund and associated AMP.

This year, the MRAP's second term concluded its three-year stint, with membership ceasing in March 2019. DMIRS would like to acknowledge the significant contribution of the outgoing MRAP members Mike Slight, Phil Scott and Donald Burnside.

The previous panel provided extensive administrative and governance oversight of the MRF and AMP, overseeing the completion of the Black Diamond pilot project in the Shire of Collie and the Pro-Force pilot project. In particular, special mention and appreciation must go to Mike Slight and Phil Scott who have served on the Panel since its inception (i.e. for two terms), and in particular to Mike as the outgoing Chairperson.

The newly appointed members of MRAP, began their three-year term from March 2019, are Sally Audeyev (Chairperson), Michelle Rhodes (Deputy Chairperson), Andrew Cuthbertson, Angela Bishop and Kapila Karunaratna.



Front row (L-R): Angela Bishop, Sally Audeyev, Michelle Rhodes,  
Back row (L-R): Kapila Karunaratna, Andrew Cuthbertson

**Sally Audeyev** is a leading projects and resources lawyer, specialising in environmental, indigenous, planning, mining and resources issues.

**Michelle Rhodes** is a director of a leading environmental consultancy company and has 22 years' experience in the environmental sector and stakeholder engagement.

**Andrew Cuthbertson** has over 40 years' experience within the industry in senior management and executive roles. He has significant experience in community and stakeholder engagement, environment and safety best practice.

**Angela Bishop** has over 20 years' experience working for government and industry in an operational and corporate capacity in the areas of environmental management and regulatory compliance, environmental approvals, rehabilitation, closure and relinquishment.

**Kapila Karunaratna** is a company director, with extensive experience in senior management roles, and a qualified mining engineer with more than 35 years' experience in all stages of natural resource planning and management from start to closure.

The MRAP meets quarterly to discuss and provide independent advice on a range of matters related to managing the MRF and work activities associated with the AMP. During the 2018–19 year, MRAP undertook a range of activities including the following:

- Endorsed a recommendation to revoke the declaration of Pro-Force as an abandoned mine, given the completion of works on the pilot site.
- Endorsed the Elverdtion Project Plan which involves a Preliminary Site Investigation. This marks the beginning of the fourth pilot project to be managed by the AMP.
- Provided advice and feedback to the policy development and work program for the coming years, including the DMIRS screening and risk assessment project which will ensure the prioritisation of future works programs will be based on contemporary datasets.
- Continued to review and develop the processes of the MRAP.

### MRF Lodgement and Reporting

Each year, all tenement holders under the Mining Act are required to submit disturbance and rehabilitation data for the purposes of calculating the MRF levy. The reporting period, or ‘levy period’, is aligned with the financial year, and tenement holders are able to submit data at any time during this period.

In 2018-19, the level of compliance with reporting obligations under the MRF Act remained very high with 98.77% of all required tenement reports provided by the due date of 30 June 2019 (Figure 1). This was slightly higher than the percentage received during the previous year.

### Projected Levy for the 2018–19 Period

Levy payments totalling \$32,337,623.82 have been assessed for 2018–19 compared to \$30,384,964.85 last year.

Under the MRF Act, disturbance data can be formally reassessed up to two years after the date of the original assessment. As a result, the final total of levy payments due for a period may vary if the disturbance data is subsequently reassessed (Figure 2).

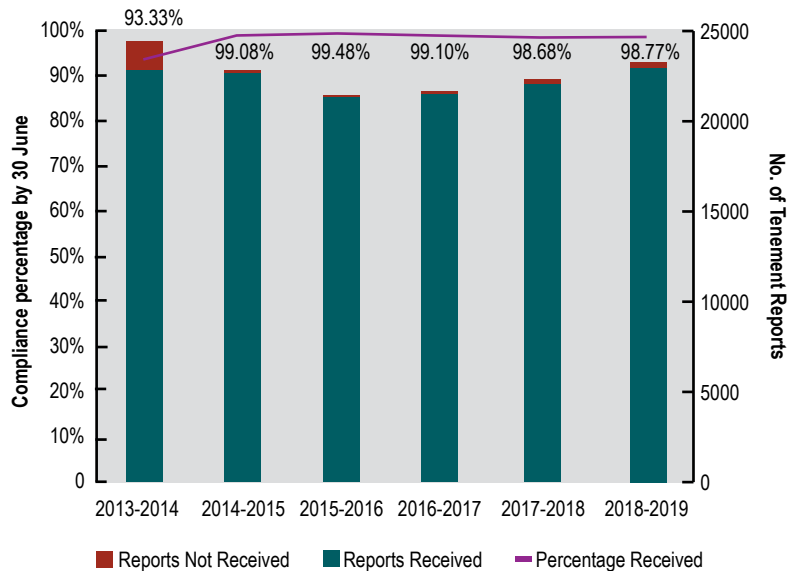


Figure 1 - Percentage of tenement reporting obligations met by 30 June for each levy period

