

Case Profile Series on
Land Trusts as Climate Change Solution Providers

Greening Australia: Innovator and Collaborator in Achieving Nature-based Solutions through Restoration



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The International Land Conservation Network is a program of the Lincoln Institute of Land Policy

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CASE OVERVIEW FOR EDUCATORS

Topic: Nature-Based Solutions

Subtopics: Land Restoration, Climate Mitigation, Novel Land Conservation Funding, climate risk management, reforestation, carbon sequestration, landowner partnerships, Greening Australia

Timeframe: 2015-2022

Primary Learning Goals: (1) Better understand how a land trust is developing and implementing a comprehensive, climate-focused series of Nature-based solution projects that generate environmental benefits and novel funding sources for land conservation. (2) Move through a case analysis that considers, in sequence, situation, challenge, proposed solutions, implementation, and results.

Secondary Learning Goals: (1) Develop insights into how land trusts can use Nature-based solutions to generate new funding sources for land conservation and restoration. (2) Gain an understanding of the large networks of public, private, and industry partners that can make such projects successful in multiple dimensions.

Primary Audiences: (1) Land Conservation organizations and practitioners. (2) Industry leaders looking for biodiversity, pollutant, and carbon offsetting. (3) Public decision-makers and regulators. (4) Staff, directors and supporters of NGOs, community organizations, (5) climate policy analysts and advocates, and (6) interested members of the general public.

Prerequisite Knowledge: General knowledge regarding climate change and the conservation of land and biodiversity

Summary: This case explores how two nature-based solutions projects came to fruition through private, government, and industry collaboration. The two cases explore nature-based solutions as vehicles to address climate goals, increase conservation funding opportunities, and address corporate sustainability goals. This study assists land conservation planners, government officials, and industry partners in understanding the development of nature-based solution-focused projects and develop insights into how those projects can be adapted in a variety of novel environmental contexts to meet the needs of industry environmental damage mitigation, as well as region-specific conservation goals and outcomes. The development of the project has taken place over the last decade, and may be adapted to or inform land conservation initiative around the globe.

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Greening Australia: Innovator and Collaborator in Achieving Nature-based Solutions through Restoration

Executive Summary

Nature-based solutions have gained the world's attention in recent years, suggesting a growing appreciation among policy makers as well as major corporate entities, their investors and their consumers, of the interconnectedness of the challenges facing our climate, our natural systems, our social cohesion, and our economic security. Greening Australia is one of Australia's largest and most ambitious land conservation and restoration organizations and is driving nature-based climate solutions through all of its work. Underpinning its success is its track record in effective cross-sector collaboration.

This paper considers two case studies of innovative collaboration for nature-based solutions (NbSs). The first, "AZ Forest," is a three-way partnership between Astra Zeneca, One Tree Planted and Greening Australia, with project support coming from the Global Evergreening Alliance. This partnership demonstrates how nature-based solutions are helping to meet climate goals, manage corporate risk exposure, and increase the scale of conservation operations. The second, 'ReefAid', is a partnership between GreenCollar, State and Federal governments, and Greening Australia. It is supported by several partners including Virgin Australia, the Ian Potter Foundation and the Prior Family Foundation. The project has demonstrated how nature-based solutions have driven the creation of a new environmental market in the form of Reef Credits, as well as delivering beneficial on-the-ground outcomes for farmers, Traditional Owners, and the environment.

These projects are demonstrating real value. Indeed, such projects demonstrate that enhancing collaboration between governments and national conservation organizations, including the members of the Australian Land Conservation Alliance such as Greening Australia, can yield measurable and enduring benefits. The following case studies focused on these projects highlight the need for national policies that foster increased innovation, collaboration and growth in nature-based projects and partnerships.



Figure 1: Examples of Greening Australia projects and areas of impact across Australia [Source: <https://www.greeningaustralia.org.au/>]

Introduction and Context

On the tenth anniversary of World Environment Day (June 5, 1982) Malcolm Fraser, then-Prime Minister of Australia, announced the establishment of a National Tree Program to reverse the decline of trees across the nation. Greening Australia, set up as the non-profit partner of the government program, took operational responsibility for organizing a program to replant trees.

