



Government of **Western Australia**
Department of **Water and Environmental Regulation**

*We're working for
Western Australia.*



Annual report

2020–21

Overview

Department of Water and Environmental Regulation

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Statement of compliance

For the year ended 30 June 2020

Hon Dave Kelly MLA
Minister for Water

Hon Amber-Jade Sanderson MLA
Minister for Environment; Climate Action

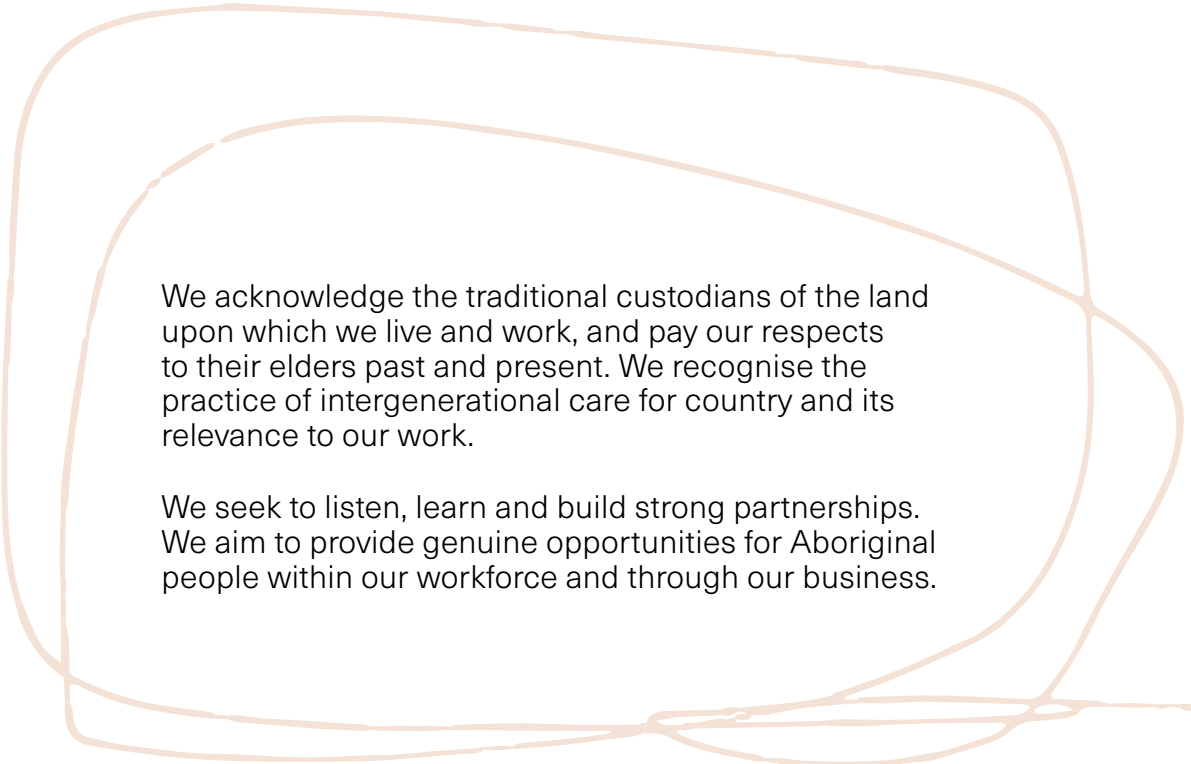
In accordance with section 63 of the *Financial Management Act 2006*,
I hereby submit for your information and presentation to Parliament the annual report for the Department of Water and Environmental Regulation for the financial year ended 30 June 2020.
The annual report has been prepared in accordance with the provisions of the *Financial Management Act 2006*.



Michelle Andrews
Director General
12 October 2021

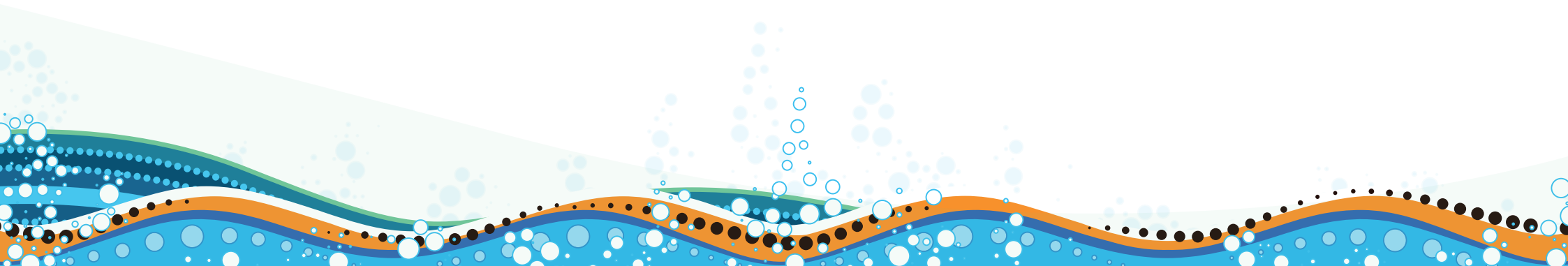


The cover artwork for this annual report was designed by Paige Corunna, a Whadjuk Noongar woman with Wajarri (Yamatji) and Palyku ancestral connections, who worked in our Corporate Communications branch as part of the WA Public Sector Commission's [Aboriginal Traineeship Program](#). The symbols represent water, air and land – all areas the department is charged with protecting – and the connections between them. Paige, 19, now works in Canberra after gaining a place on the Australian Government's Indigenous Apprenticeship Program.



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. We aim to provide genuine opportunities for Aboriginal people within our workforce and through our business.



From the Director General



I am delighted to present the Department of Water and Environmental Regulation's 2020–21 annual report.

It reflects our work on the Government of Western Australia's priority areas of waste and recycling, climate change and liveability, while furthering its commitment to improved water and environmental regulation outcomes.

It is also a result of our staff maintaining their high standards under the shadow of the COVID-19 pandemic. They transitioned seamlessly to working from home during three snap lockdowns in the Perth and Peel regions, adapted to wearing face masks and social distancing practices in our offices, and found new ways to engage with stakeholders, maintain service delivery and carry out fieldwork.

They ensured the department was open for business even if it was not quite business as usual, and I applaud their professionalism and commitment to public service.

You will find a thorough account of our operations in this report. However, I would like to highlight some achievements:

EP Amendment Act 2020

We are implementing the most significant reforms to the state's environmental legislation in more than 30 years through the *Environmental Protection Amendment Act 2020*, which received Royal Assent on 19 November 2020. The amendments include streamlining the environmental impact assessment process, improving the pathway for regulation of native vegetation clearing, improving the efficiency of regulating emissions and discharges, modernising and improving investigation and enforcement powers, and increasing penalties for certain environmental offences.

Climate Action

We took a lead role in the new Climate Action portfolio, which was announced in March 2021 as the State Government underlined its commitment to tackling climate change. This follows the department's release of the *Western Australian Climate Policy*, and the *State Electric Vehicle Strategy*.

WA Recovery Plan and Green Jobs

We played a vital part in the State Government's WA Recovery Plan to counter the effects of COVID-19. We delivered four of the seven programs under the \$60 million Green Jobs Plan, creating job opportunities while delivering environmental benefits. We were also an enabling agency for infrastructure initiatives such as road programs.

Cross-government initiatives

We supported important cross-government initiatives. We are leading the Wooroloo bushfires clean-up, and identified contamination risks as part of the Tropical Cyclone Seroja response. We are working with METRONET to support a sustainability approach, and on the Westport project we are leading the research planning to minimise the environmental impact on Cockburn Sound and surrounds. Through Streamline WA, meanwhile, we are making it easier to do business in our state by improving regulatory practice.

