

Householders' Options to Protect the Environment Inc. PO Box 6118 – Clifford Gardens, TOOWOOMBA QLD 435 (22 Vacy Street, Toowoomba QLD 4350) Ph 07 4639 2135; Email: <u>office@hopeaustralia.org.au</u> Website: <u>www.hopeaustralia.org.au</u> Facebook: <u>www.facebook.com/Householders.Options.to.Protect.the.Environment</u> ABN 48 036 173 161

# HOPE E-news Bulletin 2024 #05 --- May 2024

The following items have been gathered from various e: newsletters received by HOPE in recent times; and/or prepared specifically by HOPE members and supporters. If you have any news to contribute, please forward to <u>office@hopeaustralia.org.au</u>. Deadline for articles is 15<sup>th</sup> day of the month.

# Editorial

Welcome to the May issue of the newsletter! In this edition, we learn about legal action to stop Glencore's proposal to pump the Great Artesian Basin with industrial waste; and about the Energy Charter, creating a better energy future for all Australians. This edition also explores causation, an effective method to identifying a root issue in the effort to find a solution. We learn about Western Australia's threatened black cockatoos and how we can help them and also learn about Bush Heritage, a leading organisation that protects millions of hectares of Land across Australia.

Kind regards, Nina Stick, Newsletter Editor – HOPE Inc.

## **2023 Environmental Observances**

#### May

- 11 World Migratory Bird Day
- 12 International Day of Plant Health
- 22 International Day for Biological Diversity | United Nations

#### June

- 3 <u>World Bicycle Day | United Nations</u>
- 5 World Environment Day | United Nations
- 7 World Food Safety Day | United Nations
- 8 HOPE quarterly Ordinary Meeting
- 8 World Oceans Day | United Nations
- 17 World Day to Combat Desertification and Drought | United Nations
- 29 International Day of the Tropics | United Nations

### July

- 11 World Population Day | United Nations
- 29 International Day against Nuclear Tests | United Nations

### **Annual Pledge/Donation**

http://www.hopeaustralia.org.au/annual-pledgedonation/

We invite members and supporters to consider making an annual financial contribution to help cover our operating costs of approximately \$20,500 p.a.

Currently, our income is derived from project grants, fund-raising, corporate sponsorship and donations, but falls well short of our requirements.

Your financial support, by way of an annual pledge or donation, will considerably help us to achieve better financial viability.

# **Feature Articles**

## Saving the Great Artesian Basin (GAB)

AgForce Queensland Farmers Ltd has launched legal action in the Federal Court to stop Glencore's proposal to pump the Great Artesian Basin with industrial waste.

AgForce CEO Georgie Somerset says it's an unprecedented move for AgForce.

"The concerns of the agricultural community we represent are too great, and the silence from government regarding those concerns is too deafening for us to do otherwise," Ms Somerset says.

"As far as we can see this is the only recourse left to stop this ridiculous proposal that puts at risk one of Australia's largest freshwater sources.

We as farmers and agriculturalists know and understand the immense value of water. That's why we can't understand why anyone would propose to put that at risk - and our food security along with it."

The Great Artesian Basin sits under four states and territories, representing a water resource some 130,000 times the size of Sydney Harbour. It is one of Australia's most valuable natural resources.

AgForce is leading this campaign to protect this precious underground water resource that lies beneath around 30% of Australia's land mass. A water source relied upon by hundreds of communities and ecosystems across inland Australia, but one that mining giant Glencore is most of the way through an approvals process that would allow it to proceed with its proposal.

Ms Somerset says they have been inundated with concerns from primary producers around the state about the ramifications if Glencore's proposal proceeds, and that's why AgForce decided to underwrite and lead legal action in this way.

"This is what AgForce is here for - to represent and protect the best interests of Queensland's agricultural producers - especially in times of crisis," she says.

"We have filed papers in the Federal Court challenging the February 9 2022 Federal Environment Department decision that this proposal from Glencore to pump waste from a Coal Fired Power Station into the Great Artesian Basin was not captured by the matter of national environmental significance (MNES) provisions of the EPBC Act.

