



Environmental  
Protection  
Authority



Annual Report  
2020-21



## Environmental Protection Authority

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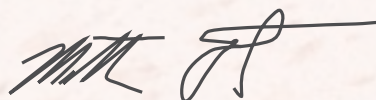
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## Letter to the Minister

Hon. Amber-Jade Sanderson BA MLA  
Minister for Environment

In accordance with section 21 of the *Environmental Protection Act 1986*, I submit for your information and presentation to the Parliament of Western Australia, the annual report for the Environmental Protection Authority for the year ended 30 June 2021.



Prof. Matthew Tonts  
Chair, Environmental Protection Authority

24 September 2021

We acknowledge the traditional custodians of the land upon which we live and work and pay our respects to their elders past and present. We recognise the practice of intergenerational care for country and its relevance to our work. We seek to listen, learn and build strong partnerships.



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## Message from the Chair



**Professor Matthew Tonts**  
Chair, EPA

This year the Environmental Protection Authority (EPA) marked 50 years of protecting the Western Australian environment. The EPA's achievements over that period have been substantial and ensured that both present and future generations of Western Australians are able to experience environments of outstanding beauty and ecological value.

As we reflect on all the EPA has achieved during the past half-century and look ahead to how we continue to provide quality advice to the Minister, Western Australia is going through an extraordinary period of development and growth. This includes a rapidly expanding resources sector, major new processing and industrial activities, urban expansion and significant infrastructure projects.

Despite the recent challenges of the COVID-19 pandemic, the number of proposals referred to the EPA in 2020–21 is the most we have seen in six years.

During the year we determined to formally assess 31 referred significant proposals (63 per cent increase from last year) and three referred schemes. In addition to the traditional industries, including mineral and energy projects, emerging activities such as hydrogen production and renewable energy are likely to be featured in future assessments. We will continue to assess these significant proposals and schemes in a robust, transparent and timely manner.

In August 2020, the Minister requested the EPA to provide advice under s. 16(e) of the *Environmental Protection Act 1986* (EP Act) on the potential cumulative impacts of proposed activities and developments on the environmental, social and cultural values of Exmouth Gulf. This work involved extensive consultation with the Exmouth community, local industry, traditional owners, and a broad range of other stakeholders. We are using this project and other policy mechanisms and models to inform our consideration of cumulative impacts in environmental impact assessment.

### **Putting our new greenhouse gas guidance to work**

Last year we published our new *Environmental factor guideline – Greenhouse gas emissions*. This year we completed our first assessment under this new guidance. We recommended approval of Pilbara Energy Generation's 165 megawatt power station, subject to conditions supporting the proponent's commitment to net-zero greenhouse gas emissions by 2040.

The Minister for Environment accepted our recommendations in February 2021 – marking the first time in Australia that a Minister has included a project's net-zero emissions target as a condition of approval.

We have assessed a number of other projects using our new greenhouse gas guidance, with a consistent focus on achieving the target of net-zero emissions by 2050 (see page 28).



Against this background, the sixth assessment report of the International Panel on Climate Change (IPCC) was published in August 2021. This report calls for deep reductions in carbon dioxide and other greenhouse gas emissions to limit human-induced global warming. The IPCC report underscores the need for the EPA to take a leading role in ensuring a reduction in emissions and addressing climate change.

### Act amendments and procedural reforms

In November 2020, the Western Australian Parliament passed a Bill to make the most significant amendments to the EP Act in more than 30 years. The amendments in the Bill were drawn from reviews and recommendations by expert advisory groups to deliver a modern EP Act to simplify and reduce unnecessary regulatory obligations on industry, while maintaining a rigorous environmental assessment process.

The amendments to the EP Act will bring a more efficient assessment process and improve the focus on environmental outcomes. An important opportunity afforded by the amendments is the recognition of cumulative impacts in environmental impact assessment.

We have made progress to implement the amendments to the EP Act by ensuring a more efficient and agile suite of EPA procedures, with the aim of continuing to achieve environmental protection.

The EP Act amendments will also facilitate an approvals bilateral agreement with the Australian Government to remove duplication for proposals assessed by the EPA; and a cost recovery process whereby the Department of Water and Environmental Regulation (DWER) will seek to recover costs for the services and staff it provides for activities related to the environmental impact assessments undertaken by the EPA.

This body of reform work is considerable for EPA Services staff and a significant number of stakeholders invested in our environmental impact assessment procedures. I am grateful for the input from the community and stakeholders and am confident that the transition to this more streamlined process will be seamless as a result.

### New membership of the EPA

I began my five-year term as Chair of the Authority in January 2021, assuming the role left vacant by Dr Tom Hatton. Dr Hatton's commitment to the EPA and leadership in environmental protection in our state was exceptional and I am honoured to continue to build on his work.

I would also like to acknowledge the longstanding contribution to the EPA of former Deputy Chair, Robert Harvey, who served from November 2012 to 2020.

Deputy Chair Lee McIntosh joined existing members Professor Fiona Haslam McKenzie, Glen McLeod and Dr Jenny Pope in November 2020. Working alongside colleagues with such depth of experience and commitment to environmental protection is a rare privilege, and at such a critical juncture, is a responsibility I proudly embrace. I look forward to steering the Authority as it rises to the challenge of safeguarding our state's precious natural assets.

On a final note, I would like to thank DWER staff for their support of the EPA. Their extraordinary work over a challenging 12 months has been critical to the work of the Authority and achieving positive environmental outcomes for the state.

On behalf of the EPA, I am pleased to present this annual report to the Minister for Environment.





## This year we acknowledge the 50-year anniversary of the EPA in WA.

In the late 1960s and early 1970s, a new era of development and industrialisation was emerging in WA, opening up vast mineral resource opportunities. With this came the realisation that the exploitation of the state's natural resources could come at a high price to the environment, so the Government of Western Australia produced the *Environmental Protection Act 1971*. The Act provided for a three-member EPA; a 14-member Environmental Protection Council; a Department of Environmental Protection; and an Environmental Appeals Board.

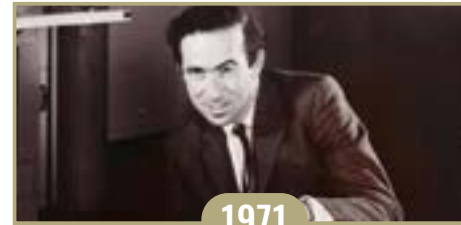
The very early years of the EPA were navigated with limited information on ecological factors for environmental assessments and a relatively small amount of available quantitative scientific data from which it could predict the likely environmental effect of any proposal. The EPA

sought to build its own expertise and draw on the experience and knowledge of federal and state government departments, research institutions, universities and many other organisations and individuals. Through the pioneering work of many practitioners, the EPA now has a robust policy framework to carry out its functions.

The original EPA greatly supported informed public participation in environmental management. This role of the public has continued to be an essential component of environmental management and decision-making throughout the past 50 years, and still is today.

At the heart of the EPA has always been protecting the environment to ensure intergenerational equity.

We are pleased to provide some stories associated with the people, projects and policies of the EPA over the past 50 years.



1971

Dr Brian O'Brien was the inaugural Chair of the EPA (1971–77) and Director of the Department of Environmental Protection. Phillip Adams QC was the Deputy Chair and Professor Albert Russell (Bert) Main was the third member.



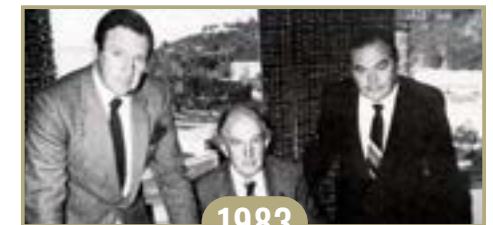
1980

In 1972 the EPA formed the Conservation Through Reserves Committee. The state was divided into 12 systems. With the population mostly in the Perth to Bunbury region, in 1980 the System 6 Committee looked at how to set aside national parks, nature reserves and recreational areas in this region.



1972

The government accepted the EPA's recommendations to reject the application for coal mining leases within the Fitzgerald River Reserve in the south-west, and to reclassify the area as an A Class reserve.



1983

EPA members: Prof. DC O'Connor, Prof. Bert Main (Chair 1982–84) and AC Gibson. Prof. Main was Emeritus Professor of Zoology at UWA. He received many honours and awards for his contribution to zoology including the Order of the British Empire.



1978

EPA members: Phillip Adams QC, Colin Porter (Chair 1978–80) and Prof. Bert Main. Major projects assessed by the EPA included the Yeelirrie uranium proposal, bauxite mining in the jarrah forest of the Darling Range, Wagerup and Worsley alumina refineries and the North West Shelf Development Project.



1984

The Dampier to Bunbury Natural Gas Pipeline became the longest natural gas pipeline in Australia after the EPA assessed its impact on the clearing of native vegetation, soil erosion and jarrah dieback.



1985

Barry Carbon (Chair 1985–93) led the Authority that introduced the *Environmental Protection Act 1986*. The Act strengthened provisions on EIA and pollution control. It also increased the membership of the EPA from three to five.

1988

Sixty-five projects were formally assessed by the EPA, including an ammonia-urea plant in Kwinana, the Cooljarloo Mineral Sands Project, Point Grey Project and the Integrated Petrochemical Complex in Kwinana.



1989

Dr Christine Sharp was the first woman to be appointed to the EPA. She joined Barry Carbon (Chair), Dr John Bailey (Deputy Chair), Dr Maurice Mulcahy and Norman Halse. She was a member for five years.



