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# Environmental Law in WA

Environmental Essentials WA



You will gain a general understanding of environmental legislation and other legislation that in WA that are required address environmental protection

- Definition of environmental law
- Sources of environmental law (and guiding principles)
- Common Law (Trespass, Nuisance and Negligence)
- Key WA and Commonwealth Acts:
  - *Environmental Protection Act 1986*
  - *Environment Protection and Biodiversity Conservation Act 1999*
  - *Biodiversity Conservation Act 2016*
  - *Rights in Water and Irrigation Act 1914*
  - *Planning and Development Act 2005 (WA)*
  - *Contaminated Sites Act 2003*
  - *Conservation and Land Management Act 1984*
  - *Mining Act 1978*
  - Relationship between State and Commonwealth Law

# What is environmental law?

3

Environmental planning and management in legislation refers to:

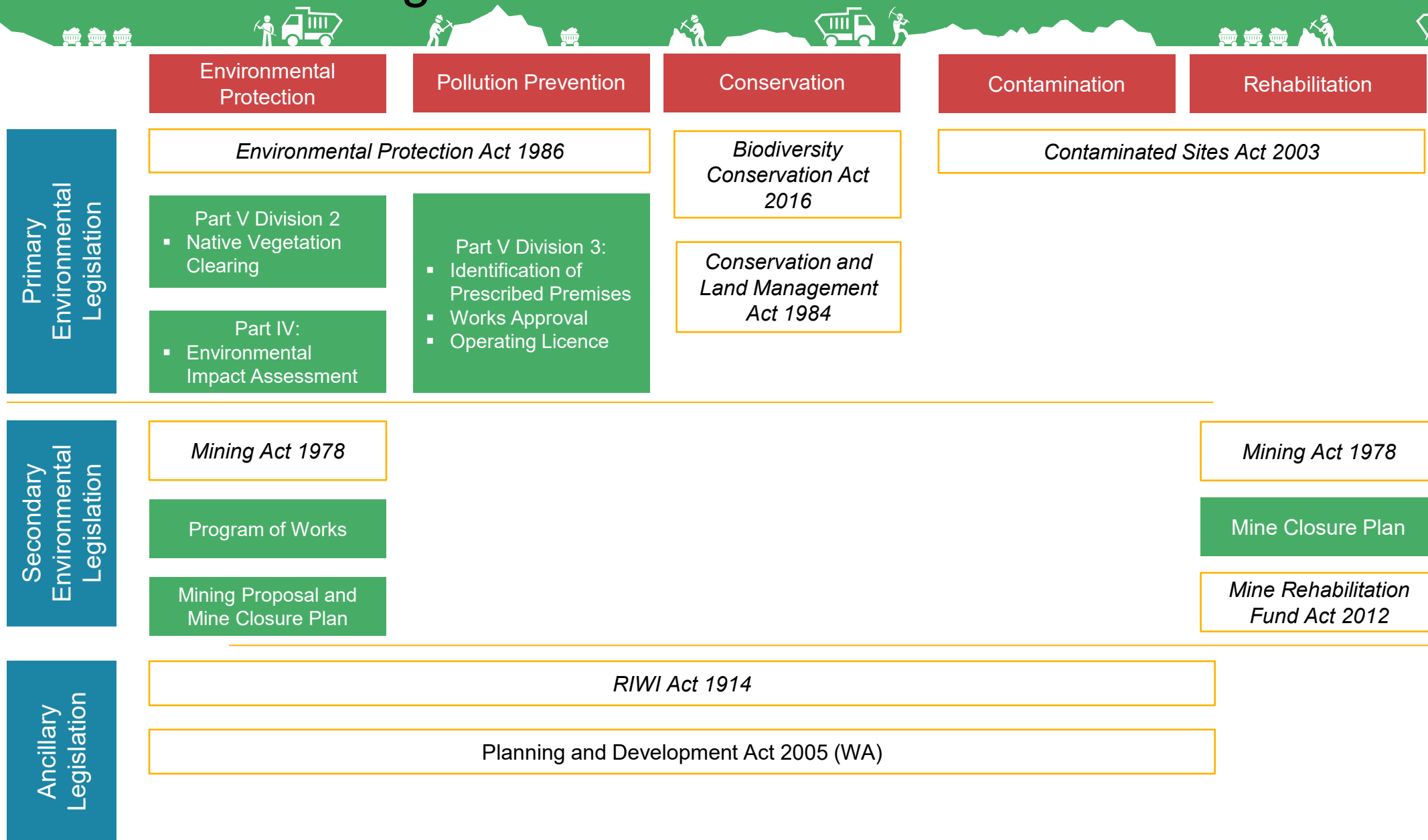
- Biodiversity
- Protecting soil, air, water
- The oceans
- Protection of areas of land or ocean (such as in national parks)
- Individual species (such as wildlife conservation laws)
- Particular actions. E.g. environmental impact assessment; remediation of environmental damage caused (contaminated sites laws) and preventing pollution.

- Common law – protecting individual's rights and private property rights where environmental values could be at risk
- Statute – Legislation enacted by the State or Federal Parliament.
- Subsidiary legislation – Regulations - local or specific details of specific measures in Legislation (made by government rather than Parliament, but usually require parliamentary approval)
- Policies and administrative guidelines - not legally binding, but decision makers must give them proper consideration
  - i.e. if not followed, reasons have to be given
  - Some agencies have competing policies
- International law and international treaties (these do not have direct legal effect in Australia until they are implemented by Commonwealth legislation).

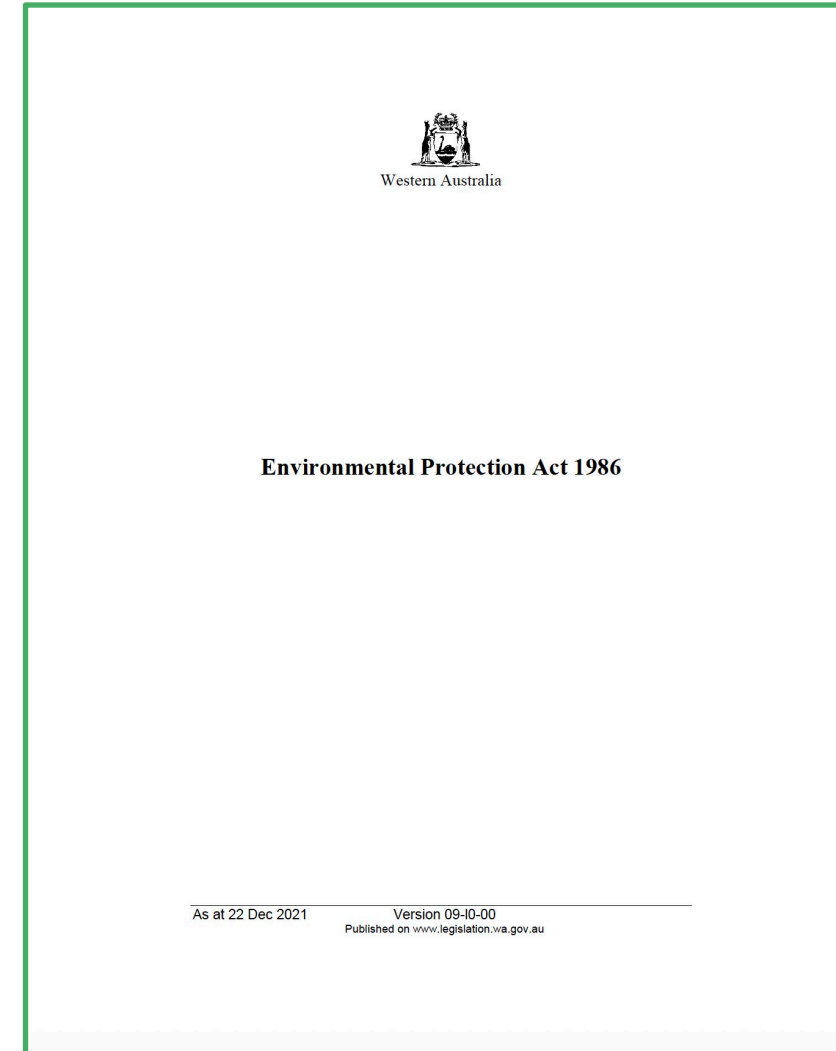
In developing new environmental legislation, law-makers are increasingly including a number of internationally recognised principles:

- the precautionary principle
- conservation of biological diversity and ecological integrity
- economic valuation of environmental factors
- the polluter pays principle
- sustainable development
- the principle of intergenerational equity
- waste minimisation
- stakeholder participation.

# WA Environmental Legislation



- Principal piece of environmental legislation in Western Australia
- Object - to protect the environment of the State, having regard to the following principles
  - The precautionary principle
  - The principle of intergenerational equity
  - The principle of the conservation of biological diversity and ecological integrity
  - Principles relating to improved valuation, pricing and incentive mechanisms
  - The principle of waste minimisation



- II – The Environmental Protection Authority (EPA)
- III - Environmental protection policies (EPP)
- IV - Environmental impact assessment (EIA) - assessment of proposals
- V - Environmental regulation
  - Pollution and environmental harm offences
  - Clearing of native vegetation
  - Prescribed premises, works approvals and licences
  - Notices, orders and directions
- VA - Financial assurances
- VI – Enforcement
- VIA — Legal proceedings and penalties
- VII – Appeals
- VIIA – Landfill levy
- VIII – General
- VIIIA - Bilateral agreements with the Commonwealth



- Environmental Protection Authority – EPA
  - Five-person board independent of Government
  - Carries out assessment of proposals
  - Not a final decision maker
  - Environmental policies and guidelines
  - Advise the Minister
  - Carry out research
  - Establish environmental standards
  - Promote environmental protection
- Minister for Environment
  - final decision maker
  - Determines most appeals

- DWER (Department of Water and Environmental Regulation)
  - Decision maker for Part V EP Act – works approval, licensing and clearing permits
  - Water licensing
  - Compliance
  - Research
  - Support for EPA
  - Climate change
  - Waste
  - Contaminated sites
  - Green energy approvals team
- Appeals convenor
  - Advises Minister on most appeals

- Part IV – environmental impact assessment
- Part V Division 2 – native vegetation
- Part V Division 3 – works approval licencing
- Part III – environmental protection policies (EPPs)
- Part VII - Appeals



## Part IV of EP Act – environmental impact assessment (EIA)

- Part IV the *Environmental Protection Act 1986* (EP Act);
- *Environmental Impact Assessment Administrative Procedures 2021* – Admin Procedures;
- EIA procedures manual
- ‘Statement of environmental principles, factors, objectives and aims of EIA’.
- Mitigation hierarchy
  - Avoid
  - Reduce
  - Restore/rehabilitate
  - Offset
- Purposes of mitigation hierarchy
  - Keep negative impacts acceptable (no unacceptable impacts)
  - Reduce negative impacts to as low as practicable

# Factors not issues

Theme	Factor	Objective
Sea	Benthic communities and habitats	To protect benthic communities and habitats so that biological diversity and ecological integrity are maintained.
	Coastal processes	To maintain the geophysical processes that shape coastal morphology so that the environmental values of the coast are protected.
	Marine environmental quality	To maintain the quality of water, sediment and biota so that environmental values are protected.
	Marine fauna	To protect marine fauna so that biological diversity and ecological integrity are maintained.
Land	Flora and vegetation	To protect flora and vegetation so that biological diversity and ecological integrity are maintained.
	Landforms	To maintain the variety and integrity of distinctive physical landforms so that environmental values are protected.
	Subterranean fauna	To protect subterranean fauna so that biological diversity and ecological integrity are maintained.
	Terrestrial environmental quality	To maintain the quality of land and soils so that environmental values are protected.
	Terrestrial fauna	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.
Water	Inland waters	To maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected.
Air	Air quality	To maintain air quality and minimise emissions so that environmental values are protected.
	Greenhouse gas emissions	To reduce net greenhouse gas emissions in order to minimise the risk of environmental harm associated with climate change.
People	Social surroundings	To protect social surroundings from significant harm.
	Human health	To protect human health from significant harm.



- All factors have policy guidance
- Most have technical supporting documents
  - Marine dredging
  - Benthic communities and habitats
  - Flora and vegetation surveys
  - Subterranean fauna surveys
  - Sampling short range endemics invertebrate
  - Terrestrial vertebrate fauna surveys

- Flora guidance

- threatened or priority species
- locally endemic or associated with a restricted habitat type
- new species or anomalous features that indicate a potential new species
- representative of the range of a species (particularly, at the extremes of range, recently discovered range extensions, or isolated outliers of the main range)
- unusual species, including restricted subspecies, varieties or naturally occurring hybrids
- representative of taxonomic groups that no longer occur widely in the broader landscape



- Significant/significance - trigger for referral to EPA and about 'effect on the environment'
- significant proposal means a proposal likely, if implemented, to have a significant effect on the environment and includes a significant amendment of an approved proposal
- A proposal can have a range of environmental impacts
- Therefore, proposal will have an effect on the environment – sum of impacts
- Impacts can be assessed, but the effect is central to decision-making
- Proponent focuses on impacts
- EPA on effect



# Key steps

1. Referral,
2. Decision to assess/not assess,
3. If assessment, then level of assessment is determined,
4. Formal scoping,
5. Preparation and then release of the environmental review document (ERD),
6. Assessment,
7. Release of the EPA report,
8. Final decision including conditions setting for approved proposals,
9. Follow up, and
10. Post approval changes.

NOTE: appeals at three points (later)



# 12 matters of significant effect

1. the object and principles of the Act
2. values, sensitivity and quality of the environment which is likely to be impacted
3. all stages and components of the proposal
4. extent (intensity, duration, magnitude, and geographic footprint) of the likely impacts
5. resilience of the environment to cope with the impacts or change (including pressures e.g. climate change)
6. application of the mitigation hierarchy to the proposal
7. consequence of the likely impacts including off-site impacts and indirect impacts
8. likely environmental outcomes, and whether these are consistent with the EPA environmental factor objectives
9. cumulative effects, taking into account cumulative environmental impacts - past, present and reasonably foreseeable future activities
10. holistic impacts – connections and interactions between impacts, and the overall impact of the proposal on the environment as a whole
11. level of confidence in the prediction of residual impacts and the success of proposed mitigation
12. public interest.

- Proposals - once approved, works on the ground can commence and environmental impacts could then occur, and includes significant amendments to approved proposals
- Strategic proposals - plans or program of works that contains a number of possible future proposals. Future impacts.
- Planning schemes - primarily Zoning or Reserving land for future uses including proposals (subdivisions and development) – NOTE all schemes are referred (caveat)



- Proponent required to refer
  - EPA template
- Minister can refer
- DMA to refer (DMIRS)
- Third party referral allowed
  - Option to declare referral not a referral
  - Option for proponent to withdraw proposal
- EPA can call in a significant proposal
- Minister can direct the EPA to assess or assess more fully at any time.
- 28 days to make a decision to assess/not assess
  - Includes 7 day public review period
  - EPA can ask for more information - clock stops for 'compliance period'
  - If information not provided within compliance period, EPA can declare proposal withdrawn
- Proponent can request change proposal during this time – EPA can reject change – submit fresh proposal an option

- Assessment is known as formal assessment
- For 'not assess' the EPA can give non-binding advice
- EPA is required to advertise its decisions to assess or not assess and if assessed the level of assessment



Env  
Prot  
Auth



Environmental  
Protection  
Authority

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SEARCH

HOME ABOUT EPA



The Western Australian Environmental Protection Authority Board providing advice to environmental impact assessment matters.

### Information about EPA

Find out about environmental assessment in Western Australia and purpose of the Environmental Protection Authority.

Read

## EPA consultation and public comment

### Welcome to the EPA consultation hub

Providing opportunities for public participation and consultation is an integral part of environmental impact assessment and developing sound environmental protection policies in Western Australia. The EPA publishes all documents open for public comment on this consultation hub.

Don't think that you are only one voice and you won't make a difference. Just one well-reasoned submission that raises a valid concern or offers a constructive suggestion can be very helpful and important.

Please note that appeals on reports and recommendations of the EPA must be made to the Minister for Environment through the Appeals Convenor at [www.appealsconvenor.wa.gov.au](http://www.appealsconvenor.wa.gov.au).

[Go to the EPA's website here.](#)

As the Department of Water and Environmental Regulation (DWER) transitions to Environment Online, some proposals will be available for consultation on the new [Environment Online Portal](#).

### Open Consultations

<a href="#">Newman Hub (Western Ridge) Derived Proposal</a>	Closes 31 May 2023
BHP propose to expand existing mining operations at the Newman Hub in the Pilbara, approximately 2 kilometres (km) southwest of Newman. The Proposal is a derived proposal for mining operations at Newman (Western Ridge) authorised by the Pilbara Expansion Strategic Proposal, Ministerial Statement...	
<a href="#">Mt Weld Rare Earths Project - Life of Mine Proposal - Additional Information</a>	Closes 11 June 2023
Mt Weld Mining Pty Ltd is proposing to expand its existing Mt Weld operations (mining, processing, and ancillary activities) to a life of mine (LOM) extent, located 35 kilometres (km) south-east of Laverton in the Northern Goldfields Region of Western Australia. An Environmental Review...	
<a href="#">Koozbana Bay Marine Structures - Public Environmental Review</a>	Closes 26 June 2023
The South West Development Commission is proposing an upgrade to the marine structures that are intended to meet existing demand and future requirements for small craft maritime infrastructure. This includes new mooring facilities for commercial and recreational vessels, floating jetties, a boat...	
<a href="#">City of Gosnells Town Planning Scheme 6 Amendments 166 &amp; 169 - Maddington Kenwick Strategic Employment Area (MKSEA) - Environmental Review</a>	Closes 7 August 2023
The City of Gosnells has initiated Amendments 166 and 169 to rezone land within the Maddington Kenwick Strategic Employment Area (MKSEA) from 'General Rural' to 'Business Development'.	

ONLINE PORTAL

CONSULTATION HUB  
PUBLIC COMMENT

CH PROPOSALS  
REFERRED TO THE EPA

ARCH SCHEMES  
R SCHEME AMENDMENT




- EPA to determine the form, content, timing and procedure of any environmental review
- Depends on its complexity, significance and public interest
- The more complex the environmental issues and likely impacts associated with a proposal the 'higher' the level of assessment.
- High levels of public interest could lead to a higher level of assessment.
- The higher the level of assessment, the more time is needed for the community to consider the project and for the EPA to assess it.
- Five 'usual' levels of assessment
  - Assessment based on referral information – no public review;
  - Assessment based on referral information and specified additional information – no public review;
  - Assessment based on referral information (with or without additional information) but with a targeted public review of that documentation;
  - Environmental review – No Public Review. A more detailed environmental review document is required;
  - Public Environmental Review (PER). A more detailed environmental review document required, and a full public review of that document is required
- Other DMAs constrained from approving – s41(3)
- s41(4) allows a DMA to approve minor or preliminary work subject to the approval of the EPA



- The EPA will issue the terms of reference for the preparation of ERD
- Called an Environmental Scoping Document (ESD).
- ERD includes
  - the initial list of key environmental factors
  - the scope of work required to be carried out to address these factors.
- The EPA prepares all ESDs.

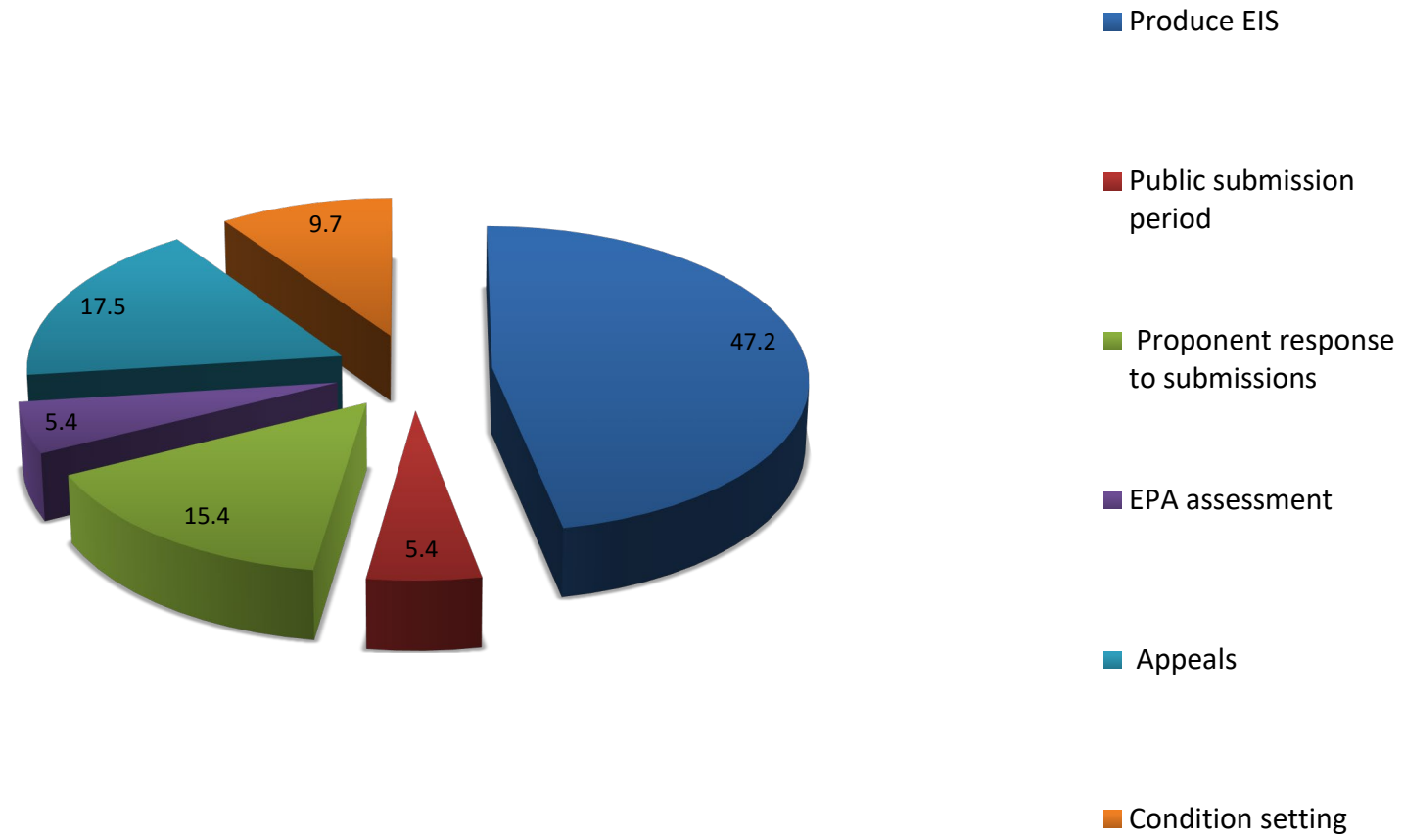
- The EPA to approve the release of the ERD
- The key considerations here are:
  - Has it met the terms of reference?
  - Is it technically sound? and
  - Is it readable?
- Once the EPA approves, it is released for public review for a specified period of time (set at level of assessment or ESD)

- 
- Free copies of ERD are provided to key organisations (community and government) as well as at public libraries
  - All submissions on the ERD are sent to the EPA not the proponent.
  - The EPA may require additional works be carried including consideration of additional factors.
  - Key issues raised in the submissions are summarized and sent to the proponent.
  - The proponent is offered the chance to respond to the issues raised in the submissions
  - Most proponents choose to do so.

- Is the proposal environmental acceptable?
- If so what conditions should be set
- Which of the factors require detailed examination and assessment:
  - which factors are potentially 'fatal flaws' or
  - which require substantial management
- Consider cumulative impacts and holistic assessment

- EPA must prepare a public report.
- Report is advice to the Minister
- Sets out clearly the proposal as assessed, which is later captured in the Ministerial Statement.
- Sets out recommended conditions and procedures
- Can provide 'other' advice
- Minister consults with 'key' decision making authorities (DMAs)
  - Usually only Ministers
- Must get agreement – Cabinet (Governor) resolves conflicts
- Minister not bound by EPA report or any appeals outcomes

- Prescriptive conditions – where a specified action is required;
- Management based condition – where specific management actions are required; and
- Outcome based condition – where the environmental outcome that should be achieved is specified rather than specific management actions.
  - Now preferred by the EPA




- S107 deals with appeals for both Part IV (EIA) and Part V.
- There are three appeal opportunities throughout the EIA process:
  - The EPA decision to not assess a proposal – third party appeals allowed,
  - The EPA report and recommendations – third party appeals allowed, and
  - The final conditions - only the proponent can appeal these.
- First 2 – Appeals Convenor advises and Minister decides
  - Not SAT
- Third – Appeals Committee – Minister bound by decision.
- Outcomes
  - Dismiss the appeals;
  - Uphold in part or in full and change the EPA recommendation and any associated condition or procedure; or
  - Refer it back to the EPA requiring a full or partial re-assessment related to the matters raised in the appeal.