"It's absurd that such a ridiculous proposal could proceed this far. But here we are, with Glencore most of the way through the process - having almost all the approvals it needs to progress to pilot stage."

She says while Glencore may call this a pilot project, one of our greatest concerns AgForce has is that if this does damage the Great Artesian Basin, there is no way of getting 300,000 tonnes of industrial waste back out of the basin again.

"This court action comes on the back of an exhaustive multi-year process to get the proposal put aside, with AgForce consistently arguing that there is no basis to even contemplate pumping waste into one of the world's great clean water sources," she says.

"A source relied upon by hundreds of communities, industry and environment across a third of Australia's landscape.

"That the project was ever contemplated defies all reason, and the fact that AgForce has to take it to the Federal Court for resolution is deeply disturbing to industry and community across Australia."

The next Federal Court hearing on the matter is in August.

AgForce General President, Georgie Somerset | <u>www.agforceqld.org.au</u>



### Putting people at the centre of the energy transition

Navigating the changing needs of customers and communities in the complex energy environment, while also transitioning to a lower carbon future, is both an exciting and challenging time. More than ever, this period of significant transformation requires a system-wide view and most importantly, collaboration across the entire energy supply chain with customers and communities.

<u>The Energy Charter</u> is a unique CEO-led collaboration of 20+ like-minded energy organisations representing the entire supply chain, with a role to bring everyone together to collaborate on initiatives that deliver better outcomes for their customers and communities, encourage difficult conversations and to amplify the customer's needs.

The vision for the Energy Charter is that by coming together in a shared collaborative space we can all create a better energy future for all Australians and bridge the gap between 'hard-to-do' and 'can-do'; to go beyond what any one of the businesses could achieve alone.

We want to keep humans at the centre of the design and delivery of energy.

#### Signatory CEO Commitments

When Signatory CEOs voluntarily sign up to the Energy Charter, they make a commitment to the Five Principles which were co-designed by customer representatives in 2018 to shape customer-centric culture change across the sector:

- Principle 1: We will put customers at the centre of our business and the energy system
- Principle 2: We will improve energy affordability for customers
- Principle 3: We will provide energy safely, sustainably and reliably
- Principle 4: We will improve the customer experience
- Principle 5: We will support customers facing vulnerable circumstances

These Five Principles underpin the key activities at the Energy Charter including our <u>#BetterTogether</u> <u>initiatives</u> and the unique <u>Accountability Process</u>.

#### #BetterTogether: bringing together customers, communities and industry

The #BetterTogether initiatives bring together customer and community representatives, energy businesses and other key stakeholders to co-design and collaborate projects with a focus on delivering better customer and community outcomes.

These initiatives leverage high impact areas for meaningful change, with focus on the rapidly evolving energy transition and the challenges of the cost-of-living crisis.

To help ensure they are creating truly valuable outcomes, each #BetterTogether initiative has a Customer or Community Outcomes Group (COG), made up of customer and community representatives relevant to the project's specific needs, who are instrumental in focusing on the voice of the customer and their specific needs.

For example, research conducted by Melbourne University's Melbourne Institute for the Energy Charter suggests that up to 60% of customers are missing out on the energy concessions that they are entitled to. The #BetterTogether initiative – <u>"Keep the money. It's yours." National Concessions Awareness + Engagement Campaign</u> was co-developed with community groups nationally to make sure those who are eligible for energy concessions know they are and know what to do. A variety of targeted channels are being used to reach customers from communities including First Nations, multicultural, older Australians, those with diverse abilities and their carers.

#### Accountability towards better customer and community outcomes

Transparency and accountability to the 5 Energy Charter Commitments are critical. Our unique Accountability Process adds value to customers and energy businesses by identifying positive outcomes and endeavours being undertaken by Signatories and providing guidance, based on stakeholder consultation, on where there are opportunities for improvement.

The Accountability Process focuses on stakeholder consultation rather than on internal processes, 'box ticking' compliance or indicators that are measured through mandatory reporting to other organisations.

