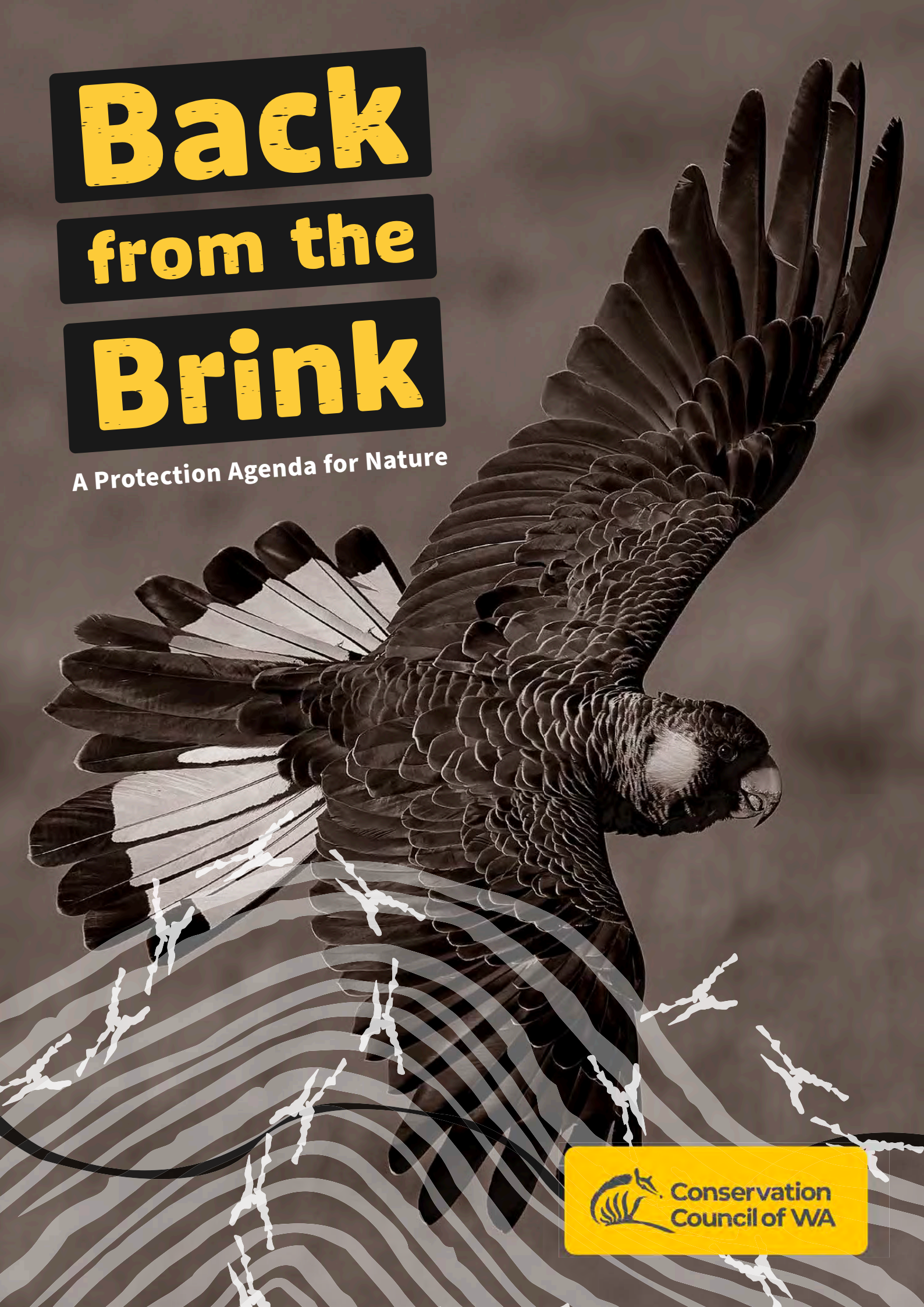
Back from the Brink

A Protection Agenda for Nature



Conservation Council of WA

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Acknowledgement of Country

The Conservation Council of WA respectfully acknowledges the Whadjuk People of the Noongar nation, along with the Traditional Owners of all Countries where it works. We pay our respects to Elders past and present. CCWA seeks to always walk alongside our Aboriginal partners, recognising their continued connection through land, sea, culture and community.

Credits

Date

June 2026

Cover image

Numbat. Image by Joel Wilson.

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We would also like to thank the following individuals, groups and organisations who reviewed this document and provided comment and feedback:

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I am proud of the work that the Nature team at CCWA has done to coordinate this important work. Every contributor here is connected to deep ecological communities in this state, and they work every day to make a difference to nature in WA.

This report was made possible through the generous support of the Koorabup Trust.

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About this Document

Back from the Brink: A Protection Agenda for Nature (hereafter referred to as **Back from the Brink**) is a roadmap to progress effective reform in Western Australia's environmental regulation and in its regulatory institutions, designed for use by civil society and policy makers. Back from the Brink has been developed collaboratively with conservation organisations, Aboriginal leaders and environmental specialists, committed to protecting WA's unique biodiversity. A list of contributors is included on page 2.

Edition 1 of Back from the Brink provides a forward-looking vision - one grounded in evidence, informed by case studies from across the state, and aligned with WA's environmental context, international obligations, and global best practice. It makes the case for environmental reform, not only as an ecological imperative but as an opportunity to secure a thriving future for both nature and people.

Back from the Brink forms the basis for ongoing efforts to work collaboratively with the government towards environmental reform, to ensure the protection of nature. The intention is for this work to be updated and added to as things change and to accommodate input from across our membership, partners and civil society.

Back from the Brink outlines a series of recommendations which are presented in four parts, outlining each of four key governance principles:

- Strategic decision making
- Environmental law and processes
- Monitoring, compliance, enforcement and transparency
- Effectiveness, independence and public participation in decision making.

Following the recommendations are a series of case studies, which highlight current and past environmental issues in WA, where there is a clear policy problem or solution. The case studies establish a connection between the recommendations and real-world applications, while further demonstrating the need for reform.

Back from the Brink is designed to:

- Provide a reference guide to assist decision makers and policy makers working towards effective environmental reform.
- Assist CCWA's member groups and broader community groups in connecting their local or specific environmental issues with policy and legislative reform, to support advocacy on environmental issues.

By outlining key areas for policy and legislative reform, Back from the Brink is designed to support constructive dialogue and decision making amongst policy makers, government agencies, and all those working to protect and restore WA's nature now and for generations to come.

Executive Summary

Nature in WA is not faring well. We live in a state that is vast, beautiful, and has a relatively high standard of living. A lot of our wealth has been built from an extractive resource industry, which has degraded and fractured ecosystems across the state. Back From the Brink: A Protection Agenda for Nature brings together thinking from across the environmental movement to provide a solution for what comes next. It is not an account of how we got here, nor is it a document that seeks to prosecute that past. It is a document that looks at what we need to do to pull nature back from the brink and give it a chance to be meaningfully restored. It demonstrates that we have choices to make as a society – choices that are well within our reach and could help nature recovery here in WA.

This report presents a number of recommendations to assist decision makers, policy makers, and community groups in identifying problems in environmental policy and to support advocacy for solutions. Framing these as recommendations is part of the language we use to engage people on the issues at the core of the document, but the reality is that they are necessary reforms, and real, deep reform is not an optional path forward – it is a key part of what we need to recover from the destruction we have already wrought on this land.

Back from the Brink has four themes that demonstrate the key areas where our current policies and processes are failing nature. It covers strategic decision making; environmental law and processes; monitoring, compliance, enforcement and transparency; and effectiveness, independence and public participation in decision making.

We know that the land we now call Australia has been cared for, for tens of thousands of years by the Traditional Custodians of the land. In Western Australia, Aboriginal peoples have carried a history of connection with Country in a way that has sustained the rich diversity in nature across the many Nations that make up this state. Honouring and respect for these knowledges and systems can help us make better choices in how we engage with the lands around us. Putting aside our ethical considerations, this is also a strategic decision. And we need to be strategic in how we plan to protect and restore nature.

For too long we've seen a piecemeal approach to environmental assessments on a project-by-project basis that has left us in the predicament we're in. We need leadership that takes the big picture into account. We need bioregional planning to give confidence to the just energy transition we all need. We also need that planning to be done with fully funded strategic assessments so that we can account for nature as a whole. Ecosystems teach us on both micro and macro levels how connected all our decisions are. And all of our decisions across the state are not happening in isolation. We see our governments do a great job of being strategic about industry and jobs, and we need to apply that same level of enthusiasm to planning for environmental protection and restoration.

There is also a lot of work that we can build on from people around the world. The Kunming-Montreal Global Biodiversity Framework (KMGBF) is an excellent framework that clearly outlines how important a systemic approach is when considering biodiversity. It's not enough to just declare places a state or national park, you have to plan and do the work to ensure biodiversity is protected.

From the strategic to the procedural, Back from the Brink then turns to looking at the need to strengthen our environmental laws and processes.

> **The current laws have failed our natural world – as evidenced by the growing list of threatened and endangered species.**

This Agenda came off the back of the Vogel McFerran Review – which preferenced the need to deregulate and streamline environmental assessment and regulatory processes under the guise that they delay industry and development. Our natural world needs us to have these processes in place to put limits on the destruction of habitat and to meaningfully account for the cost of our economy on nature. Strong laws that are enforced and funded properly are needed so that we can start writing Recovery Plans that actually stop the march of our threatened species towards extinction, not just slow it down (at best).

We need a set of laws that don't carve out exemptions to every standard we set, including clear areas that cannot be used for development under any circumstances. We need to account for climate impacts on nature – these are not separate issues, even though they might be presented that way at times. And exemptions play out in both the climate and biodiversity spaces through the corporate accounting of offsets – they themselves being an exemption we cannot afford in their current forms.

The long and short of it is that laws are only equal to our ability to enforce them. And one step prior to that, we need to understand what we're monitoring in order to do it effectively. WA hasn't had a State of the Environment report for 18 years. We haven't had a Biodiversity Audit published publicly in a decade. We need our public departments funded for these pieces of work and to properly monitor the vast landscape that is WA. The cost of not doing this properly is being borne out in the decline of our natural environment. Too often, we rely on industry to self-report. Community consultations are increasingly tokenistic or not required at all, and importantly, we don't see how decision makers consider this input. A right to reasons should be enshrined in our processes to strengthen transparency and accountability of decisions which have a material impact on the environment.

Which does lead to the final section on effectiveness, independence, and public participation in decision making. Our *Biodiversity and Conservation Act* (**BC Act**) should make requirements of the Minister for Environment in regard to their decisions. It should also enshrine the protection of our environment by preventing the Minister from approving projects that will knowingly cause harm. Beyond the legislation, an independent Environment Court would create a space for merits-based judicial reviews and ensure compliance.

Additionally, some proper funding of compliance bodies and ensuring the independence of key agencies – such as the Environmental Protection Authority (EPA), are necessary. Having third-party scrutiny, even encouraging it, and working to engage the public on environmental decisions in a transparent and meaningful way are necessary steps to make sure we're all doing our best for WA's environment.

What is evident here is that we have a lot of opportunities in Western Australia to strengthen biodiversity protection and recovery. This is not an exhaustive list of recommendations by any means, but it is a strong start on how we can bring a suite of reforms to our state's environmental practices to actually turn this ship around and repair it before we all sink. These four parts are intertwined and demonstrate the scale of the challenge and opportunities ahead of us.

All of these reforms are needed, but some aspects need immediate attention. The risk of extinction of our iconic black cockatoos is just one example of the real cost we face if we don't start taking habitat loss seriously. And with a drying climate in the South West and depleted groundwater in the North, despite increasingly heavy rain patterns, we cannot keep relying on outdated water laws that are inadequate and dangerous to our collective future.

Some of these reforms might seem bold or beyond the scope of a large state that's currently reliant on resource extraction – but the brink is real, and we have a government that speaks to the need for diversification. One of those needs is our environment – which depends on us divesting from business as usual and finding a path forward

Introduction

Western Australia **(WA)** is one of the most biodiverse regions on the planet, home to ancient ecosystems and species found nowhere else on Earth. From the tropical savannas of the Kimberley and the inland deserts to the coastal sandplains and towering forests of the South West, WA's landscapes are extraordinary in both scale and species richness. However, the health of nature in WA is in steep decline - and the threats are escalating.

Habitat destruction, climate change, unsustainable industrial development, pollution and inadequate environmental protections are driving alarming losses of biodiversity and ecosystem health. In the two centuries since colonisation, the impact on WA's biodiversity has been profound.

The extent of biodiversity loss in WA

WA is home to thousands of native species, many found nowhere else in the world. In 2000, the Southwest of WA was declared a global biodiversity hotspot, due to its rich endemism of species and threatened status. By this time, 90% of its primary vegetation had been cleared. In some parts of the Wheatbelt, the loss of native vegetation has been near complete. For example, in the Avon Botanical District over 93% of the original vegetation has been cleared, with up to 97% of woodlands removed.

Across WA, 65 Threatened Ecological Communities **(TECs)** are formally listed as threatened under the *Biodiversity Conservation Act 2016* **(BC Act)**, with a further 390 identified as likely to be threatened and are a priority for listing. Nevertheless, Department of Parks and Wildlife Biodiversity Audit (2017) provides damning evidence of ecological communities being 'totally destroyed', while remaining officially listed as 'threatened' and with ongoing threats and impacts not being reflected in the TEC data.

> **The 2025 Audit of DBCA's management of TECS found that "with a Priority Ecological Community (PEC) list of 390 communities, it is estimated it would take over 100 years with the current level of departmental resourcing allocated to the task to write the nominations for PECs that may meet the necessary criteria for TEC listing. This delays the legislative protections that come with attaining TEC status."**

Moreover, there are 16 flora species and 23 fauna species currently listed as extinct in WA, while a further 450 flora and 250 fauna are threatened (vulnerable, endangered or critically endangered). We expect that there are thousands more species at risk that are not yet listed.

The Northern Jarrah Forest, known to be amongst the most biodiverse ecosystems in the state, has experienced two major die-off events since 2011 and are now listed by the Intergovernmental Panel on Climate Change **(IPCC)** as at risk of collapse due to climate change. Despite this, large-scale strip mining continues in this region.

On the Swan Coastal Plain, approximately 80% of wetlands have been modified or destroyed, and an estimated 60% of Banksia woodlands cleared, yet urban sprawl continues to fragment what remains. With development often approved piecemeal, cumulative impacts are being poorly considered.

The Hamersley-Pilbara, home to some of the world's oldest rocks and fossils, extraordinary reptile diversity, and unique subterranean communities, and the Kimberley, known for its intact coastlines, the largest intact savannah in the world, and its globally significant rivers, wetlands and rainforests, are both facing threats from large-scale industrialisation.

Approval rates for clearing critical habitat in the Pilbara are the worst in the country, and Western Australia has consistently recorded the highest rate of federally approved critical habitat clearing since 2011. In 2025, the Federal Government approved the clearing of 34,752ha of habitat in the Pilbara, impacting five threatened species: the endangered Northern Quoll; the critically endangered Night Parrot; and the vulnerable Ghost Bat, Pilbara Leaf-nosed Bat and Pilbara Olive Python.

Even WA's offshore regions are at threat from the effects of global heating producing coral bleaching events, mass fish deaths in the Pilbara, and the collapse of unique fauna populations. Meanwhile, large fossil fuel projects and other industrial developments, that are known to intensify climate impacts, continue to be approved.

A global mandate for local leadership

The decline of nature in WA echoes the global trend in biodiversity loss. To confront the issue, Australia, along with almost 200 other nations, became a Party to the Kunming-Montreal Global Biodiversity Framework **(KMGBF)**, agreeing to halt and reverse biodiversity loss by 2030.

As one of only 17 megadiverse countries in the world, Australia has a vital role to play in the protection of biodiversity globally. And with WA being home to eight of Australia's 15 biodiversity hotspots, WA's role is especially critical. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services **(IPBES)** has warned that transformative change is urgently needed, as

> **"there is a closing window of opportunity to halt and reverse biodiversity loss and to prevent triggering the potentially irreversible decline and the projected collapse of key ecosystem functions."**

This transformative change will require a shift in WA Government priorities, which too often treat nature as a resource to be exploited rather than a living system with intrinsic value. Short-term economic interests are routinely valued above environmental protection and the public good, despite human health and wellbeing being dependent on clean water, fresh air, fertile soils and thriving ecosystems.

For tens of thousands of years, Aboriginal peoples of WA have upheld a culture of reciprocity and responsibility to care for Country, recognising the interconnectedness of all life. Their knowledge and leadership offer insightful guidance for a future in which environmental stewardship is embedded in WA's identity, culture, and governance.

To halt and reverse biodiversity loss, WA must end the destruction of remaining ecosystems, invest in meaningful restoration, and, importantly, strengthen legal protections for nature. This will require a decisive shift in government priorities to elevate the community's shared interest in a healthy environment, which our society and economy ultimately depend upon. Protecting and restoring WA's nature is both an ecological and human imperative.

Back From The Brink

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Part 1 – Strategic Decision Making

Goal: To strengthen leadership and a strategic approach from government for environmental protection in WA

Western Australia is home to globally significant biodiversity, yet a comprehensive and forward-thinking approach to environmental protection is absent from deliberative processes. Conservation efforts are chronically underfunded, and decision making prioritises economic interest over the protection of nature. Without clear governance and sustained investment, WA will face ongoing biodiversity loss, ecosystem collapse, and the erosion of the cultural and ecological values that underpin both nature and community wellbeing.

To address the challenges of biodiversity loss and ecosystem collapse, it is imperative that the WA Government takes a stronger leadership role - placing biodiversity conservation and ecological resilience at the heart of its environmental and land-use policies. This calls for a proactive and well-resourced Biodiversity Strategy that goes beyond short-term fixes, to one delivering long-lasting protection and restoration of WA's terrestrial and marine ecosystems.

This strategy should include integrated bioregional planning, investment in ecological restoration, and support for Aboriginal leadership in Caring for Country. By embracing an ambitious and coordinated approach to protecting nature, the WA Government can help protect and restore the living world now and for generations to come.

Implement an Ambitious Biodiversity Strategy

While 31% of terrestrial WA is included in Australia's Protected Areas,[i] only some of WA's Protected Areas meet the Kunming-Montreal Global Biodiversity Framework **(KMGBF)** targets.[1] Furthermore, WA's Protected Areas are not always managed in a way that adequately protects habitat from harm[2]. For example, the Pilbara and Jarrah Forest, as biodiversity hotspots, contain <9% and <15% Protected Areas respectively.[ii]

A biodiversity strategy would create the framework to ensure that acquisition of land designated as Protected Areas prioritises biodiverse and significant habitat and ensures that all of WA's diverse ecosystems are represented and protected, with at least 30% of each bioregion, subregion, and habitat type is represented and protected.

Such a strategy should, therefore:

- establish WA's obligations under international conventions and agreements, including the KMGBF targets of conserving 30% of ecosystems by 2030;[iii]
- recognise biodiversity across genotype, species and ecosystems;[iv]
- acknowledge the importance of biodiversity to support environmental, social and cultural resilience;
- be representative of the diversity across the regions;

1 The Kunming-Montreal Global Biodiversity Framework was established in 2022 to halt and reverse biodiversity loss & outlines a target to "Ensure that by 2030 at least 30 % of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity." https://www.cbd.int/gbf/targets

2 See EPA's approval of Chevron's Gorgon project, which has led to the introduction of invasive species and PFAS in a Class A Nature Reserve. EPA. (2013). Gorgon Gas Development Barrow Island Nature Reserve. https://www.epa.wa.gov.au/proposals/gorgon-gas-development-barrow-island-nature-reserve and Young, E. (2025, April 14). State must crack down on Chevron's toxic soil use in WA, says advocates. https://www.watoday.com.au/national/western-australia/state-must-crack-down-on-chevron-s-toxic-soil-use-in-wa-say-advocates-20250407-p5lpr3.html

- be supported by regular and ongoing monitoring, and robust compliance mechanisms;
- include the strongest possible protections for remnant habitat, threatened species and threatened ecological communities;
- add new protected areas;
- restore degraded land;
- set a clear standard to protect and restore biodiversity;
- measure targets; and
- introduce strong reporting requirements and review mechanisms.

Recommendation 1:

- **Develop and implement an ambitious biodiversity strategy with measurable targets and strong environmental standards to protect and restore WA's terrestrial and marine ecosystems, consistent with the Kunming-Montreal Global Biodiversity Framework.**

Adopt a Bioregional Planning Framework

See Case Study 1: Nullarbor Caves and Karst – **an example of the need for bioregional planning to identify where environmental and cultural values are incompatible with development, establish no-go zones and plan for protected areas.**

Land-use planning and development approvals often proceed without comprehensive data on regional biodiversity health. This can lead to inferior decision making and poorer outcomes for nature. Standardised bioregional planning is, therefore, needed to support Cumulative Impact Assessments **(CIA)** and to protect habitat in ecologically sensitive areas vulnerable to development.

The shortcomings of current approaches are evident in that clearing of bushland can occur without adequate cumulative assessment of individual project assessments, and where TECs with explicit conservation objectives continue to be cleared.[3] Conservation plans, designed to safeguard habitat for threatened species, are not securing the necessary protections from development or cumulative impact. And these patterns of piecemeal assessment, allowing for habitat fragmentation and loss, are occurring across the Swan, Avon, Wheatbelt, Jarrah Forest, and Pilbara regions, where development pressures continue to intensify.