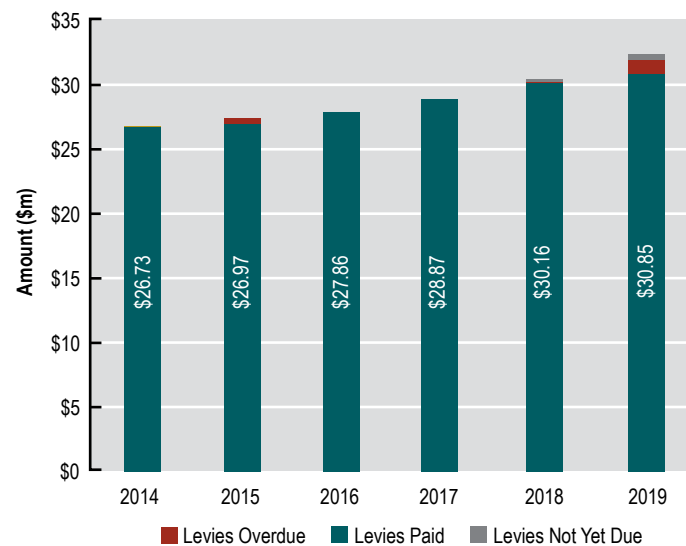


Figure 2 - Levies assessed and paid 2014-2019

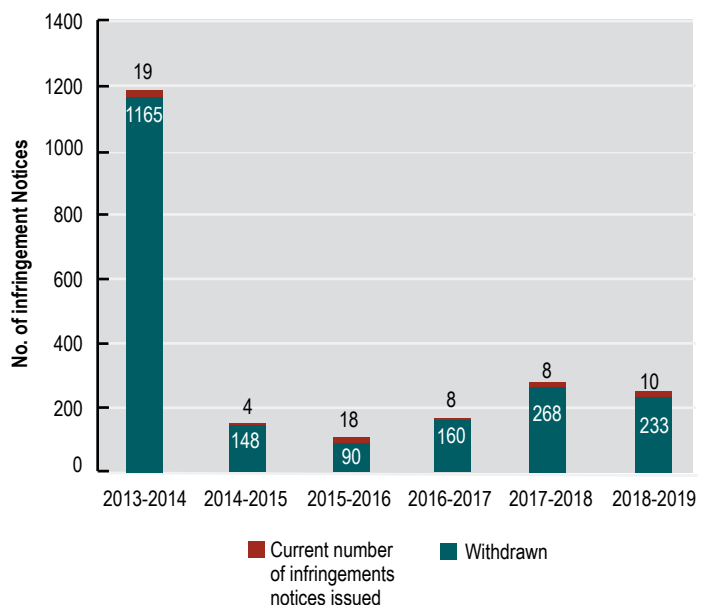


Figure 3 - Infringement notices issued for failure to provide Mining Rehabilitation Fund assessment information

## MRF Compliance Outcomes

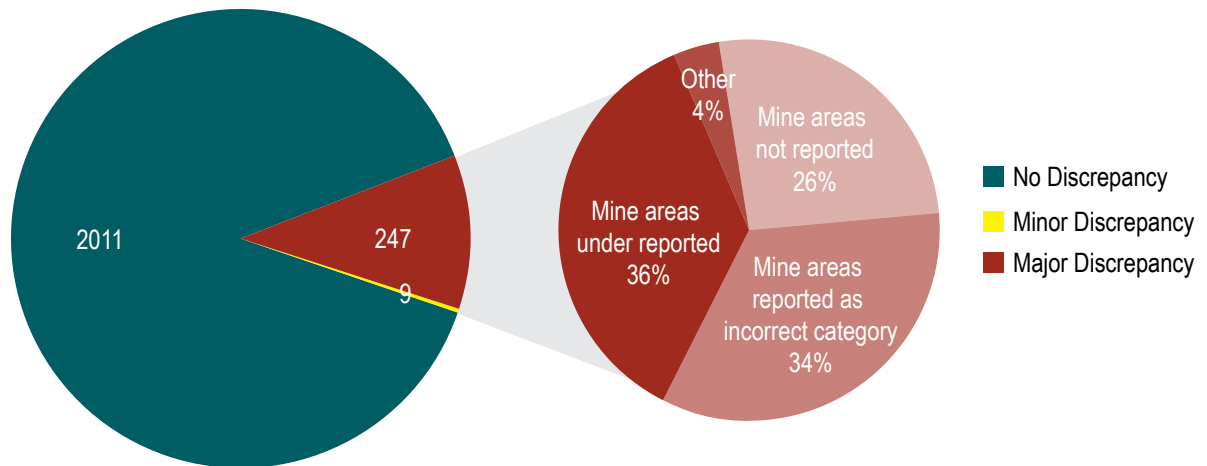


Figure 4 - 2018-19 Compliance Findings

## Enforcement

For the 2018-2019 financial year, DMIRS served 243 infringement notices to tenement holders who failed to comply with their reporting obligations under the MRF. Since 2017, DMIRS has taken a firmer approach to compliance with its reporting deadlines, as MRF reporting obligations are now well established.