Greening Australia has evolved since that time, nearly 40 years ago, and is now one of Australia’s largest and most ambitious land conservation and restoration organizations. Underpinning its success is an appreciation for the strategic significance of cross-sector collaborations. Its first corporate partner, Alcoa, started working with the non-profit in the year of its creation. Among other things, the Greening Australia-Alcoa partnership set a string of important precedents, including refining now-common direct seeding techniques, and developing a large-scale native seed bank.¹

During the first decade of the twenty-first century, a young manager in Alcoa’s Corporate Affairs department in Australia named Brendan Foran took a particular interest in the Alcoa-Greening Australia relationship.² Foran, who, prior to coming to Alcoa, had been a Supervisor in Conservation Volunteers Australia programs, understood the value of cross-sector collaboration. After nine years with Alcoa, during which he earned a Master’s degree in Business Administration from Federation University Australia, Foran took a new job in 2011 with Greening Australia. At present, he serves the organization in 2021 as Chief Executive Officer (CEO).³

Foran continues to appreciate the strategic significance of such collaboration today. In an article which named him as a “Champion” of the Shared Value Initiative (a project conceived by Harvard

Business School Professor Michael Porter and his collaborator Mark Kramer), Foran offers his take on working across sectors.

The opportunity for us lies in better articulating and broadening the conversations we have with corporate partners and private landholders of the commercial return and environmental benefits of undertaking large and ambitious large-scale landscape restoration projects in Australia.⁴

Greening Australia's interest in collaborating with the private sector can be seen both in projects that are ongoing in 2021 at a relatively modest scale, as well as in the organization's very ambitious plans for the next decade: to increase revegetation and carbon sequestration 50-fold by 2030. In the year 2020, Greening Australia sequestered some 60,000 tons per annum of carbon and restored about 6,000 hectares of habitat. By 2030, through a substantial uptick in innovative collaborations, Greening Australia aims to sequester 3,300,000 tons of carbon per annum and restore more than 330,000 hectares of habitat.⁵

As Greening Australia's *2020 Year in Review* report details, such ambition is in line with the huge climate challenge the world faces:

We are serious about maximizing our impact. To ensure that we are contributing to solutions at a global scale, Greening Australia's 2030 goals are aligned with worldwide targets for climate action, sustainable development, land restoration and biodiversity.⁶

For decades now, Greening Australia has been at the forefront of advocating for and putting into practice a more holistic approach to climate mitigation that incorporates sustainable land management practices and habitat protection.⁷ To scale these efforts, and meet its own 2030 goals, Greening Australia is working with strategic partners to implement innovative solutions.

Nature-based Solutions as a Tool for Addressing Australia's Environmental Crises

Australia is one of the most biodiverse countries in the world: after its neighbor Indonesia, it has the largest number of endemic species (plants and animals found nowhere else). And yet, since colonization, Australia has lost more mammalian species than the rest of the world combined,⁸ and is losing biodiverse habitat faster than nearly anywhere else on Earth: the World Wildlife Fund deemed Eastern Australia a 'global deforestation hotspot' – the only region of a developed nation on its list of 11 offending countries.⁹ The causes for this situation are various, but boil down to land clearing, habitat degradation, bushfire, the presence and spread of invasive species, and climate change.

As the driest inhabited continent in the world, Australia is highly vulnerable to the effects of climate change. Already the continent is experiencing higher than average temperatures; and changes in the frequency and intensity of heatwaves, droughts, frosts and rainfall patterns. These changes, by themselves and in combination with one another, are increasing pressure not only on native fauna and flora and water supplies, but also on farmers and other land managers.

Increasingly, the compounding impacts of biodiversity loss and climate change are being viewed as interlinked challenges with shared solutions. Recognizing these links, nature-based solutions for climate change are projects that harness the power of nature to mitigate (for example, to reduce greenhouse gas emissions) and adapt (for example, to use fresh water supplies more efficiently) to the impacts of climate change. Such nature-based solutions tend to focus on: the protection, restoration or management of natural and semi-natural ecosystems; sustainable management of working lands and aquatic systems; or the creation of novel ecosystems.¹⁰

Nature-based solutions have now gained the world's attention: they were high on the agenda at the 2021 World Economic Forum¹¹ and at the 2021 Climate Adaptation Summit,¹² suggesting a growing appreciation among policy makers, as well as among major corporates, their investors and consumers, of the interconnectedness of the challenges facing our climate, our natural systems, our social cohesion, and economic security.