In addition to planning for biodiversity protection, bioregional planning can also incorporate a 'fast, fair and nature-friendly' renewable energy transition strategy to address climate change impacts already known to affect WA's environment. The renewable energy transition provides an opportunity to examine the state's use of a bioregional planning framework to appropriately plan for renewables infrastructure.

Furthermore, a proactive, consultative bioregional planning framework ensures that land-use and development decisions are evidence-based, using local and regional ecological data, community knowledge and Aboriginal knowledge. Using this information, ecologically sensitive areas, critical habitats and culturally important areas can be identified and no-go zones established. To support the framework, and to promote timely and robust decision making, legally enforceable regulatory standards should be developed and/or strengthened.

Recommendation 2:

- **Fully resource and prioritise the development of bioregional plans that identify key biodiversity health indicators, threats and trends, critical habitats, ecologically sensitive areas, culturally important areas and no-go zones to inform environmental and land use planning and assessments.**

Fund Nature Conservation

Nature conservation in Western Australia is chronically underfunded. In 2025-26, the WA Government allocated just over $100 million to environmental protection[v] – only 0.2% of the state budget.[vi] The Office of the Auditor General's Performance Audit (2024-25) into the conservation of Threatened Ecological Communities acknowledged that this under-resourcing was resulting in an inability of conservation services to fulfil statutory obligations, for example, under the *Biodiversity Conservation Act 2016.*[vii]

The Biodiversity Council (2024) showed that there was strong public support for dedicating a minimum of 2% of the federal budget[4] to nature. It argued:

> **Spending on the protection and restoration of nature is not just a nice-to-have item. More than half our GDP relies on natural systems, and healthy nature is vitally important for the health and wellbeing of people and communities.**
>
> **Spending on threatened and culturally significant species and ecosystems creates lots of meaningful jobs, including in regional and remote communities.[viii]**

Accordingly, spending for nature conservation should be on par with essential government services such as health, because a healthy environment underpins human health, community wellbeing, and sustainable livelihoods. This expectation for investment in nature is realisable given WA's past and projected budgetary surplus.

Additional to prioritising funding for nature in the state budget, the WA Government should also establish a Conservation Co-Investment Framework[5] to attract further investment, for halting and reversing biodiversity loss from the Commonwealth, philanthropists, industry, Aboriginal and conservation groups to increase capacity for nature protection. In fact, three Australian jurisdictions have already successfully leveraged public-private partnerships to scale up protected areas and support Indigenous-led conservation.[ix]

3 Banksia woodlands of the Swan Coastal Plain are listed TECs at both state and commonwealth levels, with conservation advice to direct protective strategies. Nevertheless, these TECs continue to be cleared for development under governmental project approvals.

4 The 2025-26 Australian federal budget allocates approximately 785.7 billion dollars. Two percent would provide nearly $16 billion to nature. Two percent of the state budget would provide one billion dollars to support nature in WA.

5 Conservation Co-Investment Framework describes partnerships to unlock greater investment for conservation, this should not enable further degradation but focus on restoration of degraded land, conservation of important areas and landscape scale long-term protection.

The WA Government cannot afford to continue under-investing in the biodiversity that sustains life and the wellbeing of communities in our state. A bold and sustained increase in funding is essential to halt and reverse biodiversity loss, ensuring a livable future for generations to come, while safeguarding one of our greatest defenses against climate change.

Recommendation 3:

Deliver a step change in biodiversity funding consistent with halting and reversing biodiversity loss in WA to maintain the environmental assets that Western Australian communities and industries depend on.

Expand Strategic Advice

At present, development assessments in WA fail to adequately consider compounding threats to the environment. A more strategic and proactive approach to environmental assessment is needed to better inform developmental policies and planning processes, to ensure that development is ecologically sustainable and not considered solely according to economic benefit. The expanded application of strategic assessments can provide the community and decision makers with a much clearer understanding of the options, constraints and trade-offs of environmental values and economic development. This should be based on the highest standards for environmental information including robust technical data, and information from local Aboriginal people and land users.

Exmouth Gulf:

In 2021, following a request from the Minister for Environment for Strategic Advice on the Exmouth Gulf, the Environmental Protection Authority **(EPA)** released a report on the potential cumulative impacts of the activities and developments proposed for this environmentally sensitive area. Key pressures included shipping, fishing, mining, tourism, climate change, development, pastoralism, and Defence.[x] The EPA recommended increasing protection for areas of the Exmouth Gulf in collaboration with Traditional Owners, while taking an integrated management approach to the region.[xi] In September 2025, the WA Government endorsed a recommendation to protect 30% of the Exmouth Gulf through establishing no-catch sanctuary zones within a new Marine Park – jointly vested and managed with Nganhurra Thanardi Garrbu Aboriginal Corporation **(NTGAC)**.[xii]

Bungalbin - Helena Aurora:

Another example of an effective strategic assessment was the EPA's 2007 s16e *Advice on areas of the highest conservation value in the proposed extensions to Mount Manning Nature Reserve.* This advice played an important role in the 2017 government decision to protect the Helena and Aurora Range (Bungalbin) from the threat of iron ore mining.[xiii]

Furthermore, Strategic Advice for areas where significant natural values are under threat from multiple cumulative impacts within each bioregion could allow for a more systematic and comprehensive approach to environmental regulation. In conjunction with the assessment of specific industries, environmental threats, or individual proposals, the bioregional approach to strategic assessment offers a strong foundation for context-based environmental decision making.

The EPA has statutory functions and strong legal powers through the *Environmental Protection Act 1986* **(EP Act)** (e.g., s16 Functions of Authority and s17 Powers of Authority) that could be better utilised. For example, EPA reports developed under s16(c)[6] could increase the focus on areas that are at threat from cumulative pressures and over-development. These reports could also have increased statutory power, requiring Ministers and government to formally respond to the EPA's advice and ensure the protection of natural values within a bioregion that faces multiple threats.

6 The s16(c) provisions of the EP Act encourage the use of "…studies, investigations and research into the problems of environmental protection and the prevention, control and abatement of pollution and environmental harm…"

Recommendation 4:

Prioritise and fully fund the EPA to conduct assessments and produce strategic advice in response to development pressures across WA's bioregions. This could include:

- **identifying areas where Strategic Advice will advance biodiversity conservation, such as areas where significant natural values are under threat from multiple cumulative impacts;**
- **requiring Ministerial responses to Strategic Advice to be made public before decision making proceeds; and**
- **requiring the Minister to consider Strategic Advice in the assessment of proposals and provide detailed reasons for regarding or disregarding advice.**

Respect Aboriginal Peoples' Knowledge and Role in Caring for Country

Aboriginal peoples' experience, expertise and connection to Country provides valuable ecological knowledge and unique understanding. Greater involvement of Aboriginal peoples in all stages of Caring for Country, therefore, leads to better informed decision making and improved environmental outcomes.

The development of Aboriginal and Torres Strait Islander committees and partnerships within the Commonwealth Department of Climate Change, Energy, Environment and Water **(DCCEEW)** provides opportunities for advice and input into policies and the implementation of government initiatives. For example:

- the First Nations Clean Energy and Climate Change Advisory Committee **(FNCECCAC)** provides advice about Aboriginal and Torres Strait Islander peoples' rights and interest in the energy transition and climate change;[xiv]
- the Indigenous Advisory Committee advises the Minister for the Environment and Water on environment protection, heritage, policy development and Aboriginal and Torres Strait Islander engagement;[xv]
- the Committee on Aboriginal and Torres Strait Islander Water Interests **(CAWI)** includes water experts from across the country;[xvi]
- partnerships with Aboriginal and Torres Strait Islander-led groups such as the Partnership with the First Nations Heritage Protection Alliance and the Minister for the Environment and Water;[xvii] and
- when DCCEEW initiated the 2021 National State of the Environment Report, efforts were made to include Aboriginal and Torres Strait Islander authors and conduct workshops to try to incorporate Aboriginal and Torres Strait Islander voices and perspectives (noting the absence of any workshops in WA).

The WA Government's Aboriginal Empowerment Strategy commits to building Aboriginal partnerships, creating shared decision making and engagement, supporting Aboriginal-led solutions, while strengthening Government accountability.[xviii] In 2019 the WA State Government initiated the Aboriginal Water and Environmental Advisory Group **(AWEAG)** to provide strategic advice.[xix]

These initiatives provide improved connections between Aboriginal groups or committees and formal government regulatory mechanisms; however, they are yet to provide the necessary level of partnership to support high-level input and influence into environmental decision making, policy formulation, and regulatory implementation.

Recommendation 5:

Incorporate Aboriginal cultural and ecological knowledge into biodiversity strategies, bioregional plans, environmental assessments, and decision making. Strengthen the integration of Aboriginal land management knowledge and practices into mainstream land, water, and sea management. To effectively incorporate and value Aboriginal peoples' knowledge, government should provide resources and establish funded Aboriginal committees and partnerships.

Support Aboriginal Rangers and Appropriate Land Tenure Arrangements

Through Aboriginal rangers' involvement in biodiversity monitoring, cultural site maintenance, fire management, and weed and feral animal management, they are often the first to witness and respond to changes in the environment. Cultural responsibilities to care for Country, proximity and extensive local knowledge, make Aboriginal rangers critical to delivering strong environmental outcomes.

Building on the incredibly successful Aboriginal Ranger Program will enhance the tangible environmental and social benefits already being realised. By providing state-wide permanent funding to Aboriginal rangers so they can operate across all conservation tenures, Aboriginal land and other crown land will support access to Country, provide employment, support culture, and advance conservation outcomes. On conservation estate and in marine parks this should be part of joint management arrangements.

Western Australia's Aboriginal Corporations have long sought transfer of conservation estate to Aboriginal land (sole vesting) with arrangements in place for public use alongside management for conservation and cultural outcomes. Currently, the *Conservation and Land Management Act 1984* **(CALM Act)** supports joint vesting of conservation estate between the state and Aboriginal Corporations, however sole vesting to Aboriginal Corporations with lease back arrangements for national parks and joint management requires legislative reform.

Reform of the CALM Act to allow for sole vesting with native title holders and Noongar Regional Corporations, as well as expanding the scale and scope of the Aboriginal Ranger Program, is an opportunity to deliver tangible reconciliation, honour deep cultural ties to land, and strengthen environmental outcomes.

Recommendation 6:[7]

Expand and guarantee funding and support for Aboriginal Ranger Programs for all crown land:

- **Develop policy to align commonwealth and state funded ranger programs to deliver effective and coordinated outcomes across Western Australia, for example, for fire management and cultural burning and rehabilitation.**
- **Provide state-wide permanent funding to the Aboriginal Ranger Program to extend its reach across all crown land and to ensure existing programs continue operation.**
- **Increase funding to the Aboriginal Ranger Programs to enable further programs to be established and existing programs to continue operating across the state.**

Recommendation 7:

Implement joint-management arrangements for National Parks and other conservation land categories through:

- **CALM Act amendments to allow sole vesting with Aboriginal Corporations; and**
- **Developing a policy for the *Land Administration Act 1997* to support Indigenous conservation tenure to underpin Indigenous Protected Areas, the Aboriginal Lands Trust handback, and crown land with native title.**

7 These recommendations have been developed in consultation with partner organisations working on these reforms and reviewed by the CCWA Indigenous Advisory Board members and are supported by CCWA.

Support Private and Community Conservation Programs

Nearly half of WA's threatened species' habitat occurs on private or non-government land.[xx] Supporting private land conservation and community conservation programs, to protect and restore critical habitat, create conservation corridors, and maintain landscape connectivity, provides an additional opportunity to deliver positive environmental outcomes for threatened species. Despite the evident benefits for nature through protections on private land, government funding for covenanting[8] and for managing covenanted land has been in decline since the mid-1990s,[xxi] with proactive government support and promotion of all forms of private land conservation being generally poor.

WA's pastoral and agricultural estate, which covers approximately 50% of the state's landmass[xxii, xxiii,] is another identified opportunity to implement further environmental protections. Currently, conservation covenants are not permitted on pastoral leases, however, well managed conservation activities need not detract from pastoral and agricultural economies, and can even contribute to them, for instance, by providing shelter for livestock and crops, reducing soil erosion and limiting the transfer of pests and diseases.[xxiv]

Community conservation groups and WA's landcare network play a crucial role in conservation across WA and have demonstrated landscape-scale restoration success. Community-led conservation that incorporates local and traditional ecological knowledge can foster stewardship and sense of place and encourage long-term responsibility.

However, effective biodiversity conservation requires broader landscape and seascape scale approaches. To do this, support for private land conservation and community conservation programs is needed, as well as a dramatic increase and expansion in the conservation estate.[xxv] This cannot be achieved without multi-level coordination and capacity building across private, government, Aboriginal groups, NGOs, research organisations, and community groups.

Recommendation 8:

Create incentives for private landholders to protect and restore native vegetation through grants and/or state supported covenanting and stewardship arrangements. Support and build community conservation groups with long-term funding to scale-up habitat restoration projects. To increase protected areas and private lands conservation in WA there should be:

- **long-term targets set for private land conservation, especially for landscapes and ecosystems not sufficiently represented in the National Reserve System;**
- **legislative and policy changes to provide for conservation covenants permitted on pastoral leases;**
- **priority properties for conservation identified through covenants and agreements;**
- **protection of critical habitat prioritised for threatened species and ecological communities to meet conservation objectives; and**
- **incentives, ongoing support and expertise offered under a coordinated state-wide system for private and community conservation.[xxvi]**

8 Covenants programs are spread across five programs and three organisations: Land for Wildlife, Conservation Covenant and Stewardship Program, Biodiversity Conservation Covenant Program, Nature Conservation Covenant Program and Soil Conservation Covenant Program. The programs are delivered by the Department of Biodiversity, Conservation and Attractions, the Department of Primary Industries and Regional Development and the National Trust of Western Australia. Together, the Biodiversity Trust and Land for Wildlife programs combine to protect over 258,000 hectares of bushland.

Review Prescribed Burning in the Southwest of WA

See Case Study 2: Prescribed Burning in WA With a Focus on the South West **for impacts of current fire management practices on biodiversity and climate resilience.**

The Department of Biodiversity Conservation and Attractions **(DBCA)** prescribed burning strategy in the South West[xxvii] is intended to reduce the risk of wildfire, to protect human life and property, and maintain biodiversity. However, the frequent large-scale burning, often far from human life and property, increases longer-term flammability in many ecosystems, as well as having profoundly negative impacts on biodiversity, climate and human health.[xxviii, xxix]

Fire regimes that cause decline in biodiversity are listed nationally as a key threatening process and are regularly cited as a leading threat in protected species Recovery Plans.[xxx] Prescribed burns in the Southwest of WA have become increasingly destructive as declining and erratic rainfall, combined with hotter summers, have led to worsening fire weather conditions and shorter windows of appropriate weather for burning. Poorly applied prescribed burns can result in the collapse of old growth or mature habitat trees, and this can have severe implications for many species that rely on these trees. For example, over 140 giant Tingle and Karri trees collapsed after a prescribed burn near the Valley of the Giants in December 2024.[xxxi]

Instead of frequent, large-scale burning, DBCA can ensure that human life and property are protected with a contemporary, risk-based framework, focusing on enhancing bushfire detection and suppression capabilities, and carefully applied burns close to towns. Any burning beyond the urban-bush interface should be for the purpose of caring for Country, with the inclusion of Nyoongar fire knowledge and careful consideration of fire-sensitive communities and species, including Tingles, peatland, granite outcrops, Wandoo, and Red-flowering gums.

Recommendation 9:

Revise DBCA's Southwest fire management strategy to prioritise rapid bushfire detection and suppression and only carefully applied burns in strategic locations at appropriate times, instead of large-scale frequent burning. Fire-sensitive species and ecosystems should immediately be excluded from prescribed burning.

Aerial view of peatland incinerated in a DBCA prescribed burn north of Denmark. These fire-sensitive ecological communities can take centuries to recover, and only if they are not burnt again (and again).
Image courtesy of WA Forest Alliance.

Part 2 – Environmental Law and Processes

Goal: To strengthen environmental law and processes to protect WA's nature

Western Australia's environmental laws and assessment processes are failing to deliver the level of protection needed to halt biodiversity decline and to protect cultural and environmental values. Despite worsening outcomes for threatened species, [xxxii] the necessary response from government to guarantee the protection of remaining habitat, invest in restoration and implement Recovery Plans has not been forthcoming. Outdated and inadequate legislation, weak enforcement, and inconsistent decision making have left critical habitats, threatened species, ecological communities and water resources vulnerable to degradation and loss.

WA Threatened Species List

	2024 number of listings	2025 number of listings	Change in listings ↑↓
Flora	174 Critically Endangered	178 Critically Endangered	↑4
	151 Endangered	152 Endangered	↑1
	119 Vulnerable	120 Vulnerable	↑1
	16 Extinct	16 Extinct	No change
Fauna	59 Critically Endangered	61 Critically Endangered	↑2
	59 Endangered	66 Endangered	↑7
	132 Vulnerable	123 Vulnerable	↓9
	23 Extinct	23 Extinct	No change

Figure 1: WA Threatened Species List [xxxiii]

Furthermore, the widely condemned and ongoing destruction of cultural heritage sites in WA allowed under the *Aboriginal Heritage Act 1972* are out of step with modern expectations and international obligations to protect cultural heritage and to uphold the rights of Aboriginal people.

To deliver positive outcomes for nature, and greater protection of the environment and cultural heritage, WA needs a fit-for-purpose legal framework that puts nature, culture and people to the forefront of decision making. This means that the *Biodiversity Conservation Act 2016* and the *Environmental Protection Act 1986* should be strengthened, new water legislation enacted, protections for critical habitat embedded in law, climate impacts adequately accounted for, standards for Environmental Impact Assessment **(EIA)** improved to ensure decisions are consistent with the Acts' core objectives and principles, and improvements to working with Aboriginal communities to re-write and pass new Aboriginal Cultural Heritage laws.

Reforming environmental laws and processes in line with best practice will place WA in a position to make the best possible decisions to effectively protect and restore WA's biodiversity.

Review and Strengthen the Biodiversity Conservation Act 2016

WA's *Biodiversity Conservation Act 2016* is failing to prevent biodiversity loss. The statutory five-year review of the Act is long overdue. Furthermore, the BC Act was introduced without sufficient resourcing and has failed to maintain a contemporary positioning. This has become increasingly clear following Australia's signing of the Kunming-Montreal Global Biodiversity Framework **(KMGBF)** [xxxiv] in 2022.

Deficiencies of the BC Act include:[xxxv]

- the process for listing threatened species, critical habitat, TECs, and threatening processes is arduous and comes with high levels of regulatory discretion;
- unfettered discretion is available to the Minister;
- proposals involving disturbance to threatened species, which could contribute to near-term extinction, are able to be authorised;
- definitions, such as that of 'critical habitat', are too restrictive;
- exemption from identified compliance criteria is granted far too often and penalties are inadequate and rarely applied;
- a lack of mandatory strategic planning and bioregional plans, including monitoring and targets;
- inadequate public consultation processes, with a lack of meaningful capacity to effect decision making; and
- insufficient independent research input and review.

The BC Act and its implementation is weighted towards procedures over outcomes and is made ineffective through an unsustainable economic rationale in decision making. Successful conservation outcomes require effective legislation, strong enforcement and substantial increases in funding for responsible departments to effectively implement their administrative duty. The compounding threats to WA's biodiversity should be addressed by the strongest possible statutory tools, which are well-resourced and enforced.

Recommendation 10:

WA needs a modernised Biodiversity Conservation Act that is based on protection, restoration and enhancement, and grounded in evidence, ambition and purpose.[xxxvi] To do this we recommend:

- **conducting the mandated five year review and update of the BC Act in line with Australia's obligations under the Kunming-Montreal Global Biodiversity Framework;**
- **addressing the full range of cited deficiencies in the BC Act;**
- **giving the BC Act primacy over competing legislation;**
- **increasing funding for DBCA to fulfill its monitoring, compliance and other regulatory functions;**
- **meaningfully involve Aboriginal people in design and implementation;**
- **proactively addressing climate change, clearing of native vegetation, and cumulative impacts on biodiversity;**
- **setting criteria for achieving Objects of the BC Act 2016, with commensurate resourcing and public reporting;**
- **mandating Biodiversity Audits, conducted and published on a rolling basis (see also Recommendation 25 under 'Require Biodiversity Audits'); and**
- **mandatory requirements for the identification and protection of critical habitat.**

Strengthen Recovery Plans for all Threatened Species

See Case Study 3: Baudin's - the Forgotten Black Cockatoo – an example of the need to strengthen Recovery Plans to prevent species extinction.

The latest DBCA annual report[xxxvii] states that there are only Recovery Plans for 70% of WA's Critically Endangered, Endangered and Threatened Ecological Communities, and none for vulnerable species. The DBCA has a target of just 72%, with no goal to introduce Recovery Plans for every threatened species. The only published performance indicator[xxxviii] for state listed threatened species is to define whether DBCA is meeting the Recovery Plan target, not whether the plans are effective in addressing species decline.

The 2017 Auditor General review of threatened species has also highlighted that reviews of recovery plans are deficient and only occurring every five to ten years or not at all,[xxxix] and with inconsistent evaluation of outcomes.