DMIRS' firmer approach is reflected in the higher number of notices served over the past two years (which is also affected by a higher number of tenements). The majority of the affected tenement holders completed their reporting obligations after these infringement notices were served and, as of 25 September 2019, only 10 notices remain with the Fines Enforcement Registry. Figure 3 illustrates the changes in enforcement measures since 2014.

## Annual MRF Compliance Assessment

Compliance assessment of MRF reports has continued to be undertaken on an ongoing basis throughout the year to help ensure tenement holders' self-assessed data is accurate and reliable.

For the period, 2268 tenements across 33 MRF reports were assessed. Of these, 181 tenements were confirmed to have incorrect assessment information that required amendment. The amendments made to the 181 tenements covered 428 individual ground disturbing activities and resulted in additional levy payments of \$342,116 and refunds of \$41,169 for the 2017-18 period and \$27,000 from the 2016-17 levy period (as at 6 September 2019).

The most common type of error in reporting was under reporting or unreported transport or service infrastructure corridors (roads and tracks). These were followed closely by landforms, such as waste dumps and tailings storage facilities (TSF), being incorrectly reported as Land Under Rehabilitation.

## Annual MRF Data

The assessment information submitted under the MRF Act is considered the most comprehensive publicly available dataset of mine-site activities in Australia. The dataset is published annually on DMIRS' website and provides the disturbance and rehabilitation data across 32 types of mining related disturbance categories.

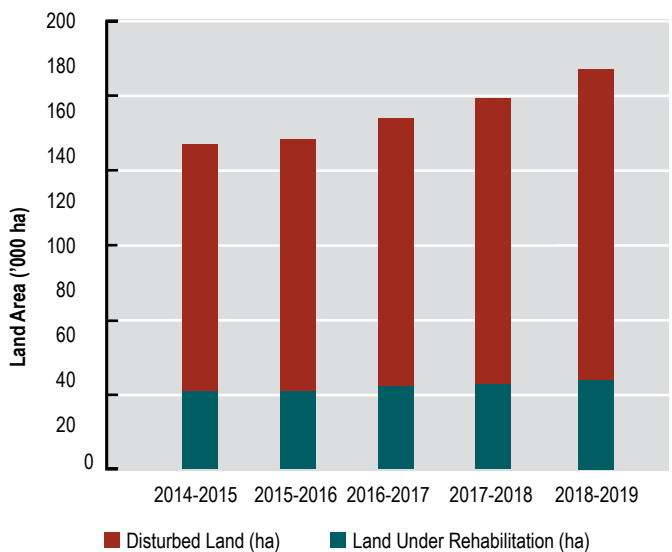


Figure 5 - Annual assessment information

The dataset relates only to Mining Act tenements subject to the requirements of the MRF Act, so it does not include tenure held under State Agreements. A summary of this dataset is provided at the end of this report. A comparison of this year's reporting period with earlier years is shown in Figure 5, and a summary of this year's data reported for each tenement type is provided in Table 1.

The area of Land Under Rehabilitation (on which rehabilitation of mining disturbances is under way) has continued to increase in respect to increases in total areas of activity. In 2019, the area of 'active' disturbance increased by 8.7% (up from 6.3% in 2018). In comparison the area of Land Under Rehabilitation increased by only 4.7% and as a proportion of total disturbance, reduced from 23.4% to 22.3%. With the year-on-year average of Land Under Rehabilitation dropping to 22.2% of total disturbances in 2019, this could indicate a slowdown in the rate of rehabilitation work. By the same token, it may also reflect that reporting of rehabilitation work lags behind the creation of the initial footprint of new activity. In 2019, there was also a higher incidence of 'write-backs' of land that was previously reported as under rehabilitation but which was re-categorised as an 'active' disturbance following completion of compliance assessments.

## Financial Summary

This yearly report provides an expanded summary of the performance of the MRF to showcase the activities within the MRF and AMP. This report is in addition to the information provided in DMIRS' Annual Report.

As at 30 June 2019, money in the fund totalled \$150.473 million, including net interest. In accordance with the MRF Act, the interest generated on the fund can be used for salaries and operational expenditure to manage the fund, the AMP, and pilot projects. Interest earned since the commencement of the MRF totalled \$9.9 million at 30 June 2019 and \$2.9 million remained in the fund after disbursements (including final repayment of the \$5.33m Treasurer's Advance in 2018-19) (see Tables 2 and 3).

DMIRS administers the MRF as a special purpose account under Section 18 of the FM Act in accordance with Section 10 of the MRF Act.