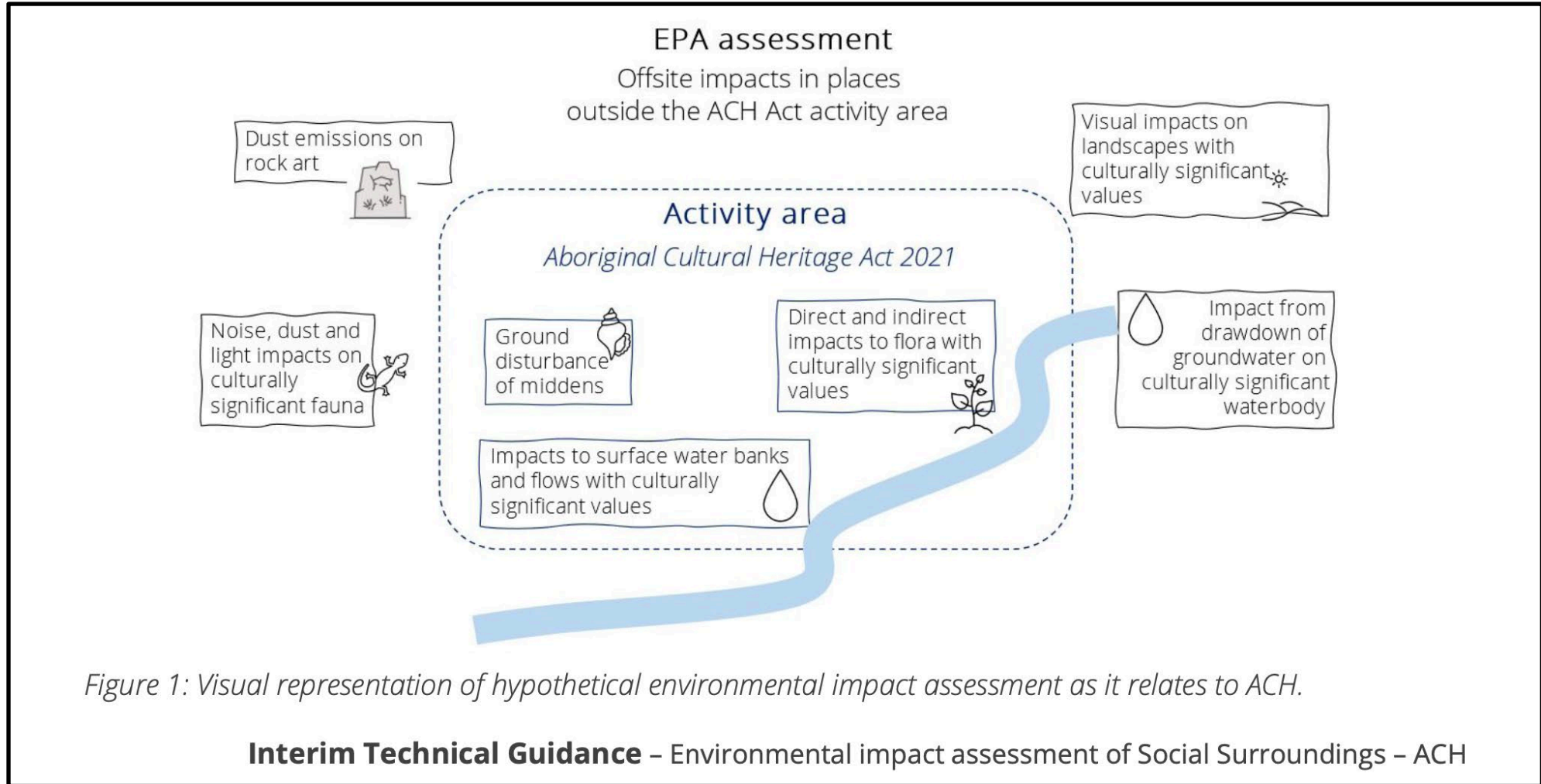


A decorative header at the top of the slide features a green background with white silhouettes of mining-related elements: a drone, a mountain range, three small trucks, a worker with a shovel, a large truck, a worker with a pickaxe, a small truck, a worker with a pickaxe, a large truck, a worker with a pickaxe, a mountain range, three small trucks, a worker with a shovel, and a large truck.

Three key policies/guidelines areas

- 
- Scope 1 emissions - direct result of an activity, or a series of activities, which are part of a proposal.
  - Scope 2 emissions – from the consumption of energy for the proposal – scope 1 for the energy provider
  - Scope 3 emissions - occur as a consequence of the activities of a proposal, both upstream and downstream
  - Guidance applies where GHG emission likely to exceed
    - 100,000 tonnes CO<sub>2</sub>-e of scope 1 emissions in any year; or
    - 100,000 tonnes CO<sub>2</sub>-e of scope 2 emissions in any year.
  - No splitting of proposals!
  - Report likely emissions including over time
  - proponents to develop a GHG EMP
  - EPA expects deep, substantial and sustained emissions reductions this decade and achievement of net zero emissions no later than 2050 along a linear trajectory (at a minimum) from 2030
  - Periodic reporting of GHG emission against EMP
  - Apply mitigation hierarchy – carbon offsets a last resort

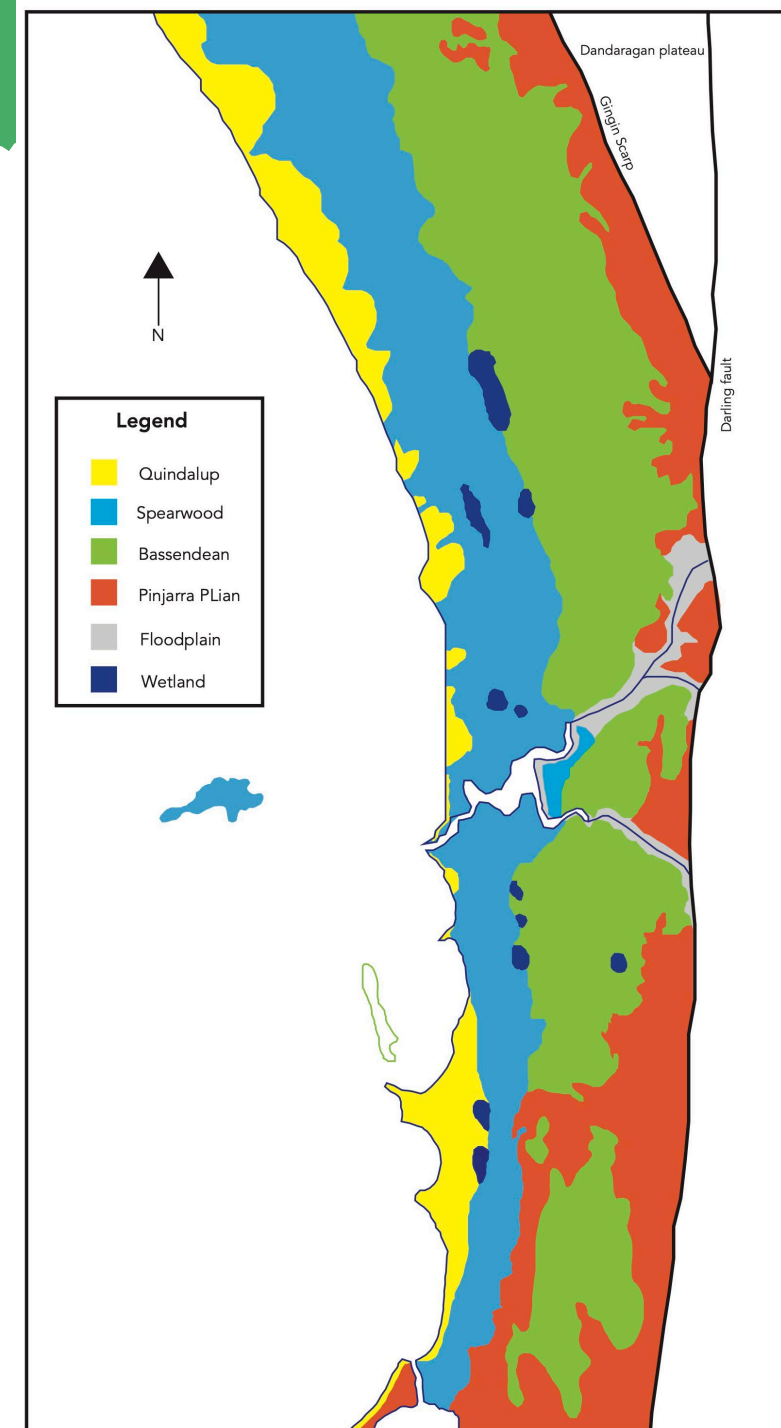
- EPA will still consider Aboriginal Cultural Heritage (ACH) even though there is *the Aboriginal Cultural Heritage Act 2021 (ACH Act)*



- Biodiversity needs to be considered at three levels:
  - Ecosystem diversity, which is the variety of habitats, biotic communities and ecological processes;
  - Species diversity, which is the variety of species on earth (plants, animals, bacteria etc); and
  - Genetic diversity, which is the variety of genetic information within and between populations of species.
- Two key issues to consider in conservation planning at the ecosystem level:
  - Deciding on the broad ecosystem types to be represented in a conservation system, and
  - Selecting how much of each ecosystem type to conserve.
- The first element is about having a representative conservation reserve system.
- In WA many of the broad ecosystem types are called ‘complexes’.
- Second question
  - 30% pre-European non urban
  - 10% pre-European urban

# Biodiversity on the Swan Coastal Plain

- Vegetation in a specific location is broadly influenced by three factors:
  - Soil and landform;
  - Climate (rainfall and temperature);
  - Depth to groundwater or proximity to surface water
- The landforms form the basis of the main vegetation complexes of the Swan Coastal Plain, with some variations
  - The Quindalup dunes - these are very exposed to weather as they are at the coast.
  - The Spearwood dunes – yellow soils also underlain with Tamala limestone, which can be at or near the surface.
  - The Bassendean landform – gutless grey soils; and
  - The Pinjarra plain – very flat landscape and mix of alluvial soils over sand













# Conservation of vegetation complexes of SCP Source: [\(EPA 2015\)](#).

Swan Coastal Plain Landform	Complex	% remaining	% in secure reserves
Quindalup Dunes	Quindalup complex	55%	22.5
Spearwood Dunes	Karrakatta Complex-North	34.5	7.1
	Karrakatta Complex-North-Transition	78.1	76.4
	Karrakatta Complex-Central and South	16.8	8
	Cottesloe Complex-North	76.4	28.6
Bassendean Dunes	Cottesloe Complex-Central and South	33.3	19.5
	Bassendean Complex-North	67.4	28.2
	Bassendean Complex-Central and South	21.3	7
	Bassendean Complex-North Transition	76.2	33.5
Pinjarra Plain	Bassendean Complex-Central and South – Transition	98.4	98.2
	Guildford Complex	5.4	0.9
	Swan Complex	11.9	4.9
	Dardanup Complex	8.5	0.1
	Serpentine Complex	8.2	1.7
	Beermullah Complex	6.6	2.8
Wetlands	Yanga Complex	13.4	5.4
	Herdsmen Complex	33.9	37.5
	Vasse Complex (Pinjar)	30	24.6
Mixed Banksia Dunes and Pinjarra Plain	Cannington Complex	12.4	7.2
	Southern River Complex	16.8	6.8

# Cost recovery - Environmental Protection (Cost Recovery)

## Regulations 2021

### Fees

Item	Circumstance	Fee	When payable
1.	Referral of proposal, under s. 38	\$32 000	In accordance with r. 6
2.	Request by proponent for approval to amend proposal, under s. 38C	\$16 000	On the day on which the request is made
3.	Request by proponent to declare proposal a derived proposal, under s. 38E	\$16 000	On the day on which the request is made

Item	Circumstance	Fee	When payable
4.	Request by Authority for additional information, under s. 38F	\$16 000	In accordance with r. 7
5.	Assessment of proposal, under Part IV Division 1	\$16 000 plus the amount, determined by the CEO under r. 5, for costs of the Department in assessing the proposal  Note: costs of the Department do not include external costs	In accordance with r. 8
6.	Requirement by Authority for information, under s. 40(2)(a)	\$16 000	In accordance with r. 7
7.	Request by proponent for consent to minor or preliminary works, under s. 41A(3)	\$16 000	On the day on which the request is made

Item	Circumstance	Fee	When payable
8.	Request by proponent for approval of assessment of amended proposal, under s. 43A	\$16 000	On the day on which the request is made
9.	Request by proponent for approval of amendment to, or amendment of conditions relating to, approved proposal, or both, under s. 45C	\$48 000	On the day on which the request is made
10.	Request by Minister for additional information, under s. 45C(2)	\$16 000	In accordance with r. 7
11.	The submission of an EMP for confirmation, endorsement or approval (however described) under implementation conditions	\$16 000	On the day on which the EMP is submitted

Item	Circumstance	Fee	When payable
	applying in relation to proposal		
12.	Inquiry by Authority into implementation conditions relating to approved proposal, under s. 46	\$64 000	In accordance with r. 9
13.	Issue by Minister of interim conditions and procedures, under s. 46A	\$16 000	Within the period of 28 days after the day on which the proponent is given notice of the interim conditions and procedures

# The EIA process for strategic proposals



- A 'significant proposal' is one which "likely, if implemented, to have a significant effect on the environment..." ;
- Section 37B of the EP Act defines a strategic proposal as one:
  - ... the extent to which it identifies —
    - (a) a future proposal that will be a significant proposal; or
    - (b) future proposals likely, if implemented in combination with each other, to have a significant effect on the environment.
- Only the 'proponent' can refer

- Proponent proponent can ask that that proposal be considered a derived proposal – i.e. already assessed EPA to agree if
  - Identified under the assessed strategic proposal
  - EPA assessment found specific proposal could proceed
- EPA can not agree if
  - New issues not covered in assessment of strategic proposal
  - Significant new in formation emerges
  - Negative impacts of specific proposal greater than as assessed for strategic proposal



# At a glance 2021–22

The EPA is an independent statutory authority that provides advice on environmental matters direct to the Western Australian Minister for Environment.



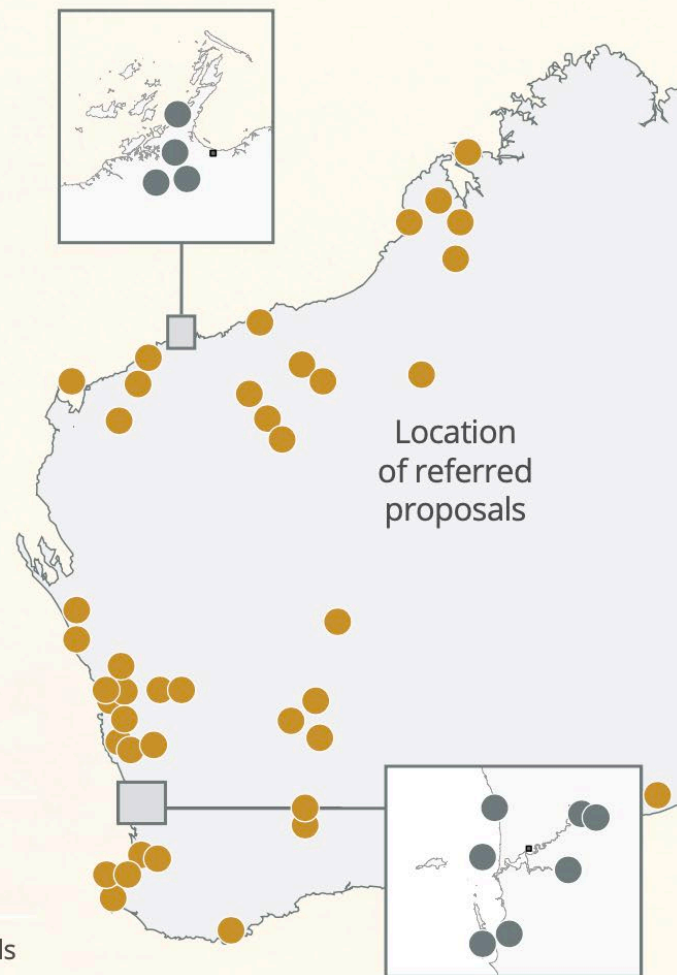
**63 development proposals and 129 schemes** referred to the EPA for a decision on whether they needed formal assessment by the EPA. This is the most development proposals referred to the EPA in the past seven years.



Determined to formally assess **30** referred proposals and **1** referred scheme.



Provided public advice for **1** referred proposals and **39** referred schemes.





A decorative horizontal bar at the top of the slide features a dark green background. On the left, a white drone icon is positioned above a white silhouette of a mountain range. To the right of the mountains, a series of white icons are spaced out: three small mining carts, a worker standing next to a large dump truck, a worker with a pickaxe, a small mining cart, another worker with a pickaxe, a large dump truck, a worker with a pickaxe, another large dump truck, three more small mining carts, and a final worker with a pickaxe. On the far right, a single large dump truck icon is placed above another white mountain silhouette.

# Offsetting

- Recall mitigation hierarchy
  - Avoid,
  - If not possible, minimise/reduce
  - Rehabilitate
  - Offset residual impacts

# What is an offset?

- Indirect compensatory measures used as mitigation for the unavoidable environmental impacts of development proposals
- Been used for 20 years in US and Europe
- More recent in Australia
  - Victoria and no net loss of native vegetation
  - NSW has legislated offsetting scheme
  - WA since 2004

- Rehabilitating already cleared land as compensation for clearing remnant vegetation (in addition to any closure site rehabilitation)



- Building new wetlands to replace wetlands to be filled to allow development















Like for like?





Like for like  
value for value?

- The size of the replacement habitat should be at least as large as the area lost;
- The values of what are lost should be replaced
- 'Compensation ratios' of greater than one should be considered

- “multipliers that show the relationship between the amounts of loss and gain” (Minns 2006:1172),
- Should be larger than 1
  - Replacement - impossible to get like for like
  - Uncertainty – replacement likely to be different from original, and
  - Timing – lost productivity whilst replacement matures

- Difficult to both implement and monitor – which agency and who funds?.
- Is securing and reserving an already uncleared area of land in private land actually an offset for clearing of native vegetation?
  - not additionality
- Replacement of normal government conservation
- Case by case offsetting doesn't always deliver optimal environmental outcome
- Corruption and buying an approval?
- Proponents weigh up economics of each position of mitigation hierarchy

- Not legally binding
- Supporting Guidelines
- Two types of offsets
  - Direct
    - Acquisition – secure conservation tenure
    - On ground management
    - Restoration
  - Indirect
    - Research
    - Funds
- Consider when mitigation hierarchy exhausted
- BUT - Raise early

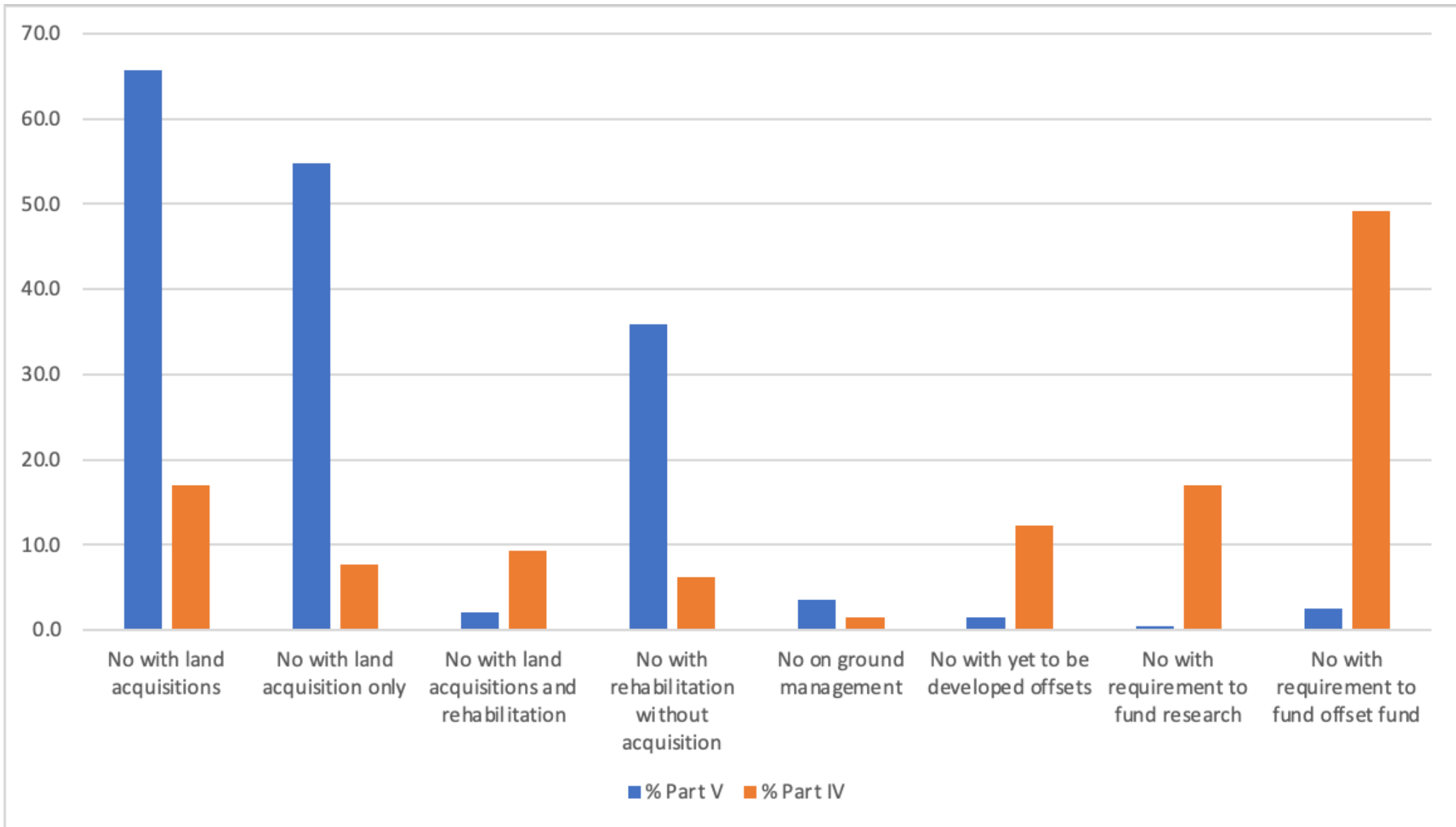


- Not>NNL – critical assets only
- Like for like preferred
- Adaptive approach – uncertainty
- Strategic approach preferred
- Offsets register
- Environmental offsets metric and guidelines
  - About ensuring transparency and consistency in the quantification of offsets under parts IV and V of the EP Act and other relevant legislation (e.g. EPBC Act)
  - Not for research offsets
  - Quantifies land acquisition and/or on-ground management and any financial contribution

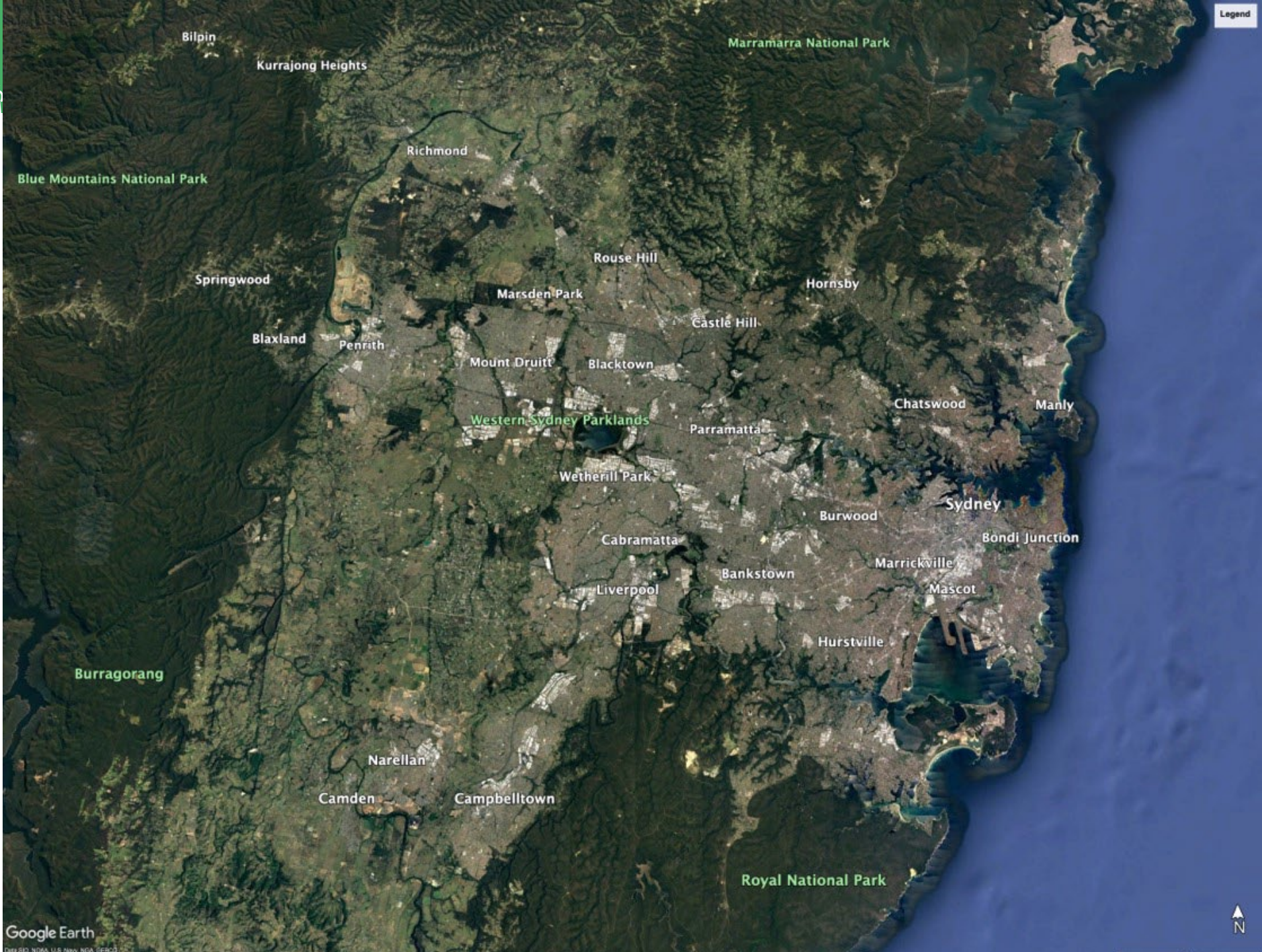
# Summarising the WA offsetting data

	<b>Part IV (EIA)</b>	<b>Party V (Clearing permits)</b>
<b>Number of offsets</b>	65.00	201.00
<b>Area that could be cleared</b>	154,097.24	3,222.35
<b>Area of aquisition</b>	5,746.50	8,989.83
<b>Ratio</b>	0.04	2.79
<b>Area restored/rehabilitated</b>	2,331.77	992.30
<b>Ratio</b>	0.02	0.31
<b>Maximum money into funds</b>	\$129,278,702.00	\$ 4,858,200.00
<b>Funds money per ha cleared</b>	\$ 838.94	\$ 1,507.66
<b>Maximum money into research and actions</b>	\$ 34,631,950.00	\$ 279,500.00
<b>Research and actions money per ha</b>	\$ 224.74	\$ 86.74
<b>Total money per ha cleared</b>	\$ 1,063.68	\$ 1,594.39