As part of their commitment to the Energy Charter, Signatory CEOs agree to publicly disclose how they are delivering against the Five Principles through Public Disclosures and engage with their customer/community councils or stakeholder forums, highlighted in Feedback Summaries. Signatories assess their maturity against the <u>Energy Charter Maturity Model</u>, indicating where on the maturity scale they are, where they intend to progress to, over what period and how they plan to achieve this.

#### **Our Collective Outcomes**

Since its 2019 launch, the Energy Charter's vision has always been clear: keeping customers at the centre of the design and delivery of energy solutions to help create a better energy future for all Australians.

In December 2023, we published <u>our #BetterTogether Disclosure</u> to provide an overview of the progress made over the past year across the #BetterTogether initiatives and through the Accountability Process, as well as help inform future efforts. A panel of 7 Signatory CEOs from across each part of the energy supply chain <u>celebrated the collaborative highlights</u> to a national audience.

For more information: please contact us at <u>hello@theenergycharter.com.au</u>.



### Causation in Environmental Challenges – Understanding Air and Land Pollution

(This analysis is written by Callum Fisher, HOPE researcher Qld)

#### Introduction

Government's response to environmental challenges like climate change and pollution through policy begin at a diagnosis of the problem. This diagnosis typically involves identifying a causal link. Much of our current environmental problems can be linked to human activity and scientists play the role of proving and arguing the causal link between humans and environmental change. And while there still seems to be a debate for some, most of us are of the understanding that much of the causation of environmental challenges is from humans. The goal now for policymakers, governments, and activists alike, is to investigate the causation further to define the problems that face us and implement solutions that attack the problem at its core. Because, if we do not properly identify the true cause of a problem, our response is likely to look more like a band-aid solution that inadequately addresses the issue. An important topic that is challenging much of the global population in the current day is air and land pollution. Defining the causal links of these pollutions in different areas is key to crafting an impactful and longer-lasting environmental response.

### Causation

Causation is simply the process in which one factor or event has a direct influence over another, typically larger event. Causation is an effective method to identifying a root issue in the effort to find a solution. When looking at the environment and government policy surrounding it, causation can be economic, social, and environmental. Causation can be categorised into three categories:

- Physical Causation
- Human Causation
- Organisational Causation

Root Cause Analysis (RCA) is a method that can be used to identify the root cause of an existing problem and help find the definitive reason why a problem or issue initially occurred. HOPE Australia believes that the most effective way to solve environmental issues that face our society is to directly address and influence the root issue. RCA can determine the facts of what has happened, identify the reasons behind its occurrence, and lead to an explanation for how changing the cause will affect the results. This way, researchers, policymakers, and advocates can identify the true source of a problem and create solutions that directly address it as opposed to solutions that don't address the issue and instead "remedy the symptoms" of the problem. Root Cause Analysis begins by defining a problem that is present, identifying causal factors underpinning it, identifying which of the factors is the likely root cause, and finally implementing solutions that directly address the identified root cause.

As a broad example, we can determine that increase in greenhouse gasses has led to an increase in climate change and global warming, this is the root cause of our climate change challenge and any policy relating to addressing climate change can be reduced to its effort to limit greenhouse gasses. By stripping away surrounding factors and symptoms we can determine that any policies or solutions that do not lead to a reduction or reversal of Co2 emissions will simply be ineffective at addressing climate change. It is also important to acknowledge the delay in cause and effect that is especially found in human induced climate change. This delay is when a cause, such as greenhouse gasses, takes a considerable period to have an effect; warmer climates.



#### Identifying an igniting causation among many factors

Causation is a primary element for not only identifying a problem and how it exactly has occurred, but also for knowing where action should be taken to address it. While an issue may be correlated to many different contributing factors, taking action to address a factor that is a known causal contributor will lead to much more impactful and effective results. By looking at bushfires across Australia we can find many contributing factors such as low rainfall, arson, lightning, location, lack of controlled burns, flora type, or temperatures. To then take these contributing factors and attempt to minimise ecosystem loss caused by bushfires we

must either identify how these contributing factors join to become a causal factor or identify which contributing factor becomes the primary causal factor.