There are clear shortcomings in the monitoring and reporting of success outcomes and Recovery Plan requirements. A standardised evaluation framework such as the *NSW Biodiversity Indicator Program*[xl] could assist in tracking the implementation and effectiveness of Recovery Plans.[xli] NSW also has the *Threatened Species Framework*, which aims for zero-extinctions (now), and has committed to ambitious targets to stabilise and improve the trajectory of threatened species.[xlii]

Kaarak – Forest Red-Tailed, Ngolak – Baudin's & Ngolyenok – Carnaby's Black Cockatoos:

All three threatened black cockatoo species in Southwest Western Australia have formal Recovery Plans that were developed more than 10 years ago and were only being reviewed in 2025. In that time, populations have continued to decline, demonstrating the inadequacy of the current approaches.[xliii] To remain effective and informed by the latest expert knowledge, Recovery Plans should be reviewed at least every five years through an adaptive management process, which is open to community input.

Recommendation 11:

To halt the decline of threatened species, ensure full funding and implementation of strong, enforceable Recovery Plans for all threatened species and ecological communities in WA, updated at least every five years, with legal powers to protect species from threatening processes as they emerge. Strategies should include:

- **adopting new perceptions of, and legal protections for, 'critical habitat', that are upheld in assessment processes;**
- **ensuring compliance with Recovery Plans and greater reporting requirements for DBCA to improve the condition of threatened species with the goal of zero new extinctions;**
- **ensuring full funding and implementation of Recovery Plans for all threatened species and ecological communities in WA, updated at least every five years;**
- **mandating and enforcing the compliance of projects that may impact on the habitat of a species with a Recovery Plan and with severe penalties for non-compliance that provide a material disincentive;**
- **strengthening regulatory enforcement capability;**
- **requiring public reporting on the implementation of Recovery Plans and identifying key metrics to assess overall impacts to threatened species as performance indicators;**
- **prioritising the creation, funding and implementation of Recovery Plans for all threatened species; and**
- **assessing and managing cumulative impacts on threatened species.**

Prioritise Ecological Restoration and Resilience

See Case Study 4: Biodiversity Matters for Resilience of Environmental Plantings for why strengthened restoration standards are essential.

The WA *Biodiversity Conservation Act 2016* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) establish a statutory framework for protecting biodiversity. However, these regulatory instruments lack the tools to deliver effective recovery and restoration (see also Recommendation 8 under 'Support Private and Community Conservation Programs').

A commitment to comprehensive ecological restoration, guided by internationally recognised standards (such as those developed by the Society of Ecological Restoration),[xliv, xlv] is essential for the rehabilitation of degraded land (e.g., agriculturally and industrially impacted land). However, these restoration programs should acknowledge that current efforts often fail to achieve self-sustaining ecosystems[xlvi] and, therefore, they should apply suitable controls and adaptive strategies to produce strong biodiversity outcomes. Strengthening statutory frameworks alongside policy frameworks to provide suitable stakeholder engagement, inclusive knowledge systems, responsive approaches, and increased funding to support regulation will ensure WA can meet its biodiversity commitments, while providing cumulative value and building ecosystem resilience for the future.

Recommendation 12:

Commit to strengthened regulatory controls, entailing improved stakeholder consultation, inclusive knowledge systems, responsive approaches and increased funding to support the restoration of ecosystems and ecological health, to build resilience in the face of existing and forecast climate change impacts. Ensure the use of International Principles and Standards for Ecological Restoration.

Protect Critical and Remnant Habitat

See Case Study 5: Northern Jarrah Forest South32 Expansion and Case Study 6: Widening of the Northam-Pithara Road – examples of the failure of existing legislation to safeguard critical habitat for threatened species and ecological communities.

Ongoing clearing and residual habitat fragmentation has led to a significant decline in biodiversity and land quality. The WA Government has acknowledged this decline and the need to address it with the introduction of WA's first Native Vegetation policy.[xlvii] However, the ongoing clearing of Threatened Ecological Communities[9] [xlviii] and other critical and remnant habitats continues with inadequate (or absent) risk data, insufficient regulatory overview and compliance enforcement or bio-regional strategic planning.

9 for example the EPA Advice in the report 'Environmental values and pressures for the Greater Brixton Street Wetlands on the Swan Coastal Plain – Advice in accordance with section 16(j) of the EP Act 1986.'

Buffers :

A key to protection and conservation of critical habitats, remnant vegetation and wetlands is the introduction of effective buffers to reduce the edge effects that arise from adjoining land uses.

Along with 200 countries, Australia signed the Kunming-Montreal Global Biodiversity Framework[xlix] including Target 3 which outlines a commitment

> **"that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed…"**

this ambition has not yet been fully adopted or reflected in policies and laws in Australia or WA.

Recommendation 13:

To halt the loss of critical and remnant habitat, relevant regulatory controls should be amended to explicitly prohibit the clearing of critical and remnant habitat and ensure these habitats are permanently protected, with no exceptions for development or land use changes. Regulatory controls should include:

- **requiring well-substantiated and enforceable buffer zones to protect conservation significant species, threatened ecological communities and conservation significant wetlands;[10]**
- **introducing and regulating a moratorium on clearing within any Local Government Authority (LGA) and Bioregion where native vegetation cover is critically low, combined with the implementation of plans to advance native vegetation cover back to 30% or greater;**
- **making the EP Act Schedule 5 'Principles for clearing native vegetation' binding statutory requirements;**
- **reviewing land clearing exemptions that enable piecemeal assessments (e.g., under Schedule 6 of the EP Act), to improve environmental assessments prior to implementation under other statutory provisions (e.g., *Forest Products Act 2000, Planning and Development Act 2005, Bush Fires Act 1954, Energy Operators (Powers) Act 1979, Fire and Emergency Services Act 1998, Local Government Act 1995,* and any other statutes that may allow clearing of native vegetation without EIA;**
- **reintroducing and bolstering programs that enable permanent and voluntary protective covenants, setting standards for improvement of vegetation cover in areas where vegetation cover is below 30% of pre-colonisation levels (see Recommendation 8 under 'Support Private and Community Conservation Programs'); and**
- **introducing enforceable standards for protecting wetlands and hydrological regimes, including well substantiated buffers, especially for Ramsar listings.**

10 Buffers must be context based and will reflect the level of ecological complexity and sensitivity. Buffers to protect against noise, visual impact, dust, ground and surface water impact, all these factors will be different. So too, buffers required to protect Ramsar wetlands, TECs, cultural heritage will vary.

Proactive Project Filtering

Poorly designed, inappropriately sited, or otherwise flawed proposals that clearly cannot meet the EPA's environmental objectives, place an unnecessary burden on limited government assessment resources. This leads to inefficiencies and delays and diverts capacity from assessing more appropriate and well-designed proposals.

Early filtering can deliver multiple benefits to proponents, government, the community and the environment. It would allow for better environmental assessment, improve efficiency, reduce delays and prevent an unnecessary drain on resources, as well as ensuring environmentally unacceptable proposals do not proceed through the system.

Recommendation 14:

Enable early filtering of flawed or inappropriately sited proposals by relevant agencies to provide quick advice that a proposal is unlikely to be environmentally acceptable using the following two-tiered approach:

(i) Pre-referral screening by agencies

- **Resource government agencies to support specialist environmental review or access to independent expert advice.**
- **Ensure that weak or flawed proposals that come before government agencies have major issues addressed or are otherwise filtered out prior to being referred to the EPA.**
- **Agencies engaging with proponents should seek early feedback on potential siting issues, design flaws and/or environmental impacts from relevant environment agencies and should engage with the EPA early in the process.**

(ii) Quick dismissal of unacceptable proposals

Amend EIA administrative procedures - and legislation if necessary – to enable the EPA to provide a rapid determination that a proposal is unlikely to be environmentally acceptable. This mechanism should apply to proposals that:

- **would clearly not be able to meet the EPA's environmental objectives;**
- **are in contravention of existing environmental policies;**
- **could not be reasonably modified to meet the EPA's objectives; and**
- **are proposed in clear no-go zones for development, for example, in environmentally sensitive areas (see Recommendation 2 under 'Adopt a Bioregional Planning Framework').**

Strengthen Environmental Impact Assessments

See Case Study 7: Perth Surf Park - an example of how clearing of a Threatened Ecological Community and critical black cockatoo habitat was approved without formal EPA assessment, highlighting the need for robust, precautionary Environmental Impact Assessments with clear assessment thresholds.

Environmental Impact Assessment **(EIA)** is intended to mitigate the environmental and social impacts of development proposals, the overall state of decline of WA's natural environment suggests that EIA is not operating effectively to mitigate against the risks. Decisions and recommendations are often at odds with the EPA's objectives, the object and principles of the EP Act and the objectives of the EPA's environmental factors, which underpin the EIA process. Moreover, there are a range of statutory, resourcing, and consultative pathway shortcomings that further complicate EIA.

The effective implementation of EIA and, ultimately, its impartiality and quality rely on addressing:

- Inadequate institutional environmental protection frameworks.
- Inadequate time and resources in government agencies to provide the highest standards in decision making.
- Inadequate input from other government agencies, party to decision making.
- Insufficient specialist expertise in decision making agencies.
- Limitations in public consultative processes.
- Inadequate or simplistic methods to predict impacts.
- Lack of rigor in risk assessments.
- Reliance on predictive assessment models above precautionary models.
- Subjective or biased evaluation of impacts, favouring project approvals and offsets.
- Lack of transparency in Ministerial decisions, obscuring political interference in environmental decision making.

Recommendation 15:

Adopt best practice in EIA, including:

- **establishment of robust guidelines with evidence-based thresholds for determining the level of assessment for referred projects, guided by robust environmental protection criteria;**
- **quickly identifying and terminating assessments of activities that would have an unacceptable impact on nature or the climate;**
- **better assessment of cumulative, indirect and long-term impacts, with greater consideration of the precautionary principle and the promotion of ecosystem outcomes;**
- **applying stronger standards for proponent environmental review documents to ensure they are founded on evidence, that they adequately account for data gaps, and are subjected to the necessary scrutiny and verification;**
- **avoidance of duplication in approval processes by placing EIA to the forefront of local government, planning, or other land use assessment processes;**
- **requiring agencies with specialisation in relevant fields to contribute to EIA processes by providing detailed and publicly transparent input;**
- **opportunities to inform and meaningfully involve the public throughout the assessment process (see also Recommendation 34 under 'Strengthen Public Participation and Accountability');**
- **requirement for proponents to consider a wider range of alternatives to establish the most environmentally protective project option;**
- **requirement for the highest standards in independent scientific and expert overview in the preparation, verification, reporting and review of assessment documentation;**
- **site inspection by the regulatory assessor should be required to support all environmental assessments.**

Assess Climate Impacts

Climate change is having profound consequences for flora and fauna across multiple taxa and trophic levels in WA, with mortality thresholds increasingly surpassed, threatening the persistence of populations.[l, li, lii] The EPA acknowledges that "Some WA ecosystems, including coral reefs, kelp forests, Karri and Jarrah forests, are already at critical thresholds and further warming will result in damage and loss that is irreversible."[liii]

Confronting climate change in an urgent and decisive manner requires a rapid and substantial reduction in our reliance on fossil fuels, along with an end to new fossil fuels projects.[liv] The International Panel on Climate Change **(IPCC)** states that "projected CO_2 emissions from existing fossil fuel infrastructure without additional abatement would exceed the remaining carbon budget for 1.5°C",[lv] while the International Energy Agency notes that no new oil and gas fields are needed on the path to net-zero emissions by 2050.[lvi]

Stopping the clearing of vegetation also presents a pathway to mitigating climate change. Vegetation acts as a carbon sink that draws large amounts of carbon dioxide from the atmosphere and helps stabilise the climate. Mitigation strategies should be devised to abate and halt the loss of sequestered carbon resulting from clearing.

The EPA has stated that it is in the public interest to mitigate greenhouse gas **(GHG)** emissions, noting that global warming should be limited to no more than 1.5°C and that WA requires deep, substantial and sustained emissions reductions this decade.[lvii] Despite this, the EPA continues to recommend approval of some of the biggest fossil fuel projects in the world[lviii] and significant land clearing to support further industrial expansion.

In October 2024, the WA Government deferred GHG emissions assessment of major polluting projects to the federal government through the Safeguard Mechanism **(SGM)**. The SGM, however, has no regard for WA state emissions or net-zero targets,[11] does not consider climate change impacts on WA nature, and does not require best practice, a mitigation hierarchy or a GHG management plan. Moreover, the SGM has been more broadly criticised for providing no clear mechanism for phasing out fossil fuels, only covering part of Australia's emissions, having limited consequences for emitters, providing no limits to offset use, giving no consideration to scope 3 emissions, and not being consistent with the Paris Agreement.[12]

11 Even if WA manages to reduce all energy emissions by 4.9% per annum as required under the SGM (for facilities), emissions will still be above where they were in 2005, let alone 43% below. This represents a shortfall of 28.6 Mt CO2-e in 2030. https://greenhouseaccounts.climatechange.gov.au

12 The SGM only covers approximately 31% of Australia's total emissions, it allows companies to comply using offsets rather than direct onsite emissions reductions, it does not account for scope three emissions, and it allows for the entry of new fossil fuel projects. Real emissions reductions are unlikely to reach nominal targets, with modelling showing that reductions are estimated to only be 12% below 2023 levels. Climate Action Tracker has rated Australia's climate policies, action, and nationally determined contribution targets as "insufficient." https://climateactiontracker.org/countries/australia

Recommendation 16:

To minimise the effects of climate change, all Environmental Impact Assessments conducted by the EPA should assess greenhouse gas emissions (GHGs) against a carbon budget for 1.5 degrees.

In alignment with best practice climate impact assessment [lix,lx] and GHG mitigation, this should involve:

- **taking responsibility to reduce emissions;**
- **applying end-to-end attribution methods that establish clear links between project emissions and specific damages to WA's environment from climate change;**
- **early screening, scoping and consultation to acknowledge project impact, risk and attribution;**
- **identifying 1.5°C aligned mitigation strategies for all emissions (scopes 1,2 & 3);**
- **establishing strong post-decision monitoring and reporting mechanisms that ensure emissions are kept in line with 1.5°C targets;**
- **adoption of a 1.5°C carbon budget analysis, with consideration of other projects and strict limits to offsets.**

Adopt Comprehensive Cumulative Impact Assessments and Controls

The present approach by the EPA is to consider cumulative effects, cumulative impacts and holistic impacts to, primarily, define the significance of a proposal as part of a broader EIA. However, there is no formalised mode of assessment for cumulative or holistic impact and no statutory controls to direct enforcement.

In September 2024, the EPA released draft CIA guidelines for targeted stakeholder comment. This included requirements for proponents to consider a greater range of pressures on the environment, such as climate change, legacy projects with ongoing impacts, invasive species and future activities in the primary approvals pathway. The draft guidelines are yet to be finalised and released for public consultation. It is unlikely that these CIA guidelines will provide the impetus to halt the expansion of competing projects, and their cumulative impact. Rather, they will provide instruction on how better to consider and assess multiple projects.

With many multiple and compounding threats to bioregions, for example, from the expansion of mining operations in the Northern Jarrah Forest, the significant dewatering and clearing of the Pilbara, the industrial expansion of the Midwest, and the increasing urbanisation and industrialisation of the biodiverse Swan Coastal Plain, it is critical that strategies to address cumulative impact are developed. These should require proponents to consider each natural value and the multiple threats to those individual values. However, importantly, CIA strategies should also incorporate mechanisms to prevent overdevelopment of regions or specific resources, including strong legal powers for regulators to act and adequate resources dedicated to rigorous assessment and enforcement capability.

Recommendation 17:

Strengthen WA's environmental laws and processes to ensure cumulative impacts are properly and comprehensively assessed through the use of best-practice environmental controls and enforcement see Recommendation 2 under 'Adopt a Bioregional Planning Framework', and Recommendation 4 under 'Expand Strategic Advice'). To do this we recommend:

- **advancing the draft guidelines for Cumulative Impact Assessment and Holistic Impact Assessment and mandate their use in EIA;**
- **providing clear methodologies for assessing cumulative and interactive environmental impacts, ensuring that assessments reflect the full scope of potential harm;**
- **incorporating mechanisms to enforce CIA and prevent over-development of regions; and**
- **resourcing regulatory bodies to provide detailed CIA assessments and to enforce compliance.**

Limit Use of Environmental Offsets

See Case Study 8: Mardie Salt Project – **an example of the environmental risks of over-reliance on offsets, including habitat loss for threatened species.**

Environmental offsets are designed to counter the impacts of both the short-term and residual effects of development projects, where land is required to be cleared of vegetation or other habitat. The underlying assumption of direct environmental offsets (i.e., revegetation schemes) is that if you destroy one thing, you can replace it elsewhere, and the environment is no worse off. In practice, offsets are being overused and are failing to protect or restore biodiversity in WA. Species and ecosystem decline continues under the current approach.

A 2019 Department of Water and Environmental Regulation **(DWER)** review of Western Australia's environmental offsets framework[lxi] found that environmental offsets approved since the release of the 2011 offsets policy[lxii] had "*…not fully counterbalanced the significant residual impacts of approvals.*" [lxiii]

Furthermore, an evaluation[13] of offsets in WA found that, at most, 39% of offsets were effective and 30% were either inadequately implemented or not implemented at all.[lxiv] Across Australia, at least 70% of environmental offsets for the destruction of habitat did not provide protection of the offset sites.[lxv]

Offsets are failing on many fronts:

- They do not provide not like-for-like or additional habitat;
- Environmental outcomes are not guaranteed, permanent, or measurable;
- Habitat loss is exceeding the rate that revegetation programs can replace it;
- Revegetation programs can only hope to address the future need and not the immediate need for replacement habitat;
- Intact, old, biodiverse ecosystems are not able to be replaced;
- The loss of unique genetic biodiversity is not being addressed by offsets;
- The compounding threats of a warming and drying climate are not being taken into account;
- Research and financial offsets do not address the ongoing loss of wildlife habitat.

Recommendation 18:

To guarantee that offsets meaningfully contribute to biodiversity conservation and an absolute gain in habitat, and to avoid being used to justify projects that are otherwise environmentally unacceptable - environmental offsets must be strictly limited, infrequently used, and governed by stringent criteria for their selection, use, monitoring and reporting. This should include:

- **ensuring that WA's existing policy and guidelines, which call for avoidance and mitigation of environmental destruction being exhausted before environmental offsets are considered, are properly enforced with transparency and accountability measures in place;**
- **amending the *EP Act* to include the mitigation hierarchy for decision making[14]**
- **implementing clear conditions for environmental offsets to measure ecological outcomes, which include contingency and future planning, in the event of ecological outcomes not being met;**
- **implementing mandatory monitoring and reporting that is timely and with severe penalties to incentivise compliance; and**
- **subjecting biodiversity offset sites to legal mechanisms (e.g. conservation covenants) to ensure these sites are conserved in perpetuity.**

13 This UWA study was funded by a DPAW (now DBCA) scholarship.

14 The Environmental Protection Act 2019 **(NT)** s26 has an environmental decision-making hierarchy which requires decision makers, proponents and approval holders to apply the hierarchy in order of priority. https://www.austlii.edu.au/cgi-bin/viewdoc/au/legis/nt/consol_act/epa2019284/s26.html

Water Reforms

See Case Study 9: Boddington Bauxite Mine - **an example of the need for a more holistic approach to water resource assessment and management.**

> **Water is essential to all life on Earth and is intrinsic to Indigenous connection to Country. It is through this lens, rather than through a lens of exploitation, that a sustainable relationship with water should be approached.[lxvi] Aboriginal peoples' right to access and use water should be enshrined in new legislation to safeguard water for everyone and all life.**

WA's inland waters face increasing pressures from climate change, which has caused significant reductions in streamflow and groundwater recharge,[lxvii, lxviii] as well as more frequent events of extreme heat, intense rainfall, and flooding.[lxix]

WA water users have an unquenchable thirst. DWER administers 12,000 water licenses to take a total of over 4 trillion litres of water annually with 78% of water used taken from groundwater aquifers almost entirely for free.[lxx] WA's water laws are outdated[lxxi] and are out of step with the National Water Initiative.[lxxii] The threats to WA's water from overconsumption and climate change make water law reform urgent.

Water Allocations

WA has non-statutory water allocation plans for most of the state, [lxxiii] but for some areas including the Northern Goldfields[lxxiv] and East Pilbara, there are no water allocation plans despite significant allocations of water for mining and agriculture. Many existing water allocation plans are outdated,[15], [lxxv] rely on studies that are more than a decade old [16], [lxxvi] and do not consider current allocations, changes in water quantity or quality, or, in some cases, environmental requirements.

The Gnangara groundwater allocation plan 2022 highlights the flaws within current laws when it comes to managing water allocations sustainably and efficiently.[lxxvii] This non-statutory allocation plan has taken years to prepare and proposes a 10% reduction in approximately 2,500 water licensees' entitlements from July 2028 to address the over-allocation of almost all the water management areas on the Gnangara groundwater system.

Water Quality

WA is the only Australian jurisdiction that has not legislated the National Water Initiative,[lxxviii] nor granted recognition of environmental water.[lxxix] There are clear examples of where the National and WA laws are not being complied with.[lxxx]

Current allocation plans are either non-statutory,[lxxxi] fail to provide allocation limits, or are non-existent for licences even if the water supplies a Ramsar[17] wetland.[lxxxii] Some allocations are not even licenced, as is the case for the Boddington mine (see Case Study 9), and fail to manage cumulative impacts.[lxxxiii, lxxxiv, lxxxv]

The 2024-25 Office of the Auditor General report on the Regulation of Water Licences found that the regulatory body, DWER, is failing to sustainably

15 for example, the 2007 Carnarvon Artesian Basin Water Management Plan - last updated in 2011.