While nature-based solutions were conceived in 2009, they are now gaining momentum as part of the [UN's Decade on Ecosystem Restoration](#), an initiative which aims to employ NbS between 2021 and 2030 on the largest scale yet, with a goal of restoring 1 billion hectares of degraded land (some 2.5 billion acres) by the end of the decade.¹³

Nothing has driven this home quite like the COP26 of the UNFCCC (the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change) held in Glasgow, Scotland in the third quarter of 2021. NbS was given an unprecedented focus at that large international gathering. Tim Christophersen, head of the nature for climate branch of UN Environment Program (UNEP), said that "We would like to see investments in conservation and restoration of nature go through a similar transformation as we've seen with renewable energy in the past 20 years, which came from a small investment area to a large mainstream focus."¹⁴

AstraZeneca: 50 million trees for the AZ Forest

Faced with the global COVID pandemic as well as urgent climate conditions around the world, corporate organizations are now stepping up to urgent global health challenges as well as the climate crisis. To cite one prominent example, AstraZeneca, the global pharmaceutical company, is providing, at no net profit, one of several vaccines intended to address the global COVID pandemic. As explained by the company's CEO, Pascal Soriot in an August 2021 interview, "We are in a world that is give and take, and when you can help, and if you have an opportunity to help, you should not say no."¹⁵

In the same interview, Soriot discussed AstraZeneca's commitment to combat climate change. The company will invest up of \$1 billion to achieve its accelerated goal of reaching net zero carbon emissions. "We are well on track to becoming zero carbon across our business by 2025 and have committed to ensuring our entire value chain is carbon negative by 2030. Since 2015, we have reduced our greenhouse gas emissions by 60% and water consumption by 20%. We are also boosting renewable energy sources and transitioning to an electric vehicle fleet, at the same time as committing to reforestation through the [AZ Forest](#)."

The AZ Forest Project

AZ Forest is AstraZeneca's effort to plant 50 million trees worldwide between 2020 and 2025 with support from several global partners, including One Tree Planted and the Global Evergreening Alliance. The AZ Forest project is a featured project of the World Economic Forum's newly launched '1T.org – The Champions for a Trillion Trees' platform, as well as the UN Decade of Ecosystem Restoration 2021-2030.

AstraZeneca's ambitious plans were unveiled at the World Economic Forum annual meeting in Davos, Switzerland, in January 2020. Within less than a year of that unveiling, Australia was experiencing the most extreme wildfires the nation had ever seen, decimating more than 18 million hectares – an area the size of Syria – and killing billions of animals. By January, the smoke had travelled to New Zealand and then across the South Pacific Ocean to Chile and Argentina. AZ's decision to plant the first half of the pledged 50 million trees in Australia recognized the devastation of the Black Summer bushfires and signaled a commitment to support the country's recovery. Additional reforestation activities are planned for Indonesia and other nations.

In Australia, AstraZeneca, One Tree Planted and the Global Evergreening Alliance are partnering with Greening Australia to get the job done. The project will create habitat for endangered species affected by the bushfires, prioritizing the planting of fauna habitat species that increase access to food supply and habitat for the koala, Regent honeyeater, and the threatened glossy black cockatoo. The project will also harness local knowledge and provide economic opportunities for Traditional Owners and rural communities through contracted works such as seed collection, planting and long-term stewardship.¹⁶

In addition to providing habitat and local economic opportunities, AstraZeneca recognizes that the project will yield other important co-benefits. Reforestation, the company explains: support[s] disease prevention by reducing air pollution, leading to improved air quality, and cooling the environment by providing shade from the sun, helping manage surface and air temperatures; reduce[s] the risk of natural disasters, such as floods and landslides; support[s] a healthy water cycle by increasing flows in the dry season and reducing flooding in heavy rainfall...; and help[s] increase physical activity in the local community [by providing] additional green space.