1992

The EPA initiated studies into the Peel-Harvey in 1977 due to the ecological collapse of the system. The EPA developed an Environmental Protection Policy, coming into force in 1992, as a legislative framework to allow for catchment management initiatives and to set out environmental quality objectives.

1994

Dr Ray Steedman was the Chair from 1994–97. During this time Position Statements and Guidance Statements were introduced and environmental factors were defined with an environmental objective against which projects were assessed. New planning legislation brought together planning and the environment and all scheme amendments were referred to the EPA.



1999

EPA members: Sally Robinson (Deputy Chair), Bernard Bowen (Chair 1998–2003), Dr Roy Green, Dr Elizabeth Matiske and Dennis Glennon.



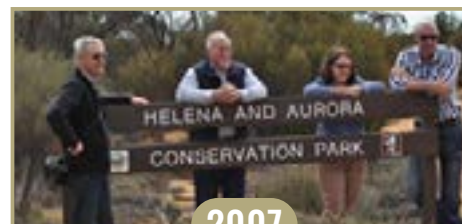
2003

EPA members: Dr Roy Green, Dr Wally Cox (Chair 2003–07), Joan Payne, Dennis Glennon and Dr Andrea Hinwood.



2004

An increase in international commodity demand led to an increased EIA workload, with a major growth in the resources sector, particularly iron ore. The EPA also assessed the Gorgon gas project on Barrow Island.



2007

Dr Paul Vogel (Chair 2007–15) led a review of EIA procedures, processes and policies in 2009, to be more risk-based and outcome focussed. Projects assessed during this time include mining in banded iron formations in the Mid West region.



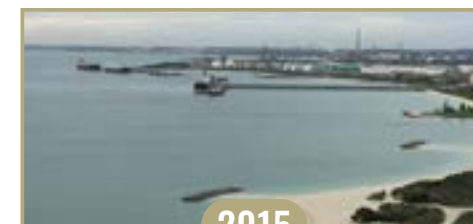
2011

The *Environmental Protection (Western Swamp Tortoise Habitat) Policy 2011* was released, which protects the habitat of this critically endangered tortoise.



2013

Environmental consultants conducting EIA surveys at James Price Point in the Kimberley discovered the world's smallest species of goanna – *Varanus sparnus* – at 23 cm long and weighing just 16 grams. It was described as an 'evolutionary marvel' unchanged for over 6 million years and with a distribution confined to the Dampier Peninsula area.



2015

The EPA began studies on Cockburn Sound in the mid-1970s. Cockburn Sound is located at Kwinana and is one of the most intensively used marine areas of WA. The *State Environmental (Cockburn Sound) Policy 2015* has built on decades of work by the EPA to understand and protect the values of Cockburn Sound.



2016

Dr Tom Hatton (Chair 2015–20) led the implementation of the recommendations of the Legal and governance review to improve the EPA policy framework. He also led the release of the GHG guidance in 2020, which provides industry and the community with a clear framework for reducing GHG emissions.

2021

*The West Australian* newspaper's education liftout, ED!, dedicated an edition to the EPA and its 50 years of achievements and featured material on the value of EIA, how the Authority works, and the vital part environmental officers play in the process. This curriculum-endorsed publication was distributed to primary schools across the state.





# At a glance 2020–21

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



**Commenced comprehensive stakeholder consultation on:**

**changes to the environmental impact assessment procedures suite** necessary to implement amendments to the *Environmental Protection Act 1986*

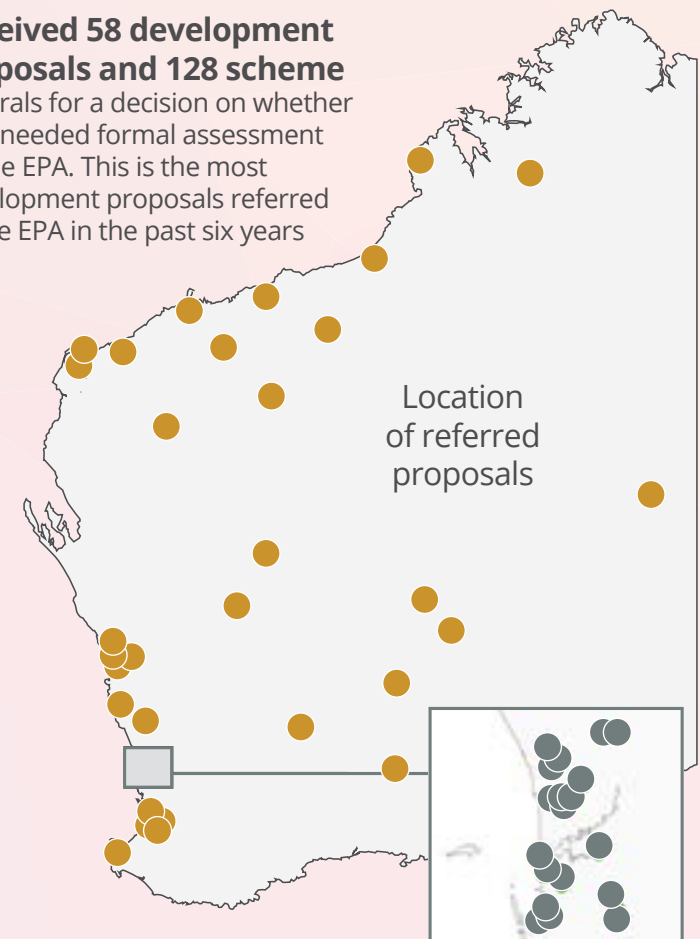
updated **Technical guidance – Subterranean fauna surveys for environmental impact assessment**

section 16(e) advice on **potential cumulative impacts on values of Exmouth Gulf**



**Received 58 development proposals and 128 scheme referrals**

for a decision on whether they needed formal assessment by the EPA. This is the most development proposals referred to the EPA in the past six years



Location of referred proposals







Completed **21** formal assessments



Published the **Technical guidance – Terrestrial vertebrate fauna surveys for environmental impact assessment**



Determined to formally assess **31** referred proposals and **3** referred schemes



Provided public advice for **2** referred proposals and **23** referred schemes



Met with the **EPA Stakeholder Reference Group** quarterly



**Applied our new Environmental factor guideline – Greenhouse gas emissions** to the assessment of significant proposals to achieve net-zero greenhouse gas emissions, including the Pilbara Energy Generation Power Plant, Waitsia Gas Project Stage 2 and Covalent Lithium Hydroxide Refinery



### Provided submissions on key government initiatives:

Aboriginal Cultural Heritage Bill 2000

State Infrastructure Strategy

Western Australian Soil Health Strategy

Dark sky and astrotourism position statement

Mine closure completion guideline

Managing water in the Fitzroy River catchment discussion paper

## Acronyms

ARC Australian Research Council  
DEAP Digital Environmental Assessment Program

DWER Department of Water and Environmental Regulation

EIA environmental impact assessment

EP Act *Environmental Protection Act 1986 (WA)*

EPA Environmental Protection Authority

EPP Environmental Protection Policy

GHG greenhouse gas

IPCC International Panel on Climate Change

MAC Murujuga Aboriginal Corporation

Minister Western Australian Minister for Environment

SRG Stakeholder Reference Group

WA Western Australia

WAMSI Western Australian Marine Science Institution





# About the EPA

## Role of the EPA

The Authority comprises five members appointed by the Governor of WA on the recommendation of the Minister for Environment.

The EPA is independent, in that we are not subject to direction by the Minister, and our advice to the Minister is public. This independence is fundamental to our ability to provide sound, robust and transparent advice.

The *Environmental Protection Act 1986* governs the EPA's operations, stipulating the use of our best endeavours to protect the environment and to prevent, control and abate pollution and environmental harm. The Act defines the environment as 'living things, their physical, biological and social surroundings, and interactions between all of these'.

We are focused and innovative in our activities to ensure we are protecting the environment for present and future generations.

Our functions include:

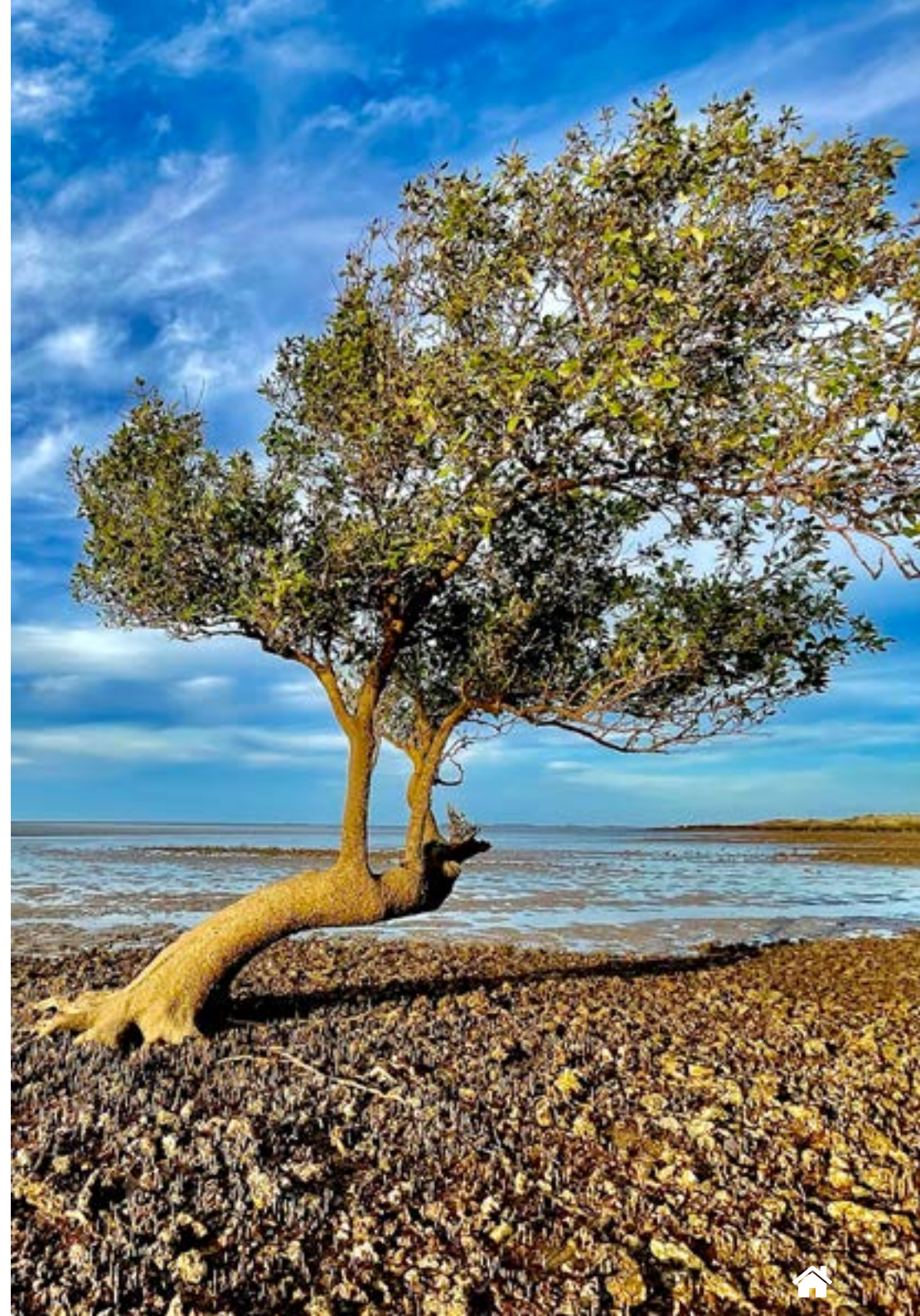
- conduct environmental impact assessments (EIAs)
- facilitate the implementation of bilateral agreements
- prepare and seek approval for environmental protection policies
- prepare and publish guidelines for managing environmental impacts
- advise the Minister on environmental matters generally.







Front: Glen McLeod and Lee McIntosh  
Back: Dr Jenny Pope, Prof. Matthew Tonts and Prof. Fiona Haslam McKenzie





## The Authority



**Professor Matthew Tonts**  
**Chair**

*Appointed as the Chair in January 2021*

Prof. Tonts has extensive professional experience spanning WA's environmental, regional, higher education and research sectors. Between 2017 and 2020 he was Pro Vice Chancellor and Executive Dean of the University of Western Australia's Faculty of Arts, Business, Law and Education. Prior to this he was Head of UWA's School of Earth and Environment, and Director of the Institute for Regional Development.

Prof. Tonts is internationally known for his expertise in environmental geography, regional environments, rural communities and spatial planning. He has worked closely with federal, state and local governments, as well as not-for-profits and the private sector on issues related to regional development, land use assessment, urban development and environmental management. He has also worked on a range of projects in collaboration with partners in Africa, North America, Europe and South East Asia.

Prof. Tonts has a Doctor of Philosophy (Geography) from Curtin University and a Bachelor of Arts (Geography and Environmental Management) (first class honours) from Edith Cowan University. In 2020 he was elected a Fellow of the Academy of Social Sciences in Australia.



**Lee McIntosh**  
**Deputy Chair**

*Appointed as the Deputy Chair  
in November 2020*

Ms McIntosh has more than 20 years' experience practicing as an environmental lawyer. She has extensive experience in the corporate, government and community sectors, been active in several environmental law policy and reform initiatives, lectured and tutored in environmental law and worked across all areas of environmental law assessment and approvals.

Ms McIntosh has also held roles on several government and community boards and given advice on the environmental approval and social licence issues associated with some of WA's most significant projects.

Ms McIntosh has a Master of Environmental Law from the University of Calgary, Canada, and a Bachelor of Laws (first class honours) and Bachelor of Science (Environmental Science) from Murdoch University.







### Glen McLeod

*Appointed as a member in October 2013 and reappointed in 2016.*

Mr McLeod is an environmental and town planning lawyer with more than 40 years' experience. He has held senior positions in major Australian, English and American law firms. In July 2012, he established his independent niche firm, Glen McLeod Legal, where he practises in the areas of environmental and town planning law. Mr McLeod is a council member of the International Bar Association's Section on Energy Environment Resources and Infrastructure and a member of the WA Law Society's Education, and Environment, Town Planning and Local Government committees.

Mr McLeod is an Adjunct Professor at Murdoch University where he teaches units in environmental and town planning law. He is a Fellow of the Royal Society of Arts. He was the recipient of the 2016 WA Law Society's Lawyer of the Year Award. Mr McLeod is the General Editor of the Thomson Reuter national loose-leaf publication *Planning Law in Australia* and an editor of the *Local Government Law Journal*.



### Dr Jenny Pope

*Appointed as a member in November 2018.*

Dr Pope has more than 30 years' experience in environmental management and sustainability in WA and internationally. Dr Pope began her career as an environmental process engineer in the water and the oil and gas industries. Dr Pope then established a consultancy in Perth which has been operating for 20 years. Dr Pope currently holds two international academic positions: Extraordinary Associate Professor in Environmental Management at North-West University in South Africa, and Fellow of the University of Cambridge Institute for Sustainability Leadership in the UK.

Dr Pope holds a Bachelor of Engineering (Chemical) with first class honours; a Graduate Diploma in Science (Biotechnology); a Postgraduate Certificate in Policy Studies (Ecologically Sustainable Development), and a PhD in Sustainability and Technology Policy. She is both a practitioner and an internationally-recognised scholar of impact assessment, with more than 50 publications in the field. She is an active member of the International Association for Impact Assessment, the Environment Institute of Australia and New Zealand and the Environmental Consultants' Association of WA.



### Professor Fiona Haslam McKenzie

*Appointed as a member in October 2019.*

Prof. Fiona Haslam McKenzie is co-director and senior principal research fellow at UWA's Centre for Regional Development. Her current work examines the socio-economic impact of the Australian staple economies, particularly the resources sector. Her international work is focused on mining activities in Canada, Chile and South Africa and a Department of Foreign Affairs and Trade teaching program across nine African nations.

Prof. Haslam McKenzie has a diverse academic background, including a PhD in Political Geography from UWA, as well as a Bachelor of Commerce, Bachelor of Arts and Master of Philosophy from UWA. She has served on several government and private sector boards. She is currently leading the Regional Economic Development Program for the Co-operative Research Centre for Transformation in Mining Economies.

Prof. Haslam McKenzie has extensive experience in population and socioeconomic change, mining and the oil and gas industries, housing, regional economic development and the analysis of remote, regional and urban socioeconomic indicators.





## Strategic activities and advice

### Strategic plan

The *EPA Strategic Plan 2019–22* guides our focus to 2022 and centres on four pillars. We are pleased to outline the progress we have made during the past year in achieving our strategic plan.



#### Improving the assessment and management of cumulative impacts

Last year the EPA made a submission to the Government of Western Australia on the government's review to modernise the *Environmental Protection Act 1986*. Among other matters, we recommended that reference to cumulative impacts be included in the Act.

We are pleased to report that Parliament has adopted this recommendation. A new clause of the amended Act recognises that 'the effect of a proposal on the environment includes a reference to the cumulative effect of impacts of the proposal on the environment.' This addition to the Act has highlighted the importance of managing cumulative impacts as a critical aspect for protecting the environment.

In August 2020, the Minister for Environment requested the EPA to provide strategic advice on the potential cumulative impacts of proposed activities and developments on the environmental, social and cultural values of Exmouth Gulf. We are using this opportunity and other policy mechanisms and models to inform our framework to improve how cumulative impacts are considered in EIA and management.







## 2 Being innovative in environmental information and digital environmental impact assessment

The EPA has continued to work closely with DWER to progress the delivery of digital EIA. Last year we helped to secure state and federal government funding for the Digital Environmental Assessment Program (DEAP). This program aims to establish new and interoperable environmental assessment systems that work across both jurisdictions. These systems include an online environmental assessment portal for proponents to submit their proposals, an environmental assessment framework for developing and progressing that proposal through the approvals process, and a biodiversity data repository that will help to provide the environmental information needed to submit and assess a proposal.

This year EPA Services staff coordinated four meetings of the WA DEAP Committee, which were convened to progress cross-agency alignment of digital data capture systems. The committee includes representatives from DWER; Department of Mines, Industry Regulation and Safety; Office of Digital Government; and Department of Biodiversity, Conservation and Attractions. The views and issues raised by this committee are communicated to the Australian Government through the Commonwealth-WA cross-jurisdictional committee.

This year the Environment Online Capability Pilot has been completed (see page 31).



## 3 Actively advising on the development of effective state environmental policies and plans

This year we continued to engage directly with policy makers on key developments in Western Australian environmental policy and legislation and made submissions to government on six important state policies and legislation, as described on page 17.

We also worked closely with DWER to inform the development of upcoming new government policies, including the Native Vegetation Policy (scheduled for release in 2021–22); the State Climate Policy; a range of new state planning policies; and the *Peel-Harvey estuary protection plan (Binjareb Djilba)*.

We have also made progress on articulating strong and effective environmental protection needs and opportunities through preparing our strategic advice on the Exmouth Gulf. Our advice considered the potential cumulative impacts of proposed activities and developments on the environmental, social and cultural values of the Gulf.