Using data acquired by Geoscience Australia and the Australian Broadcasting Corporation (ABC) we can see that while the effects of low rainfall and dry weather on Eucalyptus forests are heavily related to recent bushfires, most Australian bushfires ignite due to human involvement. Identifying causation in situations like this can be useful by allowing us to differentiate factors that may contribute to a problem occurring from the factors that definitively cause the problem to occur. It can be useful in environmental problem solving by providing us with the fundamental part of a problem that needs to be addressed to create a change.

#### Identifying Causation in Reverse (WPR)

We can also identify causation in reverse by looking at a solution that has been implemented and determining what it was addressing and how it was addressing this problem. This is a method known as the 'WPR' approach or understanding 'What is the Problem Represented to Be?' We can use this method to analyse how the government is addressing a problem, what the government has identified the cause as, and then comparing that cause with our own identification of the problem to determine if it is adequately addressing the right cause to have an effect.

To use the WPR approach we must look at a policy the government has implemented in a particular area, and critically analyse what the framing of the policy indicates the problem to be, and the causation that triggered it. If a policy is implemented to incentivise and promote electric heating in the winter over the use of fireplaces in order to reduce air pollution, the implication is that wood heating causes an air pollution problem. This is an analysis of an existing solution, but it has allowed us to identify how the creators of the solution have identified

a problem and its cause. From this one could do their own research and determine if their conclusion agrees with the government's policy and then how effective it would be.

#### Causes of Air Pollution in Australia

Using Root Cause Analysis, we can identify the primary contributing factors of air pollution in different areas in Australia. It is important here that the primary causation is different depending on the conditions of the problem we are looking at such as urbanisation level and time of year. For example, it can be determined that in the winter season, wood heating fireplaces in houses account for 50% of particle matter in the air and are the primary cause of air pollution in much of Australia. This however means that if a policy were to focus on limiting air pollution caused by wood heating, that policy must acknowledge that the intention is on addressing air pollution in winter only rather than being a holistic approach. Under the RCA approach, if we are looking to address increased air pollution in winter, then the definitive causation is wood heaters. If we were to look at increased air pollution in the summer, it would be necessary to not look at wood heating and focus on bushfires.

In major urban environments, which the majority of the Australian population reside, vehicle emissions are the primary cause of air pollution and is likely to be the best factor to address to reduce pollution. Further inspection to understand why it is the cause finds that 90% of Australian homes own at least one private vehicle and private vehicle still dominates urban cities as the preferred method of transport. This is despite 20% of commutes to work in cities being less than 5km of workers' homes. A simple solution that engages the causation is to reduce commutes in private vehicles in cities. This can be achieved by more incentives for non-car travel and the promotion of alternatives like public transport, cycling, and walking. There are multiple different costs that the government must have to evaluate to achieve this, such as the costs of infrastructure and public transport upgrades, however this is a simplified solution that addresses the primary causation of air pollution in Australian cities. It is of primary importance to ensure that the correct cause is identified so that the most effective solution can be considered.

#### **Causes of Land Pollution in Australia**

How society manage, dispose, and reduce waste is a key factor in influencing land pollution rates. Land pollution from poor waste management can affect both urban areas, residential areas, and native environments equally depending on the cause. Because we can all see waste and litter on the ground, physical waste is the most visible indicator of our pollution and can also act as a measure of our ability to prevent poor waste management. The effects of physical waste on the land can range from causing harm to wildlife and animals in the environment to degrading natural areas and spreading invasive species. Analysis of the cause of waste pollution finds that although one cause looks like it is the problem, there is an even deeper cause that could be more effective if tackled. Efforts to better manage waste can be beneficial through policies to increase recycling, reduce illegal littering from both individuals and large corporations, and increase management of waste sites. However, a deeper causation is the issue of single-use waste itself. A focus on promotion of a circular economy where items are re-used, recycled, and re-made can drastically alter the lifespan of an item and reduce the number of items becoming pollution.