Greening Australia is seeking to improve the resilience of revegetation to climate-induced loss by using climate-ready seed. "As the climate changes, many species will need to adapt or migrate across long distances to find new suitable habitat. We know that many plants and animals risk being stranded in places that will become less and less tolerable", says Amy Young, Project Manager of the Australian project. To increase the likelihood that some of these species will persist locally, we seek to source some of our seed from hotter and drier regions of Australia that are already experiencing similar conditions to those projected at our planting sites in future. This aims to increase the genetic diversity of our plantings and in turn provide the capacity of plants to adapt to future conditions.¹⁷



Figure 2: AstraZeneca plantings at Eyre Peninsula, South Australia (Credit: Mark Thomas)

Collaboration

As noted above, the AZ forest project engages the talents and resources of organizations across sectors of the economy, including: AstraZeneca from the private sector; global non-governmental organizations (NGOs) including One Tree Planted and the Global Evergreening Alliance, as well as Greening Australia, the lead on-the-ground partner in Australia; Australian federal and state government agencies, which are likewise involved in several critical components of the project, including the provision of support for the climate-ready seed project (sometimes known as the Phoenix Project); and local indigenous communities (referred to in some cases as “Traditional Owners”), which are generally supportive of project goals, and which provide a significant share of the man and womanpower and expertise to get the planting work completed competently and efficiently.

All of the parties engaged have expressed enthusiasm for the collaborative nature of the work. Brendan Foran reports that:

The devastation caused by the Black Summer bushfires [in 2019 and 2020] exemplifies the need for restoration and regeneration of our local land at scale. This landmark initiative allows Greening Australia to accelerate our work replenishing native and biodiverse trees to create environmental, community and economic impact.

Following on from the federal government's 20 Million Trees program, we are thrilled to continue delivering restoration projects of this scale with the additional support of private sector investment.

Liz Chatwin, AstraZeneca's Country President for Australia & New Zealand, noted that:

AZ Forest is a global partnership... This 50 million tree reforestation initiative will be rolled out over the next five years, and we are thrilled that half of those trees – 25 million – will be planted in Australia to support the regeneration of our land after the devastating bushfires of 2019-2020.

Chris Armitage, the CEO of the Global EverGreening Alliance's CEO, a Melbourne, Australia-based group, commented in a similar spirit.

This unique collaboration represents a major change in the way organizations are able to create impact by working together. Across the country, hundreds of organizations are aligning their efforts to scale-up the most effective land restoration practices. Together, through AZ Forest and the Restore Australia programme, we can build more sustainable and resilient farming systems and transform Australia's degraded landscapes.

In addition, Sussan Ley, the Minister for the Environment for Australia, has indicated her enthusiasm for the initiative.

We all have a role to play in the environment and at a time when the ... [National] Government is investing \$200 million in wildlife and habitat bushfire protection it is great to see AstraZeneca and partners stepping up," Minister for the Environment Sussan Ley said.

With Greening Australia we are exceeding the Government's previous 20 million trees target and 25 million more from this project will ensure even more precious habitat for our native species.¹⁸

Importantly, all of the program partners adhere to a set of Guiding Principles set out by AstraZeneca that "ensure a consistent approach to tree planting that follows the science and help guide local initiatives to have positive sustainability impacts." In effect, only those trees that are "planted through AstraZeneca and our workforce that follows the Guiding Principles" are included as part of the AZ Forest. These Guiding Principles are as follow.

1. Involve local people that will be impacted by the project (ex. landowners, communities, governments, etc.) and ensure common goals are sought
2. Monitor trees for an average of 3 years to ensure survival
3. Schedule planting for a period that is appropriate for local seasons and climate conditions

4. Select tree species that are locally appropriate
5. Ensure there is a long-term strategy to protect the area and trees as well as a risk mitigation plan (ex. to prevent fires, encroachment, etc.). Consider land ownership.
6. Verify that location of planting is aligned to impact objectives
7. Determine possible negative impacts (ex. on local communities, water, biodiversity, etc.)
8. Test soil for suitability prior to planting
9. Review local and national regulation
10. Report baseline metrics from local partner- # trees died (tree mortality); # trees planted; # trees planted by species; latitude and longitude.¹⁹

Note that in addition to the benefits it is offering to the Australia and the global community impacted by climate change, this partnership is also helping AZ to manage its risk exposure. While AZ has integrated climate risks into its overall risk management process for some time, as a sub-set within a broader Health, Safety and Environment risk, from 2020 climate change has been identified as a standalone risk.²⁰

A Market for Water Quality Improvements: Reef Credits for the Great Barrier Reef

The catchments emptying into the Great Barrier Reef lagoon spread over 420,000 square kilometers (about 104,000 acres, approximately the size of California and about 95 percent as large as Sweden). Poor land management, land clearing and development has seen a substantial increase erosion in the Great Barrier Reef region, resulting in approximately 17 million tonnes of sediment and nutrients to flow into the Reef each year. To remediate this damage and to secure the scale of investment needed to improve water quality and health of the Great Barrier Reef, Greening Australia has partnered with GreenCollar to generate Reef Credits – a voluntary environment market to incentivize water quality improvements across Reef catchments.