Looking ahead, we have started a review of the *Environmental factor guideline – Greenhouse gas emissions*.

We look to consult on a range of important policies in 2021–22 that will shape the way we engage with our state's unique environment (see page 31).



## 4 Improving the soundness, robustness and transparency of advice through our assessments

Pillar four identifies staying current with advances in impact assessment frameworks and techniques as a priority.

During the past year, to keep up with advances, the EPA has focused on revising our EIA procedures suite, which includes the administrative procedures and the procedures manual. This has been necessary to implement the amendments to Part IV of the *Environmental Protection Act 1986* that are scheduled to come into force later in 2021. We recognise that a central aspect of providing better environmental outcomes and more efficient processes is to increase clarity and consistency on key EIA matters for our stakeholders and proponents.

## Modernising environmental protection

Amendments to the *Environmental Protection Act 1986* (EP Act) were passed in November 2020. These amendments represent the most significant reform to the Act in more than 30 years.

The amendments deliver a modern EP Act with a focus on creating a more efficient, risk-based and flexible assessment and approvals process. The amendments also expanded enforcement powers, and increased penalties for environmental offences.

The reforms to Part IV of the Act that relate to EIA include:

- a new provision for cumulative impacts to be considered in EIA
- provisions to allow proponents to apply to amend a proposal during referral and streamline the amendment during the assessment process
- the EPA being able to consider other statutory decision-making processes that can mitigate environmental impacts
- a provision to split or consolidate Ministerial Statements
- clarity on provisions dealing with strategic assessments using terminology consistent with that used in other jurisdictions
- a head power for a system to accredit environmental practitioners
- types of implementation conditions, including the power to enter into covenants and impose offsets, and to make monetary contributions to a fund for counterbalancing the impacts of a proposal
- a consistent approach to confidentiality and publication requirements
- the ability to implement an approvals bilateral agreement with the Australian Government
- a head power that enables DWER to recover the costs of undertaking EIA under Part IV Divisions 1 and 2 of the Act.

To implement the amendments, we have revised some of our documents that support EIA and consulted on these through our consultation hub, including:

- revised administrative procedures
- revised procedures manual
- statement of principles, factors, objectives and aims of EIA
- new process summary of EIA.

This consultation has highlighted key areas of interest in changes to the legislation. Our revised procedures suite will incorporate feedback from stakeholders and the public.

We will continue to work through these amendments and update our own procedures and policy suite accordingly throughout 2021–22.

The revision of our procedures suite will help make our processes more efficient and improve the focus on environmental outcomes. This doesn't mean the rigour of the EPA's assessment will be compromised or that the EPA will reduce environmental protection. Rather, efficiencies will allow us to focus on key drivers of achieving environmental protection.







Milky way © Leanne Thompson

## Engagement with public policy and legislation

Following the release of our strategic plan in 2019, we have continued to grow our active role in the development of the public policy and legislation that will shape WA's future environmental and cultural footprint.

The EPA has played a significant role in shaping the environmental policy landscape in WA with our key guidance material such as the *Environmental factor guideline – Greenhouse gas emissions*. In accordance with this guidance in 2020–21, proposals have received Ministerial Conditions requiring them to undertake stepwise emissions reductions and achieve net-zero greenhouse gas emissions by 2050. It is understood that this was the first time in Australia that such conditions have been made.

Similarly, the EPA has led the consultation and roll-out of the recent amendments of the EP Act, relating to Part IV.

During 2020–21, the EPA also engaged directly with key State Government policy makers and legislators and has provided written submissions to inform the development of the following key policies:

- [Aboriginal Cultural Heritage Bill 2020](#)
- [State Infrastructure Strategy](#)
- [Western Australian Soil Health Strategy](#)
- [Dark sky and astrotourism position statement](#)
- [Mine closure completion guideline](#)
- [Managing water in the Fitzroy River catchment discussion paper](#).

Several other important policies and legislation of particular interest to the EPA will be the subject of consultation in 2021–22. These include the bilateral agreements with the Australian Government, the 10-year review of the *Forest management plan 2014–23*, and the updated Aboriginal Cultural Heritage Bill. We look forward to contributing to the definition and application of these important documents.



## Continual improvement of our policy suite

### Environmental Protection Policies (EPPs)

EPPs may be developed where the EPA considers it necessary or desirable for the protection of any portion of the environment, or for the prevention, control or abatement of pollution or environmental harm. There are currently four EPPs in force:

1. **Environmental Protection (Peel Inlet-Harvey Estuary) Policy 1992.** The *Peel-Harvey estuary protection plan (Bindjareb Djilba)* has recommendations relating to this EPP, as mentioned in the 'Community spotlight' section on page 32.
2. **Environmental Protection (Goldfields Residential Areas) (Sulfur Dioxide) Policy 2003 and Regulations 2003.**
3. **Environmental Protection (Kwinana) (Atmospheric Wastes) Policy 1999 and Regulations 1992.**
4. **Environmental Protection (Western Swamp Tortoise Habitat) Policy 2011.** In September 2019 the EPA began a statutory review of this EPP, which is expected to be completed in 2021–22.

### Guidance and procedures

Consolidation and revision of the EPA's guidance and procedures is required to align survey effort, methods, and analysis with contemporary practices in WA; to outline the EPA's expectations for EIA surveys; and to provide clarity for industry and consultants.

#### Technical guidance – Terrestrial vertebrate fauna surveys for environmental impact assessment

In July 2020, we published this updated technical guidance. The purpose of this guidance is to ensure that terrestrial vertebrate fauna data of an appropriate standard are obtained and used for EIA.

The updated guidance replaces two former guidance documents: *Technical guidance – Sampling methods for terrestrial vertebrate fauna* and *Technical guidance – Terrestrial fauna surveys*.

#### Technical guidance – Subterranean fauna surveys for environmental impact assessment

In June 2021, we consulted on this updated technical guidance through our consultation hub. The purpose of this guidance is to ensure that subterranean fauna data of an appropriate standard are obtained and used for EIA.

This guidance replaces two former guidance documents: *Technical guidance – Subterranean fauna surveys* and *Technical guidance – Sampling methods for subterranean fauna*.

#### EIA administrative procedures, EIA procedures manual and associated documents

As a result of the recent amendments to the *Environmental Protection Act 1986*, as detailed on page 16, we sought input from stakeholders on our updates to administrative procedures suite.

#### Section 16e advice – Potential cumulative impacts of the proposed activities and developments on the environmental, social and cultural values of Exmouth Gulf

During the year, we completed extensive consultation to inform the development of our strategic advice, as discussed on the next page.





## Consultation to inform strategic advice on Exmouth Gulf

In August 2020, the then Minister for Environment requested the EPA to provide strategic advice under s. 16(e) of the *Environmental Protection Act 1986* on the potential cumulative impacts of proposed activities and developments on the environmental, social and cultural values of Exmouth Gulf.

The Minister requested advice and recommendations on the:

- current state of the key environmental, social and cultural values in Exmouth Gulf
- potential impacts on those values posed by existing and proposed activities and developments in and around Exmouth Gulf
- compatibility of future developments with the key values.

We partnered with the Western Australian Marine Science Institution (WAMSI) to help deliver our strategic advice and completed extensive engagement with the local community, stakeholders and traditional owners.

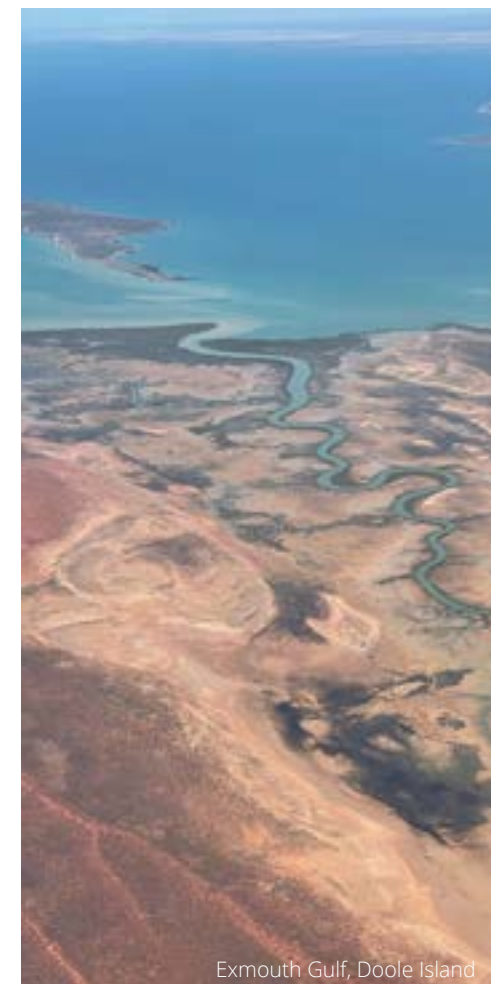
We received largely positive and informative engagement from the Exmouth community and stakeholders. The information we collected during the engagement process has provided key insights into the distinct environmental, social and cultural values of the Gulf. Engagement included:

- a three-week public consultation period in October–November 2020 that sought information on the key values and potential and current pressures in the Gulf, from which we received 316 submissions, including many from the Exmouth community
- targeted input from Exmouth locals, community and sector groups, business and industry, scientists, subject experts, and traditional owners
- two community meetings in Exmouth which focused on future opportunities for the environment, people and places of the Gulf, attended by approximately 53 community members and stakeholders
- consultation and visits on-country with the Nganhurra Thanardi Garrbu Aboriginal Corporation (NTGAC) as native title claimants for the Gulf region
- regular consultation with an Exmouth Gulf Perspectives Group, which included representatives from key sectors, including traditional owners.