**Table 1: MRF Summary of Data Reported for the period through to 2018-19**

	Disturbed Land (ha)										Land Under Rehabilitation (ha)								
	2014-15	2015-16	2016-17	2017-18	2018-19	Change 2015-16 (%)	Change 2016-17 (%)	Change 2017-18 (%)	Change 2018-19 (%)	2014-15	2015-16	2016-17	2017-18	2018-19	Change 2015-16 (%)	Change 2016-17 (%)	Change 2017-18 (%)	Change 2018-19 (%)	
Exploration Licences	8,448	7,726	9,646	10,518	12,387	-8.5%	24.8%	9.0%	17.8	87	36	38	32	27	-58.1%	5.5%	-16.0%	-15.3%	
General Purpose Leases	3,060	3,094	3,153	3,148	3,279	1.1%	1.9%	-0.2%	4.2	709	811	789	1,083	922	14.4%	-2.8%	37.4%	-14.9%	
Miscellaneous Licences	11,076	11,090	11,834	12,930	13,910	0.1%	6.7%	9.3%	7.6	708	920	1,040	952	2,072	30.0%	13.1%	-8.5%	117.6%	
Mining Leases	86,793	89,574	93,952	99,572	107,600	3.2%	4.9%	6.0%	8.0	33,160	32,759	34,707	35,751	36,600	-1.2%	5.9%	3.0%	2.4%	
Prospecting Licences	718	643	641	616	636	-10.4%	-0.2%	-4.0%	3.3	84	67	63	65	53	-20.5%	-4.6%	3.6%	-19.3%	
Retention Leases	5	355	373	383	390	7713.7%	5.2%	2.6%	1.8	0	0	0	0	0	N/A	N/A	N/A	N/A	
<b>Total</b>	<b>110,100</b>	<b>112,481</b>	<b>119,599</b>	<b>127,166</b>	<b>138,203</b>	<b>2.2%</b>	<b>6.3%</b>	<b>6.3%</b>	<b>8.7 %</b>	<b>34,748</b>	<b>34,594</b>	<b>36,637</b>	<b>37,884</b>	<b>39,674</b>	<b>-0.4%</b>	<b>5.9%</b>	<b>3.4%</b>	<b>4.7%</b>	
Percentage of Total Area	76.0%	76.5%	76.6%	77.0%	77.7 %					24.0%	23.5%	23.4%	23.0%	22.3%					

Source: Data extracted from the Environmental Assessment and Regulatory System 2, valid as at 8 September 2019. Data rounded to the nearest hectare.

Note: 'Land Under Rehabilitation' does not include all rehabilitation work being undertaken, as it excludes rehabilitation of exploration or prospecting activities conducted under Programmes of Work. For those activities, rehabilitation data is not separately reported and any rehabilitated areas remain a part of 'Disturbed Land' until all approved work (and required rehabilitation) has been completed. Those areas of 'Land Under Rehabilitation' that have been reported on Exploration Licences and Prospecting Licences are likely to relate to other (peripheral) disturbances reported on those tenements. 'Land Under Rehabilitation' also does not include 'Rehabilitated Land' that is considered to have been completed in accordance with closure obligations.

Note: Data will vary from previously reported values as assessment information is eligible for reassessment for a period of up to two years from the date of submission.

**Table 2: MRF Financial Summary**

		2015-16	2016-17	2016-17	2017-18	2018-19	2018-19	2019-20
		Actual	Budget	Actual	Actual	Estimated	Actual	Estimated
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Opening Balance</b>		<b>35,141</b>	<b>61,570</b>	<b>63,377</b>	<b>92,400</b>	<b>122,316</b>	<b>122,316</b>	<b>150,473</b>
Add receipts								
	Contribution from Industry	27,098	27,000	28,348	28,653	28,000	30,611	32,000
	Interest Received	1,175	1,510	1,654	2,223	2,794	3,094	3,514
	Other	800	800	16	N/A	N/A	411	
		<b>29,073</b>	<b>29,310</b>	<b>30,018</b>	<b>30,876</b>	<b>30,794</b>	<b>34,116</b>	<b>35,514</b>
Less payments								
	Salaries	N/A	N/A	163	144	127	163	
	Operational Expenditure	837	2000	832	N/A	N/A	478	2000
	Other	N/A	N/A	N/A	516	1056	5318	
<b>Balance at the end of the period</b>		<b>63,377</b>	<b>88,880</b>	<b>92,400</b>	<b>122,316</b>	<b>151,927</b>	<b>150,473</b>	<b>183,987</b>

Source: DMIRS Annual Report 2018-19 and DMIRS Financial Accounting Branch

**Table 3: Breakdown of sources and applications of funds for abandoned mine projects 2018-19**

Project	Levies Collected* \$'000	Expenditure from MRF Principal	Expenditure from MRF Interest	Total Expenditure to 30 June 2019 \$'000
		\$'000	\$'000	
		Project Costs	Project Costs	
Ellendale Diamond Mine	819	10	0	10
Black Diamond Pit Lake	0	0	0	0
Pro-Force Plant Site	0	0	9	9
Bulong	0	0	0	0
<b>Total</b>	<b>819</b>	<b>9</b>	<b>9</b>	<b>19</b>

Source: DMIRS, Financial Accounting Branch. Data as at 30 June 2019

\* Levies collected in 2013 and 2014

## Abandoned Mines Program (AMP)

The AMP, established in 2016, is funded through the MRF and provides a framework for identifying and prioritising the management and rehabilitation of abandoned mines across Western Australia. Throughout the 2018-19 financial year, DMIRS has continued to manage Western Australia's historic abandoned mine features through the delivery of the following projects and short-term initiatives.