Containers for Change

We launched the state's container deposit scheme, Containers for Change, on 1 October 2020. With 205 refund points in place and more than 680 people employed, up to the end of June a staggering 535 million eligible beverage containers were recycled – each generating a 10-cent refund, with more than \$1.9 million donated to charities and community groups.

Plan for Plastics

We released the Plan for Plastics policy in November 2020, a project which was then fast-tracked in June 2021. The new timeframe will see many single-use plastics phased out by the end of 2022, four years earlier than planned. We established a working group of representatives from the disability, aged-care, medical, retail and environmental sectors to ensure people who require plastic straws to meet their life needs can be assured of a continued supply.

Waste Authority and KABC support

We supported the Waste Authority as, among many projects, it launched the 'Be a GREAT sort' behaviour change campaign to reduce landfill. We also supported the Keep Australia Beautiful Council as it released the *Litter Prevention Strategy for Western Australia 2020–2025*.

EPA support

Our officers prepared environmental impact assessments, cumulative impact studies, statutory policies and strategic advice to support the work of the independent Environmental Protection Authority, which received the highest number of referrals for development proposals in six years.

Water milestones

Our precious water resources are being impacted by climate change, particularly in the state's South West. But we marked a significant milestone with the completion of a five-year program to introduce water metering and measurement to water licences above 10,000 kilolitres. We also developed a code of practice requiring water service providers to support and protect customers affected by family violence.

Groundwater allocation plans

We developed groundwater allocation plans to ensure this resource is used sustainably by businesses and the public, releasing the final Cockburn groundwater area allocation plan, consulting on proposals for Derby and the Fitzroy River in the Kimberley, and preparing the next Gnangara plan.

Supporting regional areas

We helped regional areas better cope with reduced rainfall caused by climate change. Our total investment reached \$3.7 million as we carted water for emergency livestock needs in up to 12 water deficiency declared areas. We also invested \$915,902 through the Community Water Supply Program, and \$741,890 through the Rural Water Planning works program.

Waterwise Perth Action Plan

We influenced strategic land planning to avoid impacts on our vegetation, habitat and water resources. We are encouraging waterwise urban design, work that has been enhanced through the Waterwise Perth Action Plan.

Healthy Estuaries WA program

Our work as stewards of estuaries and inland waterways continued through the \$25 million Healthy Estuaries WA program. This will be extended through additional funding to implement the Peel-Harvey Estuary Protection Plan, or Bindjareb Djilba in the local Bindjareb Noongar language, a 2017 election commitment released in November 2020.

As you will read in the following pages, many of these achievements involved significant collaboration with other government agencies and I would like to highlight our work with the Department of Finance on two key contracts – system integrator and program management services – for our important Environment Online project.

I was also delighted to learn that our most recent research into community, customer and stakeholder perceptions shows the increased focus on meeting stakeholders' needs has coincided with improvements in the satisfaction rating for many areas of our business.

Meanwhile, our commitment to business excellence has seen our Finance team recognised by the Auditor General as a best-practice large entity for timeliness and quality of reporting, financial reporting and controls. The Keep Australia Beautiful Council, which our Finance team supports, received the same recognition in the small entity category. You can see their latest efforts in our financial statements, which start on page 82.

Most of these achievements were under the leadership of my predecessor as Director General, Mike Rowe. In taking over from Mike under the State Government's senior leadership renewal in May 2021, I appreciate the ground he covered over the past four years, particularly in merging three agencies into one.

I can assure you the department will continue with its commitment of service improvement and excellence, and we have been busy setting our directions for the next three years as we develop a new Strategic Plan.

I look forward to working with you in 2021–22.



Michelle Andrews
Director General



A giant Black Swan made from plastic bottles appeared in Perth promoting Containers for Change (© WARRRL)

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Overview

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At a glance



6,183

requests for water
information via the Water
Information Reporting portal



4,237 GL

of water licensed for use



100+

air quality technical reviews
completed



394

contaminated sites
classified under the
*Contaminated Sites
Act 2003*



30,000

tonnes of recycled C&D
waste used in our Roads
to Reuse program



\$126,321

in fines issued after
51 persons/entities were
prosecuted for illegal dumping



703

new controlled waste
licence applications
assessed



4,540

water incident reviews
undertaken



3,287

reports submitted to the
Pollution Watch Hotline



12,535

water licences managed
across Western Australia



358

native vegetation clearing
permit applications
received



535 million

containers returned through
Containers for Change

Who we are

Vision

A healthy environment and secure water resources, valued by all, to support a liveable and prosperous Western Australia (WA).

Mission

To lead and excel in the sustainable management and protection of Western Australia's water and environment.

Strategic directions

This was the third year of the department's inaugural Strategic Plan 2018–21.

Share responsibility for water and the environment

We support integrated environmental and water planning to deliver whole-of-government goals, involving the community and industry. By collaborating effectively and engaging openly, we establish partnerships with stakeholders and build a shared understanding of Western Australia's environmental and water issues.

Deliver effective legislation and policy

We deliver legislative reform to enhance collaborative cross-government outcomes and reduce unnecessary regulation. Our policy and legislative framework supports good performance and encourages continuous improvement.

Be a responsive and credible regulator

We streamline our approach to regulatory assessments and advice, to provide consistency and certainty for stakeholders. Our internal practices, online systems and resources deliver good customer service, and we apply regulatory best-practice principles. We ensure regulated stakeholders meet their commitments and we undertake appropriate compliance and enforcement.

Deliver trusted information, science and evidence-based advice

We are recognised as leaders and experts in water and environmental information, science and evidence-based advice, collaborating with trusted partners to create a shared science and knowledge base and to foster innovation. We communicate and share knowledge in a timely, transparent and stakeholder-focused way to build understanding and support for sound decision-making.

Build organisational excellence

We deliver integrated services and online systems that are easy to use. Our people are knowledgeable, flexible and focused on delivering the best-possible outcomes for WA's community, economy and environment.

Performance summary

Actual results versus budget targets

The department evaluates, measures and reports on the effectiveness of its services in achieving its desired agency-level outcomes through key performance indicators.

Key performance indicators comprise both effectiveness and efficiency indicators.

Effectiveness indicators show the extent to which the department achieved its department-level outcomes, while efficiency indicators show the cost of services delivered by the department, as summarised in the following tables.

Financial targets

	2019–20 Actual (\$'000)	2020–21 Budget (\$'000)	2020–21 Actual (\$'000)	2020–21 Variance (\$'000)
Total cost of services (that is endorsed expense limit)	182,634	206,274	183,143	23,131
Net cost of services (details in the income statement)	66,254	73,884	63,290	10,594
Total equity (details in the statement of financial position)	490,592	499,149	523,091	-23,942
Agreed salary expense level	93,496	94,993	90,312	4,681
Working cash limit	8,328	9,238	8,264	974