16 for example, the Pilbara Groundwater Allocation Plan (2013), using studies from 2007 and 2011.

17 Ramsar wetlands, are wetlands that are listed as being of international importance under the Ramsar Convention, Australia is a signatory to the convention and WA is host to 12 listed Ramsar sites. https://rsis.ramsar.org

manage WA's water resources, citing major deficiencies in monitoring and compliance, with potential non-compliance incidents not being assigned to staff.[lxxxvi] The Auditor General's report follows similar findings in 2003 and 2009.

A 2021 Auditor General's report highlighted issues with drinking water in Aboriginal Communities. The follow-up report *Delivering Essential Services to Remote Aboriginal Communities* identified that water quality had improved in 38 communities following the Auditors 2015 recommendations. However, there remains ongoing issues concerning levels of water-borne pathogens, nitrates and uranium in some communities.[lxxxvii]

Recommendation 19:

Implement the recommendations made by the Office of the Auditor General[18] and supported by DWER, including recommendations to:

- **develop and document a risk-based approach to the monitoring of compliance with water licence conditions;**
- **strengthen the enforcement approach to ensure there is effective action taken;**
- **publicly release information on licence holder compliance and non-compliance to promote transparency and to encourage compliance.**

Recommendation 20:

Improve Water Resource Planning by:

- **developing, updating and implementing stronger, evidence-based water allocation plans for every catchment area in WA where there are multiple users and pressures;**
- **conducting regional groundwater studies to inform strategic management frameworks;**
- **ensuring that water allocations/ licensing provide economic benefits to Aboriginal people; and**
- **ensuring increased Aboriginal access and use of water.**

18 Recommendations made in OAG report 20: 2024-2025 Regulation of Water Licences Available at: https://audit.wa.gov.au/reports-and-publications/reports/regulation-of-water-licences

Recommendation 21:

Reform the Rights in Water and Irrigation (RIWI) Act 1914 to make it consistent with the National Water Initiative (soon to be the National Water Agreement) by legislating a new Water Act that:

- **gives statutory recognition of water for environmental and public benefit outcomes;**
- **legislates strong protections for our water resources and water dependent environmental assets;**
- **develops enforceable water quality guidelines;**
- **establishes robust and consistent monitoring and accounting of water use and environmental water outcomes with sufficient resources to DWER to fulfil its monitoring and compliance role;**
- **introduces statutory long-term water entitlements and a clear legislative framework for assigning risk for potential future reductions in the availability of water for consumption;**
- **enshrines the inclusion of Aboriginal peoples in water planning and decision making, with consent that is free, prior and informed;**
- **initiates joint decision making that considers the cultural, spiritual and environmental impacts to water[lxxxviii] and the whole environment; and**
- **deeply embeds the precautionary principles in all decisions made about water.[lxxxix]**

Recommendation 22:

- **Ensure safe drinking water for all Western Australians;**
- **improve testing of water quality in remote Aboriginal communities and remedial actions to ensure communities have clean, safe drinking water at all times; and**
- **take immediate remedial action where there is known industrial contamination of drinking water sources or infrastructure.**

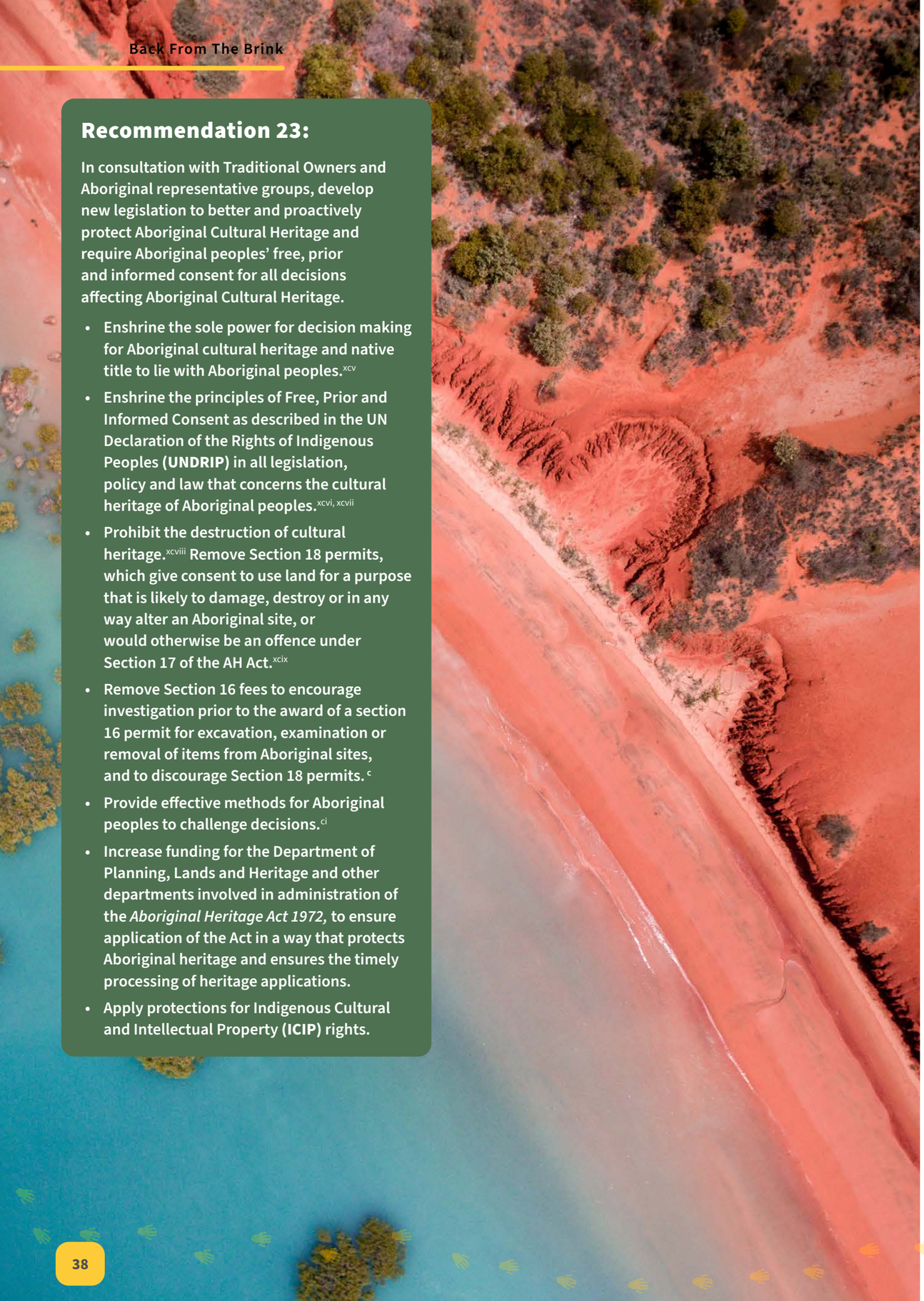
Protect Cultural Heritage

See Case Study 10: Juukan Gorge - an example of the urgent need to update legislation to protect Aboriginal Cultural Heritage.

The Aboriginal Heritage Act 1972 (**AH Act**)[xc] makes it an offence to damage or destroy Aboriginal Heritage (section 17) and provides a mechanism to allow consent to certain uses (section 18).[xci] Section 18 controls are, however, insufficient to protect against the destruction and removal of Aboriginal heritage.[xcii] This issue is discussed in the Juukan Gorge case study (see Case Study 10).

The United Nations Committee on the Elimination of Racial Discrimination **(CERD)** expressed deep concern about the failure of the AH Act to protect against the destruction of cultural heritage and to uphold international obligations on the rights of Indigenous people. CERD noted that "*none of the 463 mining-related applications made since 2010 under the Act of 1972 were rejected*".[xciii]

The legislation was founded without any consultation with Aboriginal peoples, is inadequate to formally recognise or protect Aboriginal heritage and is inadequately enforced.[xciv]



Recommendation 23:

In consultation with Traditional Owners and Aboriginal representative groups, develop new legislation to better and proactively protect Aboriginal Cultural Heritage and require Aboriginal peoples' free, prior and informed consent for all decisions affecting Aboriginal Cultural Heritage.

- **Enshrine the sole power for decision making for Aboriginal cultural heritage and native title to lie with Aboriginal peoples.**[xcv]
- **Enshrine the principles of Free, Prior and Informed Consent as described in the UN Declaration of the Rights of Indigenous Peoples (UNDRIP) in all legislation, policy and law that concerns the cultural heritage of Aboriginal peoples.**[xcvi, xcvii]
- **Prohibit the destruction of cultural heritage.**[xcviii] **Remove Section 18 permits, which give consent to use land for a purpose that is likely to damage, destroy or in any way alter an Aboriginal site, or would otherwise be an offence under Section 17 of the AH Act.**[xcix]
- **Remove Section 16 fees to encourage investigation prior to the award of a section 16 permit for excavation, examination or removal of items from Aboriginal sites, and to discourage Section 18 permits.** [c]
- **Provide effective methods for Aboriginal peoples to challenge decisions.**[ci]
- **Increase funding for the Department of Planning, Lands and Heritage and other departments involved in administration of the *Aboriginal Heritage Act 1972,* to ensure application of the Act in a way that protects Aboriginal heritage and ensures the timely processing of heritage applications.**
- **Apply protections for Indigenous Cultural and Intellectual Property (ICIP) rights.**

Part 3 – Monitoring, Compliance, Enforcement and Transparency

Goal: To strengthen environmental evaluation, monitoring, compliance and transparency

To build a shared understanding of the health of Western Australia's environment, respond effectively to the risks to nature, and hold industry and government to account, improvements to public reporting, transparency, monitoring and compliance are urgently needed. This includes strengthening biodiversity audits, conservation and Recovery Plans, and reinstating State of the Environment **(SoE)** reporting in WA to provide a consistent and accessible evidence base to inform policy and decision making.

Making data accessible to the public will not only help protect ecological values but will also establish public trust in state protection efforts. Data should utilise community, cultural, and science-backed research traditions to ensure a holistic approach to environmental monitoring and management.

To ensure protection efforts are being met, WA should offer appropriate emphasis on strengthening environmental compliance. Prioritising monitoring and compliance with adequate resources will help incentivise compliance by proponents and instil confidence that our environmental protections carry meaning.

Public confidence would be further bolstered by transparency in decision making. The WA Government should aspire to establishing a statutory 'right to reasons' for decisions under the EP Act.

And with tens of thousands of novel entities[19] flooding our environment from commercial use and production, a strong and transparent chemical and plastic pollution assessment and monitoring framework is required to mitigate risks to WA environment and public health.

These measures will help inform decision making on extractive processes, clearing, water licensing, development proposals and offsets, whilst identifying what is needed to maintain and protect the ecological values unique to WA.

Fund State of Environment Reporting

WA's environment faces increasing pressure from land clearing, climate change, and declining biodiversity, yet decision making continues in isolation from a clear publicly available health assessment of WA's natural environment. SoE reports provide public reporting on the overall condition of the environment. The data and analysis in a SoE report provide the opportunity to consider risks, inform policy, and drive actions towards protecting the environment we all rely on.

The EPA last published a SoE in 2007— nearly 20 years ago.[cii] This gap leaves WA significantly behind other Australian jurisdictions, all of which produce SoE reports every two to five years to track environmental health and trends.

Regular SoE reports are important for measuring whether key environmental values are being maintained, are improving, or are declining. Establishing a reliable baseline for tracking environmental trends will assist in forming strategies to guide sustainable development, to protect WA's unique ecosystems for future generations, and to frame public debate and engagement. Moreover, reliance on nationally derived data sets

19 Novel entities are as defined by the UN Scientific and Technical Advisory Panel as "things created and introduced into the environment by human beings that could have positive or negative disruptive effects on the Earth's system." Available at: https://www.stapgef.org/resources/advisory-documents/novel-entities

is insufficient to address the unique context-bound challenges for WA's environment - national reporting cannot justify abandoning state-level reporting.

Recommendation 24:

- **Fund and establish a legal requirement for the EPA to undertake State of the Environment reporting, mandated on a two-year cycle and enshrined in the *EP Act.***
- **Require reports to be developed with independent environmental experts, Aboriginal involvement across different regions in WA, and community input on the scope and detail of the report to ensure credible, independent and timely assessments.**
- **Require a mandatory government response to the report's findings that are made publicly available along with the SoE report. This will ensure a continual comprehensive review of WA's environmental health and trends.**

Require Biodiversity Audits

Biodiversity audits collate data on threatened species and ecological communities for the purpose of assessing the status of threats to biodiversity. This data is crucial to direct bioregional nature conservation plans and Recovery Plans, and for tracking the success of conservation efforts and planning.

In the 2017 Audit of Threatened Species, the Auditor General found that information from biodiversity audits was not being systemically analysed[ciii] and was, therefore, leaving this important information underutilised.

DBCA currently conducts biodiversity audits on an irregular basis, with the last Biodiversity Audits being conducted in 2002, 2013, 2015.[civ] More frequent audits, with adequately analysed data are necessary to facilitate effective conservation efforts. Public reporting and analysis of changes identified through the audits would provide valuable insights and evidence about the health of our environment and help inform decisions to protect nature.

Recommendation 25:

Require DBCA to conduct and publish Biodiversity Audits every two years. To deliver this DBCA should:

- **establish a dedicated team to carry out ongoing data collection and reporting to inform audits;**
- **make recommendations on responses and actions to Biodiversity Audit data; and**
- **include Aboriginal representation in the auditing process.**

Strengthen Monitoring and Compliance

Recent audits into WA's environmental regulators have found "*weaknesses in agency practice,*" concluding that there is low confidence that environmental protections are being met[cv] or that the environment is being adequately protected.[cvi] The Auditor General explained that our regulators are not effective in ensuring compliance *"with conditions to limit environmental harm and financial risks to the State,"*[cvii] and they lack an understanding of how well conditions are complied with. The Auditor General also found that current monitoring and enforcement does *"little to deter operators from breaching conditions."*[cviii]

Furthermore, the timeliness of enforcement and responses to suspected non-compliance is lagging[cix] and the lack of published compliance information reduces social pressure, which when utilised correctly, can provide leverage to promote compliance.[cx]

On monitoring threatened species, the Auditor found that DBCA does not monitor the condition of Threatened Ecological Communities **(TEC)** *"despite having the ability to do so."*[cxi] The Auditor highlights that there are no clear objectives and that progress to protect TECs is not clear because of the absence of monitoring.

Despite the evident flaws in compliance practice and environmental monitoring, there is concern that inspection programs appear to have been reduced. A reduction in inspections means there is an overreliance on self-reported and often unverified information on compliance from proponents.[cxii]

Recommendation 26:

Improve monitoring and compliance across the state by:

- **prioritising monitoring and compliance activities and programs with a focus on illegal clearing, breaches of approval conditions or licences, including water licences;**
- **establishing and fund robust monitoring and compliance program;**
- **ensuring monitoring programs are evidence based, robust and that appropriate threshold triggers applied;**
- **adopting third party independent reviews to establish the accuracy of proponent-reported information;**
- **establishing a comprehensive framework for enforcement responses, including improved timeliness of enforcement actions and penalties that reflect the risk and which guarantee an effective deterrent; and**
- **making compliance outcomes and enforcement actions more readily accessible to the public (see also third party enforcement recommendation 36), to improve transparency, accountability, and to promote good corporate citizenship and social pressure to comply.**

Strengthen Mine Rehabilitation and Environmental Compliance

See Case Study 11: Petroleum wells in Stokes Bay Mangrove System – an example of a failure in rehabilitation requirements and enforcement for oil and gas projects.

Department of Mines Petroleum and Exploration **(DMPE)** and DWER are consistently falling behind on environmental monitoring and compliance of mining. An Office of the Auditor General (2022)[cxiii] review of mining and environmental compliance found that we cannot be sure the environment is being adequately protected due to an over reliance on self-reporting from the mining sector, ineffective enforcement, reduced and incomplete monitoring programs, and an absence of public reporting and transparency.[cxiv] The Auditor's report provides an apt reminder of the shortcomings of environmental regulatory process and the potential impacts of these deficiencies on nature.

The Mining Rehabilitation Fund **(MRF)** has been in place for over a decade. The 10-year review of the legislation explains that the fund holds just $291 million[cxv] generated from the levy system which replaced closure bonds. This does not reflect the financial liability of rehabilitating existing abandoned mine features, let alone the liabilities from any newly abandoned mines. There is no equivalent levy or bond arrangement for offshore oil and gas and no adequate incentive for rehabilitating either mines or oil and gas in WA.

One of the biggest failures of the MRF is that it does not require the 29 mines operating under State Agreement Acts to contribute to the fund.[cxvi] The 2014 Auditor General's report into mine closure found *"there is no single arrangement to give the State financial security against rehabilitation failure on these State Agreement sites."*[cxvii] The 2011 Auditor General's report into Mining highlighted an even larger problem with State agreements noting that the Department of Mines *"considers that it does not have the legislative powers to fulfil a monitoring and enforcement role on State Agreement projects where the Mining Act is not specifically applied."*[cxviii]

The MRF levy and interest raised from investing the fund, which is then allocated to remediating abandoned sites, has been a welcome approach to addressing the legacy of abandoned mines in WA. However, the MRF and Abandoned Mines Program does not address the lack of incentives for companies to rehabilitate mines, ignores the increase of projects left in 'care and maintenance'[20]

20 Care and Maintenance refers to a mine that is not operating but is not under rehabilitation or closure, and with

indefinitely and the continued practice of selling off depleted assets with rehabilitation liabilities to smaller companies who do not have the capacity to meet rehabilitation requirements.

Recommendation 27:

Strengthen mine rehabilitation regulation and environmental compliance, monitoring and enforcement.

- **Review and implement outstanding recommendations made in the 2004,[cxix] 2011 and 2014 Auditor General's reports on ensuring compliance with mine conditions.**
- **Fully implement the Auditor General's (2022) recommendations to improve environmental monitoring, enforcement and transparency across the mining and oil and gas industries.**
- **Close the loopholes that allow companies to avoid closure or rehabilitation liabilities, ensuring that industry – not the public – bears the cost of environmental damage.**
- **Negotiate changes to State Agreement Acts, through Department of Energy and Economic Diversification (DEED), to require proponents to contribute to the Mining Rehabilitation Fund and develop a Memorandum of Understanding to enable DMPE to carry out monitoring and enforcement.**
- **Implement stronger requirements restricting the use of care and maintenance to evade closure.**
- **Re-establish individual bonds, in addition to levies, to strengthen the protections for meeting rehabilitation requirements and to guard against bankruptcy and incentivises rehabilitation.**
- **Implement individual bonds and levies, for the decommissioning of onshore and offshore oil and gas sector, to incentivise decommissioning and ensure funds are available in case of abandonment.**
- **Introduce chain of responsibility laws for both mines and oil and gas, protecting against selling off assets that require rehabilitation or decommissioning to companies without the means to meet those requirements.**
- **Incentivise the potential of re-mining tailings and abandoned mines with strong rehabilitation requirements.**

Strengthen Pollution Monitoring and Regulation in WA

See Case Study 12: PFAS Chemicals – **an example of the environmental and biodiversity impacts caused by inadequate pollution monitoring and regulation, including bioaccumulation in native species and widespread contamination of aquatic and terrestrial ecosystems.**

Pollution poses a significant and growing threat to WA's environment, biodiversity, and public health. Highly hazardous chemicals, including per- and polyfluoroalkyl substances **(PFAS)**, pesticides, Persistent Organic Pollutants **(POPs)**, and microplastics, accumulate in ecosystems, disrupt ecological functions, and pose risks to wildlife and human populations. The Kunming-Montreal Global Convention on Biological Diversity recognises pollution as one of the key drivers of biodiversity loss and Australia, as a signatory, is obligated to reduce the negative impacts of pollution to levels that are not harmful to ecosystems by 2030 (KMGC Target 7).[cxx]

WA shares responsibility for chemical regulation with the federal government. While the federal government oversees the import, export, and manufacturing of chemicals, their use, handling, transport, disposal and risk management, after they enter the WA market they are regulated at state level.[21] However, the current framework lacks a strong, state-wide monitoring system and enforceable pollution reduction targets, leading to the potential for unchecked environmental contamination.

Recommendation 28:

Strengthen pollution regulation by:

- **establishing a strong and transparent state-wide framework under WA's EP Act to monitor and regulate waste, chemical pollution (including highly hazardous chemicals and pesticides), PFAS, POPs and microplastics;**
- **mandating comprehensive, independent assessments of chemical contamination in terrestrial and aquatic ecosystems with biomonitoring of the terrestrial, aquatic and marine environments, focusing on areas with threatened species; and**
- **setting robust, statutory industrial pollution regulation standards and enforceable targets to reduce pollution levels and safeguard biodiversity and community health.**

Guarantee Right to Reasons

The community expects and should be entitled to reasons for government decision making that affects their interests – be it directly (e.g., proponents or neighbours), or indirectly (e.g., those concerned about environmental impacts and decisions affecting the environment as a public asset).

Without knowing the reasons for a government decision, it is very difficult for a member of the public to understand whether community views and submissions have been taken into account and what evidence was considered and relied on to reach their conclusion. The publication of a statement of reasons enables greater transparency, accountability and public confidence in decision making by setting out the reasons for which a decision was made, and the evidence relied upon in making the decision.