Background

Located in the Coral Sea, off the coast of Queensland, Australia, the Great Barrier Reef (GBR) is the world's largest coral reef system composed of over 2,900 individual reefs and 900 islands. This system is home to thousands of species of marine life including fish, whales, dolphins and six of the world's seven species of marine turtles; it is also one of the largest carbon sinks in the world thanks to its mangroves and seagrasses. As well as its important environmental benefits, the Reef protects the Australian coastlines and attracts more than two million tourists a year, contributing A\$6.4bn (US\$4.7bn) to the Australian economy and supporting 64,000 jobs.

Its abundance of natural marine life, natural beauty and vital ecosystem services in 1981 earned the GBR a place on UNESCO's World Heritage List.²¹ However, this status is now threatened as UNESCO considers listing the GBR as 'in danger'²² due to the poor condition of GBR ecosystems caused by land run-off from catchment development, extreme weather events and climate change impacts such as the 2016, 2017 and 2020 coral bleaching events.²³

After climate change, poor water quality is the biggest threat to the health of the Reef. Depending on how land is managed, pollutants such as sediment, pesticides and fertilizer can wash out to the Reef in large volumes, particularly after heavy rain events. These pollutants block sunlight; choke fish, seagrass and coral; trigger algal blooms; and cause population surges of the coral-feeding Crown-of-Thorns Starfish.²⁴ But by taking immediate, locally targeted action to improve water quality, the health of the Reef ecosystem can be improved, helping it withstand the effects of climate change.

The Project

Greening Australia has identified a simple solution to the run-off problem: work with landholders to remediate erosion areas; and restore and construct wetlands in priority areas in the Reef catchments. Currently, some gullies on farming land are meters deep, and with each heavy rain, they spread further, releasing thousands of tonnes of fine sediment each year. By rebuilding eroding gullies, the soil can be kept in place. In fact, trials over the last 5 years have demonstrated the ability to achieve a 90% improvement in water quality as a result of remediation works.

However, while the solution is simple, the sheer scale of the problem presents a real challenge to find the necessary funding to repair such a large area. When it comes to restoring eroding gullies, for example, there needs to be funding to build hundreds of kilometres of fences; help landholders implement more sustainable grazing management practices; and carry out large-scale earthworks and re-vegetation to take the eroding gullies back to a natural condition.²⁵



Figure 3: Eroded gully restoration works at Landers Gully, Queensland (Credit: Neilly Engineering Group)

Collaboration

Collaboration has been central in bringing the Reef Aid project to where it is. It will be critical to scaling the project to the next stage. Early financial support and matched funding from the Australian and Queensland governments allowed Greening Australia to bring philanthropists, corporate partners and businesses on board to boost program investment. Notably, Virgin Australia was a key early partner, helping to launch Reef Aid through a marketing partnership, amplifying awareness of the program and supporting it to meet its' A\$40 million goal for Stage One (Proof of Concept, 2016-2020). These funds allowed Greening Australia to trial remediation works on-ground, monitor water quality improvement, and demonstrate links to improved catchment health.



Figure 4: Landholder Bristow Hughes and Lynise Wearne, ReefAid Program Leader, test the water quality at Strathalbyn Station [Credit Annette Ruzicka]

On-the-ground trials have involved collaborations that have been important for achieving the vision of this project. Greening Australia has partnered with landholders and Traditional Custodians to implement management practices for sustainable and healthy wetlands, including grazing, fencing and development of land management plans. For example, Mungalla Station is owned and managed by the Nywaigi Aboriginal people, who, as well as running a beef grazing operation, manage a large area of wetlands. These wetlands are key to the health of the Great Barrier Reef. As part of the Reef Aid project, Greening Australia is working with the Nywaigi to create new wetland habitat, control weeds and improve grazing management – with tangible flow-on effects for the Reef.²⁶ Relationships like the one at Mungalla are critical to the success of Reef Aid, with commitment from landholders to steward the land helping to ensure the health of the reef into the future.