Performance summary

Summary of key effectiveness indicators

Outcome	Key effectiveness indicator	2019–20	2020–21		
		Actual %	Target %	Actual %	Variance %
1. Western Australia's growth and development is supported by the sustainable management of water resources for the long-term benefit of the state	Proportion of stakeholders who perceive the department to be effectively managing the state's water as a resource for sustainable, productive use	55	55	62	7 ↑
	Proportion of priority growth areas that have a water supply planning strategy	77	100	100	0 ↑
2. Emissions, discharges and clearing of native vegetation are effectively regulated to avoid unacceptable risks to public health and the environment	Percentage of regulatory compliance activities completed as planned	96	100	100	0 ↑
	Percentage of potential environmental risks identified during compliance monitoring program that are rectified within two months	43	40	20	-20 ↓
3. Development and implementation of strategic policy and legislation that promoted sustainable environmental outcomes	Percentage of advice and recommendations that met Ministerial approval, without the need for significant modification	86	95	92	-3 ↓
4. Waste avoided and the recovery of materials from landfill maximised	Percentage of municipal solid waste reported as diverted from landfill through recycling compared to waste strategy target in the Perth metropolitan region	34	40	31	-9 ↓
	Percentage of commercial and industrial waste reported as diverted from landfill through recycling compared to the state-wide waste strategy target	51	45	44	-1 ↓
	Percentage of construction and demolition waste reported as diverted from landfill through recycling compared to the statewide waste strategy target	81	75	81	6 ↑
5. Quality advice to the Environmental Protection Authority (EPA) and Minister for Environment on significant proposals and environmental issues	The EPA's satisfaction with the department's environmental impact assessment (EIA) service, during the year, in line with best practice principles of EIA	97	80	96	16 ↑
	Percentage of project-specific conditions which did not require significant change following the appeal process	95	80	98	18 ↑
	Percentage of assessments that met agreed timelines	94	75	92	17 ↑
	The EPA's satisfaction with the department's provision of environmental management services during the year	95	80	94	14 ↑
6. Compliance with Ministerial statement implementation conditions are monitored effectively	The number of Ministerial statements audited compared to targets	73	100	98	-2 ↓

Performance summary

Summary of key efficiency indicators

Service		Key efficiency indicators	2019–20	2020–21			
			Actual %	Target %	Actual %	Variance %	
Service 1	Water information and advice	Proportion of statutory referrals from decision-making authorities where advice is provided within target timeframes	93%	95%	93%	-2%	↓
		Average cost per statutory referral assessment	\$7,182	\$6,126	\$5,125	-1,001	↑
		Average cost per water measurement site managed	\$9,437	\$12,027	\$7,437	-4,590	↑
Service 2	Water planning, allocation and optimisation	Average cost per plan, report or guidance document to support water planning, allocation and optimisation	\$348,488	\$241,146	\$233,709	-7,437	↑
		Average cost per hour of scientific support for water planning, allocation and optimisation	\$161	\$269	\$172	-97	↑
Service 3	Water regulation, licensing and industry governance	Average cost of assessing a water licence application by risk assessment category:					
		• Low-risk	\$3,284	\$3,390	\$3,412	22	↓
		• Medium-risk	\$4,378	\$4,520	\$4,549	29	↓
		• High-risk	\$5,473	\$5,650	\$5,686	36	↓
		Average time taken (days) to assess a licence application by risk assessment category:					
		• Low-risk	46	65	30	-35	↑
		• Medium-risk	85	75	39	-36	↑
		• High-risk	87	95	47	-48	↑
		Average cost of compliance monitoring and enforcement action	\$205	\$213	\$118	-95	↑
Service 4	Environmental regulation	Average cost per works approval and licence application	\$47,220	\$36,549	\$51,891	15,342	↓
		Average cost per native vegetation clearing permit application	\$17,644	\$26,432	\$33,217	6,785	↓
Service 5	Environmental and water policy	Average cost per hour of policy advice and recommendations	\$118	\$158	\$148	-10	↑
Service 6	Waste strategies	Cost of landfill levy compliance as a percentage of landfill levy income collected	1.94%	1.94%	1.60%	-0.34%	↑
Service 7	Environmental impact assessment services to the EPA	Cost per standardised unit of assessment output	\$39,924	\$37,519	\$62,466	24,947	↓
Service 8	Environmental management services to the EPA	Cost per standardised unit of environmental management services output	\$34,793	\$27,279	\$34,572	7,293	↓
Service 9	Compliance monitoring services to the Minister	Average cost per environmental audit completed	\$65,666	\$40,407	\$56,117	15,710	↓



Our department in focus

Our priorities: A liveable environment

The Government of Western Australia is focused on building a waterwise METRONET that values the contribution of water resources to develop cool, liveable, green, safe and sustainable urban precincts, where people want to live, work and spend their time.

By 2031, the number of homes in the Perth and Peel regions near a public transport node will increase by 45 per cent compared with 2018.

By 2030, at least 75 per cent of waste generated in WA will be reused or recycled.

Waste reuse and recycling



The 2020–21 financial year saw the implementation of significant initiatives to increase reuse and recycling rates.

In October 2020, the State Government launched its container deposit scheme, [Containers for Change](#), operated by not-for-profit WA Return Recycle Renew Ltd. The scheme targets the estimated 1.3 billion drink containers bought by Western Australians each year, and the high litter rates of these containers. More than 535 million containers have been returned and recycled since the scheme began.

Under the [Waste Avoidance and Resource Recovery Strategy 2030](#) (waste strategy), we have been working to support local governments in the Perth and Peel regions to transition to food and organics kerbside collections or services by 2025.

The three-bin 'food organics, garden organics' ([FOGO](#)) kerbside collection system addresses waste separation at home and is recognised as a better-practice system by adding a separate FOGO bin. High-performing FOGO services can achieve household waste recovery rates of about 65 per cent and will make the single biggest contribution to achieving the waste strategy's material recovery targets for municipal solid waste.

There are 11 local governments with FOGO in WA – five in Perth and six in the South West – and 16 local governments signed up for funding under the \$20 million [Better Bins Plus: Go FOGO](#) program during 2020–21.

Construction and demolition (C&D) waste represents a significant opportunity for waste avoidance and material recovery. It is a focus material of the waste strategy as it makes up



The 2020–21 year saw some significant initiatives in increasing reuse and recycling rates.

about half of WA's waste stream and about 45 per cent of material recovered for recycling.

Following the 2018 [Roads to Reuse \(RtR\)](#) pilot program, in which more than 30,000 tonnes of crushed recycled concrete was used in the Kwinana Freeway Northbound Widening and Murdoch Drive Connection projects, Main Roads WA (MRWA) used a further 30,000 tonnes for road base in 2020–21. This included waste from the Subiaco Oval demolition.

The department plays a key role in collaboration with the [Waste Authority](#), MRWA and the Waste and Recycling Industry Association WA to ensure recycled C&D products meet product specification to protect public health and the environment.

Greater uptake of recycled materials in civil construction will be instrumental in helping us reach the waste strategy targets.



C&D waste is used as road base (© Main Roads WA)

Plan for Plastics

In July 2021, the World Wide Fund for Nature Australia updated its plastics [scorecard](#) for Australia and hailed WA as a plastic-free national leader. This reflects State Government commitments made through its [Plan for Plastics](#), announced by the then Minister for Environment, Hon Stephen Dawson MLC, in November 2020.



The policy was developed following consultation on the [Let's not draw the short straw – reduce single-use plastics](#) issues paper, with more than 98 per cent of those surveyed supporting further action.

In June 2021, the new Minister for Environment, Hon Amber-Jade Sanderson MLA, fast-tracked the Plan for Plastics by four years. Single-use plastic bowls, cups, plates, cutlery, stirrers, straws, polystyrene food containers, thick plastic bags and helium balloon releases will be phased out by the end of 2021.

The new timeframe will see WA's Plan for Plastics fully implemented by the end of 2022.

The move has been welcomed by the waste industry and recyclers because it supports greater material recovery rates, and single-use plastics contaminate waste streams and also create a large proportion of litter including items most harmful to wildlife.

Regulations will be implemented by the department for the statewide phase-out. This is another significant milestone in our work towards the waste strategy and a litter-free environment.

METRONET



[METRONET](#) is a cross-government initiative to build about 72 km of new passenger rail and up to 22 new stations. State Government investment so far is \$5.7 billion, and the project is a catalyst to turn over 8,000 hectares (ha) of land around the stations into desirable places for investment in housing, jobs and services for growing communities.