# WA offsetting data – % by offset type



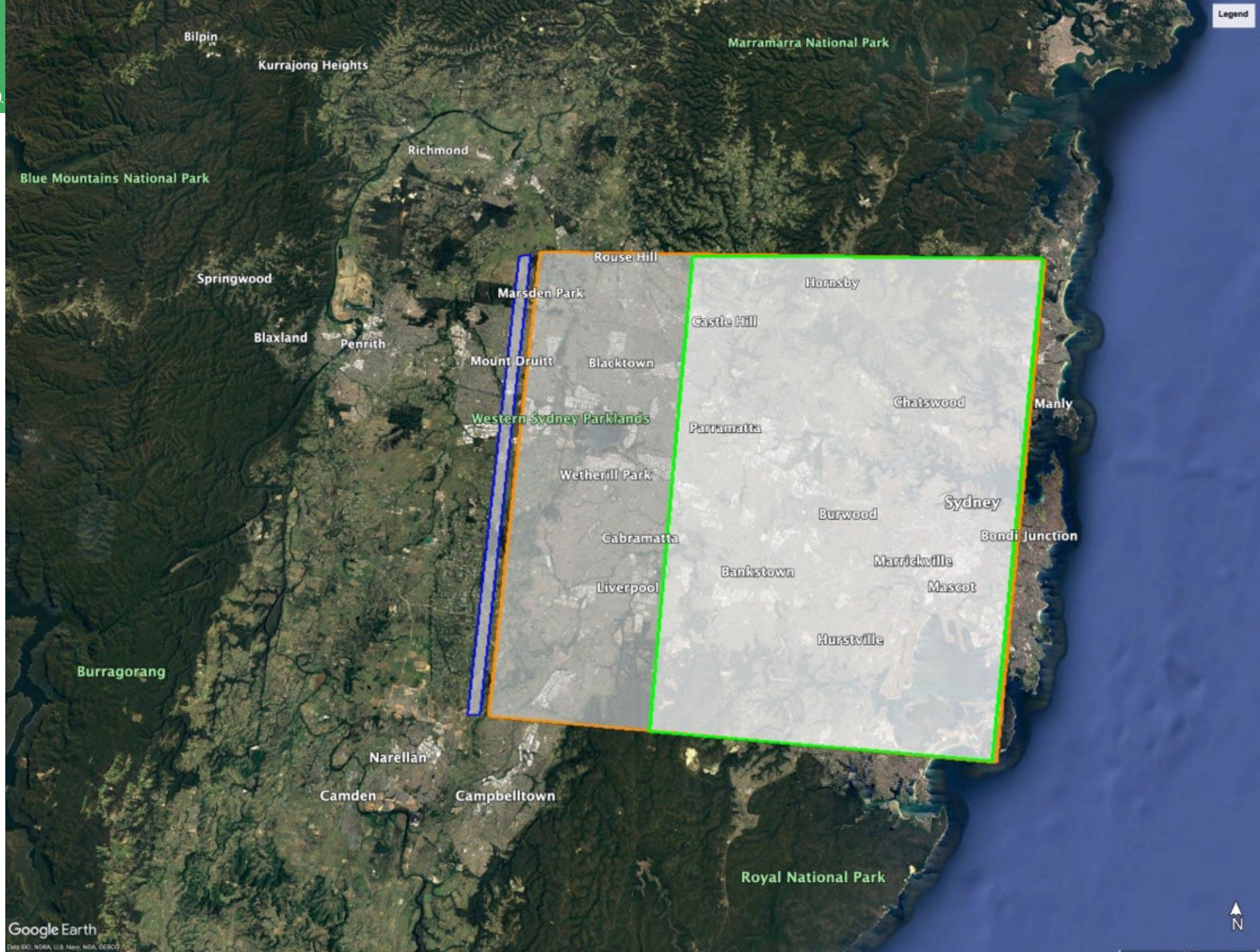
# Greater Sydney footprint

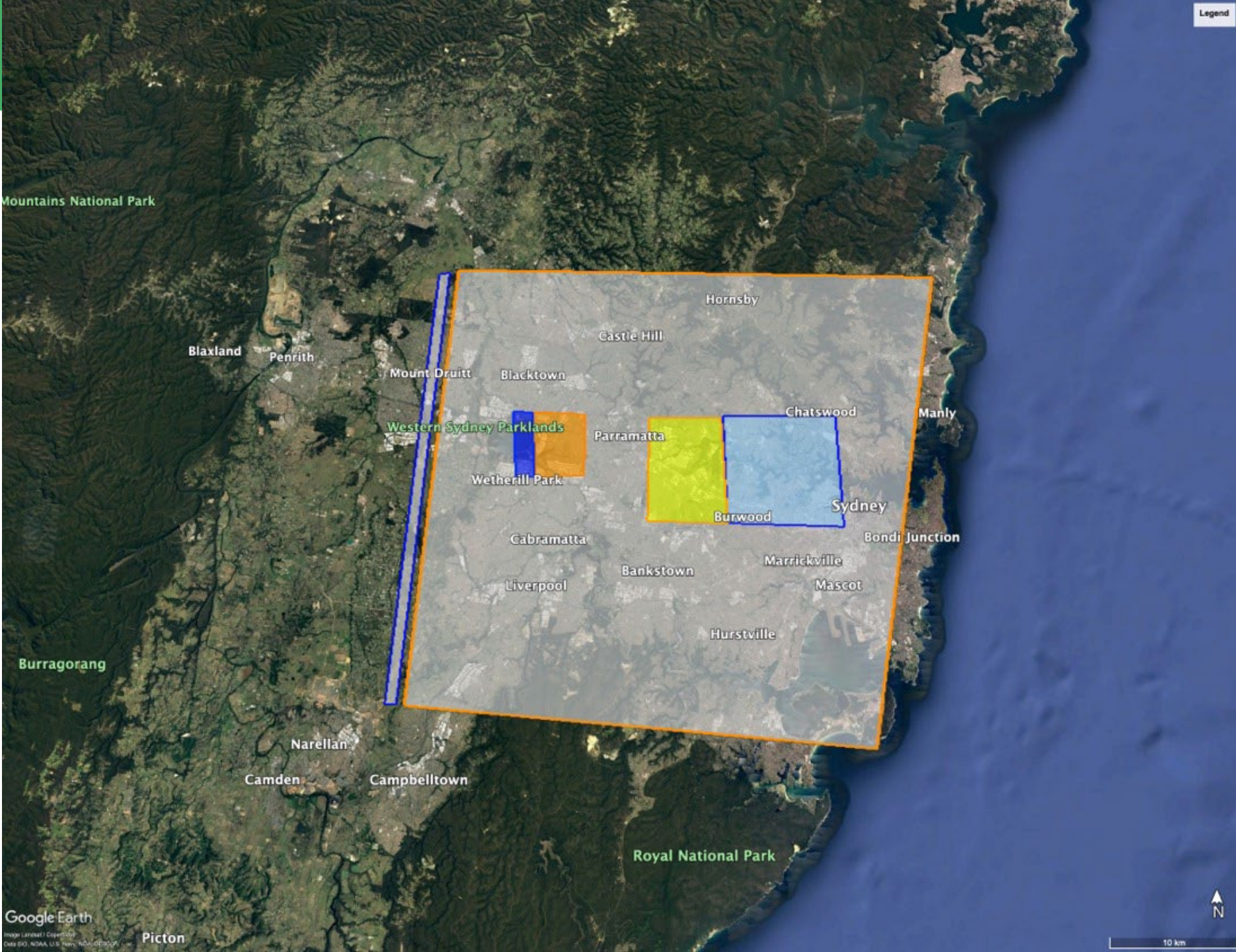


Legend



# Total clearing





Mountains National Park

Blaxland

Penrith

Mount Druitt

Blacktown

Castle Hill

Hornsby

Western Sydney Parklands

Parramatta

Chatswood

Manly

Wetherill Park

Cabramatta

Burwood

Sydney

Liverpool

Bankstown

Marrickville

Bondi Junction

Hurstville

Burratorang

Narellan

Camden

Campbelltown

Royal National Park



- Site works - \$2,500 per ha
- Seeding/establishment - \$2,500 per ha
- Maintenance (e.g. weeding) - \$1,200 per ha per year
- Say, 25 years – cost per ha - \$41,000 per ha.

# What would the funds buy you?

72

- Part V
  - 3222.5 ha cleared (8989.83 acquisition)
  - Restored 992.30
  - Net loss – 2,230 ha
  - Funds - \$4,858,200
  - Ha restored – 118.5
  - Residual loss – 2111.5 ha

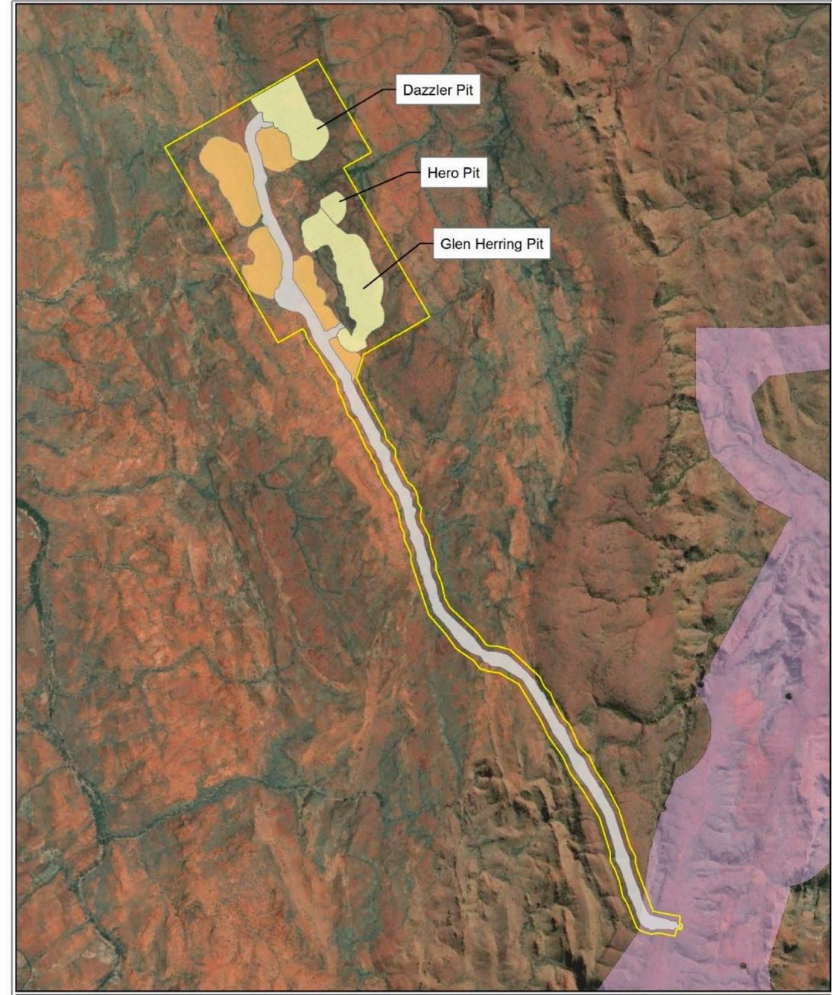
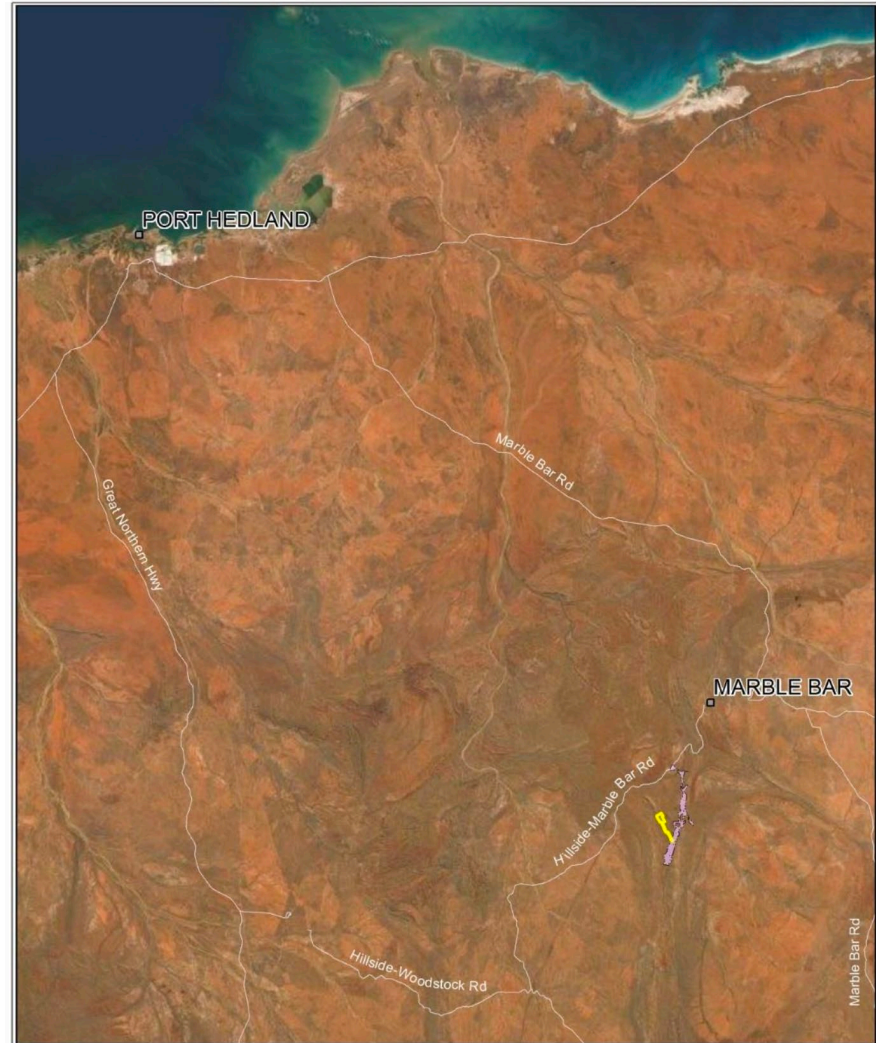


- Part IV

- 154,097.24 ha maximum cleared (5746.50 acquisition)
  - Restored - 2331.77
  - Net loss – 151,765.47 ha
  - Funds maximum - \$129,278.702.00
  - Ha restored – 3,153.14
  - Residual loss – 148,612.33 ha
- Total restored Part IV and V – 3,271.74 vs 157,319.74
  - Loss significantly undervalued



# Case studies



<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li><span style="border: 1px solid yellow; display: inline-block; width: 15px; height: 10px;"></span> Development Envelope</li> <li><span style="border: 1px solid gray; display: inline-block; width: 15px; height: 10px;"></span> Haul Road</li> <li><span style="background-color: yellow; display: inline-block; width: 15px; height: 10px;"></span> Pit</li> <li><span style="background-color: orange; display: inline-block; width: 15px; height: 10px;"></span> Waste Dump</li> <li><span style="background-color: purple; display: inline-block; width: 15px; height: 10px;"></span> Corunna Downs Project (MS 1125)</li> </ul>	<p><b>SOURCE DATA</b>                  Proponent: Atlas Iron Pty Ltd                  Basemap: ESRI</p> <p><b>DWER GIS Section</b>                  Date: 11/10/2021, Map Version: 1                  File No: DWERD1506185</p>	<p>Coordinate system: GDA 1994 MGA Zone 50                  Scale: 1:27,000 at A4</p>	<p><b>LOCALITY MAP</b></p>
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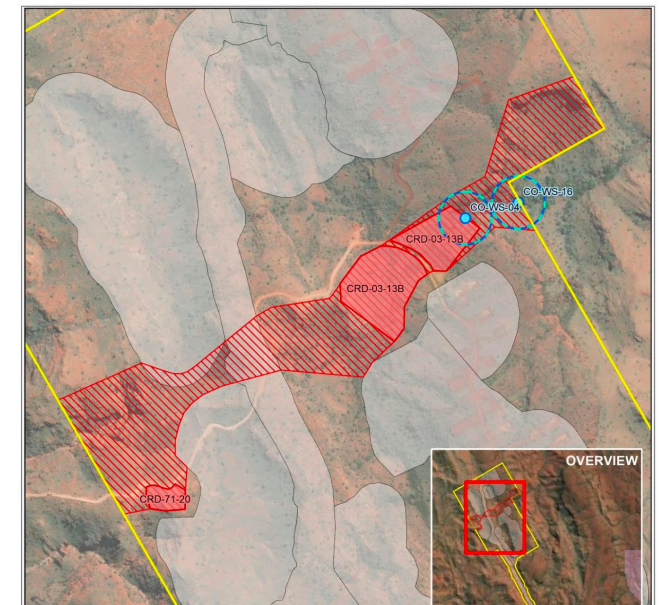
Figure 2: Development envelope and indicative footprint

- Flora and vegetation
  - clearing of 125 ha of native vegetation within a 246 ha development envelope
  - impacts to potential groundwater dependent ecosystems
  - degradation or alteration of vegetation through altered surface water flows
  - no TECs, PECs, critical vegetation types or high priority flora
- “The EPA notes that there is a significant residual impact from clearing 125 ha of ‘Excellent’ condition vegetation within the Chichester IBRA subregion. A total of 548.1 ha of ‘Good’ to ‘Excellent’ condition vegetation will be cleared as a result of the Corunna Downs and Sanjiv Ridge Stage 2 proposals. The cumulative impacts from clearing vegetation in the Chichester IBRA subregion for these proposals would constitute a significant residual impact.”
- “The EPA considers that the environmental outcome is likely to be consistent with the EPA objective for flora and vegetation provided there is a limit on the extent of clearing (recommended condition 1) and an offset is implemented (recommended condition 5)”

- Terrestrial fauna (key impact as an example)
  - potential impacts to several ghost bat roosts including caves defined as critical habitat
  - cave CO-CA-34 potential to be directly impacted due to its proximity (10 m) to the indicative footprint
  - potential indirect impact to ghost bat and Pilbara leaf-nosed bat roosting in certain caves – from noise, vibration, dust and lighting
- Proponent avoidance
  - avoidance buffers surrounding key caves and pools
  - avoid structural damage to caves through blasting design and vibration limits
- “The EPA consider that the significant residual impact from habitat loss can be regulated through recommended conditions and counterbalanced by offsets to ensure the environmental outcome is likely to be consistent with the EPA’s objective for terrestrial fauna.”



<https://www.kj.org.au/news/keeping-an-ear-out-for-the-pilbara-leaf-nosed-bat>



- Social surroundings – potential impacts
  - impacts to sites of cultural heritage (CRD-03-13B and CRD-71-20) through land disturbance and clearing activities
  - indirect impacts to culturally significant areas within and surrounding the development envelope as a result of hydrological regimes, visual impact, dust, noise and vibrations
  - impacts on pastoral activities
  - indirect impacts to the culturally significant Coongan river (9 km away from development envelope).
- Avoidance
  - avoidance buffers around cultural heritage sites CRD-03-13B and CRD-71-20
  - implementation of the MEZ which encompasses both cultural heritage sites.
- “The EPA has concluded that there is no direct impact to known cultural heritage sites by the implementation of the proposal.”
- “The EPA advises that the residual impact to cultural heritage sites should be subject to the implementation condition 1 (MEZ) and condition 4 ‘Cultural Heritage’ to ensure protection of the identified sites, to ensure the environmental outcome is likely to be consistent with the EPA’s objective for social surroundings”

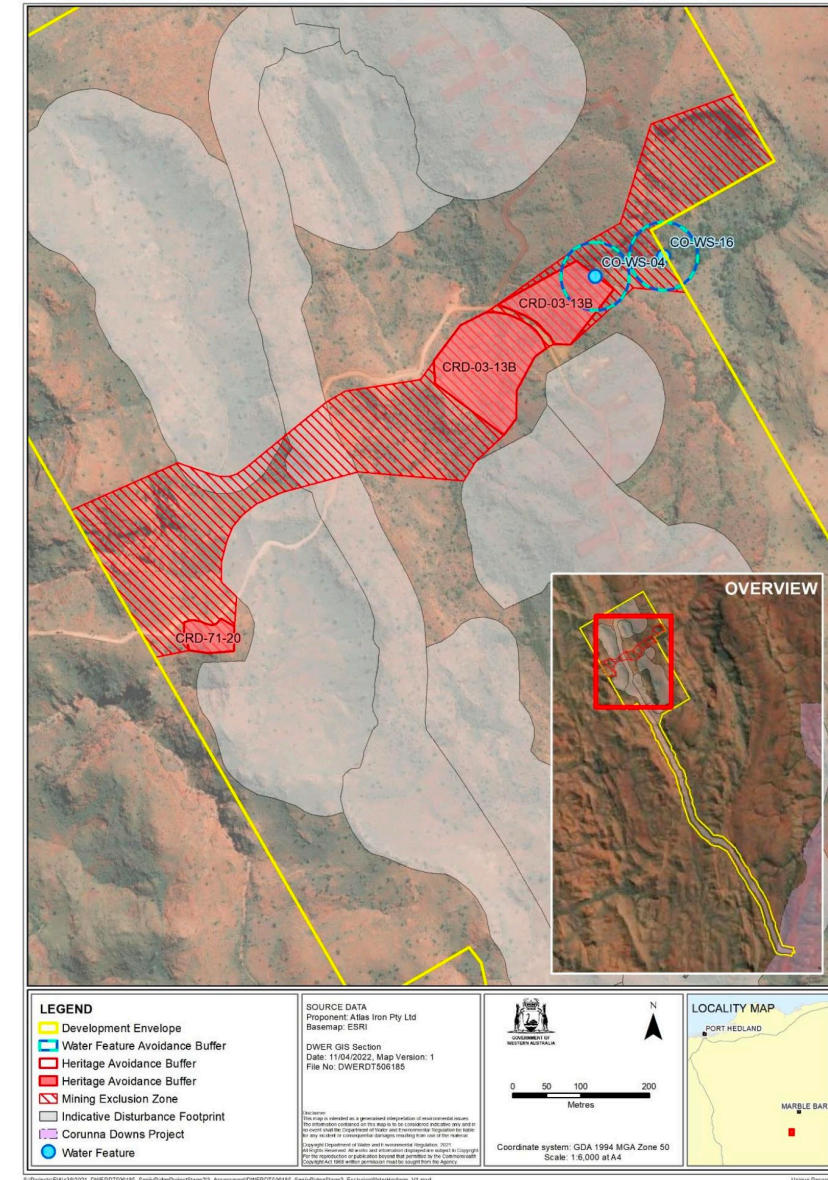


Figure 3: Mine Exclusion Zone (within the development envelope)

- “The EPA recommends that the following offset rates (calculated on the 2020-2021 financial year) should apply in the form of a contribution to:
  - \$794 per hectare of ‘Good’ to ‘Excellent’ condition native vegetation within the Chichester IBRA subregion.
  - \$1,587 per hectare of critical habitat, foraging and dispersal habitat for the northern quoll, ghost bat, Pilbara olive python and Pilbara leaf-nosed bat.”

- “Approval of the mining proposal and mine closure plan by the DMIRS under the Mining Act 1978 which considers and includes the following items:
  - Decommissioning and rehabilitation (Mine Closure) to be regulated by the DMIRS under the Mining Act 1978 to ensure that mining activities are rehabilitated and closed in a manner to make them physically safe to humans and fauna, geo-technically stable, geo-chemically non-polluting/non-contaminating and capable of sustaining an agreed post mining land use without unacceptable liability to the State.
- It is the EPA’s view that the above aspects of the proposal can be adequately regulated through the Mining Act 1978, rather than a condition under part IV of the EP Act.”



# Yalyalup Mineral Sands Project

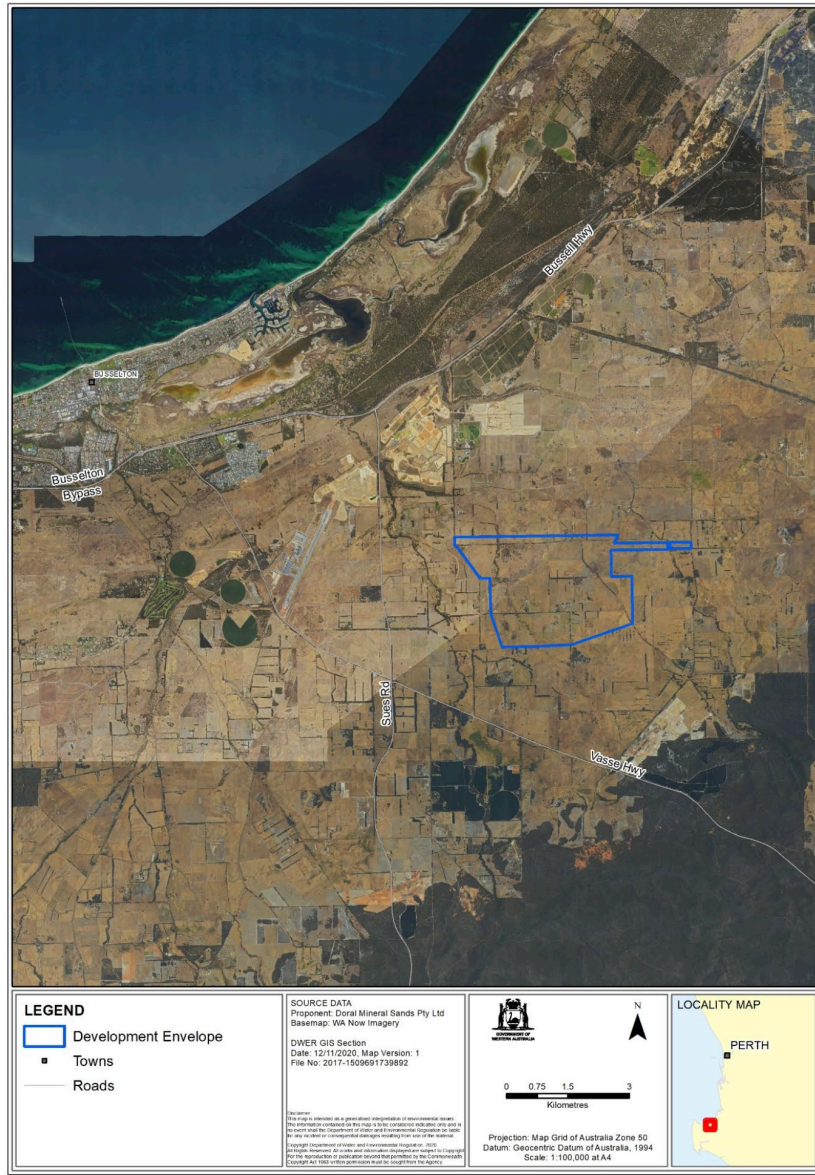


Figure 1: Regional location

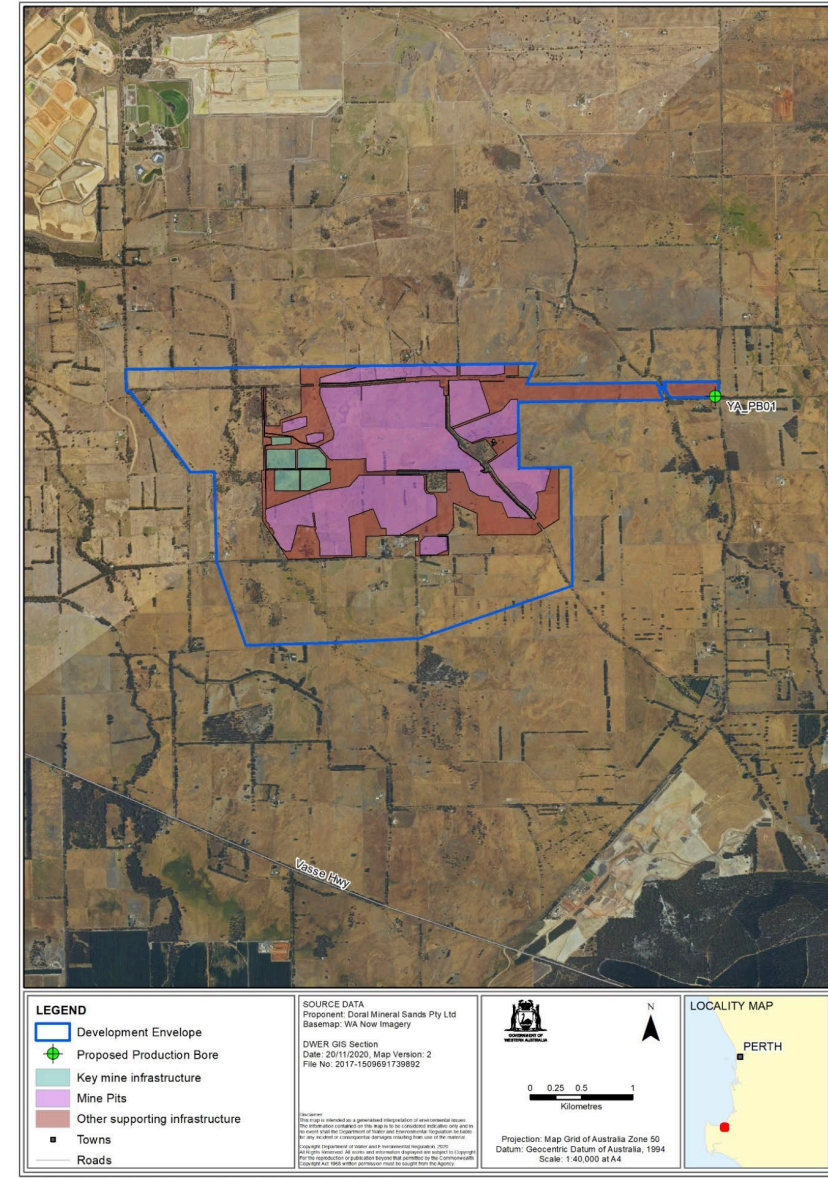


Figure 2: Development envelope and indicative disturbance footprint

- Potential impacts
  - direct clearing of 2.72 ha of native vegetation
  - dewatering activities lowering groundwater levels and impacting groundwater dependent ecosystems
  - dewatering activities lowering groundwater levels and exposing potential acid sulfate soils
  - construction of the bridge over the Abba River
  - introduction of weeds
  - dust generation
  - introduction of dieback.
- Mitigation
  - “reduced the direct impact on *Corymbia calophylla* woodlands on heavy soils of the southern Swan Coastal Plain from 0.17 ha to no clearing, and on Southern wet shrubland, Swan Coastal Plain from 0.63 ha to no clearing.”
- Offsets
  - “the EPA has concluded residual impacts are likely to be significant for the following values:
    - indirect impacts to 0.34 ha of the Shrublands on southern Swan Coastal Plain ironstones (Busselton area) TEC
    - indirect impacts to nine individuals of *Banksia squarrosa* subsp. *Argillacea* (threatened species).