### Pro-Force Pilot Site

The Pro-Force abandoned mine site is located approximately two kilometres south-east of Coolgardie in Western Australia.

Pro-Force was a former gold processing site operated by Pro-Force Mining Contractors Pty Ltd from 1996 to 2004. The site is located adjacent to The Gorge, which is a public use area and water reserve. Access to The Gorge is unrestricted, with the community and tourists accessing the site from the Coolgardie-Esperance Highway.

The derelict processing plant and other site features had been in situ for more than a decade, and were an ongoing public safety concern for the Shire of Coolgardie and local community. In response to community concerns, DMIRS selected Pro-Force to be rehabilitated as a pilot project.

Removal of old plant and site clean-up was conducted in 2016. During 2017-18, the planting of 100 saplings took place to improve the overall aesthetic of the area. A review of the rehabilitation work conducted at Pro-Force was also undertaken during 2017-18.

This review highlighted work that still needed to be completed to effectively manage safety and environmental risks at the site. This work was completed by Goldfields Land and Sea Council Land Management Rangers in February 2019, including the installation of a fence around an open mine shaft, installation of warning signage and removal and disposal of waste material around the dam.

Following consultation with key stakeholders and endorsement by MRAP, the declaration of Pro-Force as an abandoned mine site under the MRF Act was revoked under section 9(4) of the MRF Act signalling project completion.

### Bulong Nickel Tailing Storage Facility Pilot Site

The former Bulong Nickel mining operation is located approximately 40km east of Kalgoorlie. Mining operations commenced on the former tenement in the 1990s with the construction of a TSF and evaporation ponds.

The operating company went into receivership and effectively abandoned the site in 2005. The rehabilitation associated with the mining operations became a state liability after the mining lease expired in 2013. Concerns were raised regarding issues associated with seepage and dust from the TSF potentially escaping into the surrounding environment.

During 2018-19, a preliminary site investigation including soil and groundwater sampling was undertaken. Based on the results of the preliminary investigation, it was determined that additional soil and groundwater investigations are required to inform future rehabilitation and/or management activities.

As such, a detailed site investigation will be conducted in 2019-20 to help determine the next stages of the project.

### Elverdton Pilot Site

The Elverdton mine site is located approximately 10km south-east of Ravensthorpe. The historic site can be defined as a cluster of abandoned mine features comprising tailings dumps, underground mine shafts, water dams and mine infrastructure. The site sits at the headwaters of the Steere River upstream from the Culham Inlet and Fitzgerald National Park.

Gold and copper mining began in the area during 1899 with major periods of copper ore production between 1901-18 and 1957-71. The site was selected as an AMP pilot project due to community concerns about the movement of uncontained tailings down the Steere River.

During 2018-19, a preliminary project plan was prepared to describe the key project planning elements including scope, objectives and a preliminary work plan. In line with the project plan, a preliminary site inspection was undertaken in 2018-19 to verify the abandoned mine features on site and update the abandoned mines inventory and site risk assessment. Further investigation studies are planned to be initiated in 2019-20.

## Ellendale Diamond Mine

Ellendale Diamond Mine is located about 120km east of Derby in the West Kimberley region of Western Australia.

It includes the E4 and E9 pits, waste rock landforms, TSFs and areas of other infrastructure. Mining commenced at the E9 pit in 2002 and at the E4 pit in 2006. Mining at the E4 pit was suspended and the area entered care and maintenance in 2009. Mining at the E9 pit continued until 2015.

The mining tenements were held by Kimberley Diamond Company NL (KDC), but mining activities ceased at Ellendale in July 2015 when KDC entered into administration. Later that month, creditors voted for the company to be placed into liquidation.

After the mine was closed in 2015, the Minister for Mines and Petroleum created an exemption area under Section 19 of the Mining Act. This section allows the Minister to invite a mining company or consortium to apply for a new mining lease.

DMIRS has been managing the site through the AMP since then and has undertaken a range of activities within the Ellendale area to minimise the environmental, safety and health risks at the site. A geotechnical study is currently in progress on the two largest TSFs and an assessment of the risks associated with the remaining redundant infrastructure is planned for 2019-20. Further investigation studies into the ongoing management risks and associated remedial works will be initiated in 2019-20. The department continues to focus on ensuring the resource value of the tenements is not diminished and that the site remains a viable option for future responsible resource development.

A process to award tenure to a new tenement holder through an Expression of Interest (EOI) was initiated during 2018-19 and is expected to be completed by the end of the 2019 calendar year.

## Abandoned Mine Feature Screening and Risk Assessment Project

The Abandoned Mines Policy details a framework for the prioritisation and subsequent rehabilitation and/or management of abandoned mine features under the MRF Act.

In 1999, the Geological Survey of Western Australia (GSWA) commenced a project to identify and characterise abandoned mine features throughout Western Australia. The collection of records continued until 2011, and the resulting inventory comprised over 190,000 features.