The department has proactively engaged with the [METRONET](#) program from its inception and planning stages to ensure environmental and water sustainability elements are introduced, maintained and implemented at the appropriate stages.

In September 2020, we worked with the METRONET office to refine and improve key performance indicators (KPIs) developed by NEWest Alliance for construction of the Yanchep Rail Extension and Thornlie-Cockburn Link. These align with outcomes in the key policy areas of water, native vegetation, climate change, emissions and waste.

This complements the department's work in supporting the [Environmental Protection Authority](#) (EPA) in assessing METRONET proposals, and in providing environment and water advice in land planning when considering METRONET projects.

The KPIs now form the basis of the METRONET [Sustainability Strategy](#) and criteria for quarterly program reporting. The department is a member of the Transport Infrastructure and Station Precincts Executive (TISPEX) Committee to support implementation of state environmental policy across METRONET projects.

Development of a precinct Sustainability Action Plan (SAP) has started. In supporting the [Waterwise Perth Action Plan](#), we are collaborating with the METRONET office,



An artist's impression of a METRONET green bridge (© Metronet)

Public Transport Authority (PTA) and Water Corporation to embed waterwise outcomes, including water sensitive urban design (WSUD) principles and approaches, into the planning, design and implementation of METRONET transport infrastructure, stations and station precincts.

In 2020–21, in collaboration with METRONET and the PTA, the department completed three new technical guidelines and specifications, and contributed to a technical specification for the PTA to help achieve waterwise outcomes through METRONET. The department also assessed the project planning and design reports of various projects associated with METRONET and provided waterwise and WSUD advice for on-ground implementation.

A guide to water sensitive urban design for public transport infrastructure in Western Australia, a collaborative internal guideline between the PTA, the department and the METRONET office, was released in June 2021. The guide intends to embed WSUD principles and approaches in every stage of the planning and development process, and retrofitting of all present and future public transport infrastructure projects, including the projects under the METRONET program. It directly aligns with Action 36 of the Waterwise Perth Action Plan which commits to embedding waterwise outcomes into the design of all METRONET precincts.

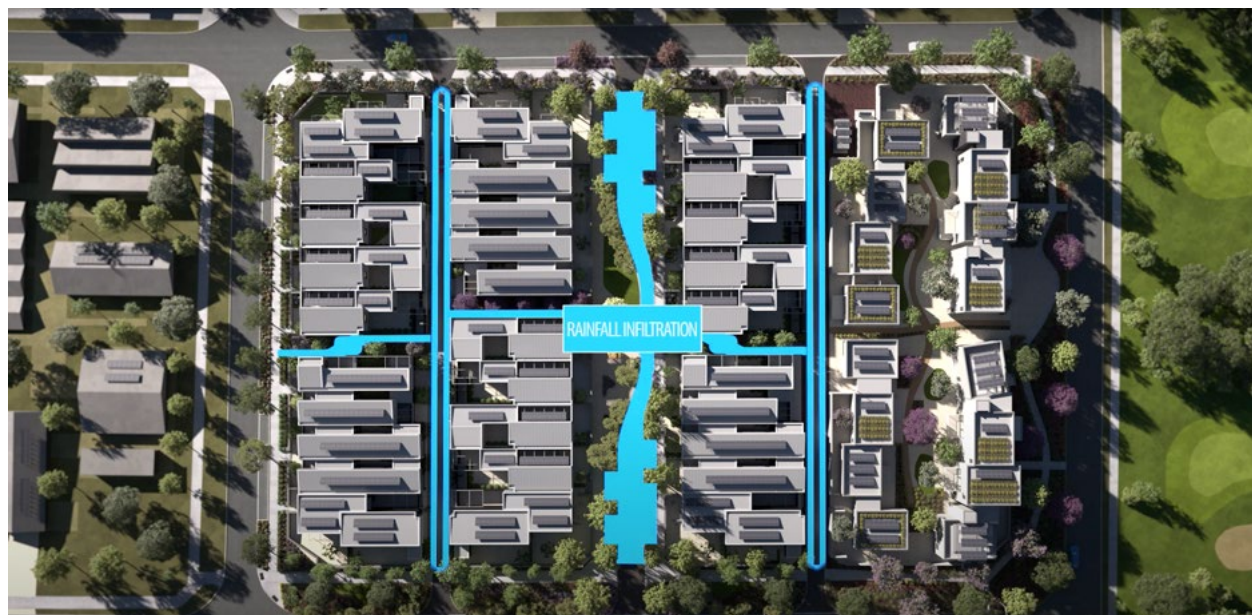
The department is a member of the Sustainability Reference Group to deliver the METRONET Sustainability Strategy and provide advice into the METRONET Resilience Framework for precinct and transport infrastructure.

Waterwise communities

The department is working with the Department of Planning, Lands and Heritage (DPLH) to strengthen waterwise outcomes in land planning and ensure planning policies and guidelines protect water resources, enhance

the urban green network, and use WSUD principles and approaches to build waterwise developments and cities in WA.

The state's recent [precinct planning policy](#), the lead policy to guide the preparation and evaluation of planning proposals for areas that require a high level of planning and design, was finalised last year and gazetted in February 2021. The policy strengthens waterwise outcomes in precinct-scale land use planning, making sure opportunities for WSUD are assessed early and align with biodiversity and local water management objectives.



Waterwise housing at East Village at Knutsford (© Development WA)

The department will continue to provide input into sustainable planning policies and guidelines through the DPLH-led [Design WA](#) initiative and review of the draft *State Planning Policy 2.9: Planning for Water*, including the associated guideline, and through the actions of the Waterwise Perth Action Plan.

Our dedicated land use planning program continues to support sustainable development by providing water and environmental data and expertise to inform the state's statutory and strategic land planning system.

Waterwise Council profile: New waterwise irrigation training program

Local governments in the Perth and Peel regions, where 80 per cent of the state's population lives, rely on groundwater as the primary source of irrigation for public parks and open space.

However, groundwater resources are coming under pressure through a combination of increasing demand and lower recharge because of climate change. Improving water efficiency is a cost-effective way to increase resilience to climate change and is important in creating waterwise communities.

Through the [Waterwise Council program](#), many local governments are already leading by example in the efficient and sustainable use

of precious groundwater to deliver aesthetic, functional public open spaces and sports grounds.

In May 2021, the Minister for Water, Hon Dave Kelly MLA, launched a new waterwise irrigation training program for Waterwise Councils.

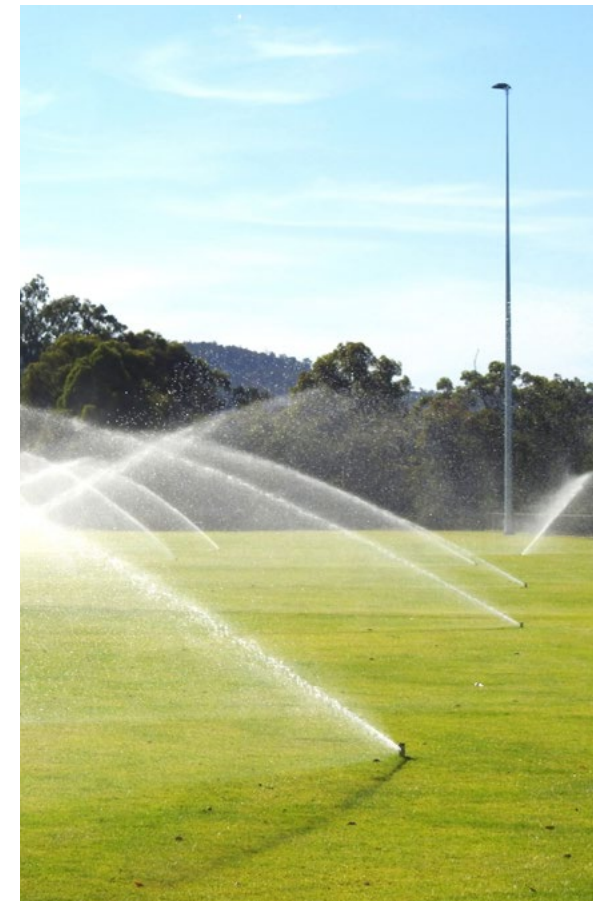
The initiative is being introduced to encourage local governments to achieve and retain Gold endorsement under the existing Waterwise Council program.