The process of requiring a statement of reasons can also lead to *"better and more rational decision making"*[cxxi] improved transparency by providing insights into the matters that were considered and improved accountability by enabling review on whether a decision was made lawfully.[cxxii]

Unlike legislation in other jurisdictions (including federally),[cxxiii] government decision makers under environmental legislation in WA are not required to provide formal statements of reasons for their decisions. A statutory right to reasons being added into environmental legislation would bring WA into line with modern best practice legal decision-making standards.[cxxiv]

Recommendation 29:

Establish a statutory 'right to reasons' for all decisions made under the EP Act and under other environmental legislative instruments, ensuring transparency in decision making.

an expectation that they will recommence operations – there are no limits on how long a mine may be in the state of Care and Maintenance.

21 For example, some of these responsibilities lie with DWER - Environmental Protection (Industrial Chemicals) Regulations 2023 and Contaminated Sites Act 2003; Worksafe - Work Health and Safety (General) Regulations 2022, Department of Health – Health (Asbestos) regulations 1992 and Health (Pesticides) Regulations 2011.

Part 4 – Effectiveness, Independence and Public Participation in Decision Making

Goal: To ensure environmental decision making protects the environment

Institutional independence and the right to public participation underpin effective environmental decision making. The recent changes to the EPA board appointments, establishing Ministerial Statements of Intent to the EPA, and removal of public appeal rights on level of assessment decisions, represent a broader weakening of independence and public participation in decision making in WA.

Independence was a foundational pillar of the EPA, yet directives from the Vogel McFerran review (2023) undermine this fundamental feature of the EPA. To ensure assessment decisions are based on environmental objectives, free from political or corporate influence, the independence of the EPA, Appeals Convenor and other environmental regulators should be safeguarded not just in law but in the culture and practice of these regulatory institutions.

Not having an independent merits review system for environmental decisions in WA undermines our EIA process which can be entirely overridden by Ministerial decisions that consider factors other than the environment, but with no transparency or reporting, and no merits-based options for review. Establishing a specialised independent Environment Court would enhance fairness and accountability and allow for the interrogation of how decisions were made. Following on from this, expanding legislative provisions in WA to allow for third-party enforcement of environmental laws, will enhance the capacity across the state to enforce conditions and hold proponents to account.

To advance regulatory independence, free from industry interference, decision making should be connected to 'place-based' knowledge, best pursued through public participation in decision making. Public participation maintains a level of civic engagement and empowerment, promotes democratisation of decision making, and it supports transparency of process and public scrutiny of decisions, forcing accountability by regulatory institutions, and a critical positioning for decision making.

Ensure Ministerial Accountability

See Case Study 13: Yeelirrie Uranium Project – an example of how Ministerial discretion allowed approval of a project likely to cause extinction of highly endemic subterranean species, despite EPA advice.

The *Environmental Protection Act 1986,* and other environmental legislation in WA, was created to protect the environment, conserve, and enhance biodiversity and nature. These legislative instruments provide government decision makers with specific powers intended to guide decision making and ensure powers are exercised in line with environmental objectives.

However, the current legislation provides a degree of discretion to government Ministers. While this provides the scope to address unforeseen circumstances, in practice it can enable decisions that undermine key protections, including the principle of ecologically sustainable development, or enable decisions that cause harm to the environment.

Western Australians should be able to have confidence that governments will make decisions that prioritise the protection of the environment. Environmental laws should place clearer requirements on the use of government powers in prioritising safeguarding the environment and biodiversity. Too often discretionary powers to consider jobs and the economy through an opaque process separate to environmental assessments mean that Ministerial decisions are made that come at the expense of good environmental outcomes. There is no mechanism to interrogate and challenge the merits of a Ministerial decision (see Recommendation 31).

Recommendation 30:

Amend the *Biodiversity Conservation Act 2016 and the Environmental Protection Act 1986* to:

- **require Ministerial decisions be consistent with the objectives of the Acts and with Recovery Plans for threatened species and ecological communities; and**
- **prevent the Minister from approving projects that are likely to cause serious or material environmental harm, including species extinction.**

Establish an Independent Environment Court

Unlike other Australian jurisdictions,[22] WA does not have an independent merits review system for environmental appeals. Instead, legislation provides the Minister for the Environment with the power to decide on an appeal, typically guided by the same departmental advice, according to which a decision was already formulated and appealed against. This should not replace the Office of the Appeals Convenor and the non-judicial mechanism for appealing EPA reports.

Moving appeals from the Minister to a specialised, independent court or tribunal would bring WA into line with other jurisdictions in Australia, such as NSW, while producing a range of benefits, including:

- increasing public confidence, as it is a public, easily identifiable and separate, specialised forum, which improves accountability for decision makers;
- providing impartiality and authority, as well as particular technical expertise, to produce better decisions, instead of tasking the Minister with reviewing the government's own decisions;
- establishing flexible and practical procedures, which further reduce time and costs involved in appeals;
- increasing transparency over appeals processes; and
- developing a system of precedents in previous court or tribunal decisions.

Establishing an Environment Court or Tribunal should retain a system that is accessible without legal representation and designed to be more informal than a higher court.

Recommendation 31:

Create a specialised independent Environment Court or Tribunal to hear both merits-based and judicial reviews of appeals and environmental decision making, to increase fairness and accountability.

Strengthen Regulatory Bodies

Reports of environmental regulatory shortcomings in WA have become commonplace, with performance audits concluding that regulatory bodies are consistently failing to conduct proper environmental monitoring and compliance.[cxxv, cxxvi] At the same time we have seen an overwhelming focus by the current government towards streamlining and fast-tracking environmental assessments and an over reliance on self-reporting, unverified information and high-risk areas have been left untargeted.[cxxvii]

Despite increasing industrial activity accompanying the additional threats of climate change and biodiversity loss, staffing levels and monitoring activities have decreased in recent years, resulting in a diminished understanding of operator compliance.[cxxviii] Strong regulation of extractive and industrial activities

22 NSW has the Land and Environment Court and QLD has the Planning and Environment Court -see QLD Planning and Environment Court Bill 2015 Explanatory Note. Available at: https://cabinet.qld.gov.au/documents/2015/Nov/PlanningBill/Attachments/PlanningEnvironCourtExNotes.PDF

is critical to safeguard against the threats these activities pose to waterways, landscapes, flora and fauna, and air quality, while posing financial risks to the state and health risks to local populations. (See Case Study 12: PFAS Chemicals for an example of the need for stronger regulation of industrial activities to prevent significant harm to the environment.)

WA's specialist government agencies DBCA, DMPE and DWER and their relevant ministers should prioritise resourcing agencies to ensure effective monitoring and compliance and enforcement with environmental conditions.[cxxix] These bodies, in most cases, have powers to enforce and ensure compliance with the EP Act, but lack the direction from government to prosecute, or the proper resourcing and capabilities to use these enforcement powers. Where they are used, they are often not commensurate with the harm that has been inflicted,[cxxx] and there are some loopholes giving exemptions to projects under State Agreement Acts.

Numerous recommendations to enable more frontline compliance have followed audits and reviews, including:

- Increased funding
- More technical expertise
- Identification of high-risk areas
- Publishing compliance outcomes
- Independent verification Third party enforcement Full documentation of site selection process Clear guidance and thresholds

Recommendation 32:

Improve the resourcing of key environmental regulators including DBCA, DMPE, DWER and other regulators, to ensure they have the capacity for effective environmental assessment, monitoring, enforcement and prosecution, particularly in addressing climate change, pollution, and habitat and biodiversity loss.

Guarantee Independence of the EPA

Independence is a foundational pillar of the EPA. The Environmental Protection Act 1986 states that neither the Authority nor the Chair shall be subject to the direction of the Minister. Providing independent strategic advice to government remains a key goal of the EPA.[cxxxi] However, recent reviews of the EPA have directed legislative changes that fundamentally undermine its statutory independence. And this follows more direct interference by government in the EPA's role and ability to set strong environmental standards.[cxxxii]

Following recommendations from the Vogel McFerran review, the *WA Government* passed the Environmental Protection Amendment Act 2024. Part 3 of the Amendment Act requires the Minister to publish a Statement of Expectations annually, which *"is to set out the Minister's objectives on matters relating to the Authority's functions"* (Part 3 21B (2)). The Act requires the EPA to "have regard to the expectation statement."

While Section 8 of the EP Act clearly states that the EPA is not subject to Ministerial direction, this new directive may conflict with the fundamental principle of EPA independence. The direction could enable political pressure to approve priority projects.

Section 7(2A) enables appointments to the EPA Board based on skills in *"industry, commerce, or economic development"*—criteria that do not align with the EPA's core purpose. To date there has been nothing to exclude people from the board with industry, commerce or economic development skills if that person also had other environmental expertise. Industry and economic factors are already weighed in ministerial decision making and should not shape the EPA's expert advice.

These changes build on historical examples of the independence of the EPA being undermined by the government.[cxxxiii]

Recommendation 33:

Guarantee the independence of the EPA by:

- **amending the *Environmental Protection Act 1986* to clarify that any Statement of Expectations is subject to Section 8 of the EP Act, ensuring the EPA remains independent from political interference;**
- **limiting the scope of the Statement of Expectations to procedural matters only (e.g., queue order), not outcomes, timeframes, environmental factors, nor to influence recommendations on specific projects;**
- **requiring that any Statement of Expectation is consistent with the EP Act's objectives and purposes (Section 4A);**
- **removing the "industry and commerce" provision for appointments to the EPA board, or require candidates meet additional existing criteria;**
- **amending the requirement for EPA members to have an "interest and experience in environmental matters" to instead require experience in the "protection of the environment", aligning with Section 4A and 15 of the EP Act;**
- **maintaining a five-member Board to preserve efficiency and cohesion in decision making;**
- **increasing transparency through the publication of deliberations; and**
- **improving EPA resourcing for its broader functions in s16 (including scientific review and advice).**

Strengthen Public Participation and Accountability

See Case Study 14: Lot 7 Buffalo Road, Sand Quarry and Case Study 15: Kennedy Bay Public Jetty - both projects pose(d) threats to threatened habitat and species and were 'not assessed' by the EPA. At Buffalo Rd, public appeals on the decision to 'not assess' led to the Appeals Convenor and EPA deciding an assessment was required. The Kennedy Bay Jetty was not open to public appeals following the removal of appeal rights in 2024 and there remains strong opposition, including from the local government, City of Rockingham.

Public participation in decision making is a critical pillar of a fair and democratic society,[cxxxiv, cxxxv] and participation in environmental decision making should be especially protected because of the *"rights of every person of present and future generations to live in an environment adequate to his or her health and well-being."*[cxxxvi] On the question of public interest and standing in environmental law, Prof. Graeme Samuel concluded that *"broad standing remains an important feature of environmental legislation, particularly given the presence of collective harm resulting from damage to environmental or heritage values."*[cxxxvii]

There are, however, mounting concerns that the WA Government's streamlining of regulations,[cxxxviii] aimed at reducing the timeframes for assessments, may restrict meaningful public participatory processes. For example, in 2024 the right to appeal an EPA referral decision on setting the 'level of assessment'[23] was removed,[cxxxix] followed by the introduction of a State Development Act which has been described as anti-democratic.[cxl]

23 On a CCWA review of 48 Ministerial decisions as part of the appeal process in 2023-2024 we found 54% of appeals resulted in improved environmental conditions or decision-making. Report available on request. See case studies 7, 13, 14 & 15 for different examples of appeals.

Public participation remains an important tool to strengthen decision making by:

- supporting the incorporation of knowledge and traditions beyond scientific and legal standpoints;
- grounding decisions in real-world operating conditions drawing on knowledge that is situated within the local environmental context;
- demonstrating community expectation on environmental protection; and
- improving trust and relationships between regulatory agencies/ institutions and citizens and/ or proponents.

Aboriginal communities can be at particular risk of exclusion from environmental decision-making mechanisms under restricted timeframes, lack of access to independent technical advice, and a failure to embed Aboriginal people into decision making processes and governance structures. The United Nations Declaration on the Rights of Indigenous People **(UNDRIP)** includes Part 4 – Self Determination and Free Prior and Informed Consent **(FPIC)**, which is considered a best practice approach to consultation.

Recommendation 34:

Retain and improve mechanisms for public participation and consultation to include standards for meaningful and ongoing public participation in Environmental Impact Assessments and decision making, such as those set out in the 1998 Aarhus Convention.[cxli]

Recommendation 35:

Implement Free Prior and Informed Consent requirements and guidance in line with the UN Declaration on the Rights of Indigenous People.

Third Party Enforcement

Australian jurisdictions such as Victoria and New South Wales[cxlii] have established rights that allow third parties to seek recourse in the courts for breaches of environmental laws. For example, bringing proceedings to restrain a breach of a provision in the EP Act such as offences of causing serious or material environmental harm.

Expanding legislative provisions to allow for third party enforcement of environmental laws, including offences under the RIWI Act, empowers the community to participate in enforcement and shares the regulatory burden. The enforcement provisions acknowledge the value of the knowledge, expertise and access to information that the public has about breaches and offences, which comes with being in proximity to where a breach is occurring. This can relieve some regulatory burden particularly in regional and remote areas of WA.

Third party enforcement has proven not to encourage vexatious litigation[cxliii] but rather to provide for useful public participation and greater accountability for environmental harm. Third party enforcement also represents an important safeguard if a government regulator fails to act (due to resourcing constraints or other policy priorities).

Allowing third parties to bring proceedings would support access to justice, public participation and accountability while balancing the regulatory burden on government enforcement agencies. It would also represent an appreciation and valuing of the intent within the community to protect the environment.

Recommendation 36:

Support third party enforcement, by establishing an express right of third parties to enforce environmental laws in Western Australia to improve public participation, access to justice, and accountability.

Case Studies

Case Study 1: Nullarbor Caves and Karst

By Dr. Stefan Eberhard, Former Honorary Associate, Western Australian Museum; Co-founder at Save the Nullarbor Inc.

Project: Western Green Energy Hub (WGEH)
Location: Nullarbor Plain
Impact: Impact to caves and karst region of World Heritage significance.

The Nullarbor Plain is the world's largest arid limestone karst,[24] which is recognised nationally and internationally for its World Heritage values.[cxliv] The Nullarbor meets all four of UNESCO's natural heritage criteria for World Heritage, based on its caves, karst landforms, and associated features such as cave minerals, speleothems, palaeo-environmental records, sub-fossil bones, and rare or endemic subterranean species and ecosystems.[cxlv] Outstanding natural attributes of the entire Nullarbor also include the world's greatest area of cave-systems in an arid environment; a record of ancient forms of life preserved in the caves; the world's longest escarpment, including lengthy lines of spectacular sea cliffs; and the remarkable surface environment of the astoundingly flat Nullarbor Plain itself.[cxlvi]

Despite a compelling and growing body of scientific evidence compiled over the last 35 years, World Heritage nomination has not been progressed in Western Australia. This contrasts with South Australia **(SA)**, which has already granted around one-third of the Nullarbor karst a high level of protection (Fig 2) and the SA Government is supporting World Heritage nomination for the SA portion of the Nullarbor and Great Australian Bight.[cxlvii] A cogent case for protection also applies to the two-thirds portion of the Nullarbor karst located in Western Australia, which harbours the majority of outstanding individual karst features including Cocklebiddy Cave, Weebubbie Cave, and Abrakurrie Cave for example.[cxlviii] A comprehensive reappraisal of the entire Nullarbor limestone region, embracing assessment of natural, cultural and marine ecosystem values, is long overdue.

The Western Green Energy Hub **(WGEH)** is a proposed 70 GW pa renewables-powered hydrogen and ammonia production and export venture. The project proposes 3,000 wind turbines and 60 million solar panels on 22,000 square kilometres of the Nullarbor (Fig 2), a new marine port and town for ~8,000 people, desalination plant, ammonia plant and storage tanks, construction workshops, ~35 hydrolyser plants, quarry, and thousands of kilometres of roads, powerlines and pipelines.[cxlix]

24 Karst landscapes are formed by the dissolutional weathering of soluble carbonate rocks such as limestone, often characterised by well-developed subterranean drainage systems and karst features including caves, dolines, blow holes, and springs.

Weebubbie Cave – a vast underground river system carrying ancient groundwater more than 100 kilometres from the inland limestone to the Southern Ocean. The high porosity of the Nullarbor limestones means the proposal poses a threat to the Nullarbor aquifer and its unique lifeforms. Image by Stefan and Bronwen Eberhard.

The proposed envelope of the WGEH sits atop the central portion of the Nullarbor karst, a region containing the highest density of recorded karst features, including multiple highly significant caves with rare and endemic cave species, speleothems, subfossil bones, and cultural heritage values (Fig 2). The development envelope contains more than 4,500 karst features, including over 400 caves, over 500 rock holes, over 1,900 blowholes, and over 1,470 dolines (Fig 3).

If the WGEH proceeds, the development will impact a vast swathe of fragile karst landscape, soils, vegetation, caves, Aboriginal cultural heritage, underground ecosystems and connected marine ecosystems. Even if infrastructure could be located to avoid the thousands of known karst features, there would be cumulative damage done to landscape, soils, vegetation, caves, dolines, blowholes, rock holes and cultural sites over ensuing decades due to the indirect impacts of a huge increase in vehicles and visitation by several thousand more people living in the area. These indirect impacts would not be confined to the project envelope, and would extend across the Nullarbor region, especially into neighbouring conservation reserves, namely Eucla National Park, Nuytsland Nature Reserve, Nullarbor National Park and Wilderness Protection Area.

As a signatory to the UNESCO World Heritage Convention, Australia has an obligation to identify and protect areas of Outstanding Universal Value (Articles 3 and 4 of the Convention). Allowing any damage to the Nullarbor's outstanding natural and cultural values would be a breach of Australia's legal responsibilities and obligations under the Convention.[cl] The Australian Government may have a legal obligation under international law to use its powers to initiate a process for World Heritage nomination of the Nullarbor. This includes the power under Section 14 of the Environment Protection and Biodiversity Conservation Act, 1999.

State governments also have an important role to play in facilitating a cooperative national approach such as through the Intergovernmental Agreement on the Environment.[cli]

Recommendations:

- **Bioregional planning to identify where environmental and cultural, and in this case – world heritage - values are not compatible with development, thus informing the identification of no-go zones and planning for protected areas.**
- **Proactive project filtering that rules out proposals in areas with outstanding natural and cultural heritage values.**

A holistic management approach to the Nullarbor karst region and its heritage values, with funding and resources to provide the highest level of protection, as prescribed by the IUCN Guidelines for Cave & Karst Protection.[clii]

(See Recommendation 2 under 'Adopt a Bioregional Planning Framework', and Recommendation 14 under Proactive Project Filtering.)

This spectacular cave lies in the heartland of Nullarbor karst Country, inside the proposed development footprint of the colossal wind and solar hydrogen hub. Image by Stefan Eberhard

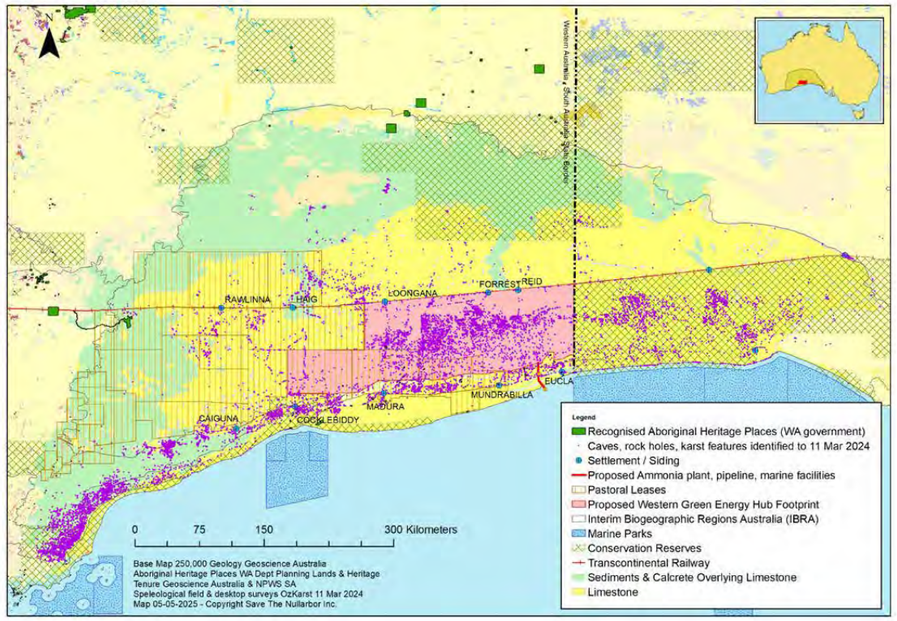


Figure 2: Nullarbor karst features identified to 11 March 2024 and the proposed footprint of WGEH as of 2024. Note the high density of significant caves and karst features inside the WGEH envelope, its abutment to the Nullarbor National Park/ Wilderness Protection Area in South Australia, and the aberrant interruption in the marine reserve system near Eucla, where WGEH propose to insert a desalinisation plant and international shipping port. Map compiled by Save The Nullarbor Inc.