A simple example of this promotion is the Containers for Change program, which promotes recycling of certain bottles and cans for a monetary value. This program encourages people to save certain items and recycle them to be re-used, allowing for a circular lifespan of the item. This program is also effective in that it encourages people to purchase certain items that are eligible for recycling over ones that are not. More information about the Containers for Change program can be found here: <u>https://www.containersforchange.com.au/qld/about-us</u>

### **Further Reading**

- ABC's Bushfire Analysis: <u>https://www.abc.net.au/news/science/2019-11-20/bushfire-ignition-source-how-we-know/11701132</u>
- Root Cause Analysis: <u>https://www.mindtools.com/ag6pkn9/root-cause-analysis</u>
- WPR Approach: <u>https://www.adelaide.edu.au/graduate-research/ua/media/162/wpr-summary.pdf</u>
  Air Pollution in Australia:
- https://www.iqair.com/au/australia#:~:text=How%20bad%20is%20the%20air,to%20bushfires%20and%20 dust%20storms.
- Causation in the Environment: <u>https://law.hofstra.edu/pdf/academics/journals/lawreview/lrv\_issues\_v37n04\_cc2\_biber\_final.pdf</u>

### Protecting Western Australia's black cockatoos

By Nina Stick – HOPE researcher WA

There are three types of black cockatoos in Western Australia; Carnaby's black cockatoo, Forest Red-Tailed black cockatoo and Baudin's black cockatoo. All three are endemic to the south west of Western Australia.

#### Carnaby's black cockatoo

The **Carnaby's black cockatoo** or also known as **short-billed white-tailed black cockatoo**, is mostly black, with narrow white scalloping on the margins of dark feathers. It is often hard to tell apart from Baudin's black cockatoo as they look very similar. Carnaby's forage and roost in trees, and nest in tree hollows, only coming to ground to drink or occasionally to forage for seed when food becomes scarce. Carnaby's feed predominately on seeds of proteaceous plant species, but will also eat some insects and small amounts of nectar. They migrate back and forth from the Swan Coastal Plain, where they feed during the summer, to the Wheatbelt where they breed in tree hollows during the winter. The only problem is, 90% of what is now the Wheatbelt used to be bushland, and this cockatoo is running out of places to breed and feed. The Carnaby's black cockatoo is now listed as endangered by WA and Australian governments and by the International Union for the Conservation of Nature (IUCN). This decline has been mainly caused by a loss of habitat and breeding sites from ongoing clearing of native vegetation since the 1950s. Carnaby's live for 25 – 50 years. As a large proportion of the remaining population is now beyond the breeding age, there may be very few younger birds to take their place. It is estimated that there is now between 20,000 to 40,000 left in the wild. It is estimated that the Carnaby's population have decreased in number by over 50% since European settlement.



Figure 1 - Carnaby's Black Cockatoo Photo: Kaarakin Black Cockatoo Conservation Centre

Other threats to their survival include:

- Habitant fragmentation as the Carnaby's black cockatoos therefore need to travel longer distances to feed and drink, especially during breeding season.
- Death / injury from motor vehicle strikes. These cockatoos can be seen feeding in native bushland along the road, however due to their size, they need time to take off. Unfortunately, this is a major cause of death and injury on the Swan Coastal Plain as Perth suburbs continue to expand and new roads are created.
- Illegal shooting. Despite the fact that it is illegal to shoot these cockatoos, it is still a major threat to the survival of the species. Some people and farmers unfortunately consider these cockatoos as pest.
- Disease: A syndrome colloquially known as "CHiPS": Cockatoo Hindlimb Paralysis Syndrome affects Carnaby's black cockatoos which are then unable to stand or walk. As a result, their condition rapidly deteriorates due to their inability to feed. The syndrome only affects Carnaby's Cockatoo. With intensive supportive care, many cases will improve over 7-10 days to full use of their legs. Scientists are presently researching why Carnaby's are affected by this syndrome. CHiPS might be a result of exposure to organophosphate (OP) pesticides which are widely used on crops in northern breeding areas. Although tissue testing for pesticide residues has been consistently negative, some birds have demonstrated depression of acetylcholinesterase in plasma and brain, indicative of exposure to anti-cholinesterase compounds. [source]
- Due to the rarity of these cockatoos, poaching is also a common issue.