The Waterwise Council irrigation training program will equip local government staff with the skills and knowledge to ensure best practice in efficient water use through improved irrigation design, installation and maintenance. It will initially run each year for the next three years and will be fully subsidised for participating local government parks and irrigation staff.

To be eligible for the training, a local government must either be endorsed or working towards achieving Gold status in the Waterwise Council program.

Delivered through a partnership between Irrigation Australia Limited WA, Water Corporation and the department, the program is fully subscribed for its first year and most participating councils are within the high-priority Gnamptarra groundwater area.

The program contributes to the delivery of the Waterwise Perth Action Plan through key action items which aim to extend and enhance the Waterwise Council program and recognise 100 per cent of metropolitan councils as Gold by 2030, as well as work towards achieving the 2030 target of 10 per cent less groundwater used across the Perth and Peel regions.



Our priorities: Climate Action

The new Climate Action portfolio was announced in March 2021. Its creation reflects the rapidly evolving science and policy of climate change both nationally and internationally, and underscores the State Government's commitment to action on climate.

The department's coordination of this new portfolio builds on the many years of good work delivered by our dedicated Climate Change unit.

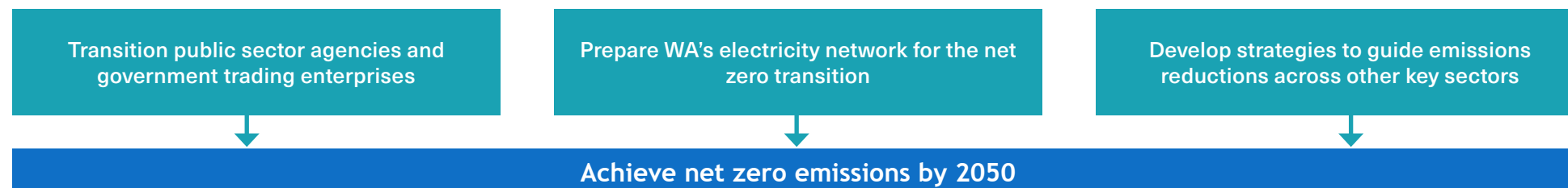
The new portfolio will oversee the implementation of the [Western Australian Climate Policy](#), which was released in November 2020. This policy commits to working with all sectors of the economy to achieve net zero emissions by 2050.

This includes actions to:

- transition public sector agencies and government trading enterprises to net zero emissions
- prepare WA's electricity network for the net zero transition
- develop strategies to guide emissions reductions across other key sectors.

In May 2021, the inaugural Minister for Climate Action, Hon Amber-Jade Sanderson MLA, launched WA's first [Regional Climate Alliance](#), an initiative to support regional local governments respond to climate change.

The alliance program is overseen by the department and the Department of Local Government, Sport and Cultural Industries (DLSCI) in partnership with the Western



The department's coordination of this new portfolio builds on the many years of good work delivered by our dedicated Climate Change unit.

Australian Local Government Association (WALGA).

The alliance model has been successfully implemented in other Australian jurisdictions and improves knowledge sharing and collaborative responses to climate change on a regional scale. It will be set up next year with a State Government commitment of \$500,000 to support local government collaboration on climate change.

Funding will be used to support Regional Climate Alliance coordinators, and to deliver emissions-reducing and resilience-building projects demonstrating economic, environmental and social benefits within local government areas.



The department chairs the Western Australian Electric Vehicles Working Group, overseeing the implementation of the [State Electric Vehicle Strategy](#).

The delivery of actions under the strategy will support the State Government in the uptake of plug-in hybrid and battery electric vehicles in the State Government car fleet and installation of charging infrastructure in government office buildings.

Synergy and Horizon Power stepped up planning for the delivery of a statewide fast-charging network. The department is finalising an information resource to support the uptake of electric vehicles by fleet managers in WA.



Minister Dave Kelly inspects the department's electric vehicle with staff at Prime House.

The department also administers the [Clean Energy Future Fund](#), which supports the implementation of innovative clean energy projects in WA. These contribute to significant, cost-effective reductions in greenhouse gas emissions, or are likely to deliver community benefits or lead to reduced emissions from broad adoption.



Our response to COVID-19

On 15 March 2020, a State of Emergency was declared in WA and measures were put in place to prevent the rapid escalation of COVID-19 cases in the community. The declaration of emergency continued through the 2020–21 year and various measures remain in place.

The department initiated an incident management team to coordinate its workplace response. It also participated in a whole-of-government program to coordinate delivery and engagement, and support WA's economic recovery from COVID-19 disruption.

Independent assessment by Edith Cowan University has shown the department was highly effective in transitioning to working from home during the May 2020 lockdown and subsequent phases of COVID-19 restrictions.

We responded to three lockdowns during 2020–21, maintaining a high level of service throughout these periods with most impacted staff mobilised and working from home within 24 hours. A refinement of services and regulatory timelines did not result in major issues with customers.



Staff adapted to working from home during lockdowns

Lessons learned from our response arrangements are being included in our emergency and continuity procedures.

WA Recovery Plan: Green Jobs

As part of the [WA Recovery Plan](#) for economic recovery from COVID-19, the State Government has invested \$60.3 million over three years in the [Green Jobs Plan](#), starting in 2020–21.

The department is coordinating the delivery of the Green Jobs Plan, which includes four department-managed initiatives and three projects managed by other State Government agencies.

The department-managed initiatives comprise:

- \$15 million to set up a Native Vegetation Rehabilitation Scheme
- \$8 million for the Offsets Funds for Recovery program from the Establishing and Maintaining Vegetation Offsets Account, set up for the purposes of Part V Division 2 of the *Environmental Protection Act 1986* (EP Act) to establish native



Green Jobs initiatives managed by the department

\$15 million to set up a
Native Vegetation
Rehabilitation Scheme

\$8 million for the Offsets Funds
for Recovery program from the
Establishing and Maintaining
Vegetation Offsets Account

\$3.3 million from the
Pilbara Environmental Offsets
Fund for Aboriginal and
conservation groups

\$25 million for the Healthy
Estuaries WA program to
improve the condition of at-risk
estuaries in the South West

vegetation which restores the biodiversity values identified in the WA Environmental Offsets Register

- \$3.3 million from the [Pilbara Environmental Offsets Fund](#) for Aboriginal and conservation groups to undertake conservation work in the Pilbara
- \$25 million for the [Healthy Estuaries WA](#) program to continue working with the community to improve the condition of at-risk regional estuaries in the South West.

Projects managed by other agencies have seen:

- \$2 million to extend fauna fencing around Whiteman Park, and the electrified feral animal exclusion fence around the Woodland Conservation Reserve inside Whiteman Park (DPLH)
- \$5 million to enhance roadside vegetation corridors, widen road reserves and replant vegetation through the Wheatbelt (MRWA)

- \$2 million to enhance foreshore protection measures in the Swan and Canning river systems (Department of Biodiversity, Conservation and Attractions [DBCA]).