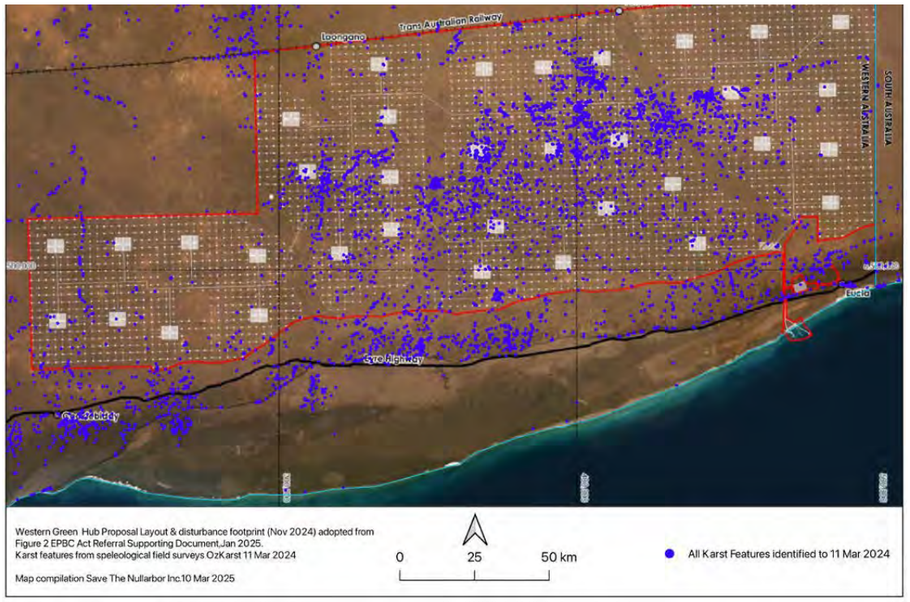


Figure 3: Western Green Energy Hub proposed indicative infrastructure layout and disturbance footprint (2024) showing more than 4,500 karst features, including over 400 caves, over 500 rock holes, over 1,900 blowholes and over 1,470 dolines identified to 11 March 2024. Map compiled by Save The Nullarbor Inc.

Case Study 2: Prescribed Burning in WA with a Focus on the South West

By Peter Robertson, campaigner at South West Forests Defence Foundation Inc.

Issue: DBCA prescribed burning and fire management practices
Location: Southwest WA native forests; other WA ecosystems
Risk: The loss of fauna including threatened species; destruction of habitat and ecosystems; promotion of a more fire-prone environment; impact on forest dependent industries and release of unregulated greenhouse gas emissions.

One of the most serious threats to Western Australia's biodiversity and other environmental, community and economic values, especially in the context of climate change, is the fire management practices of DBCA.

DBCA's approach to fire management, across all ecosystems on all categories of land for which it is responsible under the CALM Act, focuses on its annual program of prescribed burning, resulting in large-scale, frequent and repetitive burning of millions of hectares of varied natural ecosystems every year. This is conducted without adequate independent expert scientific or community input before, during or after it occurs.

DBCA's five-page 'Fire Management Strategy' has as its number one objective 'fuel management', which means prescribed burning.

DBCA's annual prescribed burning program is based on 'fuel load' and burn area targets (e.g., 200,000 ha per annum in the southwest forest regions)[cliii] that have been challenged in multiple scientific studies[cliv,clv] The program is very costly;[25] comes with significant community safety risks (e.g., pressure to burn under dangerous fire weather conditions); causes significant unregulated greenhouse gas emissions;[clvi][26] damages habitats and ecosystems and kills threatened species;[clvii] harms human health (via smoke),[clviii] and impacts important industries like honey and wine production and tourism.

One of the functions of the WA Conservation and Parks Commission **(WACPC)** under the CALM Act is to conduct periodic 'performance assessments' of the implementation of forest management plans. In 2012 the WACPC published a review of the biodiversity outcomes of prescribed burning in the southern forests.[clix] This report made a series of findings critical of DBCA's approach to prescribed burning across the forest region, such as, "there is a lack of planning detail on habitat goals for declared rare fauna species known to be within the burn boundaries." It is unclear which if any adverse findings have been addressed by DBCA.

25 DBCA annual report 2023-2024 reported spending was "$55,493,000 in last financial year for prescribed burning and fire management."

26 The South West Forests Defence Foundation estimate that "200 000 ha of prescribed burning in South-west forests would emit approximately 8 million tonnes of GHG per year."

In 2004, the EPA undertook a review of the prescribed burning practices of the Department of Conservation and Land Management in the southwest forest regions.[clx] Since then, repeated requests for a review – amid worsening climate conditions and other threats – have been consistently declined. As recently as December 2024 the EPA refused to assess a specific DBCA planned burn in the Tingle forests near Walpole, arguing that under current legislation the issue had been sufficiently assessed as part of the Forest Management Plan 2024-2033.[clxi]

Recommendations:

- **Mandate periodic and rigorous assessment of DBCA's annual prescribed burning program by a well-resourced and independent EPA.**
- **Implement more cost-effective, safer and less destructive approaches to fire management over prescribed burning, in particular, early detection and rapid suppression of unplanned fires before they become wildfires.[clxii] Require full transparency on reasons to utilise prescribed burning instead of alternatives.**
- **Prohibit fire-sensitive and long-unburnt ecosystems from inclusion in DBCA's annual prescribed burning program. DBCA's unnatural fire regimes threaten ecological communities such as EPBC-listed Empodisma peat swamps in the Walpole Wilderness Area and Red, Yellow and Rate's tingle forests.[clxiii] Areas of long-unburnt forest, woodland, heathland and wetland should be protected as a baseline against which to measure impacts and as habitat for species that rely on long intervals between fires.**
- **See also Recommendation 9 under 'Review Prescribed Burning in the Southwest of WA'.**

DBCA prescribed burn (Dec 2024) in the old growth tingle forests near Walpole resulted in the destruction of centuries-old trees like this tingle tree. DBCA has burns planned for the fire-sensitive tingle forest every year, resulting in the continuing loss of irreplaceable, iconic, tingle trees. Image by Peter Robertson.

Case Study 3:
Baudin's – the Forgotten Black Cockatoo

By Mark Henryon, BirdLife Western Australia Advocacy Committee

Species: Baudin's Black-Cockatoo (Calyptorhynchus baudinii)
Distribution: South West WA, reliant on Marri
Impact: The species is at risk of extinction, predominantly due to the clearing of critical habitat, data gaps, lack of funding, and failure to update the status of the species.

Baudin's Black Cockatoo in flight. Image by Keith Lightbody.

Baudin's Black Cockatoos (*Calyptorhynchus baudinii*) are quietly edging toward extinction. Conservation efforts have been insufficient, and the population has drastically declined since the 1950s.[clxiv, clxv] Estimates suggest a drop from 10,000-15,000 individuals in the 1990s to just 2,500-4,000 mature birds today.[clxvi, clxvii] The primary driver of this decline is habitat loss, with fire, illegal shooting, vehicle collisions, lack of nesting hollows, and competition with feral bees and other birds for these hollows also playing significant roles.[clxviii] These threats are further exacerbated by climate change, which disrupts both habitat and ecosystem functions. The species' low reproductive rate (0.3-0.6 offspring per pair per year[clxix]) and aging population[clxx] – many individuals are too old to breed – contribute to low recruitment rates (the addition of individuals to a population). Without immediate, coordinated action to address each of these threats, BirdLife Western Australia predicts that will become functionally extinct within 50 years.[27] [clxxi]

27 BirdLife WA's prediction is based on the following evidence:
1. Over 90% population decline in last 40 years
2. Approx. 2500-4000 mature birds remaining
3. Alarming trend - "increasingly steep decline in the population that is probably going to continue" (Action Plan for Australian Birds 2020)
4. Cockatoo experts agree that Baudin's are "in dire straits"
5. Their non-breeding habitat - the NJF - is being cleared and fragmented; the NJF is also struggling with a drying climate. Baudin's rely on the NJF for survival.
6. Most sensitive of the three black cockatoos, incl. noise, disturbance, location loyal, rarely use artificial hollows.
7. Upgrade of Conservation Status rejected means little protection
8. No monitoring program, no funds, no recovery plan

Baudin's have become the '*forgotten*' Black Cockatoo – overlooked in favour of the more well-known Carnaby's Black-Cockatoo. As a result, conservation actions for Baudin's are severely lacking. Four key shortfalls highlight this neglect:

- **'Data deficiency'.** There is limited knowledge about the species' population size, trends, distribution, biology, nesting sites, food and water requirements, and breeding behaviour.[clxxii] This issue is further compounded by the difficulty of locating Baudin's Black Cockatoo nesting and roosting sites in the dense, tall forests they inhabit. Furthermore, published studies often fail to differentiate Baudin's from Carnaby's Black-Cockatoo.[clxxiii]
- **Lack of funding.** Conservation programs for Baudin's Black-Cockatoo suffer from chronic underfunding, with little money allocated to surveys, research, habitat restoration, or Recovery Plans.
- **Threatened status not upgraded to Critically Endangered.** Baudin's is listed as *Critically Endangered* by the International Union for Conservation of Nature **(IUCN)**, BirdLife International, and the Action Plan for Australian Birds 2020. Yet, both the WA[clxxiv] and Federal [clxxv] governments list the species only as *Endangered*. The outdated *Endangered* listing means weaker legal protections, less scrutiny of habitat destruction, and smaller offsets – making it easier and cheaper for developers and mining companies to clear the Northern Jarrah Forest **(NJF)**.
- **No Recovery Plan.** While Baudin's Black-Cockatoo was previously part of a Recovery Plan that included the Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*), this plan expired in 2021.[clxxvi] The primary actions of the plan were limited to reducing illegal shooting and increasing the number of nest hollows.

Even if these conservation shortfalls were rectified, they would be undermined by government policies and legislation that continue to allow habitat destruction. No amount of data, funding, upgrade of threatened status, or Recovery Plans will reverse the decline of Baudin's Black Cockatoos without halting and reversing habitat loss.

Legislative reform to protect and restore habitat is essential to secure the species' recovery.

Securing the recovery of Baudin's Black Cockatoos requires comprehensive legislative reform to protect and restore their habitat. Without such reform, the species faces an extremely high risk of extinction.

The following policy recommendations will enable the implementation of targeted conservation efforts, ensuring the species' long-term recovery.

Recommendations:

- **Halt and reverse the loss of critical habitat for Baudin's Black Cockatoos.**
- **The WA Government should fully fund a Recovery Plan for Baudin's Black Cockatoos, ensuring it is data-driven and adaptable as new information emerges. Additionally, DBCA should be mandated to audit the plan regularly to ensure its implementation and success.**
- **Fund comprehensive monitoring of Baudin's Black Cockatoo across its range to gather critical information on population size, distribution, migration patterns, food requirements, breeding range and timing, breeding age, nest tree and hollow characteristics, breeding success, and nest site fidelity. This information is essential for effective conservation planning and monitoring progress over time.**
- **See also Recommendation 13 under '<u>Protect Critical and Remnant Habitat</u>'.**

Baudin's Black Cockatoo feeding. Image by Keith Lightbody.

Case Study 4: Biodiversity Matters for Resilience of Environmental Plantings

By Professor Rachel Standish,[1] written in collaboration with Elina Rittelmann-Woods,[1] Ryan Borrett,[1] Dr Alexandre Pedrinho,[1] and Dr Tina Parkhurst,[2] academic staff and PhD candidates at Murdoch University[(1)] and University of Melbourne[(2)].

Issue: Lack of guidance for diversity in environmental plantings to successfully restore ecosystems in a global biodiversity crisis
Location: South West WA
Impact: Failure of restoration efforts to achieve resilience and positive biodiversity outcomes in a changing climate.

Southwestern Australia is an obvious place for action on biodiversity loss. Habitat destruction and fragmentation of its agricultural landscapes, urban development, and resource extraction have been vast and consequential.[clxxvii, clxxviii, clxxix] Many regions have had native vegetation cleared below safe ecological limits, such as the Wheatbelt where only 7% remains.[clxxx]

More recently, climate change has exacerbated the impacts of human activity in Southwestern Australia. Future projections of rainfall reductions and increased extreme weather events will limit agricultural production on some farms.[clxxxi] There is a generational opportunity to use this unproductive land for ecosystem restoration projects that build biodiversity and carbon back into these landscapes, and reverse environmental degradation. These projects should be guided by best practice to achieve their potential environmental and biodiversity benefits.[clxxxii]

The Australian Carbon Credit Unit **(ACCU)** Scheme provides the opportunity to generate carbon credits by planting mixed-species or mallee under the Reforestation by Environmental or Mallee Plantings—FullCAM Methodology Determination 2024.[clxxxiii] Additionally, the *Nature Repair Act 2023* provides the opportunity to generate biodiversity credits by planting vegetation under the Nature Repair (Replanting Native Forest and Woodland Ecosystems) Methodology Determination 2025.[clxxxiv] Done right, proponents can claim both carbon and biodiversity credits from the same project.

Currently, the methodology determinations include detailed instructions for proponents, including the use of local 'reference' native vegetation to guide species selection for projects.[clxxxv] For example, there are requirements on seed sourcing for the carbon credit scheme (i.e., that seeds be collected from within the natural distribution of the species and appropriate for biophysical characteristics of the area planting). However, the methodologies **lack guidance on the number of species to plant**. The unstated assumption appears to be that species will return in time. The reality is that plant species do not disperse easily in the fragmented Wheatbelt landscape.[clxxxvi] Herbs, for example, do not tend to recover by themselves in biodiverse reforestation plantings.[clxxxvii] This understorey layer is critical to biodiversity and ecological function.

Projects may fail without diversity to underpin ecological resilience to disturbances, including climate-induced disturbances such as drought.[clxxxviii] This is because diverse planted forests are more likely to contain the variety of responses needed to maintain resilience in the face of multiple disturbances such as fire and flood.[clxxxix] If one species is destroyed by a pest, then other, pest-resistant species, can fulfil its ecological function until it recovers. The **methodologies require ecological resilience but lack the guidance on how to achieve it.**

The lack of guidance in the legislation leaves room for proponents to establish species-poor projects that a) do not contribute meaningfully to biodiversity outcomes and b) are not resilient to extreme climate events (e.g., drought, flood). Projects may fail, and failure will lead to uncertainty among potential investors in the nature repair market. Australia cannot afford to let this happen.[cxc] Moving forward, it is critical that biodiverse plantings aim to restore the biodiversity of the reference ecosystem and not just a fraction of it.

Wild ('reference') York gum woodland in Ballardong Country (Kellerberrin) Western Australia. Photo by Rachel Standish.

Recommendations:

- **Integrate biodiversity objectives into reforestation projects, setting specific goals, and mandating the transparent reporting of biodiversity outcomes.**[cxci]
- **Incentivise progress, e.g., to proponents attempting to return the herbaceous layer.**

See also: Recommendation 1 under 'Implement an Ambitious Biodiversity Strategy', see Recommendation 2 under 'Adopt a Bioregional Planning Framework', and Recommendation 12 under ' Prioritise Ecological Restoration and Resilience'.

Case Study 5: Northern Jarrah Forest South32 Expansion

By the Convenor at WA Forest Alliance

Project: Boddington Bauxite (Worsley) Mine Expansion, South32 Worsley Alumina Pty Ltd
Location: Boddington, Northern Jarrah Forest Bioregion, within the Harris River State Forest
Impact: Northern Jarrah Forest clearing and fragmentation, and loss of threatened and other species' habitat.

The Northern Jarrah Forest **(NJF)** is the world's most biodiverse temperate forest and largest remaining contiguous ecosystem in WA's southwest biodiversity hotspot.[cxcii] With native forest logging ended, mining is the major forest clearing and fragmentation threat. One example is South32's bauxite mine expansion near Boddington.

Bauxite mining removes the entire forest cover and lateritic subsoil; stockpiled topsoil is later returned, and the mined area replanted with Jarrah forest species.

South 32 mine truck (July 2024). Image by Simon Blears

With the forest substrate gone, ecological restoration of the NJF ecosystems is not possible.[cxciii] Compared to the original habitat, rehabilitation efforts result in a significantly diminished ecological structure, composition and function, reducing habitat quality for already threatened fauna species - counter to their Recovery Plans.[28]

Over 410 square km of the NJF has been cleared for mining since 1963. This could reach 120,000 square km by 2075.[cxciv]

The Boddington bauxite mine expansion will clear 3,885 ha of the NJF, in addition to 13,633 ha previously approved for mining where clearing is yet to begin.[cxcv]

The Jarrah Forest to be impacted is largely intact, with high species richness and minimal weed invasion.[cxcvi] Habitat loss will impact eight conservation significant fauna species, and five endangered or critically endangered species, including Forest Red-tailed and Baudin's Black Cockatoos, Woylie and Western Ringtail Possum.

After a Public Environmental Review, in mid-2024, the EPA recommended conditional approval of the Boddington mine expansion, despite stating *"pressures and threats to the NJF are yet to be fully described … due to limited understanding of complex environmental interactions at a system level, the lack of quality data and information, and the absence of a whole-of-ecosystem assessment."* [cxcvii]

The EPA has noted significant 'knowledge gaps' in government data on the Northern Jarrah Forest and recommended a whole of government approach to respond to these gaps. Recommended conditions require new surveys of conservation significant flora and fauna and future reporting to address past compliance failures and data inadequacies.[cxcviii]

The EPA considered renewed rehabilitation efforts and biodiversity offsets sufficient to address ongoing mining impacts. However, rehabilitation is expected to result in only 'a *reasonable* degree of ongoing ecological function'.[cxcix] Despite offsets being the 'least preferred option', EPA conditions feature many, particularly for threatened fauna species' habitat losses. This contravenes the IUCN policy that offsets should not allow for processes that risk the further endangerment of threatened species.[cc]

An appeal process upheld the EPA's assessment and, substantially, its recommended conditions.[cci] State and federal government approvals followed.

Recommendations:

- **Ensure projects with likely significant impacts on critical habitat and threatened species are not approved on the condition of offsets**

See also Recommendation 18 under '<u>Limit Use of Environmental Offsets</u>'.

28 The significant greenhouse gas emissions are not discussed here, nor Aboriginal cultural heritage, nor are the impacts on water resources (<u>see case study 9</u>).

Case Study 6: Widening of the Northam-Pithara Road

By Wildflower Society of Western Australia

Project: Main Roads WA, widening of the Northam-Pithara Road
Location: Central Wheatbelt
Impact: the loss and fragmentation of mature Eucalyptus woodland and other critical and remnant habitat.

Eucalyptus woodland along the Northam-Pithara Road forms part of a strategic vegetation corridor from the northern Wheatbelt, through the central Wheatbelt to the Great Southern and South Coast linking hundreds of small areas of reserved land and disused and vacant townsites. Some of this woodland includes mature eucalypts (wandoo, salmon gum and York gum), 200-400 years old, that provide foraging habitat, nesting hollows and roosting sites for a range of fauna including birds, lizards and insects. The Wheatbelt has less than 30% of remnant vegetation cover,[cciii] making this remnant vegetation significant, reflected in its listing under the *EPBC Act* as a critically endangered threatened ecological community - *Eucalypt Woodland of the Western Wheatbelt.*[cciii]

Clearing of roadside vegetation for a perceived need to improve road safety, poses a significant threat to conservation in the Wheatbelt, and to South-Western Australia more broadly.

The road safety program has failed to consider the impact of vegetation loss in areas where vegetation cover has already fallen below levels necessary to sustain high levels of biodiversity,[cciv] and has neglected to account for the presence of rare and endangered plants and animals. Furthermore, felling of the mature trees can have significant impacts, as they provide potential refuge and breeding habitat for birds and other animals.

Mature salmon gums marked for removal by Main Roads. Images by Brett Loney.

As part of the Regional Road Safety Program, the state government sought to clear 1 m of vegetation on either side of the Northam-Pithara Road to accommodate the widening of the road. The program enabled the installation of audible white lines along 10,000 km of state roads, costing a total of $1 billion.[ccv]

The clearing of the Northam-Pithara Road was assessed under the Statewide Clearing Permit issued to the proponent in 2005,[ccvi] enabling the completion of roadworks within WA without the need to apply for individual clearing permits for each project. The clearing assessment was made available to limited interest groups for comment, for the proponent to then assess and adjust the project accordingly. The comments made reflected the importance of the mature vegetation on one side of the road and the presence of singular or planted vegetation of a relatively young age on the other side of the road, as well as highlighted the need to limit the clearing to the younger vegetation and to conserve the mature eucalypts. These comments were disregarded by the proponent, who argued that modifying the project in this way would prevent it from being completed before the funding had to be expended.

When work commenced, members of the local community were outraged about the clearing of the mature eucalypt trees, and some community members arrived at the site to see owls flying from a hollow in a large eucalypt that was being felled. Inspection of the trees in the area showed evidence of several small bird species using the hollows throughout the day. There was also evidence of a goanna climbing a tree, likely seeking food from bird nests. Other species of insects, spiders, and lizards were observed in the leaf litter, shrubs and under the loose bark of trees. When staff from the proponent's local office were made aware of these environmental values, the design of the project was negotiated and modified to avoid removing the mature trees.

There are a number of aspects of this project that highlight deficiencies within the current environmental legislation and the *(Clearing of Native Vegetation) Regulations 2004* under the *EP Act.*

The Northam-Pithara Road project highlights that clearing of remnant vegetation for land development or change of land use should not be permitted in areas of less than 30% cover, even where the land is classified for that purpose under existing tenure. It also highlights the deficiencies that currently exist in the provision of area-wide permits to proponents, as well as the need to consider the follow-on environmental implications of programs, plans and strategies developed within government and corporate institutions prior to their implementation.

Recommendations:

- **Introduce a moratorium on the clearing of native vegetation in any Local Government Authorities and bioregions where the vegetation cover is less than 30% of levels pre-European settlement.**
- **Develop and implement stronger legislation that prohibits the clearing of environment that contains TECs, or rare or endangered individual species, including a 200 m buffer (such a distance has been adopted previously on scientific advice but was removed in 2015.)**[ccvii]

See also: Recommendation 1 under 'Implement an Ambitious Biodiversity Strategy' and Recommendation 13 under 'Protect Critical and Remnant Habitat'.