- Offsets

- 11-1 The proposal shall limit proposal impacts to no more than
  - 0.34 ha indirect impact of Shrublands on southern Swan Coastal Plain ironstones (Busselton area) Threatened Ecological Community;
  - indirect impact of nine individuals of *Banksia squarrosa* subsp. *argillacea*; and
  - 1.78 ha direct impact of potential breeding and foraging habitat for forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and Carnaby's cockatoo (*Calyptorhynchus latirostris*)
- as a result of the implementation of the proposal, and undertake offsets set out in conditions 11-2 to 11-9 to achieve the objective of counterbalancing the significant residual impact on the abovementioned environmental values.
- “11-2 Prior to ground disturbing activities or clearing of vegetation and within six (6) months of the publication of this Statement, the proponent shall prepare and submit the Yalyalup Mineral Sands Project Land Acquisition Offset Strategy to the requirements of the CEO.
- demonstrate how the environmental values within the Proposed Offset Conservation Area counterbalances the significant residual impact to the environmental values identified in condition 11-1



# EP Act – Part V Division 2 – Native Vegetation Clearing



The clearing of native vegetation in Western Australia is regulated under Part V Division 2 of the EP Act and the following regulations and notices:

- *Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations)*
- *Environmental Protection (Environmentally Sensitive Areas) Notice 2005 (ESA Notice)*



## History and context

- 1890 - 50,000 ha
- 1900 - 490,000 ha
- 1910 – 2,100,000 ha
- 1950 – 6,800,000 ha
- 1980 – 14,900,000 ha



[https://slwa.wa.gov.au/wepon/land/assets/images/autogen/a\\_00359.jpg](https://slwa.wa.gov.au/wepon/land/assets/images/autogen/a_00359.jpg)

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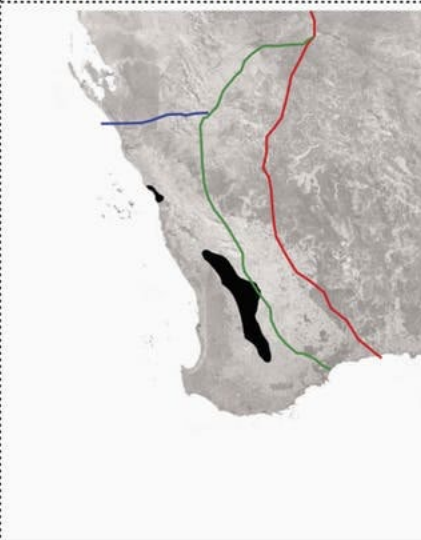
**1881**

New Norcia Mission and the Greenough Flats



**1901**

Rabbit proof fences built



**1921**

The first phase



**1931**

The Depression halts clearing



**1971**

The second phase



**PRESENT**











Northam Pittara Rd







# Vegetation loss in the Pilbara

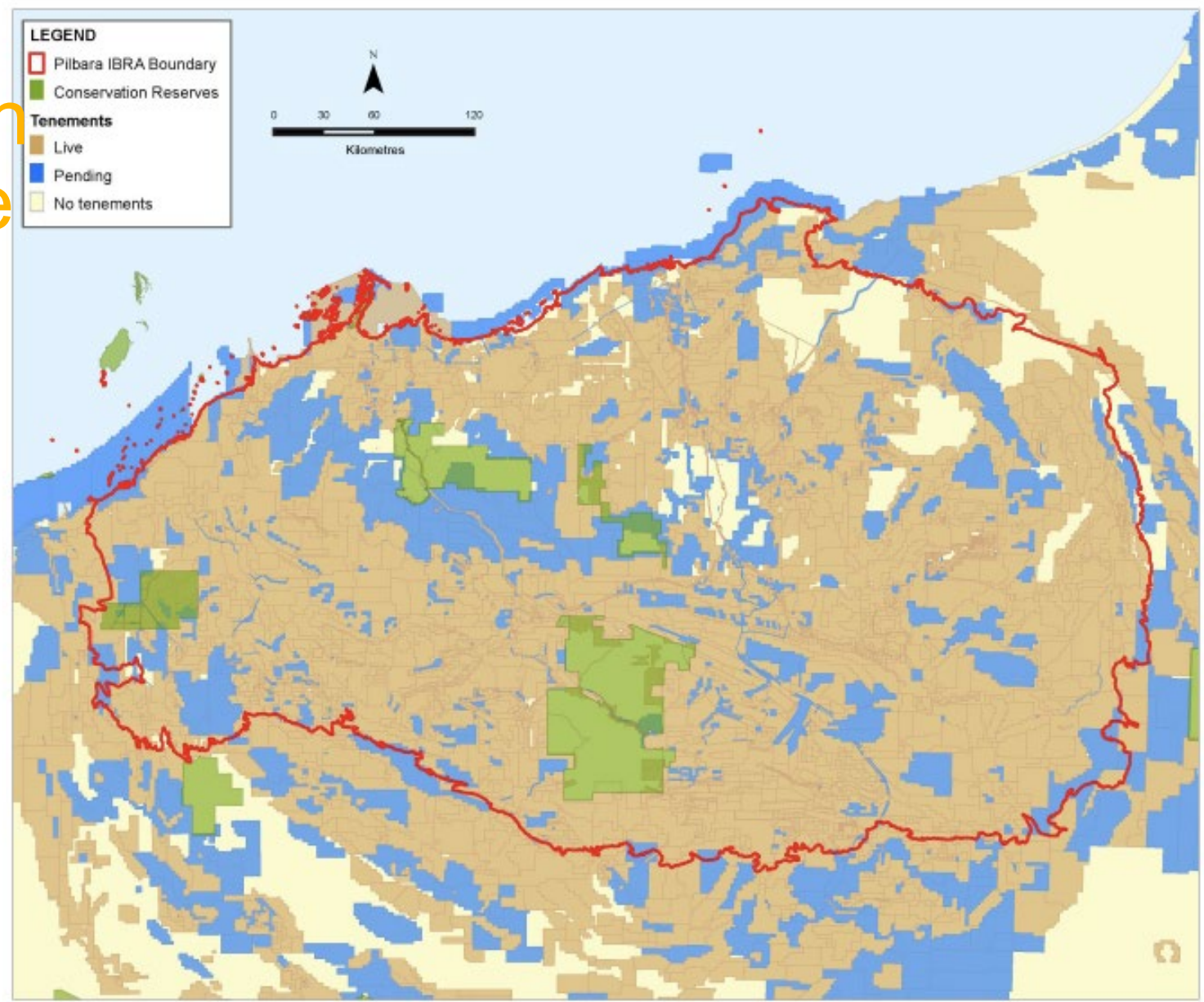
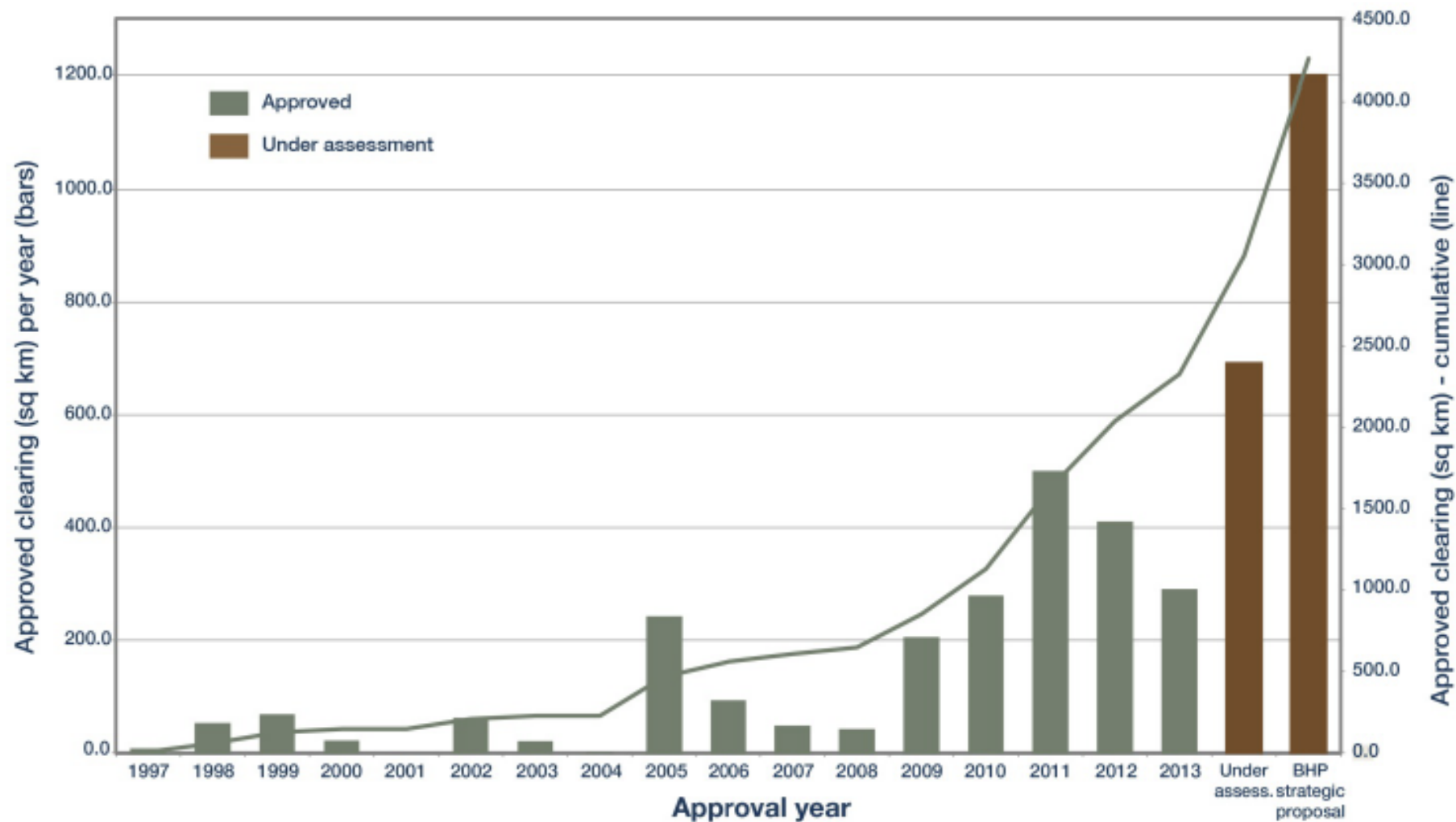


Figure 2: Mining tenements in the Pilbara



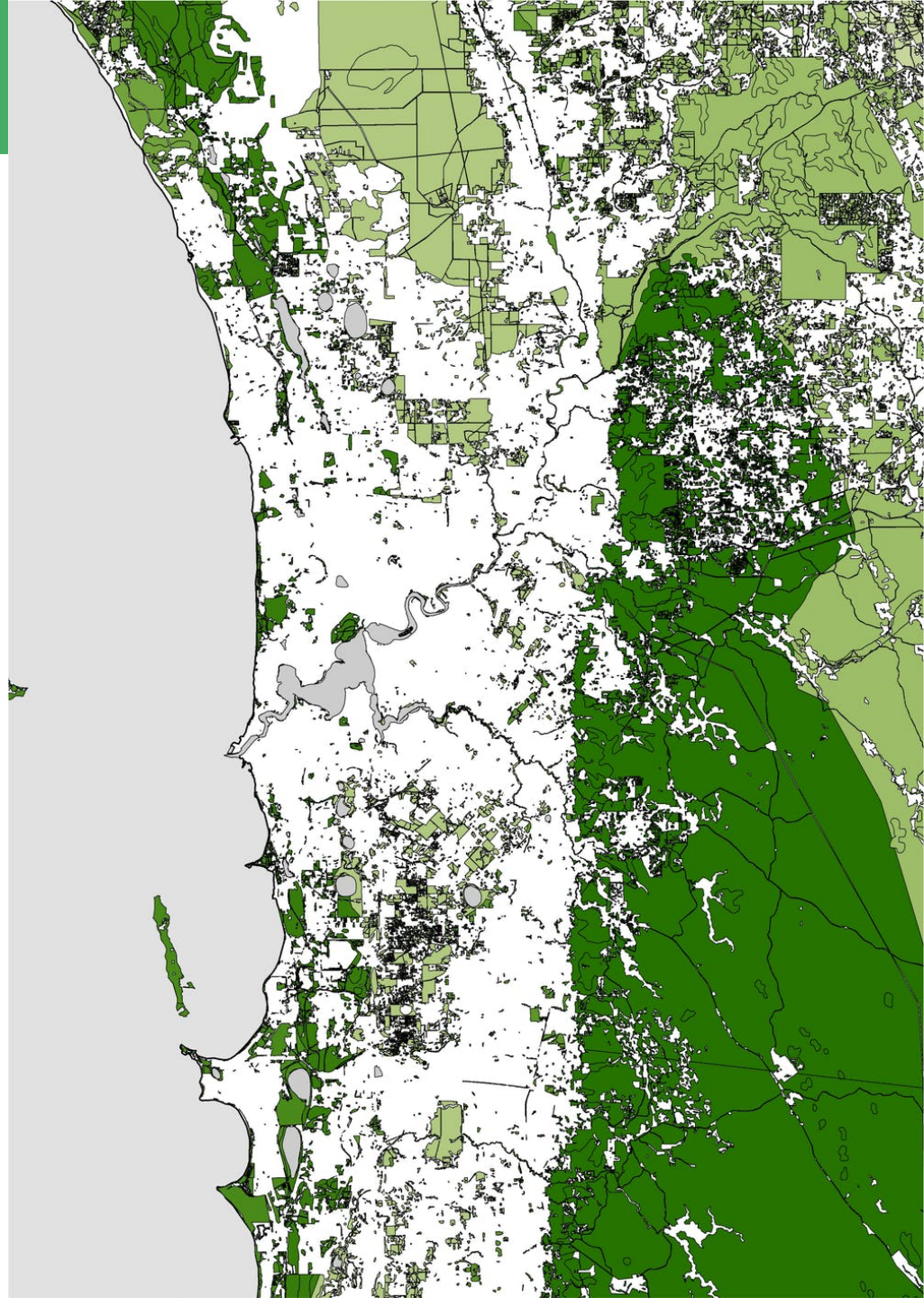


**Figure 4 Amount of native vegetation cleared in the Pilbara since 1997 (BHP Strategic Proposal is the estimated footprint over the next 50 years).**

# Cumulative vegetation loss on the Swan Coastal Plain – detailed look

- 71% of SCP vegetation cleared – urban, agriculture, forestry, mining

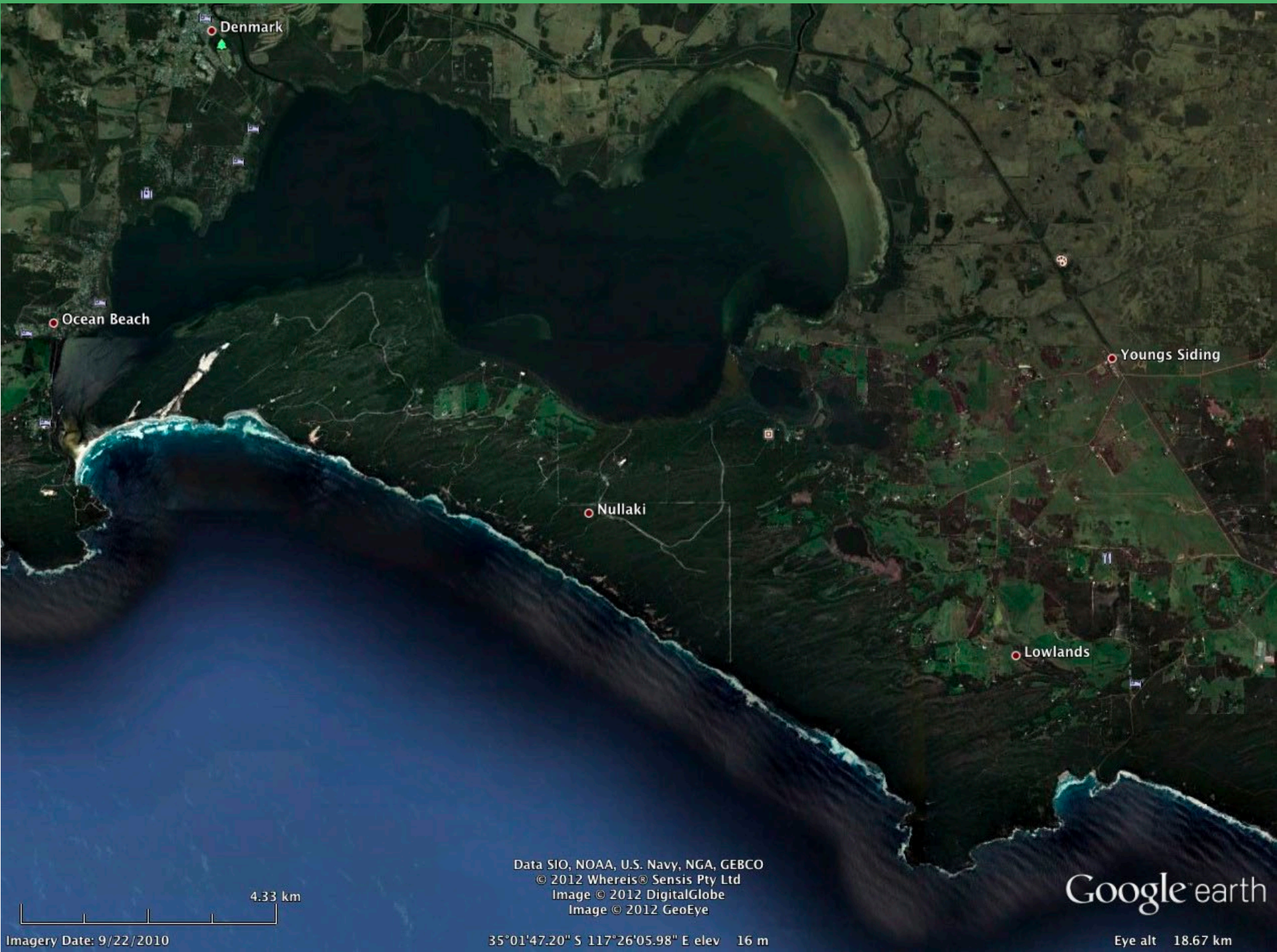
<https://images.theconversation.com/files/135865/original/image-20160830-28253-mw3m6i.jpg?ixlib=rb-1.1.0&q=45&auto=format&w=1000&fit=clip>





- Up until 2000s
  - Soil and Land Conservation Act and Soil Commissioner
  - Assessment by EPA
- Soil Commissioner
  - Only refuse if salinity a concern - not biodiversity
- EPA started assessing clearing proposals – over clearing – some LGs less than 10% left
- Between 1997 and 2003 the EPA assessed a 17 clearing proposals – all no's
- EPA assessments unsustainable – no compensation

- Clearing of access roads on the Nullaki Peninsula opposite the town of Denmark.



Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
© 2012 Whereis® Sensis Pty Ltd  
Image © 2012 DigitalGlobe  
Image © 2012 GeoEye

Google earth

Imagery Date: 9/22/2010

35°01'47.20" S 117°26'05.98" E elev 16 m

Eye alt 18.67 km

- Deemed by the EPA to have caused visual pollution therefore its illegal
- Supreme Court deemed that 'visual' is not to be pollution
- Legislation needed to be changed

‘Native vegetation’ means all types of indigenous vegetation, including:

- Those found in aquatic and marine environments
- Dead vegetation (unless declared by regulation to be excluded).

Native vegetation does not usually include vegetation that has been intentionally planted unless the planting was required by law, or the vegetation is protected under a conservation covenant or other binding agreement.

Clearing means causing substantial damage to native vegetation, including through:

- the killing or removing of native vegetation
- the severing or ringbarking of trunks or stems
- the draining or flooding of land
- the burning of vegetation
- the grazing of stock
- any other activity that kills or damages native vegetation.

It is unlawful for any person to cause or allow native vegetation to be cleared unless:

1. the clearing is in accordance with a clearing permit
2. the activity causing the clearing is exempt from the clearing laws:
  - As per Schedule 6 of the EP Act, which apply across WA
  - As per the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (“the Clearing Regulations”), which apply across WA except in environmentally sensitive areas.

- Following EPA assessment
- Taking of flora as authorised by or under a licence of the *Biodiversity Conservation Act 2016*



- A defined wetland and the area within 50 m of the wetland. Defined wetlands include Ramsar wetlands, conservation category wetlands and nationally important wetlands;
- The area covered by vegetation within 50 m of rare (threatened) flora, to the extent to which the vegetation is continuous with the vegetation in which the rare (threatened) flora is located;
- The area covered by a threatened ecological community

- Schedule 1 sets out exemptions for low impact or other mineral or petroleum activities
  - Clearing for 'low impact or other mineral activities'. Ex: temporary tracks, groundwater drilling
  - Driving vehicles off road
  - 4m wide raised blade clearing (with 100m distance between tracks)
  - Scrap and detect areas of 2 hectares per tenement
  - Clearing for camp sites and storage with a total area of 2 hectares per tenement
  - There is also an exemption that allows clearing of up to 10 hectares per financial year per authority area for clearing regulated under the *Mining Act 1978*
- Clearing for prospecting or exploration authorised under the Mining Act
- Construction of a water bore and taking water under a Licence granted under the Rights in Water and Irrigation Act 1914.

- Principle (a) – Native vegetation should not be cleared if it comprises a high level of **biological diversity**
- Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a **significant habitat for fauna indigenous** to Western Australia.
- Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, **rare flora**.
- Principle (d) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a **threatened ecological community (define later)**.
- Principle (e) – Native vegetation should not be cleared if it is significant as a **remnant of native vegetation** in an area that has been extensively cleared.

# 10 Clearing Principles - Schedule 5 EP Act – decision maker to 108

## have due regard



- Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a **watercourse or wetland**
- Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable **land degradation**.
- Principle (h) – Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the **environmental values** of any adjacent or nearby **conservation area**.
- Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause **deterioration in the quality of surface or underground water**
- Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the **incidence of flooding**.

- DWER considers most clearing applications
- DMIRS delegated to determine applications covered by
  - Mining Act 1978;
  - Petroleum and Geothermal Energy Resources Act 1967;
  - Petroleum Pipelines Act 1969;
  - Petroleum (Submerged Lands) Act 1982; and
  - Activities under state agreements
- Two broad types of referrals
  - Clearing considered to have very low environmental impacts (s51DA(4))
  - Clearing requiring a permit
- All non exempt clearing to be referred and DWER (DMIRS) determines type of referral

- Low impact clearing (no permit)
  - The area is relatively small compared to the total remaining in the region and of that ecological community;
  - There are no known or likely significant environmental values in the vegetation to be cleared;
  - The state of scientific knowledge of native vegetation within that region is adequate; and
  - Conditions are not needed to manage any environmental impacts
- Two types of Permit (Section 51E of the EP Act 1986):
  - Area permit (Form C1)
    - Clearing of defined areas specified in the permit
    - Generally approved for a default period of two years
  - Purpose permit (Form C2)
    - Clearing of different areas from time to time for a purpose specified in the permit
    - Generally approved for a default period of five years.