The Green Jobs Plan supports projects which protect the environment and create jobs, with more than 1,000 new conservation jobs expected over three years to June 2023.

WA Recovery Plan: Increasing waste recycling capacity

The State and Australian Governments are working together to transform the state's waste and recycling industry through the [Recycling Modernisation Fund](#).

In January 2021, joint funding of \$35 million was awarded subject to contract to eight infrastructure projects which will increase WA's capacity to process and recycle the state's plastics and tyres waste.

Government funding will leverage \$47 million of industry investment, and total combined investment in local processing of plastics and tyres is likely to be more than \$82 million.

Projects funded this year will create at least 200 new full-time jobs and provide the capacity to process 140,000 tonnes of WA plastic and tyre waste every year.

A further \$15 million from the national Recycling Modernisation Fund and \$15 million from the State Government will go towards a new \$86.6 million Suez Recycling and Recovery/ Auswaste Recycling pulp mill capable of processing 100,000 tonnes of wastepaper and cardboard. This will be operational before the 2024 export ban on mixed paper comes into effect.

This work supports the Council of Australian Governments (COAG) waste export ban.

Environment Online

Environment Online is a major project for the department, jointly funded by the Australian and State Governments, which builds on our legislative and regulatory capability reform program.

In conjunction with implementing the reforms of the EP Act, and the proposed reforms of our water resource management legislation, Environment Online will transform how we deliver our regulatory services, and how we interact with our regulatory stakeholders.

The State Government is contributing \$20.5 million to the project's total funding of \$28 million.

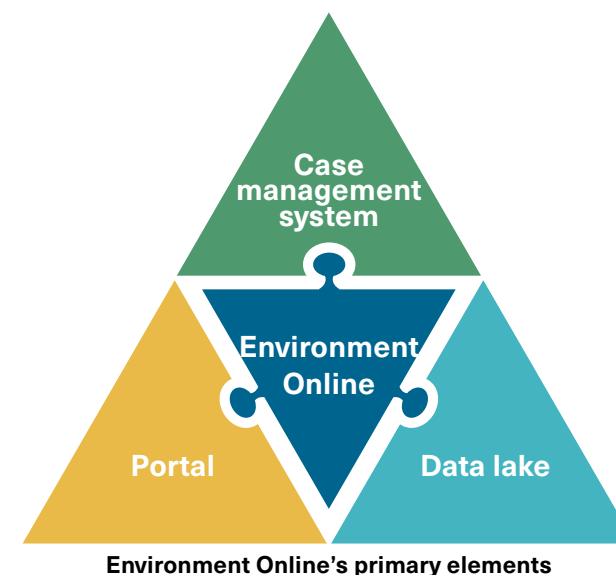
Environment Online will enable us to deliver faster, more consistent and better integrated data-driven services, and will be the department's digital 'one stop shop' platform for water and environmental regulation in WA.

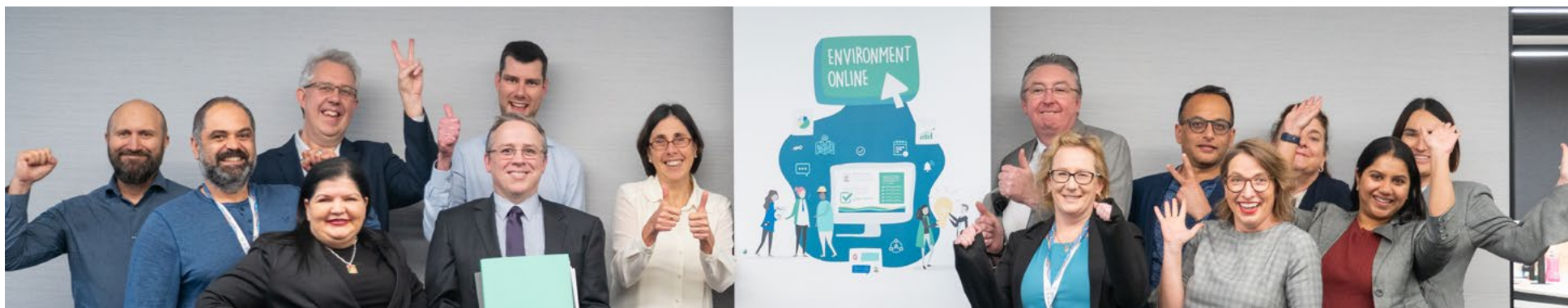
It will significantly improve business connectivity by bringing together all water and environmental information, data and processes through a single online portal. This will enable simple and fast data and knowledge sharing between our department and other agencies, including Landgate, the Department of Mines, Industry Regulation and Safety (DMIRS), DPLH, DBCA, and Geoscience Australia.

In 2020–21, we issued a tender for a technical platform and build partner, and as of 30 June 2021 were in the final stage of the procurement process, with a contract awarded in the first quarter of the new financial year.

Environment Online has continued to meet critical targets, including the need to ensure the business transformation is effectively implemented.

The build will start with environmental impact assessments under Part IV of the EP Act, which will be the first to go live in the first quarter of 2022.





Director General Michelle Andrews with the Environment Online team

The rest of the build involves increments of about five to eight months developing concurrently, building and bringing online seven business areas, and finishing in July 2024 with the integration of [Water Online](#).

Environment Online's primary elements are:

- a portal – a web-based interface which will be the single gateway to the department's regulatory functions
- a case management system – this will enable automated workflows for and across our regulatory activities
- a data lake – this brings together multiple environmental and water-resource, master (proponent, instrument, compliance) and transactional data, which is accessible to stakeholders and department staff.

Streamline WA

Environment Online supports Streamline WA, which is a flagship State Government project aimed at making it easier and quicker to do business in WA by improving regulation, systems, practice and culture. Mike Rowe, Director General of the department until May 2021, co-chaired the Government Streamline WA Steering Committee in 2020–21.

Following Cabinet endorsement of a series of initiatives to accelerate Streamline WA, the department:

- worked with other agencies to establish an approvals portal to simplify the entry point for proponents, such as the mining sector
- initiated the 'clear guidance' project to turn guidance material into plain English

- started scoping the 'reduced reporting burden' project to allow biennial reporting on a risk basis, with greater transparency
- participated in the first Common Understanding workshop on 1 June 2021, with DMIRS and other agencies, to strengthen cross-sector collaboration on assessments and approvals.

Under the broad banner of Streamline WA, we progressed the bilateral agreement on environmental assessment and approvals with the Australian Government, and started implementing amendments to the EP Act. We are also working with key partners to ensure the completed Environment Online system can be adopted by other agencies and easily modified for their use.



Artist Gloria Kearing and the department's Bronte Grant working together on the *Bindjareb Djilba – Peel-Harvey estuary protection plan*

Aboriginal engagement and advancement

The department aligns with the State Government's goal for social and economic advancement and empowerment of WA's Aboriginal communities and peoples. 2020–21 was the second year of our first Innovate Reconciliation Action Plan (RAP).

Aboriginal Water and Environment Advisory Group

A key action of the department's RAP 2019–21 was to establish an Aboriginal Water and Environment Advisory Group (AWEAG).

The advisory group provides valuable insight on policy and key initiatives, ensuring Aboriginal interests and perspectives are considered in the things we do.

The four meetings of the advisory group in the last financial year contributed advice and analysis to several major initiatives. This includes advice on:

- engaging with remote communities to provide appropriate infrastructure as part of Containers for Change

- considering broader issues when establishing Strategic Aboriginal Water Reserves
- involving Aboriginal groups and communities in landscape restoration and rehabilitation as part of the Green Jobs Plan and consultations for the development of a statewide native vegetation policy.

Our Aboriginal Engagement Strategy

This year, we have furthered our commitments to meaningful engagement with Aboriginal people and traditional owners and custodians across the state.