The Gulf is shared by many sectors and is a significant and highly valued area along the Western Australian coastline. We recognise the deep connection the traditional owners have for the land and sea country in and around Exmouth Gulf.

The region has experienced an unprecedented tourism boom as a flow-on effect of COVID-19 travel restrictions. This has highlighted the imperative to understand the pressures on the environment to ensure a healthy Gulf for future generations.

The EPA appreciates the efforts of all the participants who generously took part in and contributed to the strategic advice. We would particularly like to thank WAMSI, members of the Exmouth Gulf Perspectives Group, the NTGAC, and the Exmouth community for their continued willingness to engage and provide valuable information to this process. The strategic advice was published on the EPA website in August 2021.



Exmouth Gulf, Doole Island





## Environmental impact assessments

One of the EPA's fundamental functions is to conduct EIAs of referred significant development proposals, strategic proposals and planning schemes, and to provide the outcome of those assessments to the Minister for Environment.

### Referred proposals and schemes

During 2020–21, the EPA received the referral of 58 development proposals and 128 schemes. This was the highest number of development proposals referred to the EPA in the past six years.

During the year, the EPA made a determination on 44 referred development proposals: 31 required formal assessment and 13 did not require further assessment by the EPA. Of the 13 that did not require further assessment, we provided specific advice on environmental matters to the proponents of two of those proposals.

The EPA made a determination that on 101 referred schemes: three required formal assessment and 98 did not require further assessment by the EPA. We provided advice and recommendations on environmental factors to the responsible authority on the environmental issues raised by 23 of the 98 referred schemes that did not require further assessment.





## Assessment of state significant projects

During 2020–21, the EPA completed and substantially progressed several state significant proposals through the assessment process. We completed resource assessments and reported on:

- Pilbara Energy (Generation) Pty Ltd's *PEG Power Station* (Report 1686)
- Mardie Minerals Pty Ltd's *Mardie Project* (Report 1704)
- Covalent Lithium Pty Ltd's *Covalent Lithium Hydroxide Refinery* (Report 1700)
- Covalent Lithium Pty Ltd's changes to conditions on the *Earl Grey Lithium Project* (Report 1697)
- AWE Perth Pty Ltd's *Waitsia Gas Project Stage 2* (Report 1687).

Further, the EPA completed state significant infrastructure assessments and reports on METRONET projects, including the *Malaga to Ellenbrook Rail Works* and changes to conditions on the *Yanchep Rail Extension Part 2 – Eglington to Yanchep*, and the *Thornlie-Cockburn Link* (see page 23).

We substantially progressed a number of resource sector assessments, which are expected to be completed in 2021–22, including Robe River Mining Co. Pty Ltd's Greater Paraburdoo Iron Ore Hub Proposal and Brockman Syncline Proposal; Perdaman Chemicals and Fertilisers Pty Ltd's Perdaman Urea Project; and Woodside Energy Ltd's Browse to North West Shelf Development Project and North West Shelf Extension Project.

We are also focused on the assessment and approval of environmental management plans required by Ministerial Conditions to facilitate the progress of state significant projects, including Fortescue Metals Group Ltd's Eliwana Iron Ore Mine and Rail Projects.



## Assessed proposals

**During 2020–21, the EPA completed the formal assessment of 21 development proposals and provided the assessment reports to the Minister for Environment.**

We continue to see complexity and diversity in the proposals requiring formal assessment. The list of assessment reports completed in 2020–21 is provided in Appendix 2 and includes 13 new development proposals and eight changes to conditions of existing proposals.

### Growing potash industry

Potash is a key ingredient in fertilisers, with sulphate of potash (SoP) providing a lower-salt-content product and better outcomes for farmers than muriate of potash. Rising global populations and demand for efficient food cultivation is likely to drive demand for SoP both within Australia and overseas over the next century.

The salt lakes of WA are formed above ancient paleo channels in the state's arid interior. These lakes provide resources for large-scale production of SoP. In the past two years the EPA has finalised assessments for four inland SoP projects, with a fifth proposal still under assessment. The map shows the location of these five proposals. It is expected that additional referrals will be received in the next two years.

The growing SoP industry in the state presents new challenges for the EPA, given the arid inland salt lake environment can hold unique environmental values and historical surveys are limited. The isolated nature of each of these lakes means careful assessment is required to determine whether any flora or fauna species may be endemic to the area. In each of the assessments completed so far, we have considered the potential for restricted or rare species to occur, particularly *Tecticornia* (samphire) species at the edges of the lakes. We recommended conditions to exclude potentially rare species from the disturbance footprint of proposals.

We also recognised the potential for cumulative impacts to occur across these lakes, with particular regard to habitat values for migratory birds. In our 'Other advice' section of the [Lake Way Sulphate of Potash Project](#) (Report 1699), we identified that no information on cumulative impacts to salt lakes was readily available, and that this might affect migratory bird populations using these areas. We noted that future proposals would need to consider regional cumulative impacts on values that support migratory birds.







Construction of fauna underpass at Alkimos

## METRONET

The EPA continued to progress the assessment of the State Government's priority METRONET projects. In 2020–21, we considered four METRONET projects:

1. *Malaga to Ellenbrook Rail Works* – we recommended the proposal may be implemented subject to conditions in November 2020 (Report 1690).
2. *Thornlie-Cockburn Link s. 46 change to conditions* – we completed our inquiry in December 2020 (Report 1694).
3. *Yanchep Rail Extension Part 2 (Eglinton to Yanchep) s. 46 change to conditions* – we completed our inquiry in December 2020 (Report 1693).
4. *Byford Rail Extension* – the proposal was referred to the EPA in September 2020, and we considered and approved the environmental scoping document in December 2020.

### Malaga to Ellenbrook Rail Works

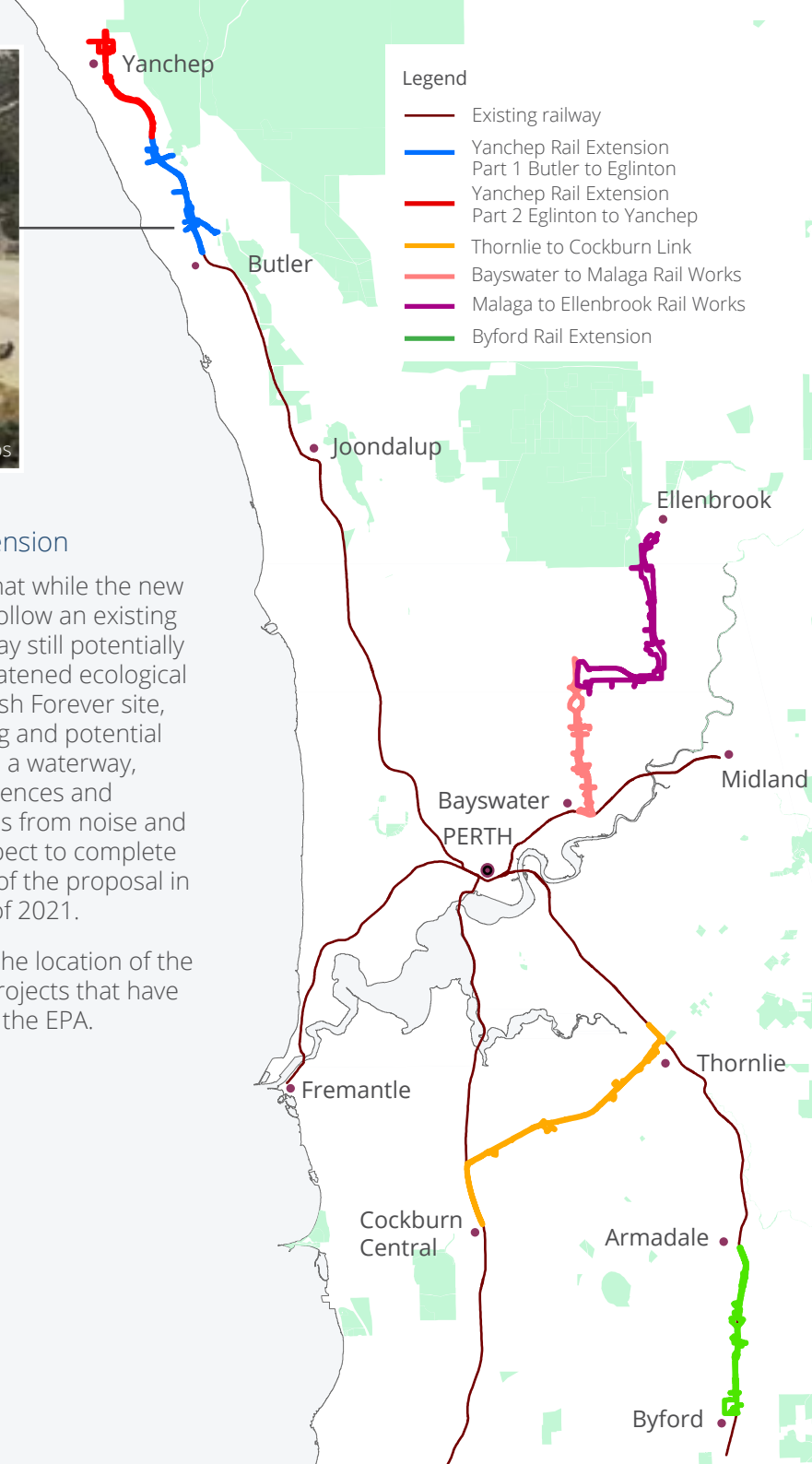
In recommending the proposal may be implemented, the EPA noted that although the new rail track would mostly be located on cleared and degraded areas, it would still have an impact on sensitive areas and ecological communities. We recommended conditions to:

- maintain the hydrological regime and water quality in Bennett Brook that supports Aboriginal cultural associations and heritage
- maintain the quality and hydrological regime of groundwater that supports Banksia woodlands of the Swan coastal plain and wetlands
- reduce noise levels for nearby residences
- monitor and manage the impacts to flora and vegetation and terrestrial fauna
- counterbalance the significant residual impacts to Banksia woodlands, Bush Forever, black cockatoos and wetlands.