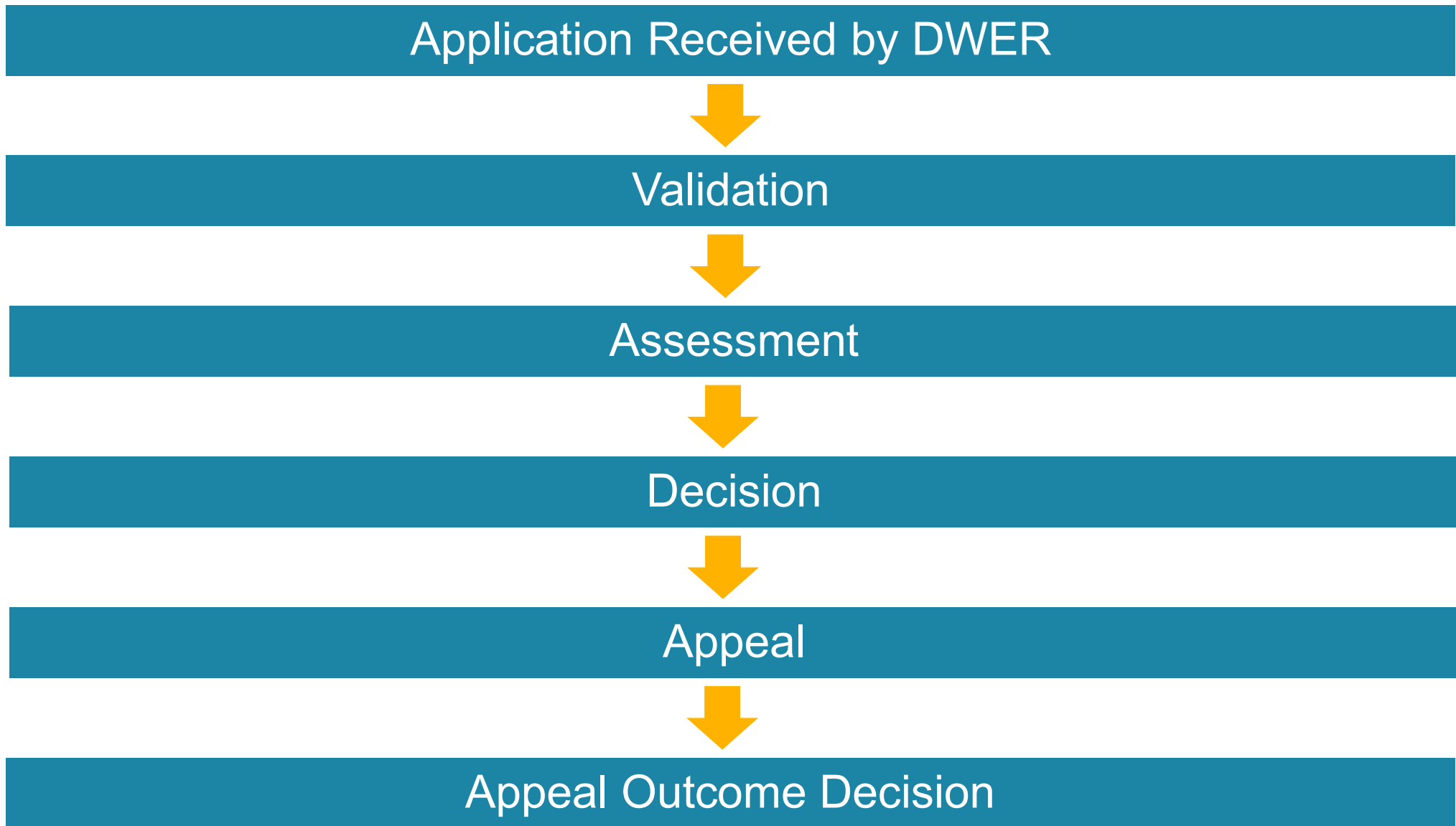
## Mining Act 1978

- DMIRS: delegated authority associated with mining related activities or associated with State Agreements
- Area or Purpose Permits
- Exemptions under Mining Act 1978
  - Clearing for 'exploration' = POW
  - Clearing for 'low impact or other mineral activities'. Ex: temporary tracks, groundwater drilling, clearing less than two hectares for camp sites
  - There is also an exemption that allows clearing of up to 10 hectares per financial year per authority area for clearing regulated under the Mining Act 1978

## Mining Act 1978

<b>Mineral tenure</b>	<b>Area permit</b>	<b>Purpose Permit</b>
General purpose lease	Applicable	Applicable
Mining lease	Applicable	Applicable
Prospecting licence	Not available	Applicable
Miscellaneous licence	Not available	Applicable
Exploration licence	Not available	Applicable
Retention licence	Not available	Applicable





## Risk-based assessment approach:

- Size
- Location
- Environmental values (see Clearing Principles) within or adjacent to the area
- Purpose of clearing
- Urgency of the application
- Public interest in the application.

# Granting a permit that is seriously at variance with the clearing principles

115

- Section 51O(3) allows the CEO
  - ... make a decision that is seriously at variance with the clearing principles if, and only if, in the CEO's opinion there is a good reason for doing so. That reason must be recorded under section 51Q
- No clear guidance
- In practice, a key reason has been safety
  - E.g. road widening and realignment to improve the safety of a section of a road used by heavy vehicles

- Includes

- Offences and penalties
- Mining and petroleum activities,
- Clearing on previously cleared lands,
- Grazing on pastoral leases,
- Clearing in water supply catchments,
- Clearing limited to 5 ha per year,
- How to apply for a permit,
- Offsets,
- Purpose permits,
- Clearing under State Agreements,
- Risk based assessment of permit applications,
- Environmentally sensitive areas, and
- Clearing processes under the assessment bilateral agreement

# State Government Native Vegetation policy



## Policy outcomes

In implementing this policy, the State Government seeks to achieve the following native vegetation outcomes:

### Outcome 1

Enable all sectors to contribute to a **net gain** and **landscape-scale** conservation and restoration.

✓  
Conserve biodiversity

✓  
Sequester carbon

✓  
Build the restoration economy and create jobs

### Outcome 2

Business certainty through regulatory clarity, efficiency and coordination.



See also **Appendix 1: Exploring net gain and landscape-scale conservation** on page 17, which includes definitions of relevant terms and explores how they will be achieved and measured for a given part of the state.

### Outcome 3

Strong, accessible evidence-base for policy-making, decisions and transparency.



**Net gain:** For this policy, net gain means that improvements in the extent and/or condition of native vegetation exceed the losses – at *landscape-scale*. It takes into account the sum total of stakeholder actions that influence it, whether these are regulated, voluntary or otherwise. This policy does not introduce net gain as a required outcome at the scale of individual proposals.

**Landscape-scale:** A scale that permits understanding and management of ecological processes across space, jurisdiction and time, with a focus on ecological corridors, resilience, connectivity and global change (including climate change).



## Native vegetation policy

for Western Australia

May 2022

A decorative horizontal bar at the top of the slide features a green background with white silhouettes of mining-related elements: a drone, a mountain range, three trucks, a worker with a shovel, a truck, a worker with a shovel, a truck, a worker with a shovel, a mountain range, three trucks, a worker with a shovel, and a truck.

## Case study - BHP Nickel West Pty Ltd



# EP Act Part V Division 3 — Prescribed premises, works approvals and licences

- Industrial premises with potential to cause emissions and discharges to air, land or water are known as ‘prescribed premises’, and trigger the need for control and management under the EP Act
- The list of prescribed premises categories are set out in Schedule 1 of the *Environmental Protection Regulations 1987* (Regs).
- Emissions are defined in the EP Act as discharge of waste, emission of noise, odour and electromagnetic radiation (s3).
- Waste includes solid, liquid, gaseous or radioactive which are discharged into the environment.
- Provides for the regulation of prescribed premises to control emissions to an ‘authorised level’.
- DWER is the assessing and approval agency



- A statutory Works Approval is required for the construction of a prescribe premises, which relates specifically to infrastructure that could cause an emission, and control or authorise emissions and discharges that occur during construction and commissioning;
- For prescribed premises listed in Part 1 of Schedule 1 of the Regs, a licence is required for the operation of a prescribed premise, which will control or authorises emissions and discharges during operations to protect the environment or public health
- Closure notice for a premise in certain circumstances where the premises requires ongoing investigation, monitoring or management to ensure environmental harm is not caused.
- Non statutory –
  - Prescribed premises listed in Part 2 of Schedule 1 of the Regs can apply to be registered instead of licenced once works approval has been granted.
  - Generally have a lower risk of causing environmental harm compared to those under Part 1
  - Not prescribed premises
- Occupiers of prescribed premises are required to submit annual reports on compliance with their licence conditions through an Annual Audit Compliance Report (AACR)

## Environmental Protection Regulations 1987

## Prescribed premises Schedule 1

Category number	Description of category	Production or design capacity
5	Processing or beneficiation of metallic or non-metallic ore: premises on which — (a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed;  (b) tailings from metallic or non-metallic ore are reprocessed; or (c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	50 000 tonnes or more per year
6	Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	50 000 tonnes or more per year
7	Vat or in situ leaching of metal: premises on which metal is extracted from ore with a chemical solution.	5 000 tonnes or more per year
8	Mineral sands mining or processing: premises on which mineral sands ore is mined, screened, separated or otherwise processed.	5 000 tonnes or more per year
9	Coal mining: premises on which — (a) water is extracted and discharged into the environment to allow coal mining; or (b) coal mining or processing occurs and tailings are discharged.	5 000 tonnes or more per year
10	Oil or gas production from wells: premises, whether on land or offshore, on which crude oil, natural gas or condensate is extracted from below the surface of the land or the seabed, as the case requires, and is treated or separated to produce stabilized crude oil, purified natural gas or liquefied hydrocarbon gases.	5 000 tonnes or more per year
11	Oil or gas production (other): premises (other than premises within category 10) on which the commercial production of oil or gas occurs (including the reforming of hydrocarbon gas).	5 000 tonnes or more per year

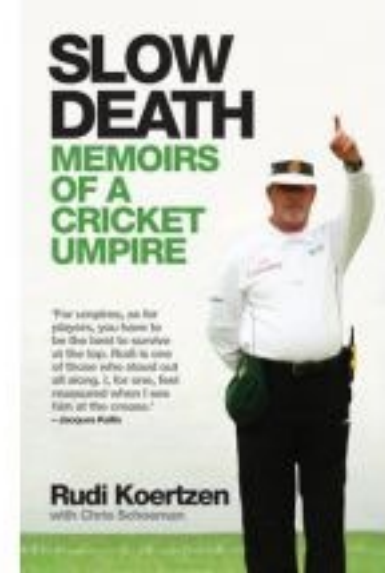
- Applications for new licences or works approval are advertised on DWER's website and in the West
- Public submissions are accepted on these applications.
- Any approved licences or works approval are published on the website along with a report explaining DWER's assessment of the proposal and the conditions that are to apply. The report also explains how it has considered any public submissions.

- Clean Air (Determination of Air Impurities in Gases Discharged to the Atmosphere) Regulations 1983
- Environmental Protection (Abattoirs) Regulations 2001
- Environmental Protection (Abrasive Blasting) Regulations 1998
- Environmental Protection (Clearing of Native Vegetation) Regulations 2004
- Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998
- Environmental Protection (Controlled Waste) Regulations 2004
- Environmental Protection (Domestic Solid Fuel Burning Appliances and Firewood Supply) Regulations 1998
- Environmental Protection (Fibre Reinforced Plastics) Regulations 1998
- Environmental Protection Goldfields Residential Areas Sulfur Dioxide Policy and Regulations 2003
- Environmental Protection (Kwinana) (Atmospheric Wastes) Regulations 1992
- Environmental Protection (Metal Coating) Regulations 2001
- Environmental Protection (NEPM-NPI) Regulations 1998
- Environmental Protection (Noise) Regulations 1997
- Environmental Protection (Packaged Fertiliser) Regulations 2010
- Environmental Protection (Petrol) Regulations 1999
- Environmental Protection (Recovery of Vapours from the Transfer of Organic Liquids) Regulations 1995
- Environmental Protection (Rural Landfill) Regulations 2002
- Environmental Protection (Unauthorised Discharges) Regulations 2004
- Noise Abatement (Noise Labelling of Equipment) Regulations (No. 2) 1985

A decorative horizontal bar at the top of the slide features a green background with white silhouettes of mining-related elements: a drone, a truck, workers, and various mountain shapes.

## Case study - Yalyalup Mineral Sands Mine

# Appeals



- Not SAT
- Appeals to Appeals Convenor
- Appeals Convenor advises the Minister for Environment
- Minister decides unless the appeal is against the Minister's decision
- Appeal against a Minister's decision
  - Appeals Committee to be set up
  - Decision of Appeals Committee final – no role for Minister
- EPA or DWER provides advice on appeal – a 'right of reply'

- EPA decision to not assess
  - Appeals – third party appeals allowed
  - Not assessed and managed by DWER clearing process (see later) if clearing the only factor – can't be appealed
- EPA decision to assess
  - No appealable
- EPA report
  - Appeals – third party appeals allowed
- Minister's final decision and any conditions and procedures
  - Only the proponent can appeal
  - Appeals committee
- Appeals must be received within 21 days of being published.
- A fee of \$10 applies to all appeals relating to EPA assessments



- Dismiss the appeals;
- Uphold in part or in full and change the EPA recommendation and any associated condition or procedure; or
- Refer it back to the EPA requiring a full or partial re-assessment related to the matters raised in the appeal.

- Clearing

- Appeals against grant or conditions of a clearing permit, the amendment, revocation or suspension of a clearing permit, or the refusal to grant a clearing permit
- Can't appeal anything not related to an amendment
- Appeals must be received within 21 days of being published.
- No fee applies
- Minister for Environment determines the appeals on advice of the Appeals Convenor and DWER

- Licences works approval
  - Appeals against
    - The conditions of a works approval or licence
    - An amendment to a works approval or licence
    - Refusal to grant or transfer a works approval or licence
    - Revocation or suspension of a works approval or licence
  - Can't appeal
    - The decision to grant a works approval or licence
    - Where a works approval or licence is amended, anything not connected with that amendment
    - The duration or boundaries of the works approval or licence, unless these are amended
  - Appeals must be received within 21 days of being published.
  - A fee of \$50 applies to all appeals relating to EPA assessments
  - Minister for Environment determines the appeals on advice of the Appeals Convenor and DWER
- Appeals can be lodged against approvals and exemption under the Noise Regulations

- Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
- Covers six main areas
  - Conservation of Australia's biodiversity;
  - Protection matters of national environmental significance (MNES);
  - International obligations
    - controlling the international movement of wildlife
    - world and national heritage;
  - EIA and approvals process where matters of national environmental significance are involved
  - Promote ecologically sustainable development; and
  - Important role of Indigenous peoples – e.g. local knowledge

- Defines “actions” which include a project, a development, and undertaking and activities or a series of activities
- Actions should be referred and are likely to be assessed when there is a potential to have a significant impact on any MNES:
  - World Heritage Properties
  - National Heritage Places
  - Wetlands of International Importance
  - Commonwealth Marine Areas
  - Migratory Species
  - Nationally Threatened Species and Ecological Communities
  - Great Barrier Reef Marine Park
  - Nuclear Actions
  - Water Resource, in relation to coal seam gas and large coal mining development
- No climate trigger (yet?)



# Ecological community



- Threatened ecological communities (TECs)
- An extremely high risk of extinction in the immediate future;
- WA examples
  - Shrublands and Woodlands of the eastern Swan Coastal Plain
  - Sedgeland in Holocene dune swales of the southern Swan Coastal Plain
  - Banksia woodlands just listed
  - Most in SW of WA

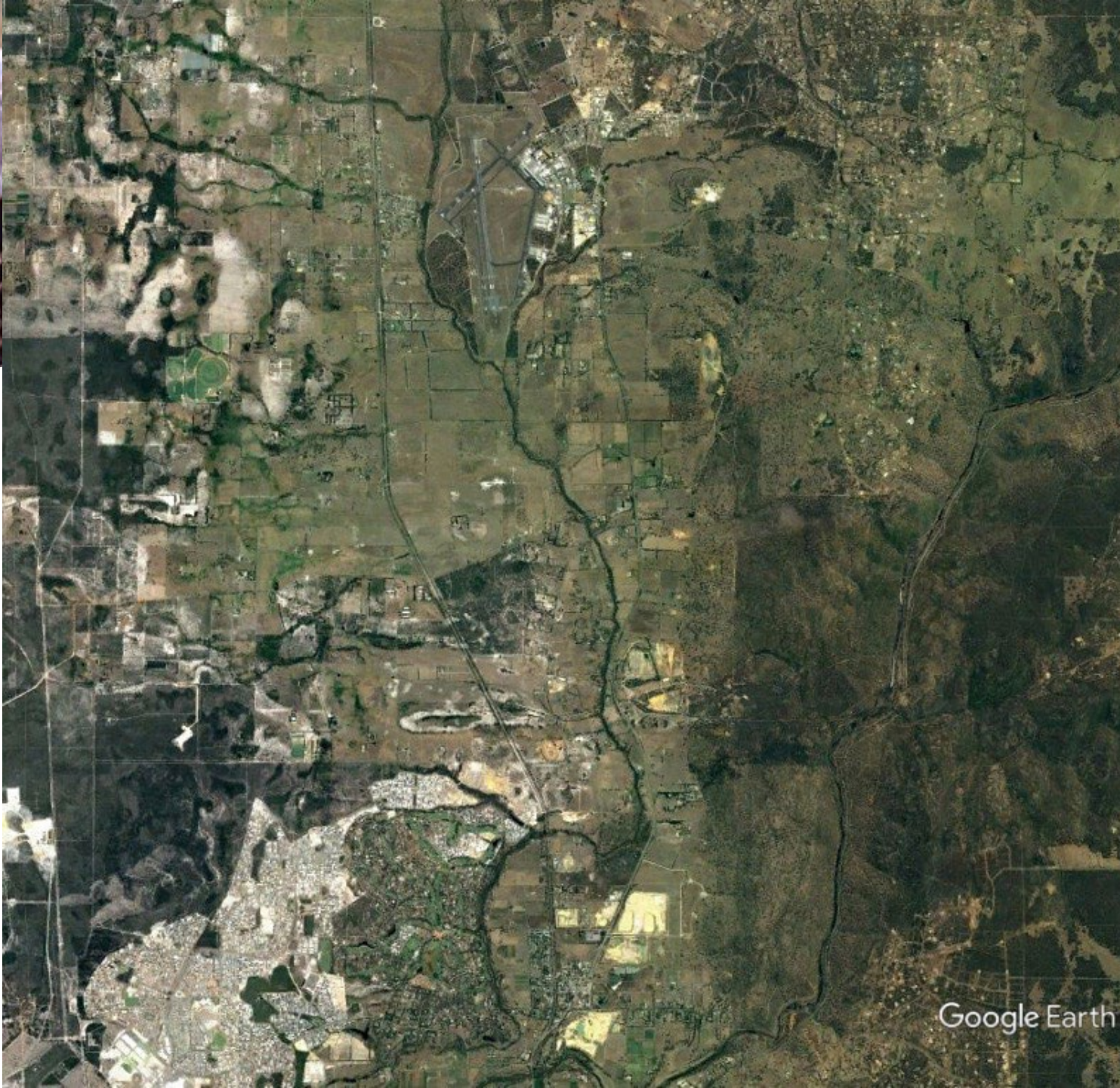
# Threatened species

136

- Western swamp tortoise;
- Carnaby's cockatoo
- Gilbert's Potoroo



Photo: Arthur Georges



Google Earth





[http://www.blackwoodbasingroup.com.au/wp-content/uploads/2015/06/Resized\\_cockatoo.jpg](http://www.blackwoodbasingroup.com.au/wp-content/uploads/2015/06/Resized_cockatoo.jpg)



<http://www.abc.net.au/news/image/6992266-3x2-700x467.jpg>

A decorative header at the top of the slide features a green background with white silhouettes of mining-related activities: a drone, a truck, workers, and various mining equipment.

## Comparing WA and Commonwealth EIAs

- **WA**
  - Proposal and schemes
  - Referral is proposal likely to have significant impact on environment
- **EPBC Act**
  - Actions – ‘controlled actions’ if assessed
  - Referral is action likely to have a significant impact on a MNES
  - Other referrals
    - Commonwealth land, and
    - Commonwealth agencies are proposing to take an action

- WA
- EPA

- EPBC Act
- Minister for environment

- **WA**
- Proponent
- DMA
- Third party referrals
- EPA can call in
- Minister can refer

- **EPBA Act**
- Proponent
- Third party referrals
- Minister can call in

- **WA**
- EPA decides
  - Could have a significant effect on environment
- **EPBC Act**
- Minister determines if action is a “controlled action”
  - Could have significant impact on MNES



- **WA**
- EPA
- Advice to Minister
- **EPBC Act**
- Department of Climate Change, Energy, the Environment and Water(DCCEEW)
- Advices Minister for Environment (one exception)
- Cannot over-ride State decision
- Can decide differently than State EIA

- **WA**
- Assessment on referral documentation only – no public review
- Assessment on referral documentation and additional information – can be targeted public review
- Referral Information (with or without additional information) with public review
- ERD required (referral document inadequate) – no public review
- Public Environmental Review - (referral document inadequate) – full public review

- **EPBC Act**
- Accredited - State EIA or other
- Assessment of referral documentation only – public process
- Assessment of referral documentation plus other published information only – public process
- EIS required (public environmental review)
- Public inquiry (commissioners appointed)

- **WA**
- EPA approves

- **EPBC Act**
- Minister approves

- **WA**
  - Minister for Environment
  - Report default position – but Minister can decide different from EPA report and any appeals
- **EPBC Act**
  - Minister for Environment
  - Report informs the Minister not ‘default’ position

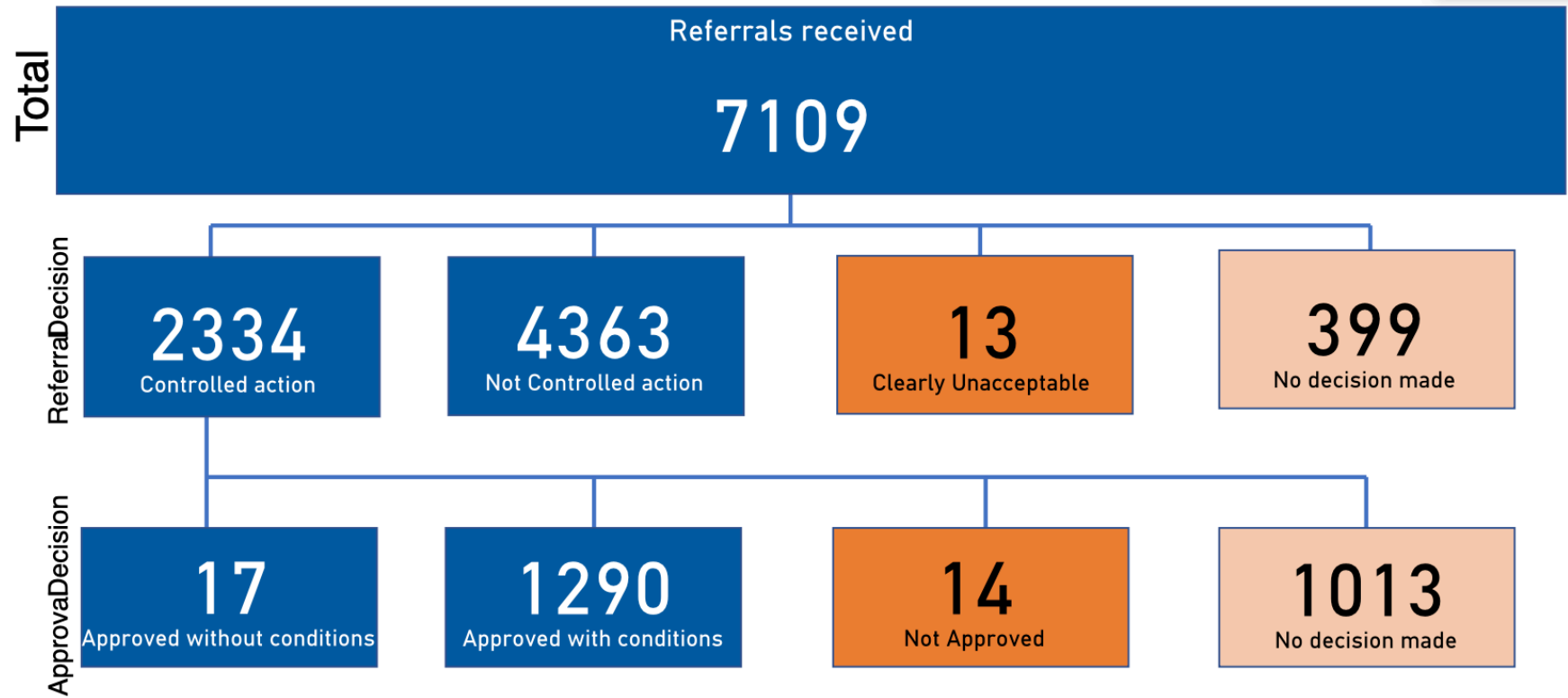
- **WA**
  - Appeals convener
  - Ministers decides
  - Not assess decision
  - EPA Report
- **EPBC Act**
  - Limited
    - Not on Minister's decisions
    - Only where he delegates
    - To Administrative Appeals Tribunal

- The Australian Government has bilateral agreements with all state and territory governments to accredit EIA processes that meet set standards.
- State assessing agency provides report to Minister
- Commonwealth Minister still gives approval
  - One assessment process but two approvals
- No example of delegation of decision making yet

# Referral data

Outcomes of all referrals received under the EPBC Act from July 2000 to 31 March 2023

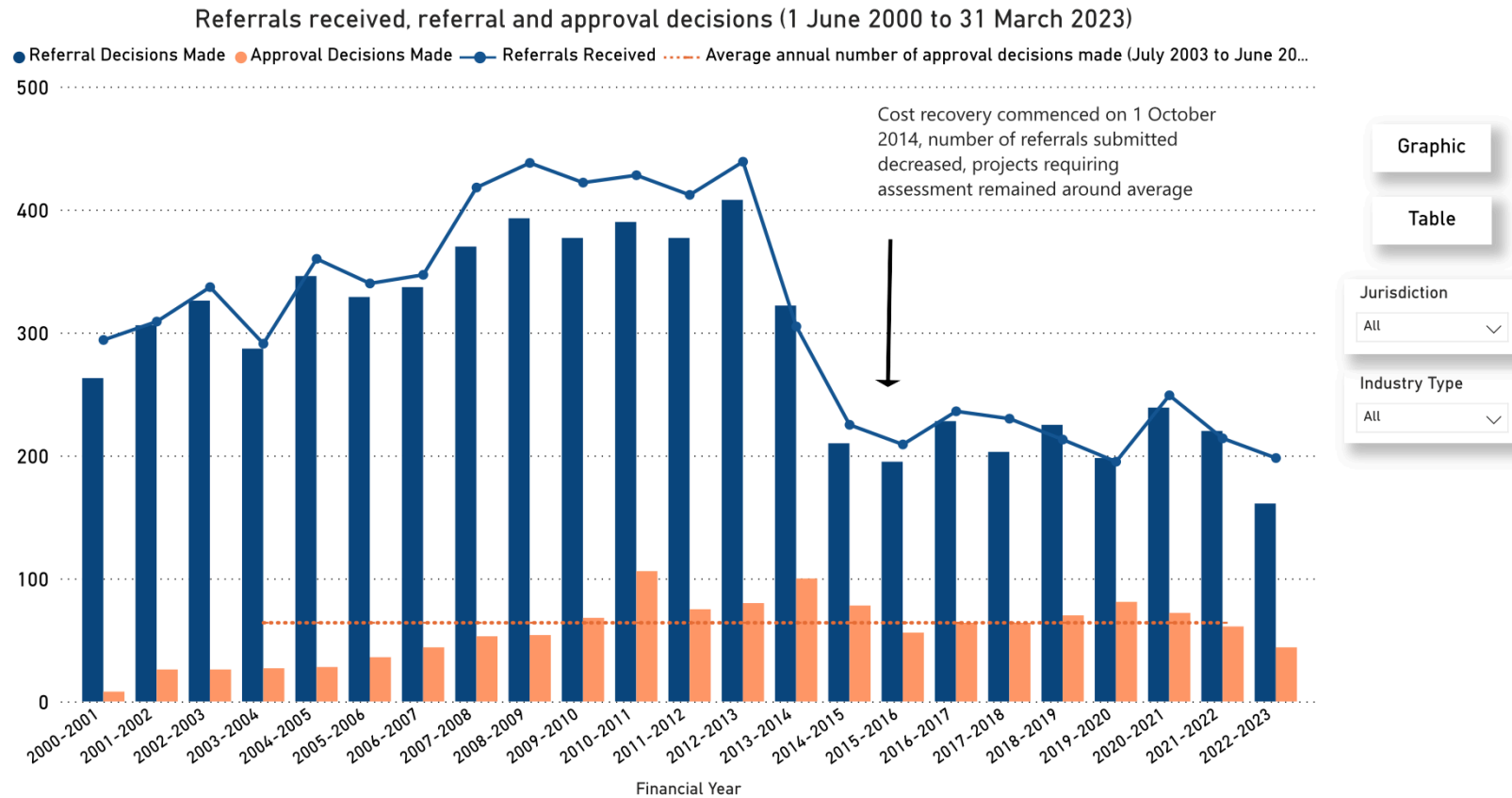
Financial Year  
 2022-2023



The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* came into force on 16 July 2000. This chart represents the outcome of all 68 referrals submitted since then to 31 March 2023. 'No decision made' includes projects that at the reporting date were undergoing assessment; on hold pending information from the referrer; not progressing to a decision and being formally lapsed. During the 2022-2023 financial year, 98 referrals received were determined to be controlled actions. These referrals will likely have their approval decisions made between approximately 6 months to 2 years from now.