Large mature tree cut down by Main Roads. Image by Brett Loney.

Case Study 7: Perth Surf Park

By Urban Bushland Council

Project: Perth Surf Park
Location: Jandakot – within the Threatened Ecological Community - Banksia woodlands of the Swan Coastal Plain
Impact: The clearing of endangered Banksia Woodland, which provides critical habitat for two threatened black cockatoo species.

The Perth Surf Park was initially proposed in 2018 for Tompkins Park in Alfred Cove.[ccviii] This site is a Bush Forever Site (BF 331) with significant environmental value, providing a buffer to the Swan Estuary Marine Park, and supporting the A-Class Nature Reserve located adjacent. The site also includes wetland and dampland habitat that forms important wildlife corridors. The proposal was referred to the EPA and public comment was advertised, receiving 740 public submissions – 66% of which called for an assessment. However, the EPA decided not to assess, despite huge community opposition. Subsequently, an appeal against the decision was made and was put indefinitely on hold, due to the immense pressure from the public.

An alternative site in Jandakot was later chosen, with plans for an open water surfing lagoon, accommodation, food and beverage venues, functions centre and events space, skating facilities, and health and wellness facilities.[ccix] The Perth Surf Park was referred to the EPA in 2022 by the proponent, PSP Properties. This new location contains critical habitat for the endangered Carnaby's Black Bockatoo and the vulnerable Forest Red-tailed Black Cockatoo, as well as the Threatened Ecological Community - *Banksia woodlands of the Swan Coastal Plain.*[ccx] Additionally, the site includes a Conservation Category Wetland **(CCW)**.

DWER found that the proposal was at variance with the following four clearing principles:[ccxi]

- The vegetation is of high biodiversity value – *clearing principle (a)*:
- The area contains three vegetation types, three quarters of which is in good or better condition.
- The vegetation is part of habitat critical to the survival of black cockatoos and habitat for multiple other fauna – *clearing principle (b)*
- The application area contains 2.08 ha of foraging habitat for two black cockatoo species
- The vegetation is part of a TEC – *clearing principle (d)*
- The clearing of 3.16 hectares of the endangered Banksia Woodland will contribute to the further decline and fragmentation (i.e., have a significant impact) of this endangered ecosystem
- The vegetation is growing in association with a wetland – *clearing principle (f)*
- The proposal will result in the clearing of 1.48 hectares of a wetland that has values that are commensurate with a CCW.

Despite these findings, the Perth Surf Park project was not assessed by the EPA and was granted a clearing permit by DWER.

Again, the proposal was referred to the EPA, receiving 1,096 submissions, with 946 requesting an assessment. Again, the EPA decided not to assess, despite great community opposition, citing that the likely environmental effects were not significant enough to warrant assessment. No advice was given. In the explanation of the decision, the EPA considered that the vegetation is of "low-moderate quality foraging habitat for black cockatoo" (Perth Surf Park extract of determination, p.1),[ccxii] which is in contradiction to DWER's reports of good to better condition foraging habitat.[ccxiii] The EPA also failed to address the loss of a TEC and impacts to a CCW.

A clearing permit was then granted by DWER to clear a total of 5.75 ha of native vegetation. Following a lengthy appeals process, the Minister upheld the decision by DWER. The Minister justified his decision by stating that the "economic benefits of the surf park outweigh the significant environmental values of the application area".[ccxiv] The Minister also admitted that the project was part of a private commercial venture.

This case exemplifies the lack of accountability and independence in WA's environmental decision making. In 2024, further legislative changes weakened the EPA's independence, introducing fast-tracked approvals, removal of rights to appeal 'not-assess' decisions, and the introduction of a "Statement of Expectation" from the Minister for the Environment.[ccxv,ccxvi] This is why reform is greatly needed.

Recommendations:

- **Introduce provisions to ensure that projects at variance to the clearing principles can't be approved, to prevent the clearing of critical habitat or TECs.**
- **Guarantee a 'right to reasons' for all decisions made under the EP Act, including the reasons for why a decision was made and the evidence relied upon in making the decision. Where economic reasons factor into the decision, mandate the provision of a triple bottom line analysis (economic, social and environment) of the proposals. See 'Guarantee Right to Reasons' for more detail.**
- **Make proponents responsible for demonstrating the public benefit of projects.**
- **Reinstate and update *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992.***

See also: Recommendation 13 under 'Protect Critical and Remnant Habitat', Recommendation 14 under 'Proactive Project Filtering', and Recommendation 15 under 'Strengthen Environmental Impact Assessments'.

From top to bottom: (A) Old grass tree. Image by Margaret Owen. (B) Red-Tail Black Cockatoo. Image by John Blakey. (C) Members of the community gather to protest the proposal to clear threatened ecological communities and the habitat of threatened species. Image by Heidi Hardisty.

Case Study 8: Mardie Salt Project

By Australian Marine Conservation Society

Project: Mardie Salt Project
Location: Pilbara coast, Roebourne Plains & Robe River Delta Mangrove system
Impact: Loss of native vegetation in good to excellent condition, including habitat supporting the vulnerable Pilbara olive python and a Priority 3 ecological community, and significant residual impacts on the intertidal and marine values and species dependent on them.

The Mardie Project is a large-scale industrial salt and sulphate of potash project by Mardie Minerals Pty Ltd, located 80 km southwest of Karratha in the Pilbara region of WA. Spanning more than 28 km of the Pilbara coastline, the project includes seawater intakes, expansive salt ponds, bitterns disposal to the marine environment and an export facility.[ccxvii]

The southern end of the project development envelope intersects with the Robe River Delta Mangrove Management Area. This area contains regionally significant mangroves.[ccxviii]

The EPA's 2021 assessment report found the proposal would have "significant residual impacts" on terrestrial flora and fauna, including clearing of critical Pilbara olive python habitat and a Priority 3 ecological community – the *Horseflat Land System of the Roebourne Plains*.[ccxix]

The EPA also assessed that the project would have significant residual impacts on intertidal and marine values from disturbance of coastal samphire, algal mat and mangrove habitats. These habitats are of high value, providing important ecosystem services that include primary productivity and nutrient cycling; foraging habitat for migratory birds; and breeding, nursery and other habitat for significant marine species.

Despite this, the EPA approved the project with conditions, mostly in the form of environmental offsets.

Mardie Minerals was required to contribute funds to the Pilbara Environmental Offsets Fund to compensate for significant residual terrestrial impacts. The required marine offsets were research offsets: that is, the payment of funds by the proponent for studies on the marine habitats that would be significantly impacted. This included mapping the original and current extent of intertidal habitats (mangroves, algal mats, and samphire) on the west Pilbara coast; quantifying the impacts of sea level rise on these habitats; and identifying the ecological roles, values and function of these intertidal habitats.

Allowing habitat destruction to be offset in this way drives ongoing, incremental loss of biodiversity and the erosion of habitat baselines. While the research is important - and should have been conducted to inform the proposal's assessment - as an offset project it cannot prevent or directly compensate for the certain loss of habitat. Some habitats, particularly those that provide critical habitat for threatened species, are irreplaceable and should not be offset by funding future research or management programs.

Financial offsets allow proponents to fulfil their obligations through payments, with no guarantee that actions to compensate for the environmental damage will be delivered. Moreover, there are major concerns with the Pilbara Environmental Offsets Fund itself. A 2024 review found that after six years, the program had only funded four small projects and was failing to achieve its intended outcomes.[ccxx]

The Australian Marine Conservation Society, Kailis and the WA Fishing Industry Council appealed the EPA's Mardie assessment report, but, aside from some changes to conditions around transparency and oversight of the offsets, the Appeals Convenor upheld the EPA's recommendations.

Furthermore, immediately after the approval of the project, Mardie Minerals referred an expanded project to the EPA: the 'Optimised Mardie Project', which was subsequently approved. The proposed expansion is significant, including a 25% increase in the Terrestrial Development Envelope, a 30% increase in clearing of vegetation in good-to-excellent condition, and a 53% increase in the discharge of bitterns.[ccxxi]

Recommendations:

- **There should be no option for financial offsets through research projects.**
- **Ensure that all environmental offsets provide an absolute net increase in habitat and biodiversity outcomes.**
- **Offsets should be thoroughly monitored by an independent party with environmental credentials to ensure outcomes are met.**
- **Ensure that offsets are like-for-like and additional, with outcomes that are guaranteed, permanent and measurable.**
- **The use of offsets should be rare, and not the default.**

See also Recommendation 18 under 'Limit Use of Environmental Offsets'.

Aerial shot of mangroves, Urala Creek. Image by Andre Rerekura.

Mangroves at Exmouth Gulf. Image by Blue Media Exmouth.

Case Study 9: Boddington Bauxite Mine

By Alex Gardner, Emeritus Professor at UWA Law School

Project: Boddington Bauxite (Worsley) Mine, South32, Worsley Alumina Pty Ltd.
Location: Boddington, WA
Impact: Water resources and groundwater dependent ecosystems.

In 2024, South32 was approved to expand the Boddington Bauxite Mine (**the Worsley mine**) and increase groundwater abstraction from 500 ML per year to 900 ML per year.[ccxxii] Within this expansion area is Newmont's Boddington gold mine (**the Newmont mine**); in April 2025 the Minister renewed Newmont's surface water licence for 15 gigalitres per annum from Hotham River.[ccxxiii]

The area has been impacted by historical clearing, mining activities,[ccxxiv] and a drying climate,[ccxxv] with low rainfall and low recharge rates. The Worsley mine activities include clearing and groundwater abstraction which presents risks to groundwater dependent ecosystems from increasing salinity, the rise of water tables (**groundwater mounding**) and drawdown.[ccxxvi]

The key water body at risk from these mines is the Hotham River, which is critical habitat for the endemic south-western snake necked turtle, a species that is listed as Near Threatened on the IUCN Red list of Threatened Species.[ccxxvii] Cumulative clearing and removal of deep-rooted native vegetation has led to groundwater mounding and elevated salinity levels at the Hotham River.[ccxxviii] The salinity levels are now well above Australia and New Zealand Guidelines 2018, leading to death of riparian zone trees and decreased stream biodiversity.[ccxxix]

In the company's environmental assessment of its proposed Worsley mine expansion, there was only limited analysis of risks to groundwater dependent ecosystems and minimal hydrogeological data. There was however an indication that the groundwater may support EPBC-listed species; this should have prompted the EPA to require further investigation from South 32.[ccxxx]

The EPA's 2024 assessment was that groundwater drawdown from the Worsley production bores would be localised, and regional cumulative impacts not significant.[ccxxxi] In December 2024, the WA Minister for the Environment issued Ministerial Statement 1237 approving the Worsley mine expansion under the EP Act.[ccxxxii]

The Worsley mine is established under a 1973 State Agreement with Worsley/South32, by which the State promises to provide water sufficient for the needs of the mining operations at points chosen by the company within the mineral lease.[ccxxxiii] These State Agreement water rights are implemented under State law and are subject to compliance with any environmental protection requirements imposed by a State agency.[ccxxxiv]

The main legal authority for South32 and Newmont to take water for their mining operations comes under the *Mining Act* mining leases administered by the Department of Mines, Petroleum and Exploration.[ccxxxv] Mining lease water rights are subject to the operation of the *Rights in Water and Irrigation Act 1914 WA* (**the RIWI Act**). The western part of the Worsley and Newmont mining areas are proclaimed for RIWI Act surface water licensing of extraction from the Hotham River. Newmont Boddington Gold's Surface Water Licence was renewed for ten years on 9 April 2025. It authorises the taking of 15 gigalitres/year from the Hotham River.[ccxxxvi] South32 was issued a new Surface Water Licence[ccxxxvii] to take 3 ML/year from the Hotham River for the Worsley mine until March 2027, so it is relying mainly on groundwater.

Hotham River. Image by Jess Boyce. Hotham River and bridge. Image supplied by WA Forest Alliance.

The area of these mines is not proclaimed for groundwater licensing.[ccxxxviii] Outside of their mining leases, South32 and Newmont can also buy groundwater from landholders who have unregulated common law rights to capture and use groundwater. However, the use of groundwater from areas not proclaimed for *RIWI Act* licensing is subject to regulation under the EP Act. The Minister for Environment, under Ministerial Statement 971 (2014),[ccxxxix] authorises the Newmont mine to use 47 ML/day (approx. 17,000 ML/year) and requires Newmont to ensure that mine dewatering drawdown does not cause long term adverse impacts to groundwater dependent vegetation, including riparian vegetation of the Hotham River.[ccxl, ccxli]

For the Worsley mine, Ministerial Statement 1237 includes condition B16-1 for the protection of *"inland waters"* and groundwater dependent ecosystems. It requires proposal outcomes of "*no adverse impacts … attributable to the proposal"* to *"hydrological regimes and water quality of relevant rivers"* (including Hotham River), *"groundwater ecosystems" within the mine area, and "to neighbouring groundwater users"*.

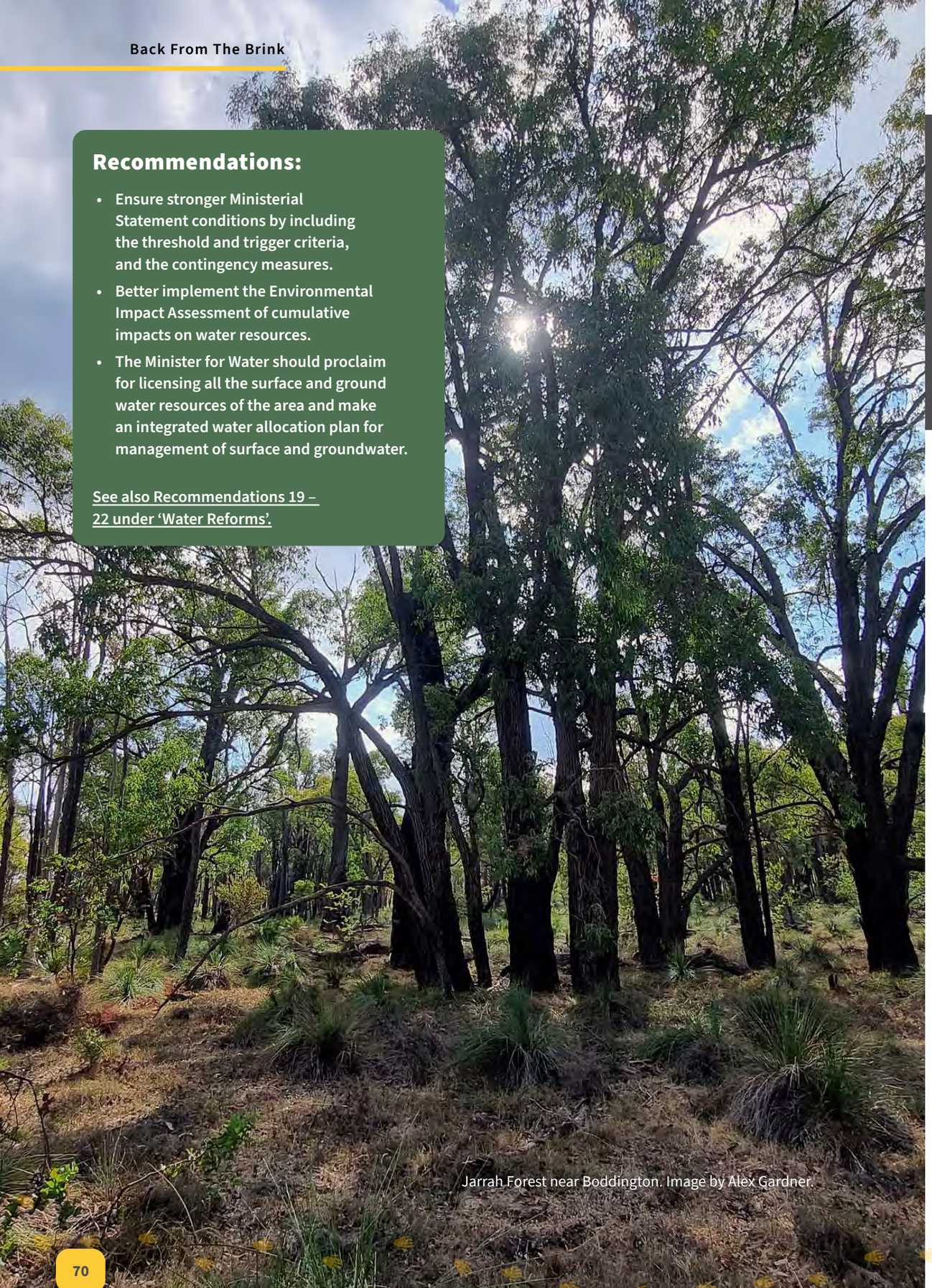
The means for achieving these objectives is a Water Management Plan **(WMP)** which, under Condition C4-1, is required to show that the outcomes are met through monitoring against *"threshold criteria"* (limits) and *"trigger criteria"* (warnings) and fulfilling contingency measures if these criteria are not met.

However, the EIA of the South32 expansion proposal did not adequately assess the cumulative impacts on water resources of the two mines operating so closely. In contrast, the scoping of Newmont's 2025 expansion proposal does clearly require a CIA of Newmont's mine interacting with other mining operations in the region, including those by South32 and Alcoa.[ccxlii] It could be even better if the Minister for Water were to proclaim all the surface and ground water resources of the area for water licensing and make an integrated water allocation plan to guide the water licensing in the area.

Recommendations:

- Ensure stronger Ministerial Statement conditions by including the threshold and trigger criteria, and the contingency measures.
- Better implement the Environmental Impact Assessment of cumulative impacts on water resources.
- The Minister for Water should proclaim for licensing all the surface and ground water resources of the area and make an integrated water allocation plan for management of surface and groundwater.

See also Recommendations 19 – 22 under 'Water Reforms'.



Jarrah Forest near Boddington. Image by Alex Gardner.

Case Study 10: Juukan Gorge

By Eloise Hogg, Research Officer at Conservation Council of WA

Project: Nammuldi Iron Ore Mine, Rio Tinto
Location: Puutu Kunti Kurrama Country, Hamersley Range 60km Northwest of Tom Price in the Pilbara
Impact: Destruction of ancient Aboriginal Heritage known as Juukan Gorge.

In May 2020, Rio Tinto destroyed Aboriginal sites as part of a permit granted by the Minister for *the Aboriginal Heritage Act 1972* **(the Act)** to access more iron ore.[ccxliii] This resulted in the destruction of an ancient rock shelter at Juukan Gorge on Puutu Kunti Kurrama Country in the Pilbara region of Western Australia. The significance of the Aboriginal site cannot be understated, with evidence of Aboriginal people first using Juukan Gorge 47,000 years ago until "just a few decades ago".[ccxliv] Thousands of significant artefacts were found at the site during an excavation conducted in 2014, including human hair and tools.[ccxlv]

Despite opposition from Traditional Owners, the Aboriginal cultural heritage permit was granted to Rio Tinto, and the Aboriginal heritage site was destroyed. This destruction was permitted under the Act.

As Southalan (2020) explains:

> **"The statute makes it an offence to damage an Aboriginal site (section 17). The statute also lets parties apply for ministerial consent to use land in a way which may damage Aboriginal sites and, if the Minister consents, gain immunity from committing any offence under the Act (section 18)."** [ccxlvi]

A 2011 WA Auditor General report also found that the Department of Planning, Lands and Heritage that administers the Act is insufficiently resourced, and that Aboriginal cultural heritage may be destroyed without the State knowing or acting.[ccxlvii]

After the destruction of Juukan Gorge, the Minister for Aboriginal Affairs started a review of the Act that resulted in the brief implementation of *the Aboriginal Cultural Heritage Act 2021.* However, this was revoked after five weeks following backlash from farmers, confusion about the laws and division.[ccxlviii] Unfortunately, the flaws in the Act that allowed this destruction still remain.

Aboriginal Heritage laws in WA are deficient. This is one example of a systemic problem that should be addressed through stronger representation and authority of Aboriginal people and senior knowledge holders.

Recommendation:

- Pass new legislation that is led by Aboriginal people; that better and more proactively protects cultural heritage.

See also Recommendation 23 under '<u>Protect Cultural Heritage</u>'.

Case Study 11: Petroleum Wells in Stokes Bay Mangrove System

By Environs Kimberley

Issue: Failure in planning and assessment and in rehabilitation requirements for oil and gas
Location: Stokes Bay in King Sound, West Kimberley
Impact: Threat of leaking oil and gas infrastructure in National Heritage listed King Sound.

King Sound is a globally significant and pristine natural landscape renowned for its exceptional environmental and heritage values. It is characterised by large tidal influences, a unique tropical climate, diverse mangrove species, and complex coastal habitats.[cclxix] Home to many diverse species, King Sound's tidal flats are especially critical for migratory shorebirds, providing essential feeding and roosting sites.[ccl] The region's wilderness remains largely unmodified, distinguishing it from similar systems globally. As a result, it plays a pivotal role in supporting biodiversity and maintaining ecological balance on an international scale and it has been recognised as part of the West Kimberley National Heritage Listing.[ccli]

From 1984 to 2007, Esso,[ccliii] ANZOIL[ccliii] and ARC Energy[ccliv] drilled three oil and gas wells along with causeways and well pads in and around the marshes and mangrove systems at Stokes Bay and King Sound in the Kimberley. Two of the wells never produced, while production at one was short lived.