### Byford Rail Extension

The EPA found that while the new rail track would follow an existing rail corridor, it may still potentially impact on a threatened ecological community, a Bush Forever site, cockatoo foraging and potential breeding habitat, a waterway, and nearby residences and recreational areas from noise and vibration. We expect to complete our assessment of the proposal in the second half of 2021.

The map shows the location of the six METRONET projects that have been referred to the EPA.



## Miralga Creek DSO Project

This year the EPA completed its assessment of Atlas Iron's *Miralga Creek Direct Shipping Ore (DSO) Project* (Report 1689). The proposal, to mine iron ore from five satellite pits from three mining areas (Miralga East, Miralga West and Sandtrax), is located 100 kilometres south-east of Port Hedland.

We assessed the proposal at the level of Referral Information with additional information required, and set a public review period of two weeks for the additional information. It was also assessed as an accredited assessment between the Australian and Western Australian governments. The assessment focused on the clearing of 220 hectares of native vegetation.

Two significant species – the ghost bat and the northern quoll – were recorded in the study area. Ghost bats roost in deep complex caves beneath bluffs of low, rounded hills, granite rock piles and abandoned mines, with a specific microclimate (23–28°C) and relative humidity (50–90 per cent).

These features often occur within habitats including gorges, gullies, low stony plains, hillcrest and hillslopes. Thirteen caves were confirmed or identified as potential roost caves for ghost bats.

We recommended the proposal may be implemented subject to conditions including managing impacts on the habitat of the northern quoll, ghost bat and Pilbara leaf-nosed bat.

The conditions require the preparation and implementation of a significant species management plan, which must contain baseline monitoring, a staged approach to blasting, and blast avoidance within 100 metres of three high-value caves or any other diurnal roosting cave until the results of monitoring indicate the cave will survive blasting.

We also recommended an offset condition to counterbalance the significant residual impact of clearing vegetation within the Chichester Interim Biogeographic Regionalisation for Australia (IBRA) subregion, which is foraging and denning habitat for the northern quoll, ghost bat and the Pilbara leaf nosed bat.



Miralga Creek





## Pilbara salt projects

This year we completed the assessment of the Mardie Project – a large-scale industrial salt project. This project is the first of three similar proposals on the west Pilbara coast to be completed; the Eramurra Industrial Salt Project and Ashburton Salt Project are currently under assessment.

There are two existing operational salt farms in the region (Onslow Solar Salt Project and Dampier Solar Salt Field Enhancement). Each of these proposals use evaporation of seawater to produce salts, and include extensive evaporation and crystalliser ponds, seawater intakes, processing plants and other associated infrastructure.

The establishment of salt farms in coastal areas has the potential to impact on intertidal benthic communities such as algal mats, mangroves and samphire. Cumulative impacts from proposals may result in the loss of habitat values for significant species, including migratory birds, as well as a decline in ecosystem health that may impact marine fauna.

During the assessment of the Mardie Project we focused on the potential regional and cumulative impacts on sensitive coastal ecosystems. We also noted the potential for the proposal to increase the effects of sea level rise on intertidal communities, by preventing the inland migration of benthic communities.

In our 'Other advice' section of the [Mardie Project](#) (Report 1704), we noted that future proposals in this area would need to consider cumulative impacts to intertidal benthic communities and habitat, taking into consideration existing, approved and proposed projects.



Mardie project

## Outcomes of appeals

During 2020–21, the Minister for Environment issued 30 Ministerial Statements for proposals that were assessed by the EPA. Of these proposals, seven received one or more appeals against the EPA's assessment report. As a result of these appeals, one Ministerial Statement featured significant changes to the conditions we recommended (in this case, the Minister allowed the appeals in part).

The significant changes as a result of the appeals process included:

- inserting a new condition requiring an offset for the loss of 1.22 hectares of Carnaby's cockatoo foraging habitat
- amending an existing condition to clarify the intended requirement to maintain 'excellent' condition vegetation and restore degraded vegetation to 'good' or better condition within Bush Forever site 309.

Most of the conditions (98 per cent) provided in Ministerial Statements did not undergo significant change as a result of the appeals process.

Reviewing significant changes made to conditions during the appeals process allows for continual improvement of our recommended conditions.



An aerial photograph of the Murujuga National Park coastline. The image shows a wide, sandy beach curving along a calm, blue body of water. In the background, there are large, rounded hills covered in dense, reddish-brown vegetation. A dirt road runs along the beach, with several vehicles parked or driving on it. The sky is a pale, hazy blue.

## Focus – feature articles

### Protecting rock art on Murujuga

The EPA acknowledges that the sea and country of Murujuga holds immense cultural and spiritual significance to Aboriginal people. Murujuga is widely recognised as an area of outstanding conservation and heritage value, with one of the most dense and diverse collections of rock art in the world.

We are committed to supporting the Australian Government, the State Government and the Murujuga Aboriginal Corporation (MAC) to successfully achieve a World Heritage listing by the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Centre to formally recognise the outstanding values of Murujuga globally.





During 2020–21, the EPA completed the *Study of the cumulative impacts of air emissions in the Murujuga airshed* (Ramboll Australia Pty Ltd 2021). The study included air emissions from existing and proposed future industries, shipping and aggregate sources in the Pilbara region to assess and predict air quality under a range of future development scenarios in Murujuga. The study will be used to inform existing and future EIAs situated in Murujuga and inform aspects of the Murujuga Rock Art Monitoring Program.

During 2020–21, we progressed the assessment of four proposals situated within or related to Murujuga:

- Perdaman Chemicals and Fertilisers Pty Ltd's Perdaman Urea Project
- Woodside Energy Ltd's Browse to North West Shelf Development Project
- Woodside Energy Ltd's North West Shelf Extension Project
- Yara Pilbara Fertilisers Ltd's Ammonia Plant Renewable Hydrogen Project.

In response to a request from the Minister for Environment, we began an inquiry into changing the existing implementation conditions of Woodside Energy Pty Ltd's Pluto Liquefied Natural Gas Facility.

We anticipate completing our assessments of these proposals and the inquiry during 2021–22.

The EPA acknowledges the working partnership with MAC which has continued to develop during 2020–21. We recognise the critical role of MAC in preserving and protecting land, heritage and culture. Looking ahead, we will continue to liaise with MAC as the assessments progress; this will help to facilitate proactive and appropriate measures to ensure the effective preservation and protection of heritage values.

The values of Murujuga once again attracted significant public interest this year. The EPA will continue to consider the significant environmental values of Murujuga in assessments and notes future activities and developments should demonstrate compatibility with the protection of key values of Murujuga and its surrounds. We consider there is an opportunity to strengthen the protection of Murujuga through avoidance of activities and development proposals that could use alternative locations, for example, the Maitland Industrial Estate.





Drilling Waitsia-04 © Mitsui E&amp;P Australia

## Applying our new greenhouse gas guidance

The EPA's *Environmental factor guideline – Greenhouse gas emissions* has been in place for more than a year, and 2020–21 saw the release of the first assessment reports that applied this guidance.

The EPA's report for the Pilbara Energy (Generation) Pty Ltd's *Pilbara Energy Generation Power Station (PEG) proposal* (Report 1686) was published in August 2020. The PEG proposal is to construct and operate a 165-megawatt gas-fired power station in the Pilbara region. Greenhouse gas (GHG) emissions was a key environmental factor for this assessment, with scope 1 GHG emissions estimated at 670,666 tonnes per annum (tpa) CO<sub>2</sub>-e over the life of the proposal. We assessed the proposal's GHG management plan and recommended the proposal be implemented subject to conditions to reduce GHG emissions to net-zero by 2040 via five-yearly reduction targets.

One month after we released the PEG report, we published AWE Perth's *Waitsia Gas Project Stage 2 (Waitsia) proposal* (Report 1687). The Waitsia proposal is to construct, operate and decommission a 250 terajoules per day, conventional gas plant in the Mid West region. GHG emissions was a key environmental factor for this assessment, with scope 1 GHG emissions estimated at 300,000 tpa CO<sub>2</sub>-e over the life of the proposal. We assessed the proposal's GHG management plan and recommended the proposal be implemented subject to conditions to offset reservoir GHG emissions from the start of operations and align long-term emissions reduction targets with net-zero by 2050.

The PEG and Waitsia proposals were the first major projects in Australia to receive conditions of approval that committed them to achieving net-zero GHG emissions by 2050. These conditions are a critical step in the effort to decarbonise major projects in WA.





Since publication of these reports, the EPA has been encouraging proponents – where GHG emissions is a key environmental factor for assessment of their proposals – to reduce emissions from the start of operations and commit to long-term emissions reduction targets.

In May 2021, we published our report for the *Covalent Lithium Hydroxide Refinery proposal* (Report 1700). Our assessment and subsequent recommendations for the proposal aligned with key condition recommendations for the PEG and Waitsia proposals. Combined, these three proposals assessed under our new guidance have set the expectation that high-emitting proposals in WA will achieve net-zero GHG emissions by 2050 (or sooner).