Data extracted from the Portal and Assessment System on 04 April 2023.

# Overview of outcomes for projects referred under the *Environment Protection and Biodiversity Conservation Act 1999*

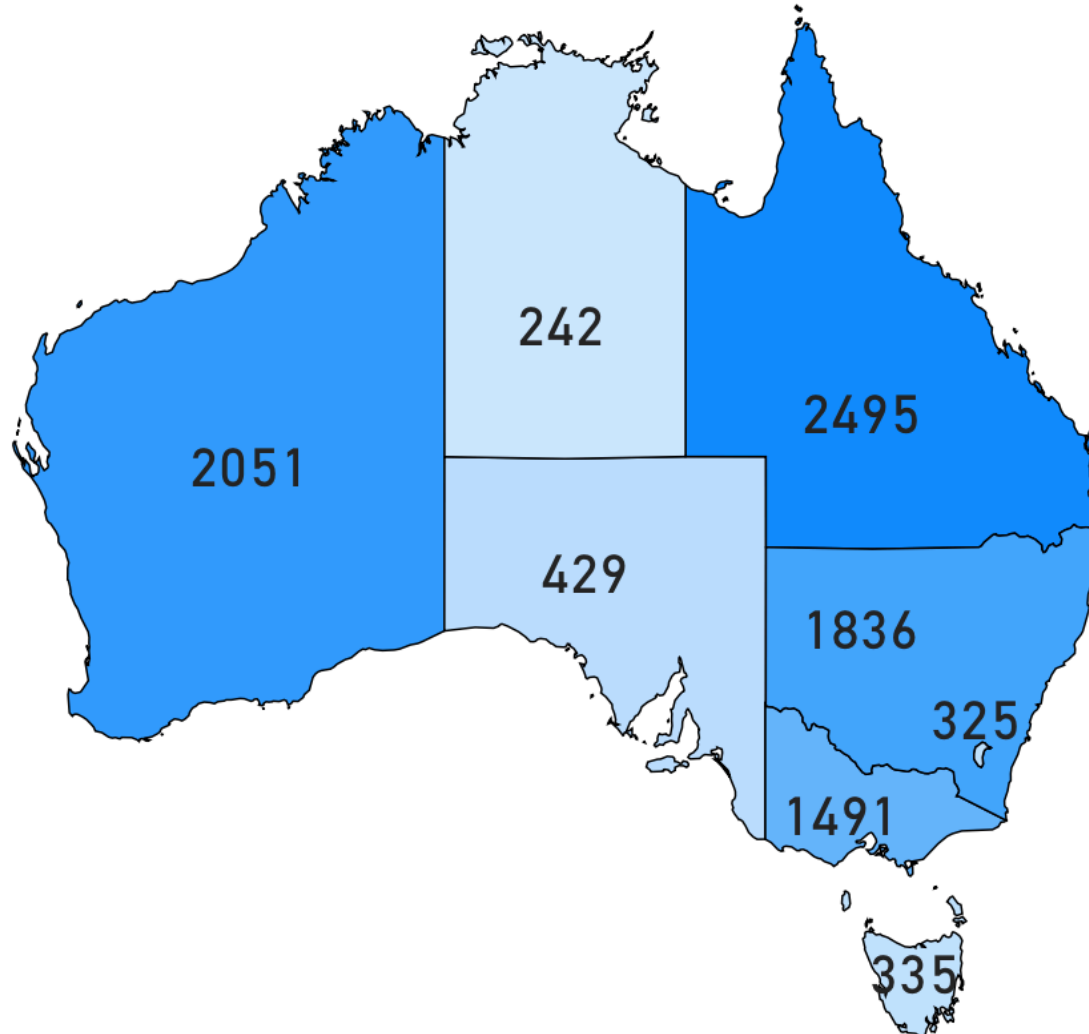


Data extracted from the Portal and Assessment System on 04 April 2023.

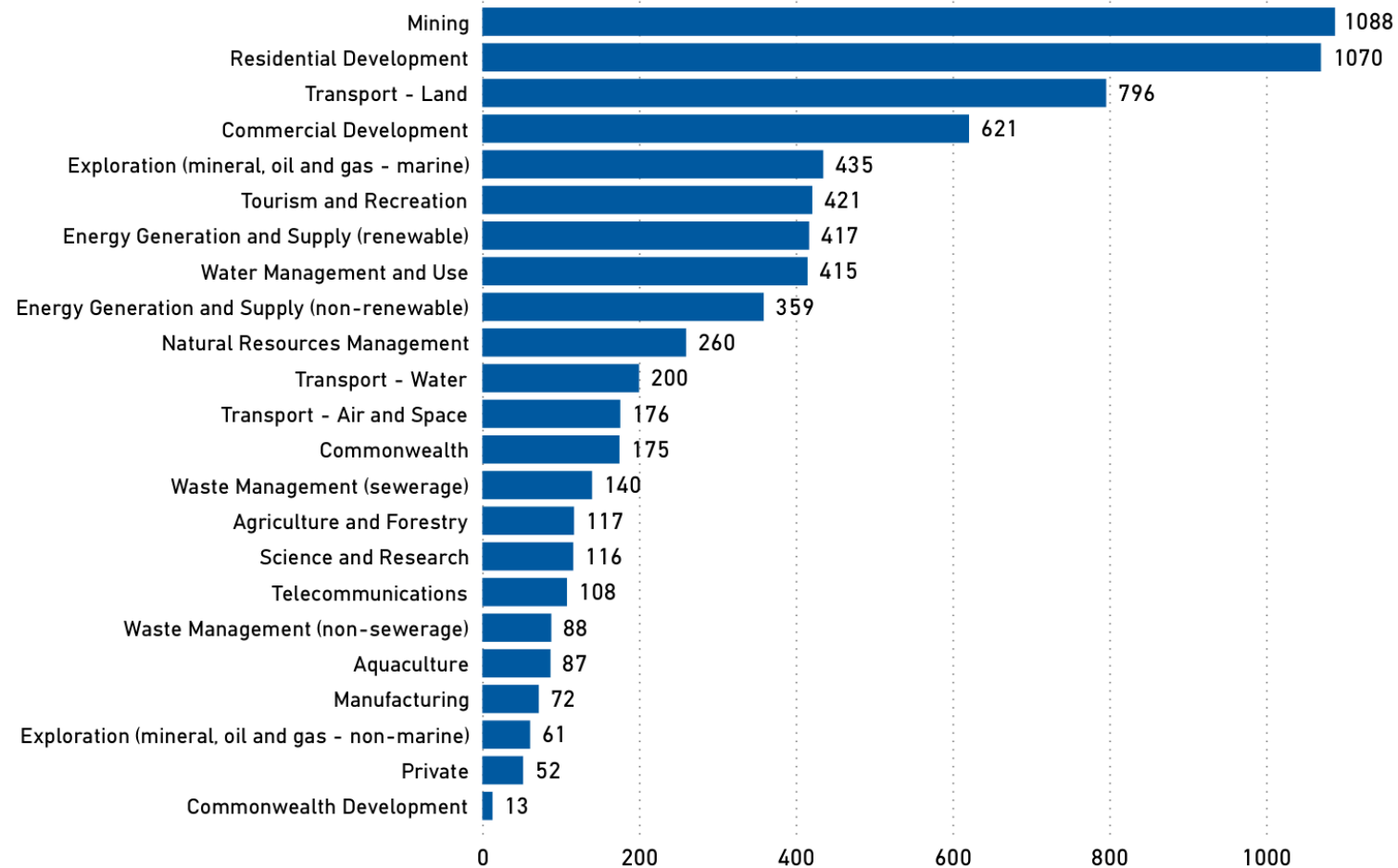


# Geographic distribution of projects

EPBC Act decisions from July 2000 to 31 March 2023  
(by Jurisdiction)



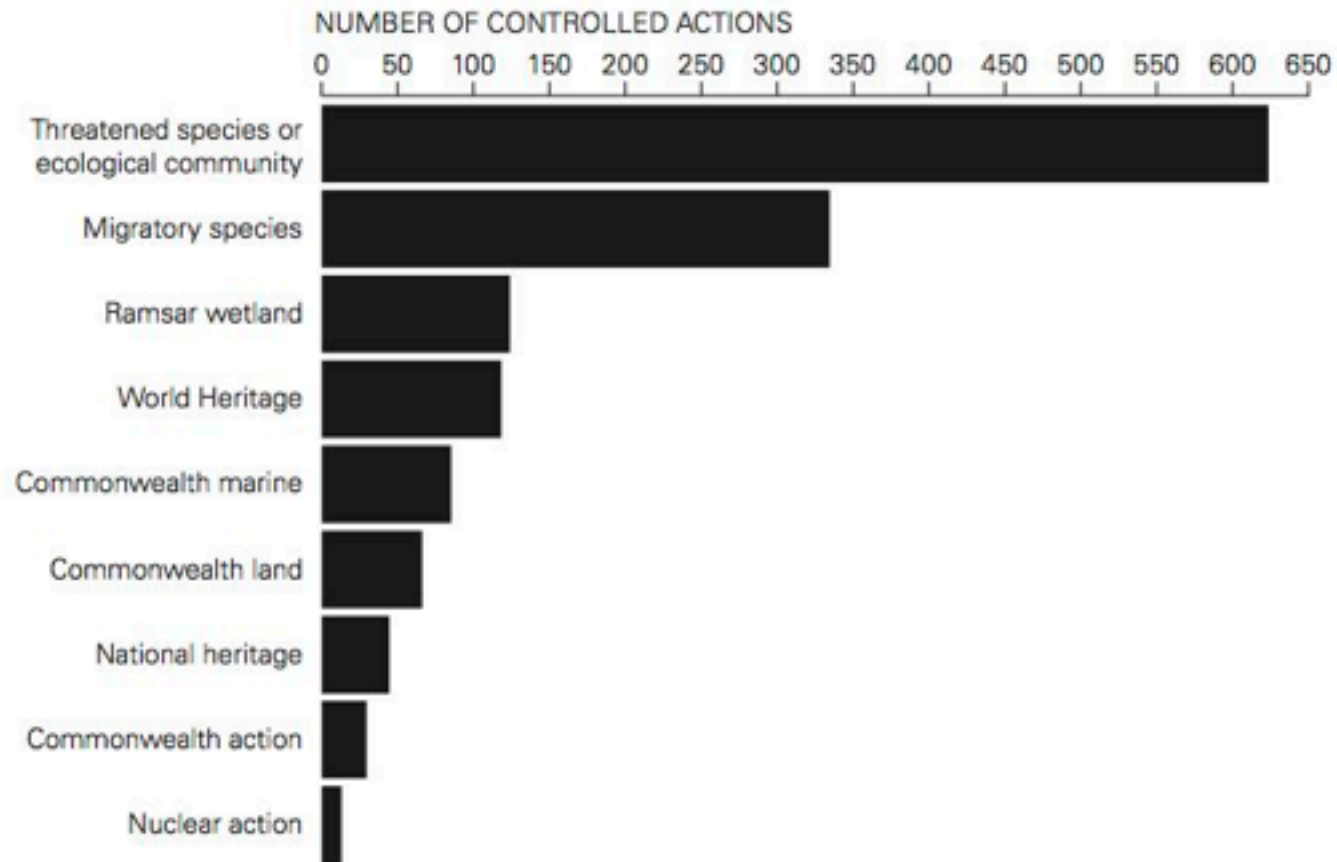
## EPBC Act Referrals received from July 2000 to 31 March 2023 (by Industry Type)



Data extracted from the Portal and Assessment System on 04 April 2023.

Note: This chart includes all s68 Referrals and s160 requests for Advice submitted from July 2000 to 31 March 2023.

**Figure 5.5:** Criteria for controlling provisions against the number of controlled actions for the *EPBC Act 1999*, July 2000 to July 2008



(Sources: DEH 2001; 2002; 2003; 2004; 2005; 2006; DEWR 2007; DEWHA 2008; 2009c)

*Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The current environmental trajectory is unsustainable.*

The EPBC Act is ineffective. It does not enable the Commonwealth to play its role in protecting and conserving environmental matters that are important for the nation. It is not fit to address current or future environmental challenges.

Recommendations include:

- Greater decision making power to States and Territories
- establishing legally enforceable 'national environmental standards' for matters of national environmental significance with a greater emphasis on regional (landscape) level planning
- establishing an independent regulator focused on enforcement and compliance
- reducing reliance on, and reviewing, environmental offsetting arrangements
- greater inclusion of Indigenous peoples' traditional knowledge and views in science processes and decision-making
- Regional and strategic planning

- Nature positive
- National Environmental Standards
- Establishing an independent national environment protection agency—to be known as Environment Protection Australia (EPA)
  - issuing permits and licenses
  - project assessments, decisions and post-approvals
  - compliance and enforcement
  - assuring states, territories and other Commonwealth decision makers apply National Environmental Standards under accredited arrangements.
- Improving environmental data and information
- Regional Planning
- Environmental offsets reform
- Improving conservation planning arrangements
- Working with First Nations partners

## EPBC Act 1999

- If proposed clearing (Part V only) will have or is likely to have an impact on a Matter of National Environmental Significance (MNES) = assessed under bilateral agreement
- Bilateral agreement: impacts of clearing on relevant MNES as part of Part V clearing permit assessment
- Only applies to clearing applications initially referred to the Commonwealth and which the Commonwealth has determined to be a 'controlled action'



*Biodiversity Conservation Act 2016 (BC Act)*

- ‘take’ flora – i.e. destroy or remove flora,
- ‘take’ fauna – “to kill, injure, harvest or capture fauna by any means”,
- ‘disturb’ flora – altering or damaging flora without taking,
- ‘disturb’ fauna – “chase, drive, follow, harass, herd or hunt fauna by any means” or attach a tag.
- ‘modify’ a threatened ecological community – an action that destroys an occurrence or modifies an occurrence to such an extent that its species composition and/or structure is unlikely to recover.



- The taking flora (including flowers, seeds, whole plants, timber and firewood) from Crown and private land for commercial purposes is not permitted unless done under an appropriate licence.
- Private use on private land doesn't require licence
- The taking any non-threatened fauna from any land requires an appropriate licence.
- Modifying a TEC must be authorised by the Minister. This has been delegated to the CEO
- Taking or disturbing threatened species of flora or fauna must be authorised by the Minister. This has been delegated to the CEO
- The taking or disturbing flora from Crown or private land for biological assessment, relocation, scientific or other non-commercial purposes (including consultants) may be authorised under an appropriate licence. The permission of the private land owner or occupier is required

- If a proposal has approval under the EP Act (Part IV or V) or is covered by an exemption under Part V or the EP Act Regulations, approval to take non-threatened flora under the BC Act is not required. Authorisation to take threatened flora is still required under section 40 of the BC Act.
- If a proposal has approval under the EP Act (Part IV or V), authorisation to disturb threatened fauna will not be required. Authorisation to take threatened fauna is still required under section 40 of the BC Act.
- Ministerial authorisation under BC Act section 45 is required to modify a TEC even if an approval has been granted under the EP Act or is covered by an exemption



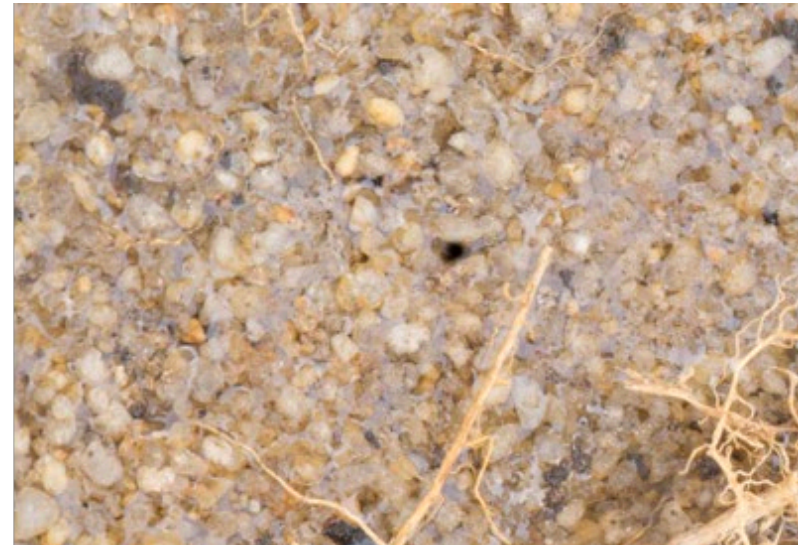
*Rights in Water and Irrigation Act 1914 (RiWI Act)*

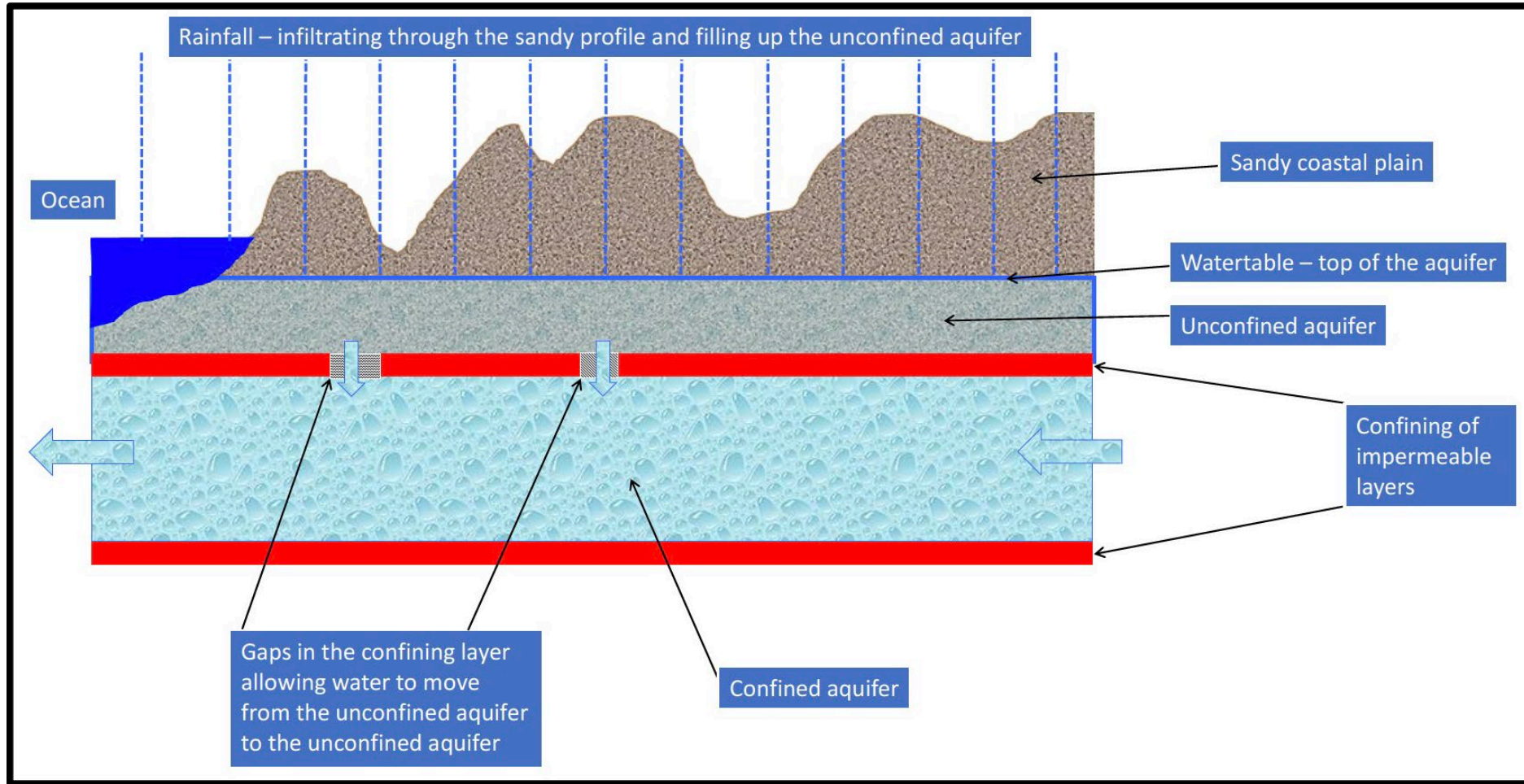
- Governs the regulation and rights associated with water resources
- Licences and permits define how much water can be taken and specify required management conditions
- The DWER issues licences and permits under the RiWI Act to
  - Granting section 5C licences to take water from proclaimed areas for surface water and unconfined aquifers;
  - Granting section 5C licences to take water from any artesian (confined) aquifer
  - Granting section 5C licences to take water where an artesian aquifer discharges at the surface and it is not a proclaimed area;
  - Granting section 26D licences to construct and alter wells for artesian and non artesian wells
  - Interfere with the bed and banks of a watercourse (Section 11/17/21A )

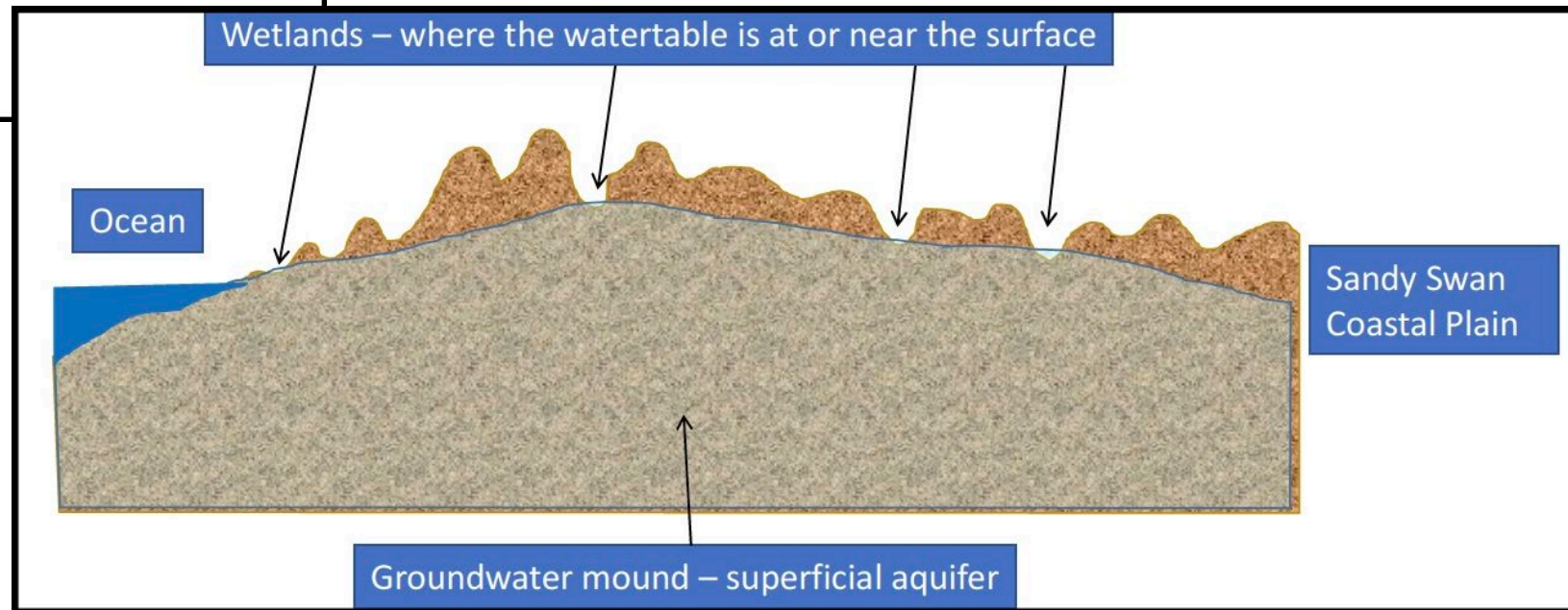
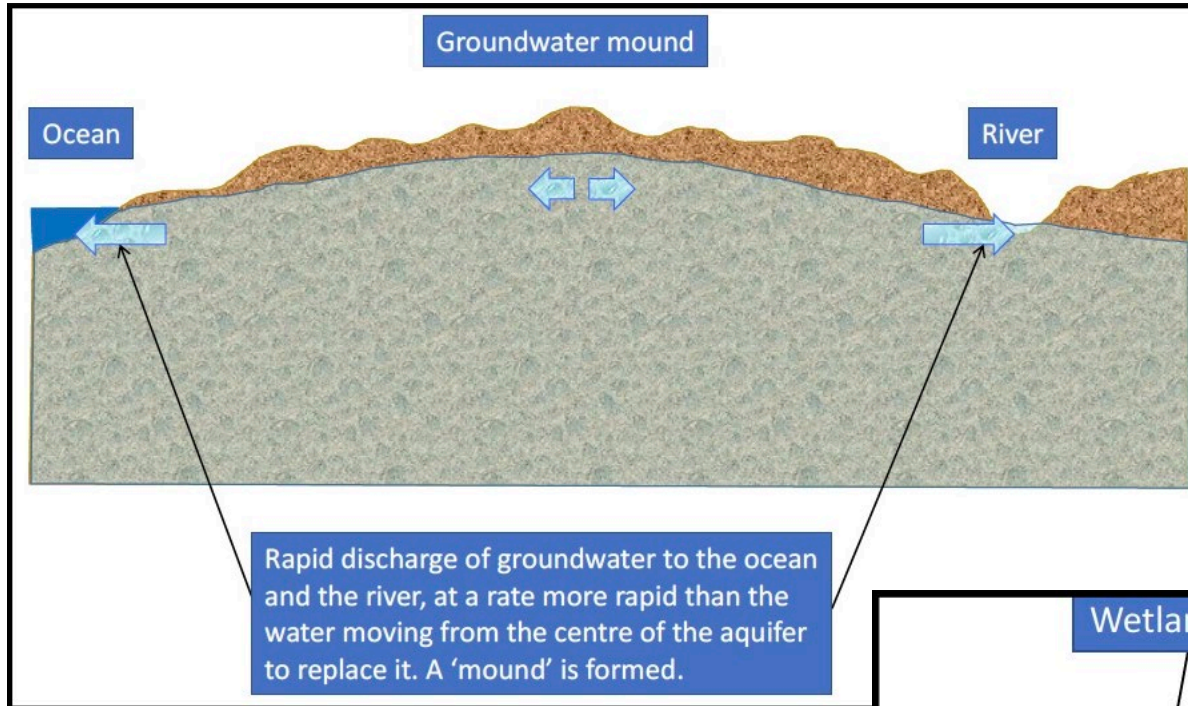


- For water table aquifers relating to:
  - small scale construction dewatering (not for mining);
  - domestic water use;
  - stock that is not intensively farmed;
  - constructing monitoring wells, and
- Riparian rights on a watercourse for stock and domestic use includes irrigation of a small garden (permit is required to interfere with the watercourse).