As part of the RAP, the department is progressing the development of its first



The AWEAG group with Minister for Water Dave Kelly, third from right

Aboriginal Engagement Strategy (AES), which will provide a platform on which the agency interacts with Aboriginal people at all levels of policy and planning, and in its regulatory and science functions.

The advisory group has highlighted the importance of having a strong vision that acknowledges the rights and responsibilities of WA's First Nations people and how the department can support them to achieve their goals by:

- linking with existing programs
- building consideration of cultural protocols
- ensuring cultural safety in all areas
- reconsidering language and structure to ensure it acknowledges the goal of building mutual benefit and ensures free, prior and informed consent through engagement.

Improving Aboriginal inclusion in water planning

There is increasing recognition of the importance of including Aboriginal people in water management and planning and for ensuring current and future Aboriginal cultural, social and economic development opportunities are incorporated upfront in the department's water allocation planning activities.

Water allocation plans currently being developed in Derby and for the Fitzroy River have involved significant consultation with Registered Native Title Prescribed Bodies Corporate. The result of this will be water allocation plans that include greater recognition of traditional owners' connection to country and water, strong consultation requirements for any development and water licence applications, protection of the cultural values associated with water, and establishment of water reserves for Aboriginal peoples' economic use.

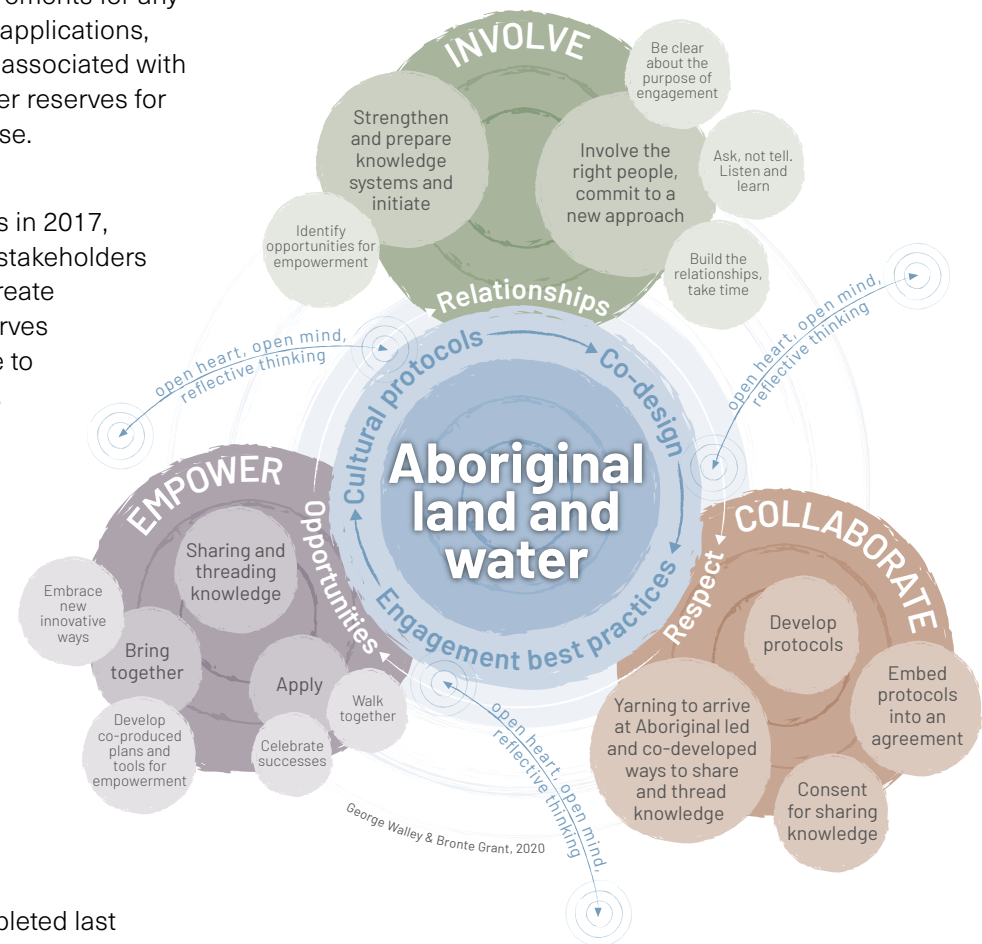
Following election commitments in 2017, the department is working with stakeholders to investigate opportunities to create Strategic Aboriginal Water Reserves in areas where water is available to access through a future licence.

Advisory group members identified that:

- water management must be sustainable
- those involved must be given the opportunity to be part of the consultation
- any decisions must include the right people speaking for the right areas.

The ground-breaking work completed last financial year on the water components of

the native title settlement in the Mid West, through the [Yamatji Nation Indigenous Land Use Agreement](#), was of particular significance. It recognised the importance of water to Aboriginal people, not only in practising culture but also as an economic opportunity.



Bring Together Walk Together Aboriginal Partnerships Framework

The advisory group is actively involved as new water resources reform legislation is drafted and progressed.

Bring Together Walk Together Aboriginal Partnerships Framework

Building on the partnership established for the [Peel-Harvey estuary protection plan \(Bindjareb Djilba\)](#), the department and Bindjareb elder George Walley have developed the [Bring Together Walk Together Aboriginal Partnerships Framework](#).

This framework communicates a pathway to build and maintain strong partnerships for Aboriginal land and water outcomes and has been endorsed by the advisory group as a method for partnership engagement in department-led projects.

The *Bring Together Walk Together Aboriginal Partnerships Framework* was shared and well received at the Danjoo Koorliny Kep Water Symposium and the Power to the People Conference in Mandurah in 2020.

Stakeholders in our community are adopting the framework as a tool to guide meaningful partnership engagement with Aboriginal people.

Wooroloo bushfire recovery work

The February 2021 Wooroloo bushfire burnt over 10,000 ha and caused extensive damage to properties, homes and buildings within the City of Swan and Shire of Mundaring.

The State Government is supporting local governments in the clean-up. Coordination of the [Wooroloo Bushfire Coordinated Residential Clean-up Program](#) is being managed by the department in collaboration with the City of Swan, the Shire of Mundaring and the Department of Fire and Emergency Services.

The program is part of the overall recovery plan for residents impacted by the Wooroloo



Removal of bushfire-damaged waste

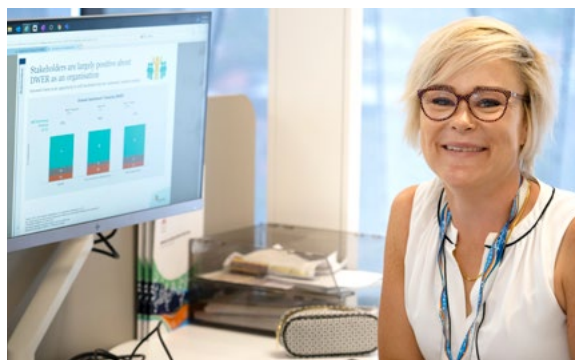
bushfires and includes removal of fire-impacted hazardous materials such as asbestos, chemicals and copper chrome arsenic-treated timber, and removal of fire-destroyed buildings, structures, vehicles and ash.

Steady progress with the clearing of blocks saw 67 properties completed by 2 July. More than 2,200 tonnes of general waste has been removed in the clean-up. High recycling rates saw 5,525 cubic metres of rubble and 36.4 tonnes of steel recovered, removed and recycled up to 2 July.

Some properties contain fire-impacted asbestos needing specialist clean-up, with more than 2,330 tonnes (including soil) removed up to 2 July. The department's Pollution Response Unit and Air Quality staff also provided technical support to the Perth Hills bushfires response.