#### Forest red-tailed black cockatoo

They are regarded as a long lived but slow reproducing species. Individuals may survive in the wild for 25-50 years but may have just one offspring every 2-3 years. Their range has contracted by approximately 30% since European settlement, mainly due to habitat loss. With the loss of habitat, they now eat the introduced Cape Lilac and on some garden eucalypts. Destruction of forests and woodland for housing developments has significantly reduced the habitat for Forest Red-tailed black cockatoos. There is competition for nesting hollows from feral European bees, Galahs, Corellas and the introduced Rainbow Lorikeet. The impact of fire, particularly in breeding season, and Raven attacks have significantly reduced the numbers of young Forest Red-tailed. The sub-species is listed as Vulnerable by both the WA and Federal governments.



Figure 2 - Forest Red-tailed black cockatoo Photo: Kaarakin Black Cockatoo Conservation Centre

#### Baudin's black cockatoo

It is listed as **Critically Endangered (IUCN 2021) with a population decrease of 90% over the last three generations.** The population is now estimated at just 2,500-4,000 mature individuals. In Perth, Carnaby's are more located on the Swan Coastal Plain whereas Baudin's live in the Perth Hills. There has been a dramatic decrease in numbers in the last 10 years as its low rate of reproduction (1 chick per year) means that the species cannot replace the large number shot by orchardists. Sadly, this iconic cockatoo is still considered as pests by many farmers and orchardists. There are penalties of up to \$10,000 for shooting black cockatoos under the Wildlife Conservation Act. Logging, especially in the Nannup area is also a threat to the survival of



the species. Few logging companies instruct employees to check trees for hollows before felling the trees. Baudin's cockatoos are also vulnerable to the loss of habitat and habitat fragmentation. With more and more species competing for hollows and food sources, their number have sadly dramatically decreased in the last decades. Due to their similar appearance, Baudin's and Carnaby's black cockatoos were considered the same species until **1979** however they have differences in bill shape, call (They have a 'witch-a' sound while Carnaby's have a 'wee-loo' call), diet and habitats. They are also known as "white-tailed black cockatoos." Baudin's or as they are also called, long-billed black cockatoos primarily feed on and nest in marri trees, eating a wide range of other nuts and seeds if marri is not available. They also eat insects and larvae from under bark and from the wood of live and dead trees.

Figure 3- Baudin's black cockatoo Photo: Kaarakin Black Cockatoo Conservation Centre

### What you can do to help black cockatoos

- Identify and protect mature marri trees and remaining nesting hollows
- Take part in the Great Cocky Count organised by Birdlife WA
- Protect remnant bushland particularly in the Perth area
- Plant native black cockatoo foraging species in your garden.
- If you are in a breeding area you can erect artificial hollows.
- Put out a water source, even a small bird bath!
- Report injured black cockatoos to Kaarakin Black Cockatoo Conservation Centre
- Identify and report feral bee hives in nesting hollows.
- Lobby your Local council to plant native trees in parks and reserves that will feed black cockatoos.
- If you have a big backyard, plant native trees such as marri and jarrah
- Spread the word
- Support Kaarakin Black Cockatoo Conservation Centre <u>Kaarakin Black Cockatoo Conservation</u> <u>Centre | Black Cockatoo Rescue (blackcockatoorecovery.com)</u>
- If you think you have seen a Carnaby's, Baudins or Forest Red-tailed black cockatoo, fill out a
  Department of Biodiversity, Conservation and Attractions fauna report form and send it to the
  Department's Species and Communities Branch at <u>fauna@dbca.wa.gov.au</u>. The Department keeps
  track of the distributions of threatened species to help monitor population trends and inform
  management decisions
- Report suspected shooting or poisoning to Department of Biodiversity, Conservation and Attractions.
- Protecting their habitat is vitally important, particularly old growth forests. As two thirds of Australia is privately managed rural land, private land owners will play an increasingly important role in conservation of these beautiful birds and other threatened species. If you own or live on land that is habitat for black cockatoo please contact your local Landcare office to find out ways that you can help.
- Ask the state and federal governments for stronger nature protection laws

#### References

(Kaarakin Black Cockatoo Conservation Centre, accessed 3, 4 & 11 February 2024) https://blackcockatoorecovery.com/

# **Reminder about HOPE's philosophy**

### THE HOPE CHARTER

HOPE (Householders' Options to Protect the Environment) encourages people to take responsibility for protecting and enhancing the environment in their everyday lives.