- Mostly on sandy type soils
- Water held in the gaps between the particles
- Aquifers
  - Confined
  - Unconfined







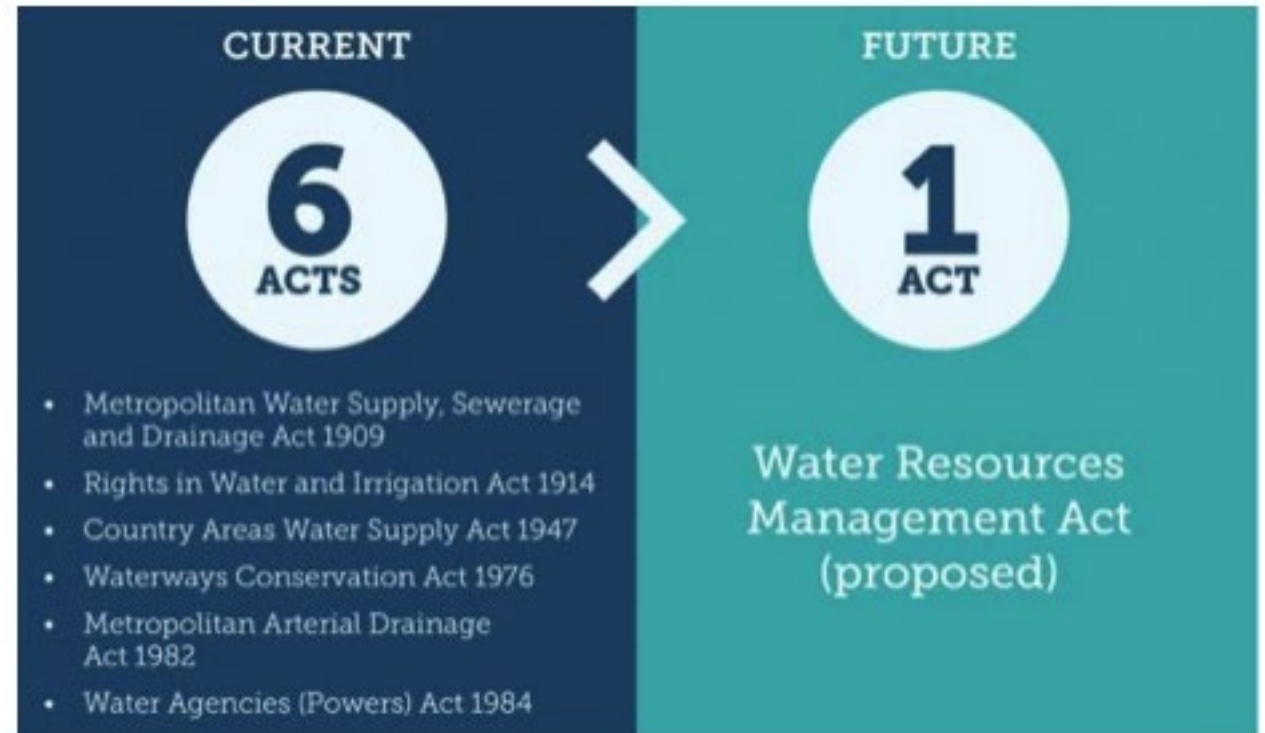


Water resources management is currently managed under six separate Acts.

New water legislations has been promised by current Government.

### **Policies and guidelines:**

- Western Australian water in mining guideline
- Take and use of water
- Water resource assessment and planning
- Protecting public drinking water supplies and natural environment
- Measuring the taking of water
- Manage breaches of water laws
- Managing unlicensed groundwater use
- State Planning Policies – SPP 2.9 from WAPC



- The RiWI Act has provisions that ensure catchments of drinking water sources are protected by proclaiming them
  - Underground Water Pollution Control Areas (UWPCA) for groundwater or
  - Water Reserves, or Catchment Areas for surfacewater.
- Collectively these areas are referred to as Public Drinking Water Source Areas (PDWSAs)
- 3 levels of protection (or zones) can be declared on different sections of land- called Priority Protection areas
  - Priority 1 (P1) offers the highest level of protection and has strictest land use controls. It usually covers land owned by the State.
  - Priority 2 (P2) offers medium level of protection and land use controls so that no increase in risk of pollution to the water source. P2 areas can be declared over private land by only allowing low intensity land uses, Normal residential development is not permitted.
  - Priority 3 (P3) provides the lowest level of protection and land use controls, with the aim of limiting the risk of pollution to the water source. Water supply sources need to co-exist with other land uses such as residential, commercial and light industrial developments.

- EPA recognizes three categories of wetlands
  - Conservation category wetland (CCW) – are wetlands with a high degree of naturalness;
  - Resource enhancement (R) – wetlands with some level of degradation although higher levels of human use; and
  - Multiple use (M) – largely degraded with little human use value.
- The EPA views CCWs as deserving the highest level of protection.
- Some CCWs are also TECs
- Ramsar wetlands
  - internationally important because they are either habitats for migratory waterbirds, or are of world scientific significance
  - Ramsar treaty or the Convention on Wetlands of International Importance signed in Ramsar, a city in Iran, on 2 February 1971
  - There are 61 Ramsar sites in Australia, 10 of which are in WA

# WA Ramsar wetlands

- Ord River Floodplain,
- Lakes Argyle and Kununurra,
- Roebuck Bay,
- Eighty-mile Beach,
- Forrestdale,
- Thomsons Lakes,
- Peel-Yalgorup System (including the Peel-Harvey estuary and the chain of coastal wetlands which includes Lake Clifton,
- Toolibin Lake,
- Vasse-Wonnerup System, and
- Lake Warden System.





## Western Australian water in mining guideline



	Stage A Preliminary consultation	Stage B Scoping the Water Management Task	Stage C Water Licence Application and EPA Assessment	Stage D Development of an Operating Strategy and Final Licence Decision	Stage E Construction, Operation and Closure Planning	Stage F Decommissioning and Closure
Inputs	<ul style="list-style-type: none"> <li>Regulatory consultation – assess complexity of water issues</li> <li>Preliminary Conceptual Water Balance</li> </ul>	<ul style="list-style-type: none"> <li>Proponent scopes assessment requirements and timetable</li> <li>Apply for 26D licence</li> <li>Conceptual Water balance (updated – will dewatering be required)</li> </ul>	<ul style="list-style-type: none"> <li>Proponent conducts investigations and prepares hydrogeologic assessment documents</li> </ul> <p>Operational policy no. 5.12 – Hydrogeological reporting associated with a groundwater well licence</p> <ul style="list-style-type: none"> <li>Applications for 5C licence for the mining project (and permit applications where relevant)</li> </ul>	<ul style="list-style-type: none"> <li>Proponent drafts operating strategy</li> <li>Finalise any additional work</li> </ul> <p>Operational policy 5.08 – Use of operating strategies in the water licensing process</p>	<ul style="list-style-type: none"> <li>Carry out water approval consistent with conditions</li> <li>Licensed proponent provides monitoring reports and other information required during term of licence, conditions and commitments of the operating strategy</li> </ul>	<ul style="list-style-type: none"> <li>Proponent implements mine closure plan</li> </ul>
Outputs	<ul style="list-style-type: none"> <li>Clarity on any critical issues and conceptual water balance</li> </ul>	<ul style="list-style-type: none"> <li>Agreed scope of hydrological assessment and other investigations</li> <li>Section 26D for exploration and investigations</li> </ul>	<ul style="list-style-type: none"> <li>Finalised hydrogeologic reports</li> <li>Input into preliminary mine closure plan</li> <li>EPA assessment and approval parallels this stage</li> </ul>	<ul style="list-style-type: none"> <li>Approved mine site operating strategy</li> <li>5C Licence issued</li> </ul>	<ul style="list-style-type: none"> <li>Reporting requirements</li> <li>agreed scope of works for decommissioning the mine’s water-related assets and rehabilitating the mine site</li> </ul>	<ul style="list-style-type: none"> <li>Decommissioning of water related assets</li> </ul>



*Contaminated Sites Act 2003*

## Big Picture:

- Primary legislation for assessment and management of contamination
- S9(1) of the CS Act requires the function of the Act be complementary to and not to override other Acts – i.e. compliance with the CS Act required
- Key component to mine closure and relinquishment.
- Having a Part V license does not exclude proponent from CS Act requirements
- CS Act requirements for Mine Closure Plan and approval

## Noted Elements:

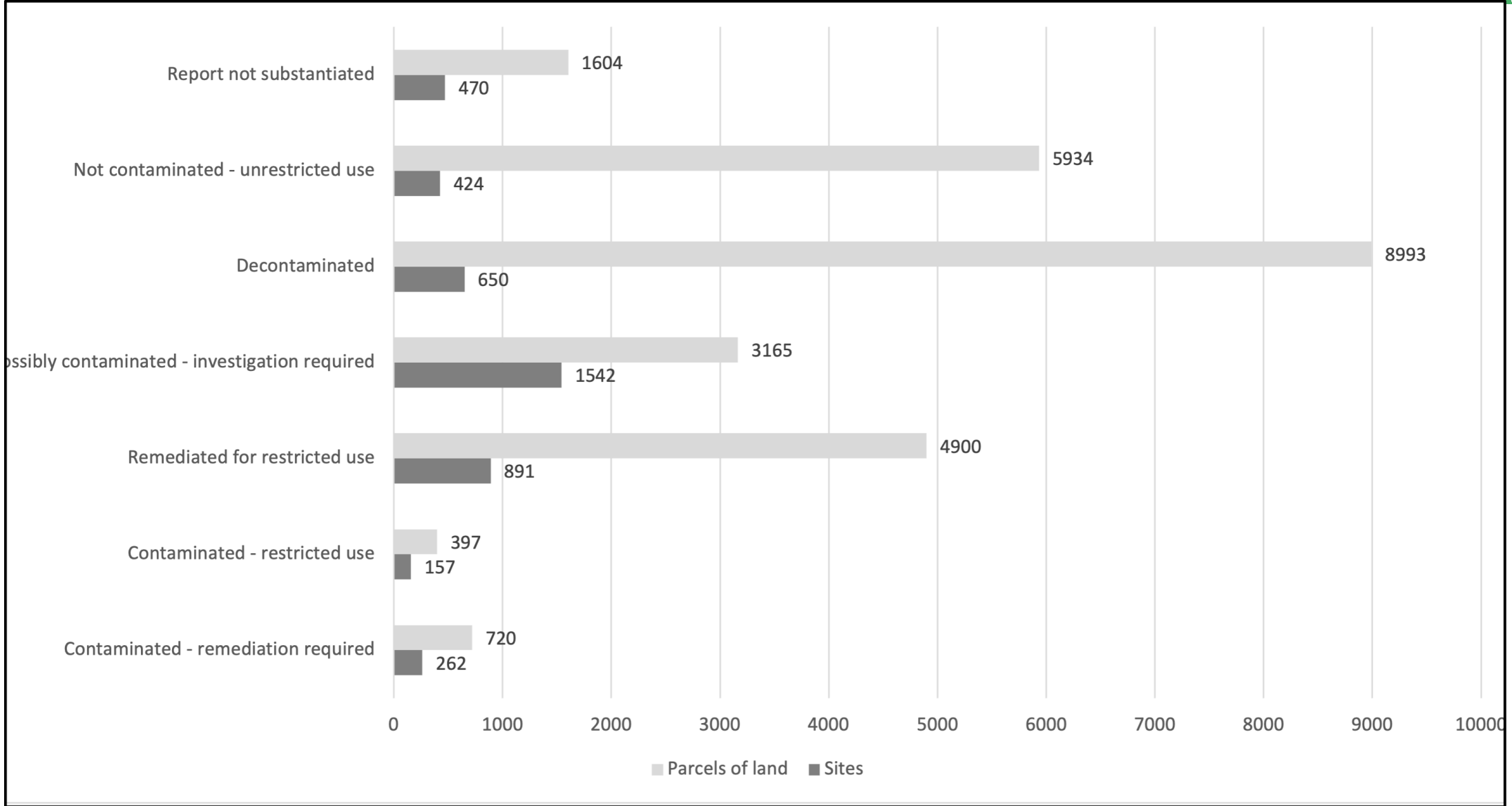
- Protect human health, the environment and environmental values by providing for the identification, recording, management and remediation of contaminated sites in the State of Western Australia.
- Under the Act, land owners, occupiers and polluters must report known or suspected contaminated sites to DWER. Any person can make a report
- Contaminated defined as *“in relation to land, water or a site, means having a substance present in or on that land, water or site at above background concentrations that presents, or has the potential to present, a risk of harm to human health, the environment or any environmental value”*.



- Report not substantiated – following a report being submitted under s11, there is no evidence of contamination;
- Possibly contaminated — investigation required – some evidence of contamination and further investigation needed to confirm status;
- Not contaminated — unrestricted use - no evidence of contamination;
- Contaminated — restricted use - the site is contaminated but suitable for limited and restricted use;
- Remediated for restricted use - the site is contaminated but some level of remediation has occurred so that it is suitable for restricted use;
- Contaminated — remediation required; and
- Decontaminated - the site has been remediated and is suitable for all uses.

# Status of the contaminated sites database as at 30 June 2021

178



- DWER is required to place a memorial on the title of land classified as either:
  - Contaminated — remediation required;
  - Contaminated — restricted use;
  - Remediated for restricted use; or
  - Possibly contaminated — investigation required

- all sites classified as 'contaminated — remediation required' are to be remediated (s23)
- the sites classified as 'contaminated, restricted use', 'remediated for restricted use' or 'contaminated, remediation required' need to be clearly specified
- CS Act defines 'person responsible' for sites classified as 'contaminated — remediation required' who is responsible for remediation of the site
- Anyone who caused or contributed to the contamination of a site is responsible for remediation, whether the action that caused the contamination was lawfully approved or not, if that action occurred after the CS Act came into effect (2 August 2006)
- If the action occurred before the CS Act came into effect anyone who caused or contributed to the contamination is responsible for remediation only if that action was carried out unlawfully
- Change of land uses under PD Act triggers a clean up to the level required for that land use. DWER sign-off agencies to clear a planning condition
- If an owner or occupier of a site classified as 'contaminated — remediation required' proposes a change of land use or has carried out a change of land use after the CS Act came into effect, then that owner or occupier is responsible for remediation of the site and not the person who caused or contributed to the contamination

- NEPM ASC (National Environment Protection (Assessment of Site Contamination) Measure 1999) provides national framework for assessment of site contamination and recommends that the investigation of contaminated sites be carried out in stages.
- Only address site characterisation
- DWER has published a “Guideline: Assessment and management of contaminated sites”
- Remediation involves the development of a remedial action plan (RAP), its implementation and, where required, a management of residual contamination via a site management plan (SMP).
- The RAP needs to include the specific remedial targets to be achieved for the chemical of concerns.
- These targets need to be agreed to by DWER on advice of Department of Health

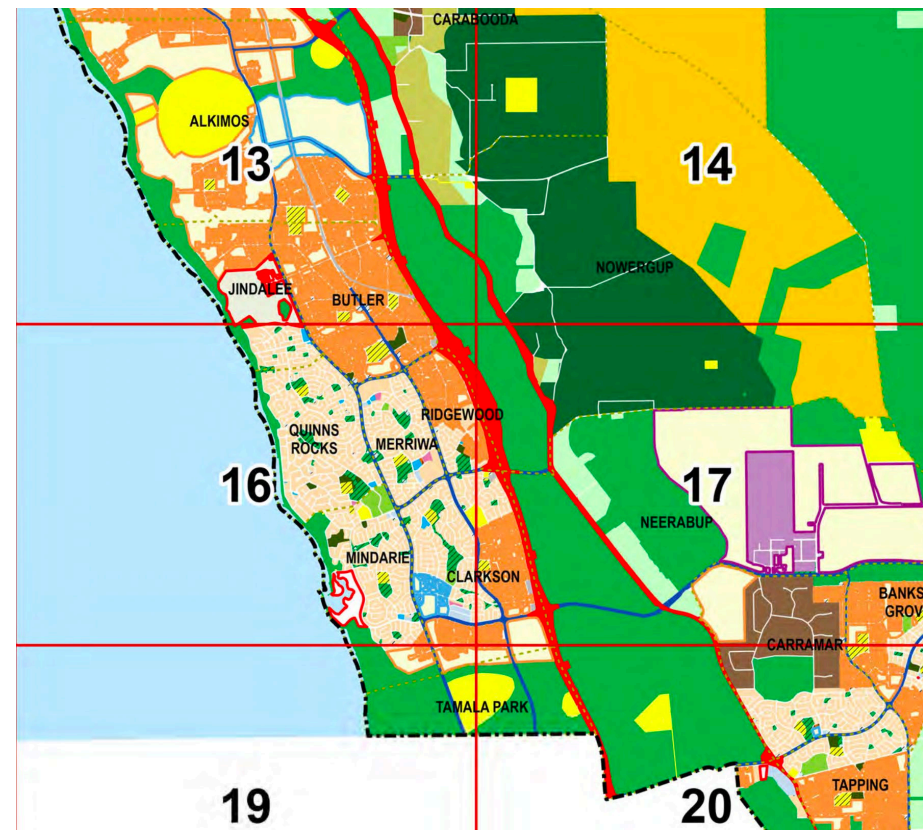
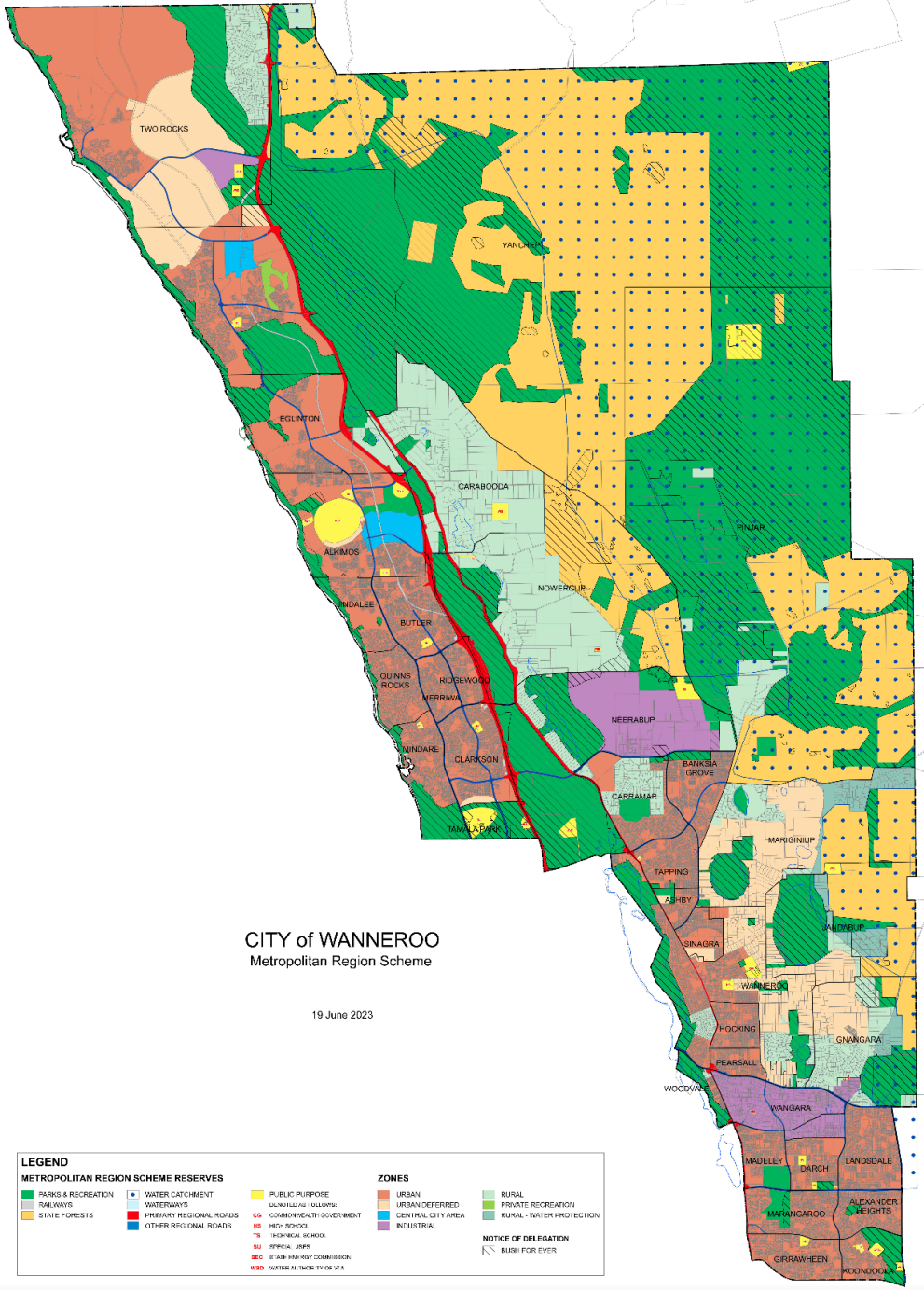


*Planning and Development Act 2005 (PD Act)*

- To provide for a system of land use planning and development in the State
- State Planning Policies (SPP)
- Region Planning Schemes
  - Perth
  - Peel
  - Bunbury
- Local Planning Schemes – 137 Local Governments

- Crown land is 'Reserved'
- Private land 'zoned' and general land uses defined
  - Region – broad zones
    - Urban
    - Commercial
    - Industrial
    - Rural
  - Local – very specific zoning and land uses
    - Land use table
- Zoned land can be subdivided consistent with local zoning
- Subdivided land can be developed consistent with zoning with conditions
- Decision making also guided by State and Local Policies





## Schedule 1 – Zoning Table



ZONES	RESIDENTIAL	MIXED USE	COMMERCIAL <sup>3</sup>	SERVICE COMMERCIAL <sup>3</sup>	PRIVATE COMMUNITY PURPOSES	GENERAL INDUSTRY	LIGHT INDUSTRY	RURAL	RURAL RESIDENTIAL	LANDSCAPE ENHANCEMENT	RURAL RESOURCE
USE CLASSES											
abattoir	X	X	X	X	X	D	X	X	X	X	X
agriculture – extensive	X	X	X	X	X	X	X	P	X	X	P
agriculture – intensive	X	X	X	X	X	X	X	P	X	D	P
amusement parlour	X	D	D	D	D	X	D	X	X	X	X
ancillary dwelling	P	D	X	X	X	X	X	D	D	D	D
art gallery	X	P	P	D	P	X	X	A	A	D	A
animal establishment	X	X	X	X	X	X	X	D	X	X	D
animal husbandry – intensive	X	X	X	X	X	X	X	D	X	X	D
bed and breakfast	D	D	D	X	X	X	X	D	D	D	D
betting agency	X	D	P	P	D	X	X	X	X	X	X
brewery	X	X	A	A	X	D	D	A	X	A	A
bulky goods showroom	X	X	D	P	X	X	P	X	X	X	X
industry – cottage	A	A	D	D	X	D	P	D	D	D	D
industry – extractive	X	X	X	X	X	D	X	D	X	X	D
industry	X	X	X	X	X	P	A	X	X	X	X

- P means that the use is permitted if it complies with all relevant development standards and requirements of this Scheme;
- I means that the use is permitted if it is consequent on, or naturally attaching, appertaining or relating to the predominant use of the land and it complies with any relevant development standards and requirements of this Scheme;
- D means that the use is not permitted unless the local government has exercised its discretion by granting development approval;
- A means that the use is not permitted unless the local government has exercised its discretion by granting development approval after advertising the application in accordance with clause 64 of the deemed provisions;
- X means that the use is not permitted by this Scheme except where the provisions of the Scheme specifically provide for the local government to approve a use that is otherwise not permitted.

Planning approval and a licence maybe required

- State Planning Policy 2.4 - Planning for Basic Raw Materials
- Covers extraction of
  - sand (including silica sand)
  - clay
  - hard rock (including dimension stone)
  - limestone (including metallurgical limestone)
  - agricultural lime
  - gravel
  - gypsum
  - other construction and road building materials
  - materials which may substitute BRM.
- Policy recognizes
  - Significant Geological Supplies (SGS) - the highest priority extraction areas for BRM that represent strategic, long-term supplies of BRM requiring protection
- WAPC approval maybe required

A decorative horizontal bar at the top of the slide features a green background with white silhouettes of mining-related elements: a drone, a mountain range, three small trucks, a worker with a shovel, a large dump truck, a worker with a pickaxe, a small truck, a worker with a pickaxe, a large dump truck, a worker with a pickaxe, a mountain range, three small trucks, a worker with a shovel, and a large dump truck.