Stakeholder, customer and community insights

Social research provides insights that can inform us about reputation management, direction setting, risks and opportunities, priorities for work, the success of ongoing work and measurement of corporate key performance indicators.



Executive Director Strategy and Engagement Nygarie Goyal with the stakeholder engagement database

In 2020–21, our annual stakeholder, customer and community insight research was conducted by Metrix Consulting.

Stakeholder and customer priorities

Water security is still considered the key overall priority among stakeholders and customers, although recycling has increased in order of priority for stakeholders.

While the order of priority of specific water and environmental issues is the same at a community level, some issues were less of a 'major' concern this year.

Land and water pollution, how waste is managed, and water security remain key areas of concern and interest.

Strategic direction and initiatives

Research indicates our strategic directions, including our enhanced regulatory capability work, are responding to stakeholder, customer and community feedback.

Compared with last year, stakeholders were more likely to say they are satisfied with their relationship with the department because it is responsive to their queries.

Stakeholders were also more likely to cite the department being able to provide information and advice as a reason for positive overall sentiment this year and agree the department has adequate data and information about the state's water and environmental resources.

Stakeholders were more likely to say they are satisfied with their relationship with the department.

Water licensees also had a more positive overall impression of the department this year. They were more favourable about how the department makes its decisions, rating it higher in terms of having adequate data and information, considering current and emerging issues, being solutions focused, finding sustainable ways for development to progress and taking a long-term approach to planning.

Our water management KPI result has steadily increased in recent years, with 62 per cent of stakeholders in 2020–21 perceiving our management to be effective compared with 52 per cent in 2019.

This coincides with the completion last year of a 24-month program focusing on the water licensing process and backlogs.

Strategic direction profile: Deliver trusted information, science and evidence-based advice

Maintaining an excellent understanding of our environment and water resources and being able to analyse, model and share that information in ways that are clear, practical, useful and timely are critical foundations of what we do.



We have several specialist laboratories that provide valuable services to inform our programs and decisions, and support our system stewardship role.

Air quality science and monitoring

The department's experienced air-quality experts continue to develop new and innovative ways to track air pollution and expand our knowledge of air-quality science.

This includes technical input into surveillance monitoring campaigns in the vicinity of pollution sources and investigating the use of new technology such as electronic noses (or 'e-Noses') for odour field studies. We are also collaborating with local universities on the analysis of satellite imagery to better understand how bushfires can affect air quality, and on the use of low-cost sensors. Complex dispersion models have been developed with our scientific oversight for the Murujuga and Collie priority airsheds.

The Air Quality team has ensured the department has been able to better manage industry development applications by auditing scientific claims. It has provided more than 100 technical reviews for internal and external clients, including high-profile industry proposals in priority airsheds such as Port Hedland in the Pilbara.

WA is a signatory to the National Environment Protection (Ambient Air Quality) Measure and is required to report annually on the results of air quality monitoring undertaken by the department. We have 10 metropolitan and six regional permanent monitoring stations feeding data into an extensive database; this is distilled to a live public air quality index which is updated hourly.

State governments are currently standardising and refining this index to provide simpler and clearer information when air quality is poor (such as during bushfire events) so members of the public can take appropriate action to minimise health effects.

The air monitoring network will be expanding to Port Hedland when the department takes over responsibility from industry for monitoring ambient air quality.

Noise

The department provides specialist environmental noise advice to key stakeholders including the EPA, local and State Government agencies, and the community.

Environmental noise expertise also supports the department's policy, regulatory, and compliance and enforcement functions.

The department responded to 74 requests for noise advice or support this year. Of these, in its role of supporting local government authorities (LGAs) to administer the Environmental Protection (Noise) Regulations 1997, the department responded to 63 requests for environmental noise advice, technical support or laboratory analysis. Specialist environment noise advice was provided 25 times relating to matters under EPA consideration, and in response to 11 requests from other Australian and State Government agencies.

Further support was provided to LGAs in the form of two noise regulation training sessions.

This year the draft [Guideline: Assessment of environmental noise emissions](#) was published for public feedback.



Aquatic Science Phytoplankton Ecology Unit

The Phytoplankton Ecology Unit (PEU) is essential to our waterways management programs, and continues to provide great service to the Department of Health and local governments, processing 1,750 routine algal inspections and 120 response samples for fish kills and algal blooms during the year.

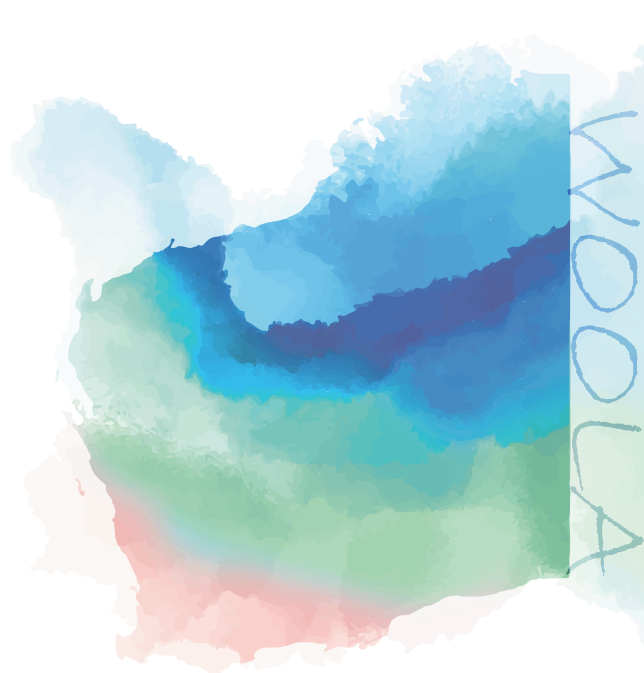
During COVID-19, PEU staff switched from working in the laboratory in Joondalup to working the microscopes at home, so there were no delays in our expected deliverables. Back in the specialty Joondalup facility, the PEU has established algal culture facilities to enable a shift to genomic sequencing through extracted DNA and rapid assessment of toxicity in those species considered harmful. In the coming year, the lab will be responsive to changes in algal species and associated health risks as the climate warms.

In December 2020 the PEU completed its final phytoplankton analysis for Swan and Canning after 25 years of weekly sampling. This work will now be conducted by DBCA in the Swan-Canning riverpark.

Next year will be a big one for the unit as it completes phytoplankton analysis for Healthy Estuaries WA projects and Cockburn Sound phytoplankton analysis for the Westport project's baseline data.

Woola! Our new awards program

We believe praise and recognition are fundamental to creating a thriving workplace. Following a survey of staff in 2020 and a 'sprint' design process in March 2021, the department held its inaugural Woola Awards and Recognition ceremony on 23 June 2021.



As our head office is in Joondalup, on Whadjuk Noongar Country, it was recommended we adopt a Noongar word for our awards. Woola, meaning 'shout of praise', was the most popular choice when tested with staff. Cultural advice from George Hayden, Manager of the Noongar Boodjar Language Cultural Aboriginal Corporation, confirmed the appropriateness of this word and gave us permission to use it.

United Nations Public Service Day on 23 June was chosen as the day to celebrate the value of public servants to their communities.

Following a nomination process, Bernard Ryan, Senior Manager Policy, was presented with our first Significant Achievement Award for his dedication in the areas of waste avoidance, resource recovery and environmental protection. Almost 140 staff received certificates for

reaching milestone lengths of 10, 15, 20, 25 and 35 years of continuous public service in 2021.

In 2022 the awards will be expanded to include a new Living Our Values award, with the winner voted by staff. The winner of the Significant Achievement Award will be decided by a panel representing a cross-section of our workforce.



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