HOPE members and supporters have the following aims:

- to use a little as possible of energy and resources;
- to create minimal pollution, both directly and indirectly;
- to prefer, in general, renewable to non-renewable, natural to manufactured, and local to imported; and
- Tto support and promote 'best practice' natural resource management and landcare activities.

HOPE encourages people:

- to view environmental problems in their local, economic and global context.
- to use what is already there, making the most of existing resources, technology and community networks; and
- to create, communicate and celebrate lifestyles which reduce consumption and improve quality of life.

While HOPE endorses individual action, it also encourages people to act together in their local community, and in society as a whole to further these aims.

HOPE is a non-profit organization and is not affiliated with any political party.

# **National News**



### https://www.bushheritage.org.au/

Written By Cassandra Adofo-Kissi - HOPE researcher ACT

#### Main Aims

Bush Heritage Australia began in 1991 by Bob Brown who purchased two forest blocks to protect them from logging. From these humble beginnings, Bush Heritage Australia has expanded becoming a leading organisation that protects millions of hectares of Land across Australia. This work is enabled through a vast network of reserves, partnerships and collaboration with Aboriginal and Torres Strait Islander people and other landholders.

Bush Heritage Australia is dedicated to creating a future that is healthy and resilient. As such they continue to protect the diversity of Australia's landscapes, plants and animals, a unified and formidable force for nature, grounded in science and culture.

They help protect and contribute to the management of:

- 10.4 million hectares of in partnership with their Aboriginal and Torres Strait Islander partners
- 7,735 native species recorded on Bushland Heritage Australia's reserves.
- 1.2 hectares through our reserve network.
- 2.3 million hectares with their agricultural partners.

#### Achievements

Nationally, Bush Heritage Australia, has maintained or improved the health of about 80% of their conservation targets. Over 85% of their threats have been reduced or remain unchanged.

In 2016, Bush Heritage Australia established priority landscapes to help focus our work on areas of Australia under-represented in the National Reserve System and apply skills to address the threats to those habitats.

#### **Campaigns/Projects**

Bush Heritage Australia undertakes several projects, some of these involve 'Right-Way Science'. 'Right-Way Science' was born out of the term 'Right-Way' which is often used across Indigenous communities. Bush Heritage Australia has developed the 'Right-Way Science' to bring people together using language that is understand by their Indigenous partners. It is underpinned by the same values, beliefs and principles held by Bush Heritage Australia.

These projects have conservation benefits as well as social and cultural benefits. These benefits include:

- empowerment of our Aboriginal Partners.
- a broadening of perspectives for all parties.
- development of new skills.
- highlighting the intimate links between people and nature
- providing opportunities and resources for Indigenous people to pass on their own knowledge to younger generations.

In support of 'Right-Way Science', Bush Heritage Australia has two awards presented at Bush Heritage Australia Conferences. These conferences are a collaboration between Bush Heritage Australia and ESA.

The awards are presented to the best speakers of 15-minute talks who demonstrate 'Right-Way Science' and 'Indigenous-led' science at the ESA conference annually.

Winners receive a certificate and a cheque for \$5000 with the money going towards supporting further 'Right-Way Science' projects and 'Indigenous-led' projects.

In keeping with accountability and transparency, a report of how the money was spent must be provided to the ESA and Bush Heritage Australia.

For more information on 'Right-Way Science' projects please visit the website at <u>https://www.bushheritage.org.au/what-we-do/science/right-way</u> or <u>https://www.ecolsoc.org.au/awards/conference-grants/right-way-science-prize/</u> for the awards.