## Mining Act 1978: Mining Proposal - overview

- a prospecting licence,
  - carry out certain activities in searching for minerals and to extract or disturb up to 500 tonnes of material from the ground
- exploration licence,
  - Carry out low impact activities including soil sampling and rock chip sampling, as well as higher impact activities such as drilling
- retention licence,
  - allow more time for the holder to develop a mining proposal once the mineral resource has been identified
- mining lease,
  - commence commercial mining production and covers only the mining (extraction) operations
- general purpose lease or
  - for non-mining purposes including operating machinery, handling tailings
- a miscellaneous licence
  - are generally supporting infrastructure not specifically related to the extraction or processing of minerals, and includes roads, abstracting water, aerodrome, tunnels, powerlines, power generation, pipelines and workers' accommodation

- DMIRS has produced “Statutory Guidelines for Mining Proposals” that sets out:
- Definition of small mining operations; and
- General table of contents for large proposals, including
  - Proposal description,
  - Activity (project elements) details,
  - Disturbance envelop,
  - Site plan,
  - Stakeholder engagement,
  - Baseline environmental data,
  - Environmental risk assessment,
  - Expected environmental outcomes,
  - Environmental management system, and
  - Mine closure plan

- for prospecting licences and there is no similar document for exploration licences
  - Area to be disturbed;
  - List of activities and infrastructure;
  - A description of the existing environment, in particular the vegetation to be cleared and its significance;
  - Proposed environmental management; and
  - Proposed rehabilitation

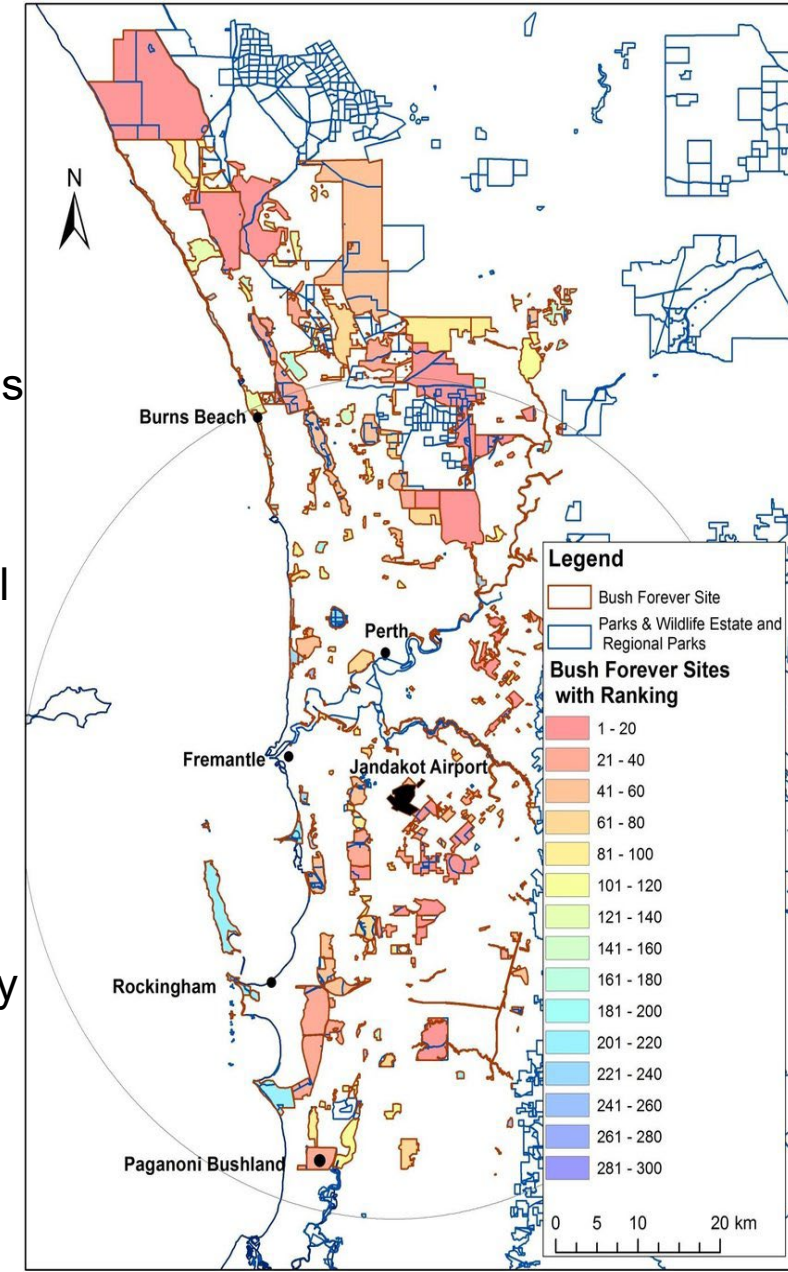
- “Environmental Objectives Policy for Mining” (Department of Mines Industry Regulation and Safety 2020);
- “Environmental Applications Administrative Procedures” (Department of Mines Industry Regulation and Safety 2022),
- a ‘principle objective’ for mining regulation which is:
  - *“Resource industry activities are designed, operated, closed, decommissioned and rehabilitated in an ecologically sustainable manner, consistent with agreed environmental outcomes and post-mining land-uses without unacceptable liability to the State.”*
- Sets environmental objectives for four key factors



- Biodiversity - To maintain representation, diversity, viability and ecological function at the species, population and community level.
- Water Resources - To maintain the hydrological regimes, quality and quantity of groundwater and surface water to the extent that existing and potential uses, including ecosystem maintenance, are protected.
- Land and Soils - To maintain the quality of land and soils so that environmental values are protected.
- Rehabilitation and Mine Closure - Mining activities are rehabilitated and closed in a manner to make them physically safe to humans and animals, geo-technically stable, geo-chemically non-polluting/non-contaminating, and capable of sustaining an agreed post-mining land use, and without unacceptable liability to the State.

DMIRS and EPA will confer on whether to refer (off shore criteria not shown)

- Environmentally Sensitive Areas including:
  - Within 500m of World Heritage Property
  - Within 500m of a Bush Forever site
  - Within 500m of a Threatened Ecological Community
  - Within 500m of defined wetlands (including Ramsar wetlands, ANCA wetlands Conservation category wetlands)
- Area containing rare flora Area covered by an Environmental Protection Policy.
- Within 500m of a declared/proposed State Conservation Estate, including National Park, Nature Reserve, Conservation Park, or State Forest and Timber Reserves.
- Within a Public Drinking Water Source Area.
- Within 2 kilometres of a declared occupied town site (for Mining Proposals and petroleum Environment Plans only).
- Hydraulic fracturing exploration and development activities.
- Activities within the Strategic Assessment for the Perth Peel Region and potentially in conflict with the outcomes of the Strategic Assessment.
- Area previously or currently subject to formal assessment by the EPA.





## Statutory Documents



[ProForma - Mining Closure Plan for Small Mining Operations - March 2020 - 474 Kb](#)

Proforma to be used for reviewed Mine Closure Plans - as per the Statutory Guidelines for Mine Closure Plans - effective 3 March 2020 (word version)



[ProForma - Mining Closure Plan for Small Mining Operations - March 2020 - 201 Kb](#)

Proforma to be used for reviewed Mine Closure Plans - as per the Statutory Guidelines for Mine Closure Plans - effective 3 March 2020 (pdf version)



[Statutory Guideline for Mine Closure Plans - March 2020 - 473 Kb](#)

Mandatory form and content for Mine Closure Plans under the Mining Act 1978 effective 3 March 2020

## Policies



[Environmental Objectives Policy for Mining - March 2020 - 223 Kb](#)

Identifies environmental factors and objectives for decision making under the Mining Act 1978

## Guidelines



[Mine Closure Plan Guidance - how to prepare in accordance with the Statutory Guidelines - March 2020 - 1 Mb](#)

Supporting guidance information to inform the preparation of Mine Closure Plans



[Mine Closure Plan Checklist - 1 Mb](#)

Checklist to assist with the preparation of a mine closure plan.

## Technical guidance



[A framework for developing mine-site completion criteria in WA - 5 Mb](#)

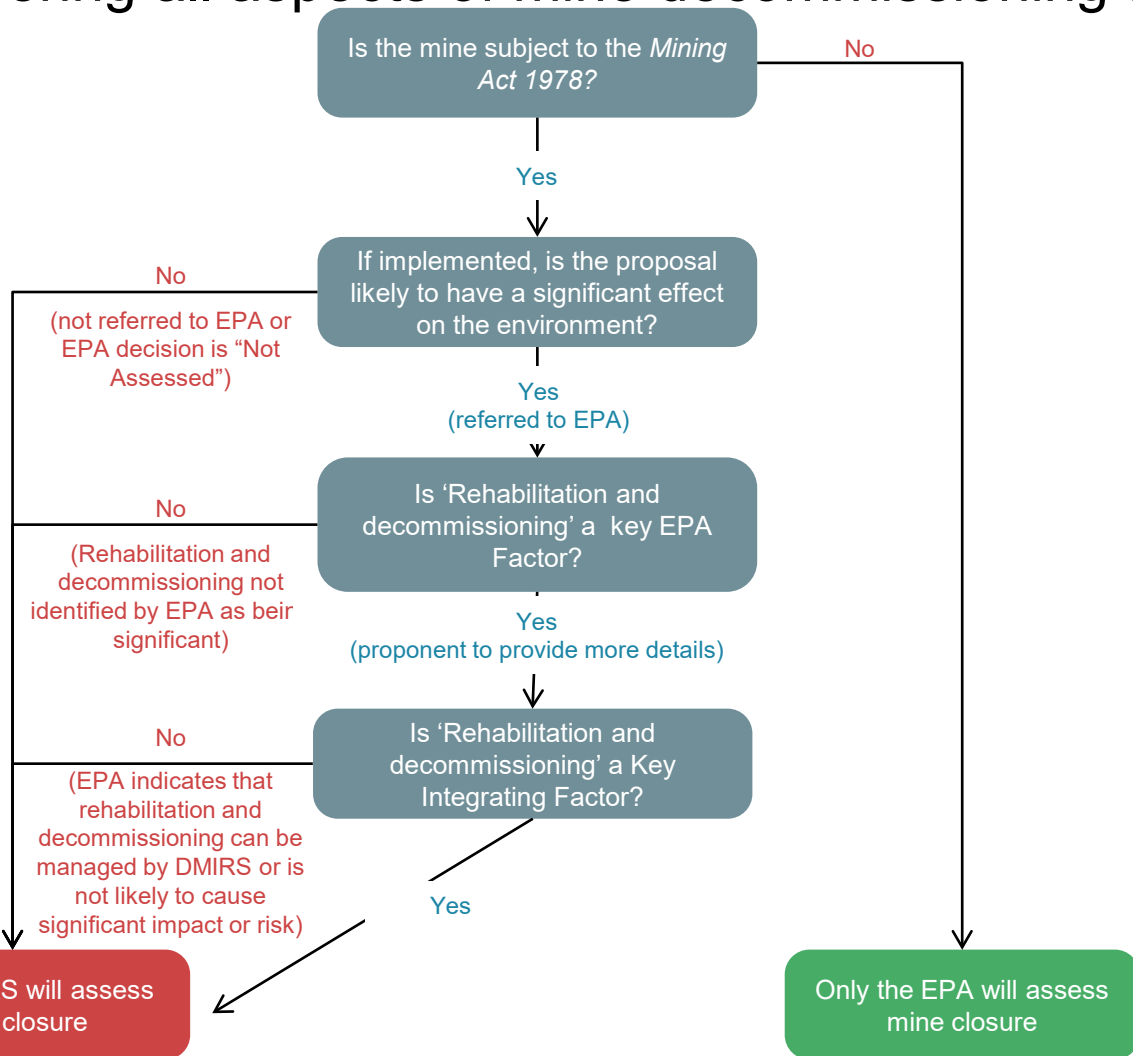
Supports the development of completion criteria and monitoring outlined in the Guidelines for Preparing Mine Closure Plans.



[Guide to departmental requirements for the management and closure of tailings storage facilities \(TSFs\) - August 2015 - 337 Kb](#)

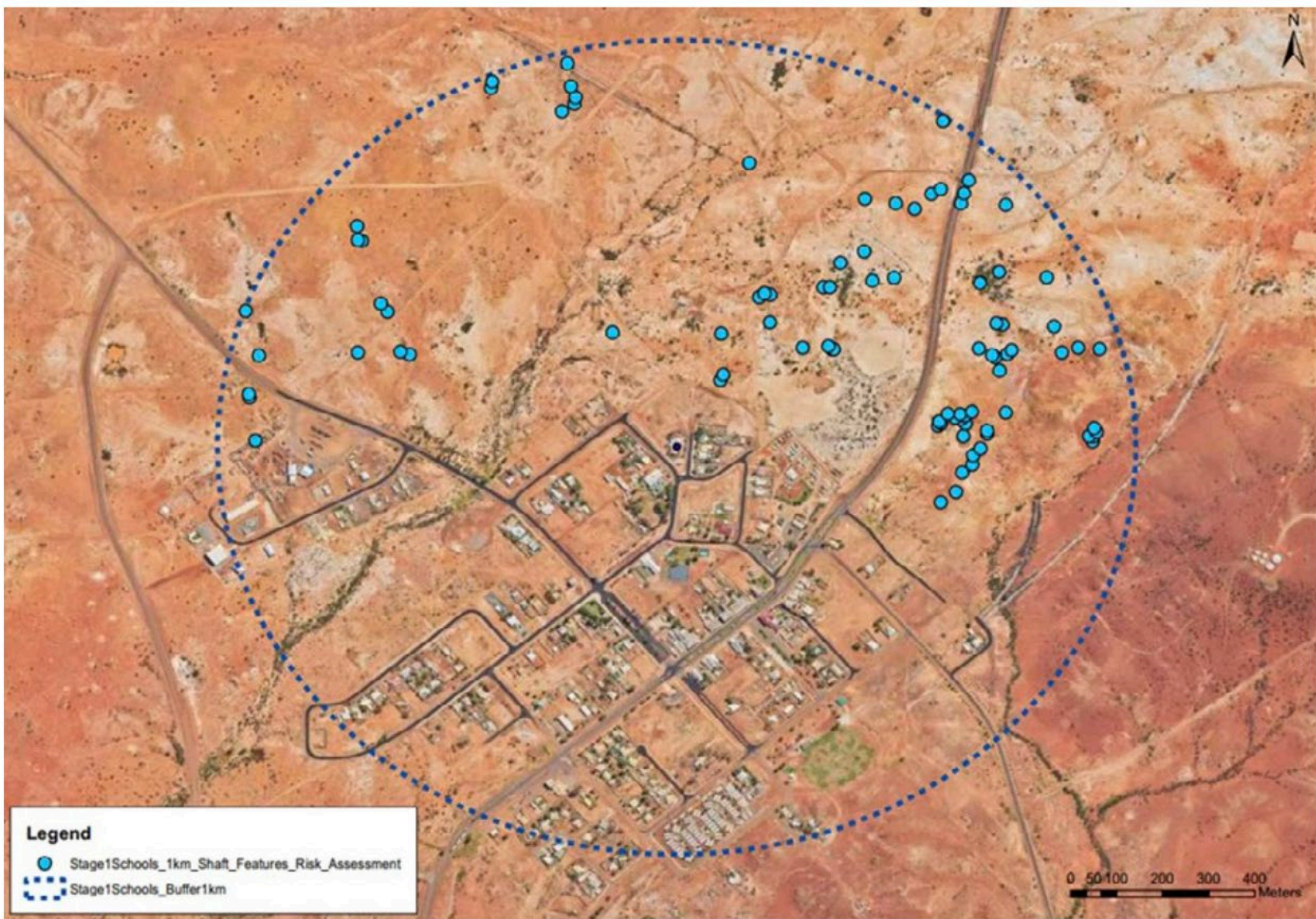
This guide has been provided to assist tailings storage facilities (TSFs) designers and operators with preparing the required reports for managing a TSF.

Mine closure plans – submitted by a company associated with a mining proposal and covering all aspects of mine decommissioning and rehabilitation



- Cover Page
- Summary
- Identification of Closure Obligations and Commitments
- Stakeholder Engagement
- Baseline and Closure Data Analysis
- Post Mining Land Uses
- Closure Risk Assessment
- Closure Outcomes and Completion Criteria
- Closure Implementation
- Closure Monitoring and Maintenance
- Financial Provisioning for Closure
- Management of Information and Data
- Reviewed Mine Closure Plans

- the establishment of the MRF
- the declaration of abandoned mine sites
- a levy payable in respect of mining authorisations
- Rehabilitation Liability Estimate Calculator
  - estimate of rehabilitation liability and the associated MRF levy under a variety of scenarios.
  - demonstrates how to reduce the levy through progressive rehabilitation of disturbances on the tenement
  - Tenement holders who use the calculator must still submit their annual MRF disturbance report



**Image 5 – Abandoned shaft features identified in the inventory within 1km radius of Cue Primary School**

- All tenement holders (with the exception of tenements covered by some State Agreements), are required to report disturbance data and most must contribute annually to the fund.
- Tenements with a Rehabilitation Liability below \$50,000 (i.e. payment less than \$500) are not required to make a payment into the MRF
- Interest earned from the fund is available to rehabilitate abandoned mines where the tenement holder/operator has failed to meet rehabilitation obligations and efforts to recover funds from the holder/operator have been unsuccessful
- levy is based on the average expected cost of rehabilitation of different types of land disturbances, multiplied by the “fund contribution rate”, which was set at one per cent
- It replaced an Unconditional Performance Bond system (that still exists on some tenure) because companies would go into liquidation and then the Government was left with the rehabilitation costs
- Bonds are still imposed or retained where DMIRS considers there is high risk that a tenement holder’s rehabilitation liability may revert to the State
- Reporting is required 30 June each year
- Auditing of the MRF reports are done periodically
- Document previous disturbance on a tenement before commencing your own disturbance.





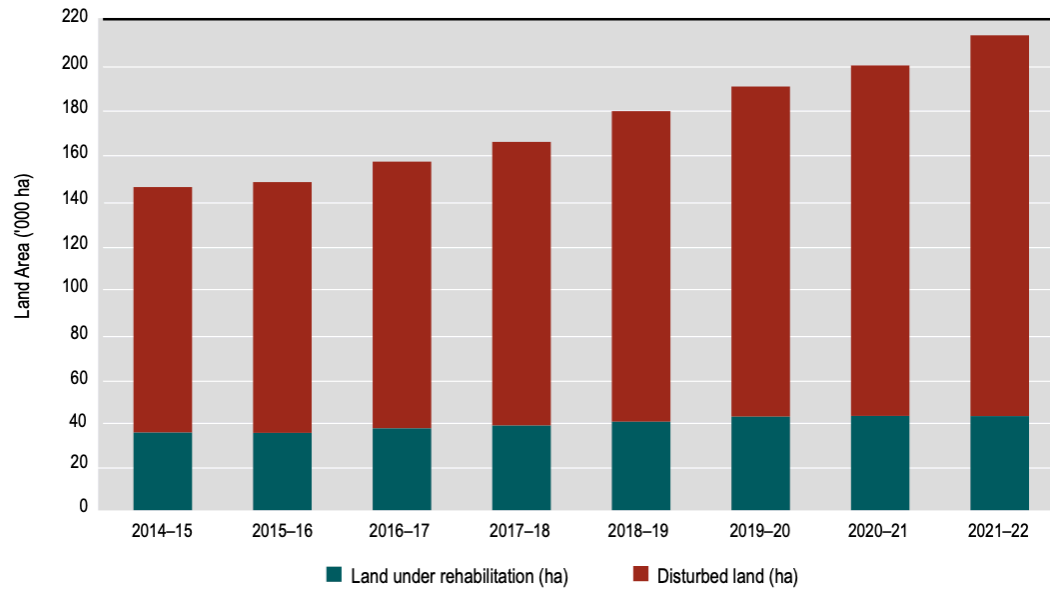
## Rehabilitation Liability Categories and Unit Rates

The following table has been reproduced from Schedule 1 of the MRF Regulations

Description of infrastructure or land	Category	Unit rate
Tailings or residue storage facility (class 1) Waste dump or overburden stockpile (class 1) Heap or vat leach facility Dam – saline water or process liquor	A	\$50,000
Tailings or residue storage facility (class 2) Waste dump or overburden stockpile (class 2) Low-grade ore stockpile (class 1) Plant site Fuel storage facility Workshop Mining void (with a depth of at least 5 metres) – below ground water level Landfill site Diversion channel or drain Dam - fresh water	B	\$30,000
Low-grade ore stockpile (class 2) Sewage pond Run-of-mine pad Building (other than workshop) or campsite Transport or service infrastructure corridor Airstrip Mining void (with a depth or at least 5 metres) – above ground water level Laydown or hardstand area Core yard Borrow pit or shallow surface excavation (with a depth of less than 5 metres) Borefield Processing equipment or stockpile associated with <i>Basic Raw Material</i> extraction Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and is not otherwise described in this Table	C	\$18,000
Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations	D	\$2,000
Land (other than land that has been disturbed by exploration operations) Topsoil stockpile	E	\$2,000
Exploration operations: land under rehabilitation, rehabilitated land	No rate applicable	-



# Some data on clearing/disturbance



## Disturbance (ha)

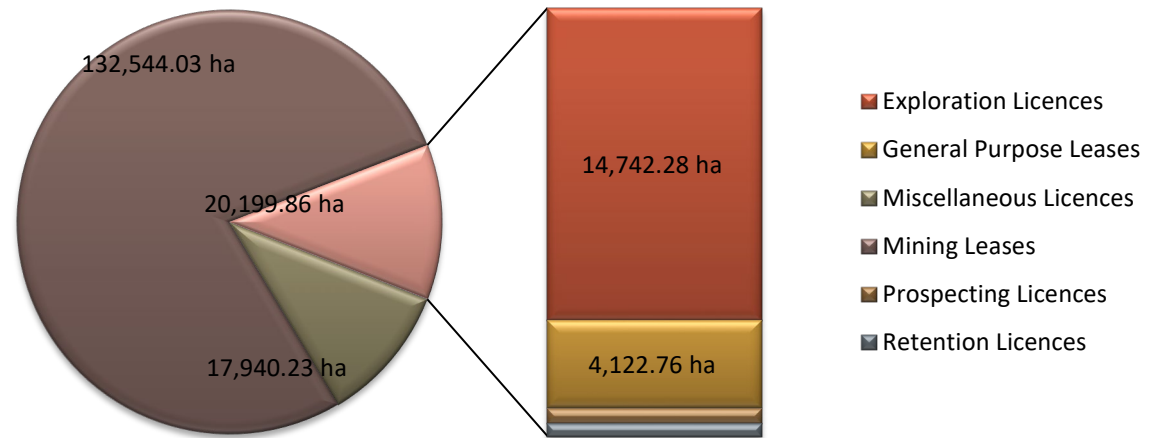
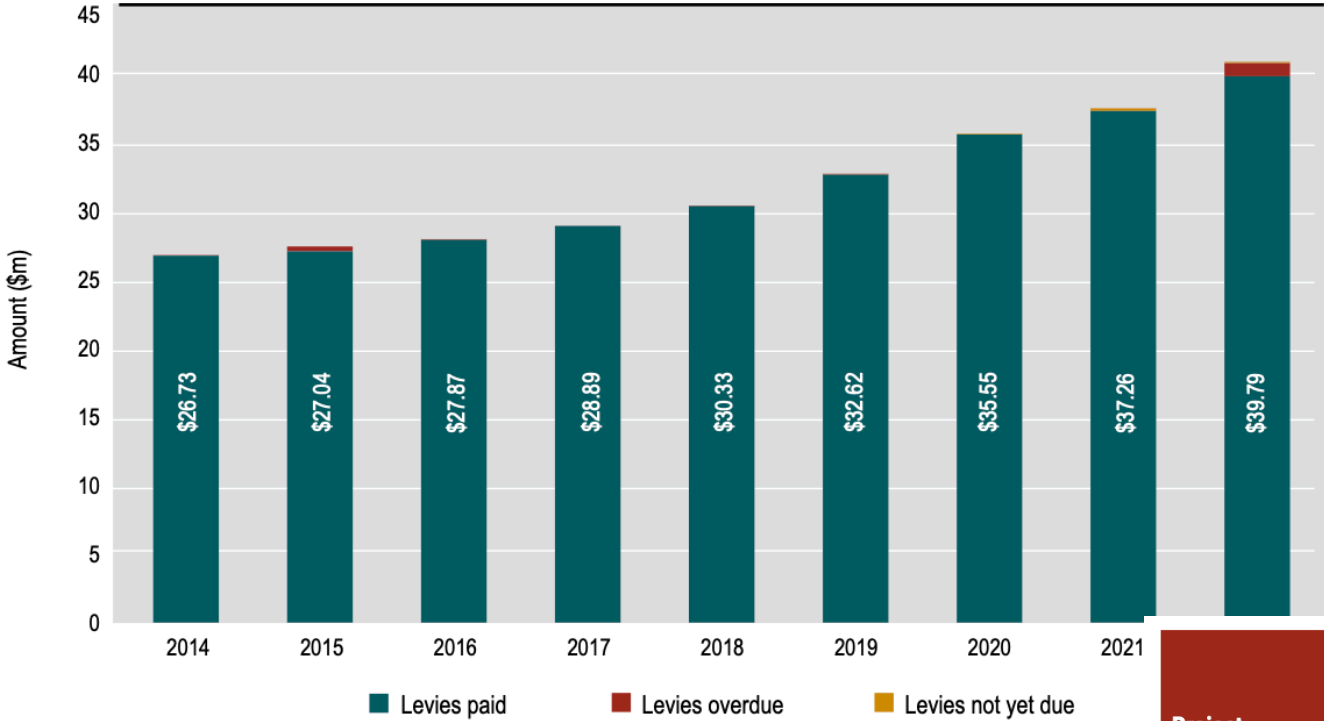


Figure 5 – MRF data reported for land under rehabilitation



**Figure 2 – Levies assessed and paid 2014–2022**

Project	Expenditure from MRF Principal \$'000	Expenditure from MRF Interest \$'000	Total Expenditure to 30 June 2022 \$'000
	Project Costs	Project Costs	
Elverdton	-	3	3
Donnybrook shafts	-	40	40
Safe Shafts for Towns	-	231	231
Ellendale	2,616	-	2,616
Ashmore-Seppelt	61	-	61
<b>Total</b>	<b>2,677</b>	<b>274</b>	<b>2,951</b>

**Table 3: Breakdown of sources and applications of funds for Abandoned Mine projects 2021–22**