New owners have since purchased the tenements and wells, but maintenance has been poor, with DMPE (formerly Department of Energy, Mines, Industry, Regulation and Safety) confirming through a rare site inspection in 2021 that the well infrastructure is deteriorating and threatening the local environment.[cclv] Overall, DMPE identified 44 breaches of environmental conditions and nine key findings including corrosion at the three well heads, a blow-out preventer in the wrong position, hydrocarbon staining, and waste left on site.[cclvi] Most importantly, it was recommended that Departmental 'Directions Notices' should be issued to the companies to enforce action. The directions notices were never issued as recommended in 2021, but, eventually in February 2025, a single directions notice was issued for one of the wells with no explanation to why the other notices were never issued.[cclvii]

One of the causeways is currently inaccessible due to erosion and the whole area is inaccessible throughout the wet season and on certain tides.[cclviii] These long-disused wells could potentially leak into the National Heritage listed King Sound or vent methane into the atmosphere. If a well blowout was to occur there would be great difficulty in getting the required heavy machinery to the well site in a timely manner to avoid an environmental disaster.

Despite being located in an internationally significant mangrove system,[cclix] none of these projects were assessed through *the EP Act 1986*, with assessment being undertaken in-house by DMPE without referral to the EPA, no public comment period and without a full release of environmental plans.

The WA Government has since failed to ensure adequate decommissioning and rehabilitation of the sites.[cclx] There are also no industry funds or bonds to ensure clean-up of the mess should any of the companies go into liquidation. As it is an oil and gas project, it does not fall into the Mining Rehabilitation Fund.

The owner of the tenements and wells, Gulliver Productions, has since been sold to a little-known overseas company,[cclxi] with a sale price estimated to be $400,000.[cclxii] After Parliamentary Questions, an official estimate of the decommissioning and rehabilitation cost is still unknown, but it is understood to be many millions of dollars' worth of work, given the remote and inaccessible site.

This case represents a failure in planning and assessment and in rehabilitation requirements for onshore petroleum companies. These kinds of projects clearly require assessment by the WA EPA with public input and should be mandated with enforceable conditions and decommissioning and rehabilitation requirements. The current system where DPME purports to carry out environmental assessments is not adequate. Stronger adherence to guidelines with clear thresholds for determining the level of assessment for referred projects is required.

With most of King Sound included in the National Heritage listing as part of the West Kimberley National Heritage area, pristine environments such as these should be included in no-go zones that inform environmental and land use planning and assessments. If there were no-go areas for sensitive ecosystems like the King Sound mangroves then the proposal could've been rejected from the beginning and adjacent areas protected.

The whole King Sound bioregion must be given marine park or similar status and protected from any future oil and gas exploration. Sections of the *Petroleum and Geothermal Energy Resources Act 1967*[cclxiii] should be applied to permanently remove all petroleum tenements from the King Sound bioregion.

Recommendations:

- **Require a decommissioning bond to be held prior to approval of a project, with strict decommissioning standards, monitoring and enforcement**
- **Establish stronger guidelines to ensure that projects with similar impacts are assessed by the EPA at the highest level with Public Environmental Review**
- **Bioregional planning for the Kimberley to identify no-go zones and protected areas, including for marine parks.**

See also: Recommendation 2 under 'Adopt a Bioregional Planning Framework', Recommendation 15 under 'Strengthen Environmental Impact Assessments', and Recommendation 27 under ' Strengthen Mine Rehabilitation and Environmental Compliance'.

King Sound. Image by Richard Costin.

King Sound. Image by Richard Costin.

Case Study 12: PFAS Chemicals

By Jane Bremmer, Chair of Toxics Free Australia

Issue: Pollution from Perfluoroalkyl and Polyfluoroalkyl Substances **(PFAS)**, aka forever chemicals
Location: Western Australia – aquatic and terrestrial environments
Impact: the increasing contamination of the environment, bioaccumulation in native species and impacts to human health.

Perfluoroalkyl and Polyfluoroalkyl Substances **(PFAS)** are a group of more than 14,000 synthetic chemicals that do not easily degrade and therefore pose a significant risk to the environment. This risk is severe, as there is currently no effective method of destroying PFAS. Impacts on human health and the environment have been recognised internationally, with several being listed in the Stockholm Convention[cclxiv] for elimination, due to their carcinogenic, bio-accumulative, persistent and toxic properties. PFAS has been recognised as a global threat,[cclxv] compelling governments around the world to act.

Despite growing awareness of the harmful impacts of PFAS, these chemicals are embedded in our materials production systems (e.g., clothes and cooking ware) and waste streams, posing an increasing risk to the environment. Contamination can come from water systems, leachate from waste management facilities, firefighting foams, industrial pollution sources, contaminated sites and pesticides.

Pesticide boom sprayer. Image by the Department of Agriculture and Food WA.

The persistent and increasing contamination from PFAS presents a significant threat to biodiversity, aquatic and terrestrial ecosystems and human health.[cclxvi]

Chemicals are inadequately regulated at the state and federal level, with current laws and regulations failing to prevent environmental harm from chemical pollution. Nature protection laws should be improved to address the increasing impacts of chemical pollution, especially persistent organic pollutants such as PFAS which are now ubiquitous in our environment.

In Western Australia, testing run by the government showed that every surface water body and the majority (91%) of groundwater tested contained PFAS chemicals above the limit of reporting, which is the lowest level concentration that can be measured for these chemicals by a laboratory.[cclxvii] Many of these locations exceeded both the federal government's standards for aquatic environments (NEPM 3.0)[cclxviii] and were well in excess of standards set for the protection of aquatic environments in the European Union[cclxix] and United States.[cclxx]

PFAS contamination has also been found extensively across Australia both in natural and urban environments. [cclxxi, cclxxii]

Stockpiles of PFAS contaminated wastes, such as those created through firefighting foams, remain an ongoing source of harm to communities and the broader environment. [cclxxiii, cclxxiv] The widescale

application of PFAS pesticides in both the agricultural and urban environments contributes to widespread contamination of the environment. [cclxxv]

The environmental protection standards for PFAS in Australia are inadequate and directly contribute to adverse impacts on biodiversity, [cclxxvi, cclxxvii, cclxxviii] water quality, aquatic and terrestrial ecosystems health and human health. For example, PFAS contamination of urban water ways has led to one of the apex predators of wetlands – the tiger snake – showing high bio accumulation and maternal offloading (transfer of contamination to offspring), with evidence of reduced body condition, muscle dysfunction, and metabolic issues. Essentially, these tiger snakes were skinnier and sicker than they should be.[cclxxix]

This is a major concern for threatened species at known sites of PFAS contamination. Chevron's Gorgon project, located on Barrow Island, is an A-class nature reserve and is home to 1,400 flatback turtles (vulnerable), 100 species of birds, 13 mammal species, 44 different reptiles and close to 4,000 different plants, with 24 species found nowhere else in the world. An investigation in 2022 found PFAS contamination of water and soil caused by the Gorgon project, presenting significant risk to the previously untouched environment.[cclxxx]

Recommendations:

- **Ban PFAS as a group of chemicals.**
- **Bring our environmental and human health protection standards for PFAS into alignment with the EU, US, and other OECD standards.**
- **Set robust and effective statutory industrial regulation pollution standards and enforceable targets for PFAS, including restricting the use of PFAS pesticides and addressing industrial emission pollution sources of PFAS.**
- **Mandate regular, comprehensive, independent assessments of chemical contamination of the environment.**
- **Clean up PFAS contaminated sites as a priority.**

See also Recommendation 28 under ' Strengthen Pollution Monitoring and Regulation in WA.

Tiger snake. Image by Lauren Sydoruk.

Case Study 13: Yeelirrie Uranium Project

By Nuclear Free WA

Project: Yeelirrie Uranium Project – Cameco
Location: Tjiwarl Country, East Murchison, southern side of the Montague Ranges
Impact: The project, if implemented, would remove the entire habitat of up to 12 highly endemic subterranean fauna species, likely causing their extinction.

The suterranean fauna survey of Yeelirrie is perhaps one of the most thorough subterranean fauna surveys ever conducted in WA. Subterranean Ecology (the company who conducted the study) found that up to 12 species of stygofauna and troglofauna are highly endemic to the Yeelirrie calcrete zone, calcrete is a porous geology which is also the habitat for the subterranean fauna.[cclxxxi] There is no evidence that these 12 species exist anywhere else in the world. The project proposal included plans to remove 100% of the habitat of the 12 species through dewatering and mining. The WA EPA assessment found that the Yeelirrie uranium mine project would most likely cause the extinction of these species.[cclxxxii]

Following a Public Environment Review, the EPA assessment identified that Cameco's Yeelirrie uranium mine proposal would most likely cause the extinction of 12 species of subterranean fauna and was therefore inconsistent with the objectives of the EP Act.[cclxxxiii] The proponent appealed, but the Appeals Convenor found that the EPA's findings were likely to be correct.[cclxxxiv] The Minister for Environment agreed with the Appeals Office,[cclxxxv] but in consideration of other factors, including employment and the economy,[29] approved the mine [cclxxxvi] despite its significant environmental impact.[cclxxxvii]

CCWA and three Tjiwarl women challenged the decision through the WA Supreme Court and then the Court of Appeal. The court cases were only able to focus on whether the Minister had made an administrative error in the decision, not whether the decision was right or consistent with the *EP Act*. Both cases were dismissed.[cclxxxviii]

The Yeelirrie project was not developed and, having failed to meet the five - year deadline to substantially commence the project, is now unable to go ahead without significant re-evaluation by the WA Government.[cclxxxix]

29 The project has not been developed and there is now clear evidence that the project was not economically viable and has not contributed employment opportunities to the state - which highlights that unsubstantiated claims about a projects value to jobs and the economy should be interrogated and the Minister should be required to provide evidence in any statement of reasons.

Recommendation:

- Establish an independent Environment Court that can review the merits of a Ministerial decision to ensure consistency with the EP Act.
- Legislate a prohibition on uranium mining and withdraw expired projects under s47A of the EP Act.

See also: Recommendation 30 under 'Ensure Ministerial Accountability' and Recommendation 31 under 'Establish an Independent Environment Court'.

Case Study 14: Lot 7 Buffalo Road, Sand Quarry

By Carolyn Bloye, Convenor of Binningup Coastcare and Environment Group 2010-2014

Project: Coonawarra Nominees Pty Ltd proposal for sand mining
Location: Lot 7 Buffalo Road, Harvey Coast and Leschenault Estuary
Impact: Loss of parabolic dunes in good condition, erosion, destabilising estuary and seawater inundation impacting estuary health and impacting migratory waders and shorebirds. Clearing of Tuart/Peppermint woodland, habitat which supports threatened species.

The Coonawarra Nominees' sand extraction proposal at Lot 7 Buffalo Road included the removal of a fragile parabolic dune system adjacent to Buffalo Beach and native vegetation adjacent to the Leschenault Estuary.[ccxc] The Appeals Convenor's report to the Minister for Environment (2010) stated, in reference to the EPA response:

> **The vegetation proposed to be cleared provides protection from erosion for sand dunes in the area. The EPA advised that the increased erosion that may result from the proposal could affect the conservation values of the nearby Leschenault Conservation Park and nearby Conservation Category Wetlands.[ccxci]**

Egret at Leschenault Estuary. Image by Carolyn Bloye.

Images left to right. Saltmarsh samphire priority ecological community, essential high conservation value habitat for migratory waders, waterbirds and local fauna. Image by Rachel Allan. White-faced heron at Leschenault Estuary June 2025. Image by Carolyn Bloye.

Upon referral the EPA initially decided to "not assess" the proposal. Five appeals were lodged opposing the EPA decision and calling for a Public Environmental Review.

After considering appeals, in March 2010, the EPA's decision not to assess was overturned by the Office of the Appeals Convenor.[ccxcii] The Appeals Convenor's evaluation deemed the environmental risks for this site warranted formal assessment, with significant risk factors necessitating a formal EIA, recommending a Public Environmental Review. The EPA conceded that in light of new information provided through the appeals that a PER was warranted.[ccxciii, ccxciv]

The Appeals Convenor's decision referenced strategic studies and government reports highlighting the areas constrained land use:

> **Low intensity tourist development on parts of the better drained soils of Lot 7 Buffalo Road, east of the line of primary foreshore dunes, would be appropriate subject to stringent environmental assessments and ongoing management. Clearing of this area shall be discouraged.**[ccxcv]

The decision also noted that the concerns raised in the appeals were broadly associated with potential impacts to the biodiversity values of the Lot and surrounding area which includes conservation significant flora and fauna, dune systems and habitat values.[ccxcvi]

Following further consultation, the proposal was withdrawn, averting potential long-term environmental degradation. The Lot 7 Buffalo Road case underscores the need to preserve public appeal rights to safeguard environmental values.

Recommendations:

- **Reinstate and strengthen the public's right to appeal EPA decisions to not assess proposals.**
- **Enable early filtering of flawed or inappropriately sited proposals.**
- **Broaden the requirement for a 'right to reasons', with an express statutory right to request the reasons for a decision or exercise of power under the EP Act.**

See also: Recommendation 14 under 'Proactive Project Filtering', Recommendation 29 under 'Guarantee Right to Reasons', and Recommendation 34 under 'Strengthen Public Participation and Accountability'.

Case Study 15: Kennedy Bay Public Jetty

By Philip Jennings, President at Wetlands Conservation Society Inc.

Project: Kennedy Bay Public Jetty
Location: Kennedy Bay, Port Kennedy
Impact: Increased boat traffic and pollution of a conservation marine area.

Port Kennedy is a coastal suburb at the base of Warnbro Sound, about 50 km south of Perth. It contains a large conservation reserve called the Port Kennedy Scientific Park which is part of the Rockingham Lakes Regional Park. It is a site of outstanding scientific importance because it contains a set of unusual linear wetlands called the Becher Point suite that are Ramsar-listed.[ccxcvii] These wetlands are examples of how coastal wetlands form in a dynamic coastal dune system. They also support a threatened ecological community called *Sedgelands in Holocene Dune Swales of the Southern Swan Coastal Plain*. Very little of this TEC remains as most of what once existed along the west coast has now been cleared for housing.[ccxcviii]

Becher Point is an outstanding example of a dynamic cuspate foreland, formed over recent millennia by sediment transport by coastal currents. The waters surrounding Becher Point are an important whitebait nursery, with boating activity restricted in the area.[ccxcix] All the coastal waters in Kennedy Bay are part of the Shoalwater Islands Marine Park.

On the 13th of May 2025, the EPA decided not to assess a proposal by a resort developer to build a public jetty in Kennedy Bay to provide recreational opportunities for boating and water sports and to enhance its existing resort.[ccc]

The proposal includes:

- an elevated main deck;
- a low-level short-stay vessel berth;
- a central jetty 'node' to include a diving platform, terracing, stairs, swimming platform, ladders; and
- a demarcated swimming area.

Sedgelands in Holocene Dune Swales of the Southern Swan Coastal Plain TEC. Image by Philip Jennings, Wetlands Conservation Society.

Due to the degradation of WA's environmental laws, and the removal of appeal rights on EPA decisions to not assess, the public and the scientific community have no right to appeal this decision by the EPA. There are community concerns that constructing a public jetty in the biodiverse marine environment of Kennedy Bay could have serious adverse impacts on the marine environment and affect sediment transport on this dynamic coastline. The jetty will attract boat traffic and marine pollution into what was previously a high-quality conservation area.[ccci] Port Kennedy is an important breeding and feeding area for fish, dolphins, little penguins and a wide variety of shorebirds.[ccii] In recent years, some of these species have been injured by boating and fishing activities and these will certainly increase once the jetty is constructed. Human disturbance has been attributed to the population crash of little penguins on Penguin Island,[cciii] so it is critical that these pressures should be considered when evaluating impacts on localised populations of fauna and flora.

Because the EPA has decided not to assess this project, and the right to appeal EPA decisions on 'level of assessment' has been removed, the Minister is unable to set binding ministerial conditions to protect the scientific and environmental values of this Ramsar-listed site. The City of Rockingham has expressed concern about this development and is unhappy that they will have to meet the considerable costs of maintaining the public jetty after it is handed over to them in two years' time.[cciv] This project should have been formally assessed to enable the Minister to require a Management Plan for the jetty and surrounding waters and to enable scientists, the public and the City of Rockingham to express their views on the project.

Recommendations:

- **Reinstate and strengthen the public's right to appeal EPA decisions to not assess proposals.**
- **Halt all work on this project until the long-term management plan for the jetty has been resolved to the satisfaction of the City of Rockingham.**

See also: Recommendation 13 under 'Protect Critical and Remnant Habitat' and Recommendation 34 under 'Strengthen Public Participation and Accountability'.

Kennedy Bay. Image by Philip Jennings, Wetlands Conservation Society.

Glossary

Biodiversity
Biodiversity, or biological diversity, is a term used to describe the number of species that make up an ecosystem. Broader definitions may also include genes or ecosystems as the unit of analysis. However, there is no strict definition of the term, which continues to be redefined and expanded.

Environment
In alignment with the definition provided under the *Environmental Protection Act 1986*, environment means "living things, their physical, biological and social surroundings, and interactions between all of these."

Evidence-based knowledges
The term 'evidence-based knowledge' is used to both expand on and interrogate the notion of scientific evidence as the ideal of knowledge and truth. Consideration of evidence-based knowledge thus supports the inclusion of community-based and cultural knowledges, alongside scientific knowledge traditions.

Policy
Broadly speaking policy provides the governing rules for an organisation. Within the WA Government context, a policy provides a statement of intent or guidance in decision making.

Ramsar listed wetlands
Reference to Ramsar wetlands concerns their listing on the Ramsar Convention on Wetlands. "The Convention on Wetlands is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources."[cccv] To meet Ramsar criteria wetlands must meet a range of environmental significance criteria, and are considered to be of international importance.

Regulation
Regulation refers to any of the (typically government) systems used to direct a range of controls, or the work of a regulatory body. Regulation may also refer to subsidiary legislative controls.

Remnant habitat
Remnant vegetation/habitat refers to vegetation that has survived clearing and development, has had limited disturbance and may partially or completely represent an intact ecosystem. These areas can help to inform restoration efforts.[cccvi]

Scientific knowledge
This document has preferentially applied 'evidence-based knowledges' above the more restrictive use of scientific knowledge. Where 'science' and 'scientific knowledge' has been applied, it refers to "…the practice of 'scientists' most commonly under methodological conditions of observation and experimentation, working towards precision, but being continually open to review and update to maintain consistency and to offer the best representation of the world. This model of science is held as the exemplar of 'research science'."[cccvii]

Species richness
Species richness is a measurement of the number of species at a location. It is one of the oldest measures of species diversity (biodiversity).

Strategic assessment with advice
At various times the terms 'strategic', 'strategic proposal' and 'strategic assessment' are used in the EP Act, EPA Administrative Procedures, EPA website and elsewhere. The EPA refers to its s16(e) advice as 'Strategic Advice'. The EPA also conducts 'strategic assessments' of 'strategic proposals', e.g., the James Price Point gas hub strategic proposal.

The term 'Strategic assessment with advice' **(SAWA)** is used here/ in this piece to cover EPA assessment and advice reports that are not tied to the assessment of a specific project or proposal.

Wetlands
"Wetlands are areas that are permanently, seasonally or intermittently waterlogged or inundated with water. This water can be fresh or salty, flowing or still and the wetland can occur naturally, or may be artificially created."[cccviii]

The DBCA definition of a wetland is broad and can include lakes, sumplands, floodplains, creeks, estuaries, and others. They may be permanently or intermittently inundated or waterlogged.

List of Abbreviations

ACCU: Australian Carbon Credit Unit

AWEAG: Aboriginal Water and Environmental Advisory Group

BC Act: *Biodiversity Conservation Act 2016*

CALM Act: *Conservation and Land Management Act 1984*

CAWI: Committee on Aboriginal and Torres Strait Islander Water Interests

CCW: Conservation Category Wetland

CERD: Committee on the Elimination of Racial Discrimination (United Nations)

CIA: Cumulative Impact Assessment

EIA: Environmental Impact Assessment

EP Act: *Environmental Protection Act 1986*

EPA: Environmental Protection Authority

EPBC Act: *Environment and Biodiversity Conservation Act 1999*

DBCA: Department of Biodiversity Conservation and Attractions

DCCEEW: Department of Climate Change, Energy, Environment and Water

DMPE: Department of Mines Petroleum and Exploration

DWER: Department of Water and Environmental Regulation

FNCECCAC: First Nations Clean Energy and Climate Change Advisory Committee

FPIC: Free Prior and Informed Consent

ICIP: Indigenous Cultural and Intellectual Property

IPBES: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

IPCC: Intergovernmental Panel on Climate Change

IUCN: International Union for Conservation of Nature

KMGBF: Kunming-Montreal Global Biodiversity Framework

LGA: Local Government Area

MRF: Mining Rehabilitation Fund

NJF: Northern Jarrah Forest

NGOs: Non-Governmental Organisations

NTGAC: Nganhurra Thanardi Garrbu Aboriginal Corporation

OAC: Office of the Appeals Convenor

OAG: Office of the Auditor General

PEC: Priority Ecological Community

PER: Public Environment Review

PFAS: Per- and Polyfluoroalkyl Substances

POPs: Persistent Organic Pollutants

RIWI Act: *Rights in Water and Irrigation Act 1914*

SGM: Safeguard Mechanism

SOE: State of Environment

TEC: Threatened Ecological Community

UNDRIP: United Nations Declaration of the Rights of Indigenous Peoples

WACPC: WA Conservation and Parks Commission

WMP: Water Management Plan

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