During 2018-19, the AMP team developed a robust, and repeatable process of prioritising these abandoned mine features that pose a high risk to the community and/or the environment. By prioritising the features, the AMP is able to systematically rehabilitate and/or manage the features that represent the greatest risk.

The policy requires that features are prioritised with consideration to significant community and environmental risks. Given the large number of records in the GSWA inventory, it was necessary to undertake a high-level interrogation of the data using criteria to select features that may represent the highest potential risk, prior to undertaking a more detailed desktop assessment. The selection criteria considered:

- proximity to environmentally sensitive receptors and populated areas;
- specific feature characteristics that represent a safety or environmental hazard;
- potential for contamination; and
- community and departmental nominated features.

The risk assessment and prioritisation process identified high-risk shafts and open stopes that present a significant fall and entrapment risk as a priority for management and rehabilitation under the AMP. To address these risks, the AMP team has commenced a shaft remediation program, and is planning for a pilot program to be undertaken in 2020.

In addition, DMIRS will continue to engage with stakeholders to obtain new and/or updated information on abandoned mine features in 2019-20. This will ensure ongoing prioritisation of features will be conducted on the most up-to-date dataset possible.

The outcome of undertaking this process has resulted in the shaft remediation project being instigated in 2019-20.



# Summary Data

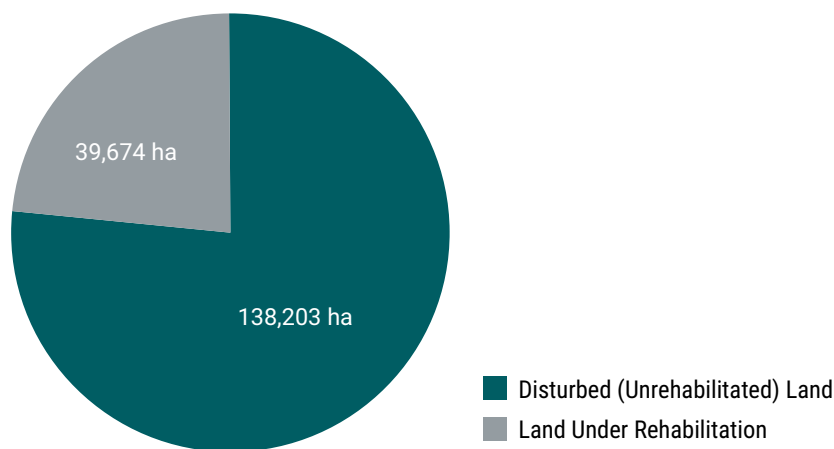
The full MRF data set for each reporting period is published annually on the DMIRS' website. This section provides an overview of the Mining Activity and Disturbance Data for the period ended 30 June 2019 for those tenements required to report under the *Mining Rehabilitation Fund Act 2012*.

## MRF tenement activities for July 2018– June 2019 period

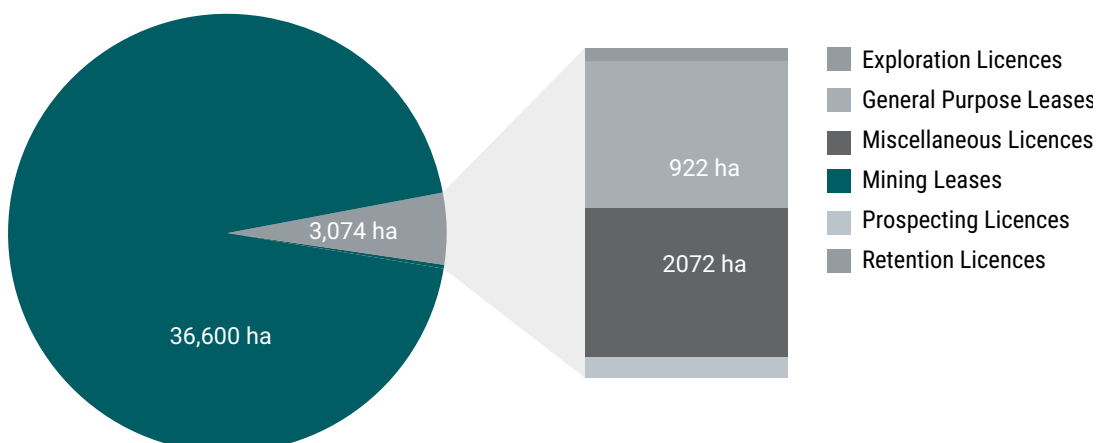
Released under section 15(3) of the *Mining Rehabilitation Fund Act 2012*

	Disturbance (ha)	Land Under Rehabilitation (ha)
Exploration Licences	12,387	27
General Purpose Leases	3,279	922
Miscellaneous Licences	13,910	2,072
Mining Leases	107,600	36,600
(based on data as at 17 September 2019) Prospecting Licences	636	53
Retention Licences	390	0
<b>Total</b>	<b>138,203</b>	<b>39,674</b>