This expectation was also reflected in our advice to the Minister on Woodside's *Greenhouse gas management plan* for its Pluto operation. The original GHG conditions in the Ministerial Statement for Pluto were approved in 2007 and contained a requirement to offset reservoir GHG emissions. The contemporary

GHG abatement plan, approved by the Minister on the advice of the EPA in June 2021, commits the Pluto project to delivering net-zero by 2050 – reducing total GHG emissions from the previously approved proposal by tens of millions of tonnes. In approving Pluto's contemporary GHG abatement program, the Minister requested the EPA to review Woodside's Ministerial Statement to reflect the revised program and contemporary GHG conditions, ensuring strengthened compliance with the new targets.

This year we began a technical review of our GHG emissions guidance to clarify and investigate a range of issues considered by the EPA since the document was first published. Once the review is complete, the revised draft guidance will go out for public consultation.







## Looking forward

### South West forests

A key challenge for the EPA in the coming years will be the on-ground consideration and implementation of a range of new State Government environmental strategies and plans, including the new Western Australian Climate Policy, and the Native Vegetation Policy. These policies seek to address the most significant, large-scale environmental issues affecting the Western Australian environment and will require government, industry and the community to come together to help deliver tangible and effective outcomes. The EPA looks forward to working with our key stakeholders to give effect to the environmental benefits expounded by these new policies.

We will engage with several emerging environmental issues in the coming year to help secure long-term environmental outcomes. Our northern Jarrah forests will need considered management as some of WA's major industries progress with their plans to expand their operations. The intersection of complex land uses and environmental values are set against the diversity of pressures that

these forests now face – from climate change and the reduced rainfall it brings, to devastating bushfires and the controlled burns that are employed to manage their impacts.

The EPA looks forward to bringing a sound scientific perspective to these important issues in 2021–22 and beyond.





## Capability testing of Environment Online

The work of digitally transforming EIA in WA will continue in 2021–22 after the capability pilot was completed in May 2021. The capability pilot successfully demonstrated a 'proof-of-concept' prototype and work is ongoing to drive further innovation in the next phase.

The capability pilot will serve as the basis for consultation with key industry, community and government partners, so that the actual build of the EPA assessment portal produces a product that is user friendly and functional for all users. Building of the EPA's component of the broader Environment Online project will begin early in 2021–22 and is expected to be operational in the first half of 2022.

We will continue to work to identify and define the requirements that will allow users of the new platform to apply, submit, monitor and review submissions and approvals related to EIAs.

We are committed to continuing to engage with key stakeholders as we move towards implementation of Environment Online to ensure the system is robust and fit-for-purpose.

## Policy priorities

The EPA has committed to an annual review process of our policy suite to help determine our policy priorities. This annual review considers any relevant feedback received from stakeholders during the previous year, including our Stakeholder Reference Group. Priorities identified for 2021–22 were to:

- complete the review of *Environmental factor guideline – Greenhouse gas emissions*
- complete the review of documents to support EIA to incorporate amendments to the *Environmental Protection Act 1986*
- publish the revised and updated *Technical guidance – Environmental impact assessment of marine dredging proposals*, to include the science developed by the Dredging Science Node established under WAMSI
- publish the *Guidance for Planning and Development – Protection of naturally vegetated areas in urban and peri-urban areas*, which is an update to the EPA's Environmental Protection Bulletin 20
- publish the *Guidance for Planning and Development – Western swamp tortoise habitat*, which is an update to the EPA's Guidance Statement 7
- develop the EIA (Part IV Divisions 3 and 4) Administrative Procedures and Procedures Manual to align with the recent amendments to the *Environmental Protection Act 1986*
- review *Guidance Statement 41 – Assessment of Aboriginal heritage* to align with the EPA's policy framework and the new Aboriginal Cultural Heritage Bill
- review the *Environmental factor guideline – Social surroundings* to align with the new Aboriginal Cultural Heritage Bill and incorporate other recent learnings

- review the *Technical guidance – Sampling of short-range endemic invertebrate fauna*
- review the *Technical guidance – Flora and vegetation surveys for environmental impact assessment* and the *Environmental factor guideline – Flora and vegetation*
- review offsets policy and practice
- begin the five-year evaluation of our implementation of the recommendations of the Independent Legal and Governance Review into Policies and Guidelines for Environmental Impact Assessments under the *Environmental Protection Act 1986*.

We are confident the policy suite contributes to achieving the objectives of our strategic plan, specifically to increase public confidence in our processes by ensuring the soundness, robustness and transparency of our advice.





## Community spotlight

### Protecting the Peel-Harvey estuary

The Peel-Harvey is the largest estuary in southern WA and is part of the Ramsar Convention-listed Peel-Yalgorup wetland system, a listing which makes it internationally important.

The estuary suffered an ecological collapse in the 1980s as a result of nutrient pollution from surrounding catchments, leading to the 'Dawesville Cut', an engineered outlet to the ocean, to help flush out the waterbodies. The Cut has helped improve the estuary's water quality, but warning signs indicate it is under ecological and environmental stress once again.

In September 2020, the Peel-Harvey Catchment Council (PHCC), together with Murdoch University and University of Western Australia briefed the EPA on the results of an Australian Research Council (ARC) Linkage Project: 'Balancing estuarine and societal health in a changing environment'. The ARC Linkage Project spanned three years and began in February 2016. It was funded by the Australian Government (via ARC), universities, state and local governments and the PHCC, and was a collaboration between all these stakeholders.





The project investigated the links between catchment management and downstream effects and used this information to model and predict changes in estuary health arising from changes in catchment land uses and estuary management. The research produced a report card on the Peel-Harvey estuary's current condition to help guide decision-making across the Peel-Harvey catchment. Increasing levels of nutrients from the surrounding catchments, combined with reduced river flow as a result of our drying climate (which concentrates nutrients and reduced flushing), is putting the system under pressure. Agriculture is a major contributor to nutrient load, and increased urban development also presents a risk.

The *Peel-Harvey estuary protection plan (Binjareb Djilba)* is a whole-of-government approach to protecting the estuary. It presents a list of actions needed to protect and improve the estuary's water quality so it may continue to support the region's community, ecology and economy. The protection plan calls for a number of actions emphasising collective

decision-making to implement the plan and strategic coordination of estuary management. This includes an action to implement a contemporary statutory framework to achieve water quality improvements in the Peel-Harvey estuary by revising the current Environmental Protection (Peel Inlet-Harvey Estuary) Policy 1992 or replacing with an appropriate alternative.

The Peel Harvey EPP is a legislative framework to allow for catchment management initiatives in the policy area. The purpose of this EPP is to set out environmental quality objectives which, if achieved, will rehabilitate the estuary and protect it from further degradation; and to outline the means by which the environmental quality objectives for the estuary are to be achieved and maintained.

Research projects such as the ARC Linkage Project help give direction and set priorities for government and stakeholders to work together to improve the health of the Peel-Harvey estuary and its rivers and catchments.





# Engagement with stakeholders

## Site visits

As part of the EPA's ongoing commitment to stakeholder engagement, we conducted site visits and field trips, invited public submissions on assessments and regularly met with the Stakeholder Reference Group.

Site visits are an opportunity for the EPA to gain a first-hand appreciation of the environmental setting and constraints of proposals, to listen to community concerns and to discuss aspects of proposals in the field with subject matter experts. Site visits are generally undertaken following the public review of a proponent's environmental review document. At this stage, with all the available technical and public information on hand, the EPA is well informed on important elements of the proposal in question and key environmental issues.

This year the EPA and DWER staff visited the Exmouth region three times to meet and engage with stakeholders, traditional owners and members of the public directly. These meetings were integral to forming our strategic advice to the Minister for Environment on the potential cumulative impacts of proposed activities and developments on the environmental, social and cultural values of Exmouth Gulf.







Glen McLeod, Jenny Pope, Fiona Haslam McKenzie and Matthew Tonts at Exmouth Gulf



Jenny Pope at Mardie



Fiona Haslam McKenzie at Paraburdoo

## EPA site visits 2020-21

Date	Destination	EPA participants
22 July 2020	Structure Plan - Lot 9008 Frankland Avenue, Hammond Park	Tom Hatton
6–7 August 2020	Stirling Ranges and Denbarker Tingle Forest	Robert Harvey, Glen McLeod, Fiona Haslam McKenzie
14 August 2020	Greater Paraburdoo Iron Ore Hub, Shire of Ashburton – <i>Hamersley Iron Pty Limited</i>	Robert Harvey, Fiona Haslam McKenzie
24 August 2020	Lake Wells Proposal, Shire of Laverton – <i>Australian Potash Limited</i>	Robert Harvey, Fiona Haslam McKenzie
3 September 2020	Workshop with Murujuga Aboriginal Corporation, Karratha	Tom Hatton, Fiona Haslam McKenzie
24 September 2020	Malaga to Ellenbrook Extension, City of Swan – <i>Public Transport Authority</i>	Glen McLeod, Fiona Haslam McKenzie
1 October 2020	Byford Rail Extension, City of Armadale and Shire of Serpentine – <i>Public Transport Authority</i>	Tom Hatton
21–23 October 2020	Exmouth Gulf (EPA s. 16(e) advice)	Jenny Pope, Fiona Haslam McKenzie
15 December 2020	Boddington Bauxite Mine – <i>Worsley Alumina Pty Ltd</i>	Fiona Haslam McKenzie
5 March 2021	Bunbury Outer Ring Road Southern, Shire of Capel – <i>Main Roads Western Australia</i>	Matthew Tonts, Lee McIntosh, Fiona Haslam McKenzie
16 March 2021	Mardie Project, City of Karratha – <i>Mardie Minerals Pty Ltd</i>	Matthew Tonts, Lee McIntosh, Fiona Haslam McKenzie
21–23 March 2021	Exmouth Gulf (EPA s. 16(e) advice)	Matthew Tonts, Glen McLeod, Jenny Pope, Fiona Haslam McKenzie
13 May 2021	Carnarvon, to meet with NTGAC (EPA s. 16(e) advice)	Jenny Pope, Fiona Haslam McKenzie
13 May 2021	Revised Proposal for the Roy Hill Iron Ore Mine, Shire of East Pilbara – <i>Roy Hill Iron Ore Pty Ltd</i>	Matthew Tonts

































































## EPA meetings

The EPA met 13 times during 2020–21. At these meetings, we met proponents of development proposals and environmental experts to discuss assessments; received briefings from specialists on strategic environmental matters; and continued updating governance procedures for the Authority.