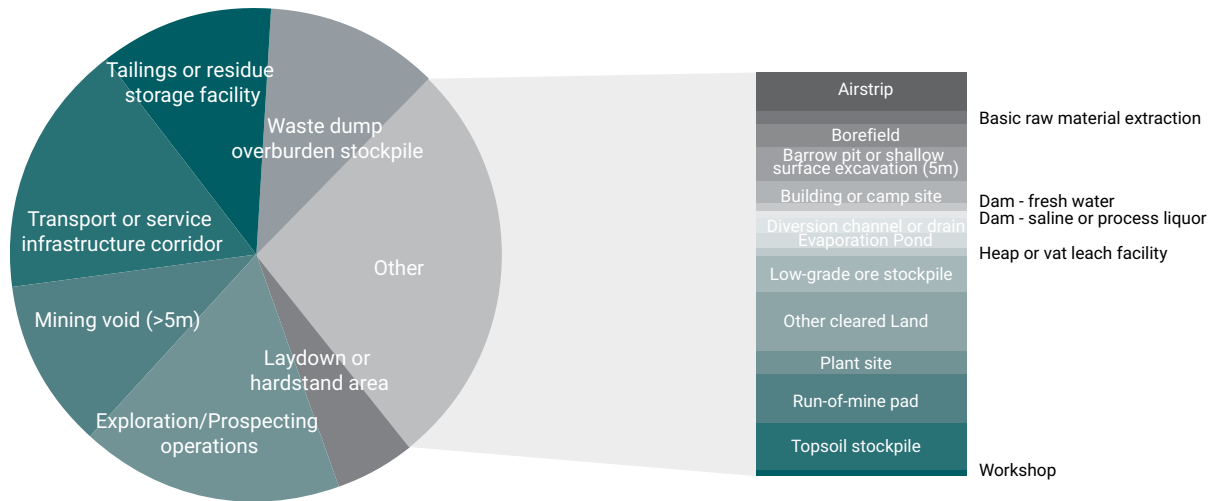
### Total Disturbance



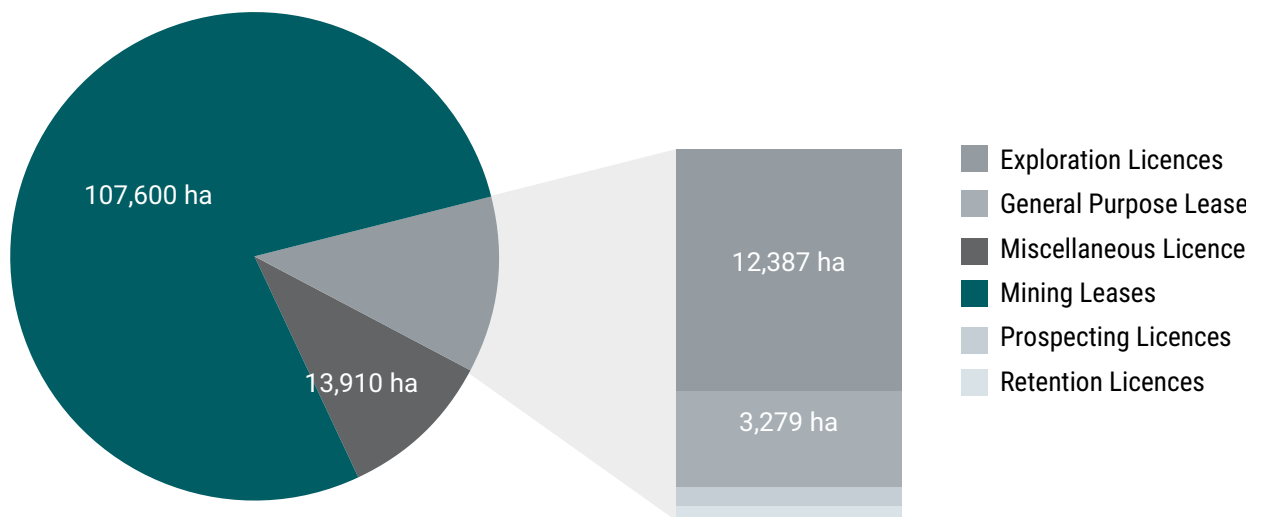
### Land Under Rehabilitation



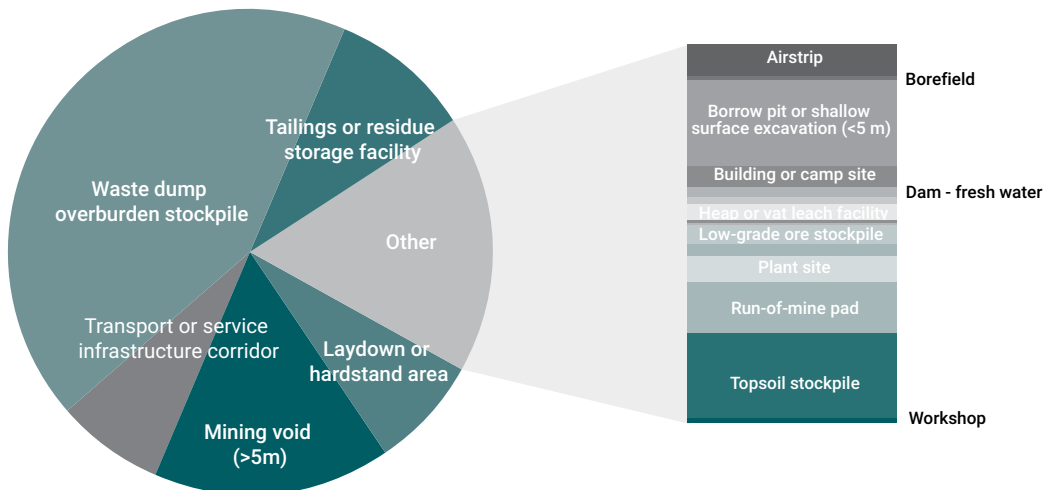
## Disturbance Land



## Disturbance (ha)



## Land Under Rehabilitation (ha)



Mining Activity Type	Disturbance (ha)	Land Under Rehabilitation (ha)
Airstrip	2,040	214
Basic Raw Material Extraction - Processing equipment or stockpile associated with basic raw material extraction	588	73
Borefield	1,656	50
Borrow pit or shallow surface excavation (with a depth of less than 5 metres)	2,390	1,835
Building (other than workshop) or camp site	1,363	251
Core yard	191	4
Dam - fresh water	529	38
Dam - saline water or process liquor	567	23
Diversion channel or drain	1,182	147
Evaporation pond	1,445	208
Exploration/Prospecting Operations - Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations	25,403	-
Fuel storage facility	62	2
Heap or vat leach facility	583	203
Landfill site	183	24
Laydown or hardstand area	6,942	3,328
Low-grade ore stockpile (class 1)	1,182	70
Low-grade ore stockpile (class 2)	1,745	277
Mining void (with a depth of at least 5 metres) - above ground water level	6,538	1,703
Mining void (with a depth of at least 5 metres) - below ground water level	10,513	4,893
Other Cleared Land - Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and is not otherwise described in this Table	6,277	0
Plant site	1,442	222
Run-of-mine pad	3,859	490
Sewage pond	143	8
Tailings or residue storage facility (class 1)	13,610	2,708
Tailings or residue storage facility (class 2)	1,799	1,179
Topsoil stockpile	4,590	1,078
Transport or service infrastructure corridor	24,946	2,892
Waste dump or overburden stockpile (class 1)	13,598	14,375
Waste dump or overburden stockpile (class 2)	2,550	3,336
Workshop	289	45
<b>Total</b>	<b>138,203</b>	<b>39,674</b>

Mining Activity Type (Simplified)	Disturbance (ha)	Land Under Rehabilitation (ha)
Airstrip	2,040	214
Basic Raw Material Extraction	588	73
Borefield	1,656	50
Borrow pit or shallow surface excavation (< 5 m)	2,390	1,835
Building or camp site	1,363	251
Core yard	191	4
Dam - fresh water	529	38
Dam - saline water or process liquor	567	23
Diversion channel or drain	1,182	147
Evaporation pond	1,445	208
Exploration/Prospecting Operations	25,403	-
Fuel storage facility	62	2
Heap or vat leach facility	583	203
Landfill site	183	24
Laydown or hardstand area	6,942	3,328
Low-grade ore stockpile	2,927	347
Mining void (> 5 m)	17,051	6,596
Other Cleared Land	6,277	0
Plant site	1,442	222
Run-of-mine pad	3,859	490
Sewage pond	143	8
Tailings or residue storage facility	15,409	3,886
Topsoil stockpile	4,590	1,078
Transport or service infrastructure corridor	24,946	2,892
Waste dump or overburden stockpile	16,147	17,711
Workshop	289	45
<b>Total</b>	<b>138,203</b>	<b>39,674</b>

(based on data as at 17 September 2019)

Note: This information is collected solely for the purposes of calculating the levy, and should be used with caution when drawing conclusions, particularly about trends in mining and rehabilitation activity. Additionally, it should be noted that:

- the Rehabilitation Liability Estimate (derived by applying the category unit rates to the reported areas of activity) is a 'normalised' base for deriving levies across activities and does not necessarily correlate in any way to 'real' rehabilitation costs at any one site.
- the reported area (in hectares) is a 'snapshot in time' that can be assessed by tenement holders at any point in the year.
- changes in disturbance and rehabilitation levels from one reporting period to the next may be comparing data that was not assessed at the same point in time (e.g. they could be assessed by the holder on 30 June in Year 1 and on 1 July in Year 2) and/or may not show the impact of increases and decreases that occur within the reporting period.
- the data does not include disturbance and rehabilitation attributable to operators under a State Agreement. It therefore reflects only a sub-set of mining activity across the State and is unlikely to be indicative of the industry as a whole.

Government of Western Australia

**Department of Mines, Industry Regulation  
and Safety**

8.30am – 4.30pm

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