Dr Tom Hatton concluded his term as Chair of the EPA on 4 November 2020. Robert Harvey concluded his term as a Deputy Chair of the EPA on 17 November 2020. Lee McIntosh began her term as a Deputy Chair of the EPA on 18 November 2020. Prof. Matthew Tonts began his term as Chair of the EPA on 18 January 2021.

### EPA meetings 2020–21

	Tom Hatton	Robert Harvey	Glen McLeod	Jenny Pope	Fiona Haslam McKenzie	Lee McIntosh	Matthew Tonts
23 July 2020							
20 August 2020							
17 September 2020							
15 October 2020							
29 October 2020							
26 November 2020							
10 December 2020							
28 January 2021							
25 February 2021							
18 March 2021							
22 April 2021							
20 May 2021							
17 June 2021							
Participation	4	5	13	13	13	8	6





## Stakeholder Reference Group

The EPA's Stakeholder Reference Group (SRG) invites representation from key external stakeholders and peak industry bodies. Members have the opportunity to provide input to our guidelines, processes and performance. During the year, the SRG met four times.

At 30 June 2021, core membership of the SRG comprised:

### Conservation

Conservation Council of WA  
Environmental Defenders Office  
The Wilderness Society of WA  
Environmental Institute of Australia and New Zealand  
Environmental Consultants Association  
Natural Resources Management WA

### Resources industry

Association of Mining and Exploration Companies (AMEC)  
Australian Petroleum Production and Exploration Association (APPEA)  
Chamber of Commerce and Industry of WA  
Chamber of Minerals and Energy of WA (CMA)

### Other industry

Urban Development Institute of Australia – WA Division  
WA Local Government Association  
Pastoralists and Graziers Association of WA  
WAFarmers

The SRG provided valued input into the implementation of the Environmental Protection Act amendments. The revised draft EIA procedures suite which included the documents published on the consultation hub (see page 16) plus associated instructions, forms and templates – was released for consultation from 23 April 2021 to 31 May 2021. The Chair and Deputy Chair briefed stakeholders on the revised procedures at the EPA's SRG meeting on 23 April 2021.

The Chair and Deputy Chair met with key industry stakeholders and undertook further consultation through question and answer sessions in May. These included sessions for:

- SRG members – 10 May
- CME and AMEC members – 11 May
- Environmental Consultants Association members – 12 May
- APPEA members – 13 May
- government and other stakeholders – 18 May
- conservation sector stakeholders – 25 May.

## Consultation

### Consultation hub

Providing opportunities for public participation is important for EIA and developing sound environmental policies, guidelines and procedures in WA.

The EPA publishes documents that are open for public comment online at [consultation.epa.wa.gov.au](https://consultation.epa.wa.gov.au). Members of the public are encouraged to submit their comments through the consultation hub.

The public and stakeholders can also use the hub to request they be notified of new items by email.

### Number of comments received via the consultation hub:

Type of consultation	Number	Number of comments*
Proposals under assessment	13	318
Seven-day comment on referrals	52	2,573
EPA guidance	4	167

\* Comments received via email or the post are not included.



# Appendices



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## Appendix 1: Referrals received and levels of assessment

### Proposals under section 38 of the *Environmental Protection Act 1986*

Total proposals referred to the EPA under section 38	58
Determinations on level of assessment for proposals referred	44
Assess – Referral Information (no public review)	4
Assess – Referral Information (with public review)	14
Assess – Environmental Review (no public review)	0
Assess – Public Environmental Review	13
Not Assessed – Public advice given	2
Not Assessed – No advice given	11

### Schemes and scheme amendments under section 48A of the *Environmental Protection Act 1986*

Total schemes referred to the EPA under section 48A	128
Determinations on the level of assessment for schemes referred	101
Scheme Assessed (Environmental Review)	3
Scheme incapable of being made environmentally acceptable	0
Not Assessed – Public advice given	23
Not Assessed – No advice given	75





## Appendix 2: Completed assessment reports

### EPA assessment reports completed in 2020–21

Report number	Public Environmental Review	Proponent	Date approved
1690	Malaga to Ellenbrook Rail Works	Public Transport Authority of Western Australia	26 October 2020
1692	Cooljarloo West Titanium Minerals Project	Tronox Management Pty Ltd	4 November 2020
1695	Yalyalup Mineral Sands Project	Doral Mineral Sands Pty Ltd	11 January 2021
1699	Lake Way Sulphate of Potash Project	Piper Preston Pty Ltd	28 January 2021
1704	Mardie Project	Mardie Minerals Pty Ltd	29 June 2021
Report number	Environmental Review (no public review)	Proponent	Date approved
1688	Lake Wells Potash Project	Australian Potash Limited	31 August 2020
Report number	Referral Information (no public review)	Proponent	Date approved
1686	Pilbara Energy Generation Power Station	Pilbara Energy (Generation) Pty Ltd	14 August 2020
1700	Covalent Lithium Hydroxide Refinery	Covalent Lithium Pty Ltd	25 May 2021
1701	CBH Kwinana Fertiliser Project	Co-operative Bulk Handling Limited	1 June 2021
1702	Cervantes-01 Conventional Well Drilling Proposal	RCMA Australia Pty Ltd	25 June 2021
1703	Shark Bay Maintenance Dredging	Shark Bay Resources Pty Ltd	29 June 2021
Report number	Referral Information (with public review)	Proponent	Date approved
1687	Waitsia Gas Project Stage 2	AWE Perth Pty Ltd	31 August 2020
1689	Miralga Creek DSO Project	Atlas Iron Pty Ltd	22 September 2020



Report number	Change to conditions – section 46 inquiry	Proponent	Date approved
1685	Sandy Ridge Facility – inquiry under section 46 of the <i>Environmental Protection Act 1986</i> to amend Ministerial Statement 1078	Tellus Holdings Ltd	3 July 2020
1691	Wagerup Alumina Refinery – Production to a maximum capacity of 4.7 million tonnes per annum and associated bauxite mining – inquiry under section 46 of the <i>Environmental Protection Act 1986</i> to amend Ministerial Statements 728 and 1069	Alcoa of Australia Limited	2 November 2020
1693	Yanchep Rail Extension Part 2: Eglinton to Yanchep – inquiry under section 46 of the <i>Environmental Protection Act 1986</i> to amend Ministerial Statement 1129	Public Transport Authority of Western Australia	17 December 2020
1694	Thornlie-Cockburn Link – inquiry under section 46 of the <i>Environmental Protection Act 1986</i> to amend Ministerial Statement 1114	Public Transport Authority of Western Australia	17 December 2020
1696	Parker Range (Mount Caudan) Iron Ore Project – inquiry under section 46 of the <i>Environmental Protection Act 1986</i> to amend Ministerial Statement 892	Polaris Metals Pty Ltd	25 January 2021
1697 (assessment no 2263)	Earl Grey Lithium Project – inquiry under section 46 of the <i>Environmental Protection Act 1986</i> to amend Ministerial Statement 1118	Covalent Lithium Pty Ltd	27 January 2021
1697 (assessment no 2279)	Earl Grey Lithium Project – inquiry under section 46 of the <i>Environmental Protection Act 1986</i> to amend Ministerial Statement 1118	Covalent Lithium Pty Ltd	27 January 2021
1698	Sino Iron Mine Continuation – inquiry under section 46 of the <i>Environmental Protection Act 1986</i> to amend Ministerial Statement 822	Sino Iron Pty Ltd and Korean Steel Pty Ltd	27 January 2021





## Appendix 3: Guidelines and procedures published or revised

### EPA guideline and procedures published or revised in 2020–21

<b>1. Procedures for EIA</b>
<b>1a. Instructions and templates</b>
Review: Instructions on how to prepare EP Act 1986 Part IV Environmental Management Plans (September 2020)
Review: Instructions for preparing Impact Reconciliation Procedures and Impact Reconciliation Reports (February 2021)
<b>2. Environmental considerations in EIA</b>
<b>a. Factor Guidelines and Technical Guidance</b>
Technical guidance – Terrestrial vertebrate fauna surveys for environmental impact assessment (July 2020)
<b>3. Submissions by the EPA in line with Pillar 3 of the EPA Strategic Plan – Actively advising on the development of effective state environmental policies and plans*</b>
Western Australian State Soil Health Strategy – discussion paper (August 2020)
Infrastructure Western Australia: State Infrastructure Strategy discussion paper (August 2020)
Aboriginal Cultural Heritage Bill 2020 (September 2020)
Western Australian Planning Commission: Draft position statement: Dark sky and astrotourism (March 2021)
Draft Department of Mines, Industry Regulation and Safety: Mine closure completion guideline (April 2021)
Department of Water and Environmental Regulation: Managing water in the Fitzroy River catchment discussion paper (May 2021)

\* Note that these dates reflect the submission date, not the date of publication on the EPA website



Carnaby's cockatoo





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