This important foundational work – driving investment and on-ground trials – has demonstrated the feasibility of scaling the model. But as Brendan Foran points out, “to secure the scale of finance needed, we really need a transformational change in how water quality improvement is funded in Australia.” That’s why Greening Australia has now partnered with GreenCollar, Australia’s biggest carbon broker, as well as the Queensland Government, natural resource management organizations, and local landholders, to generate Reef Credits.

Similar to the carbon offset market, the Reef Credit Scheme creates a market for water quality improvements, paying landholders for improved water quality resulting from their on-farm

actions, without compromising the productivity of their land. Each Credit is a tradeable unit representing a quantifiable volume of nutrient, pesticide or sediment prevented from entering the Great Barrier Reef catchment, providing landholders with a set payment that incentivizes improvements to eroding gullies and degraded wetlands.²⁷

Landholders benefit from the additional, diversified income stream, enabling them to integrate sustainable practices into their existing operations. Investors are able to get a quantifiable outcome for any investment made into water quality improvement, and provides future opportunities for return on investment by stacking credits, and potential trading in carbon, blue carbon, water quality and biodiversity credits; thus resulting in a reliable way of making a positive impact for the Great Barrier Reef.

Now, Greening Australia is calling for catalytic investment to scale up its proven gully and wetland restoration methodology in priority catchments and to prevent 400,726 tonnes of water pollutants from flowing into the Reef. It is aiming to raise A\$70 million by 2025, scaling to an overall investment of A\$289 million by 2030.

Strategic Collaborations: Lessons and Outcomes

Key Drivers of Effective Collaboration

Greening Australia has been refining and adapting its approach to strategic collaborations for almost 40 years, and Reef Aid and AZ Forest are no exception. More than ever, 'collaboration is king', says Foran:

“The environmental sector does not currently possess the might or balance sheets of the private sector, but we can tap into it with strategic partnerships that go deeper than traditional corporate social responsibility.”²⁸

Key ingredients for successful partnerships include identifying partners with aligned strategic objectives and aspirations, across all sectors and funding streams.

To identify aligned objectives, it is first necessary to clearly articulate those objectives. Greening Australia's Reef Aid program sought to use market-based incentives to drive this action, to implement the most immediate and cost-effective methods to strengthen the resilience of the Great Barrier Reef's coral and marine ecosystems in the face of climate change. This objective helped identify and attract the most appropriate partners, including: corporate partner Virgin Australia, which was seeking to seed an innovate project with substantial climate impact; philanthropy organisations The Ian Potter Foundation and The Prior Family Foundation, which both are significant funders of pilot projects; and GreenCollar, which seeks to drive environmental markets at scale. Similarly, there was a clear alignment of aspirations between AstraZeneca and Greening Australia --both parties were seeking strong outcomes for biodiversity and the climate, and both parties were ready and willing to respond to the immediate aftermath of the Black Summer Fires.

Effective and strategic collaborations for environmental initiatives require the conservation sector to work creatively across sectors. Foran explains:

[to] apply our best collective knowledge to our toughest challenges we need to truly embrace cross-sector collaboration. This means moving past a black and white view of organizations that are traditionally deemed as ‘the problem’ or ‘the solution’.²⁹

In some cases these partnerships seem like strange bedfellows, such as when global players like KKR³⁰ or Shell³¹ invest in environmental organizations. But the impacts of such collaborations, including capacity to leverage and scale investment, can be significant. They also are potentially well placed to help ride the ‘tsunami’ of capital coming to the sector.

This said, traditional forms of funding continue to play a strong role in large environmental projects, particularly when investment is required to pilot, enable and make “cornerstone” commitments to such initiatives. For the Reef Aid project, Greening Australia was able to leverage government and philanthropic funds to trial on-site remediation techniques. This has allowed Greening Australia to demonstrate that repairing gullies and wetlands reduces sediment flows into the Reef by up to 90%. It has also allowed Greening Australia to identify the most cost effective treatments, opening a path to take the program to scale.

Collaboration to Achieve Scale

Collaboration is key to achieving scale, and “the demand for and investment in nature-based solutions has never been stronger,” says Foran. In fact:

...the opportunities for joint investment are staggering. Businesses can advance their sustainability commitments and develop new market offerings through partnerships that create both financial and impactful environmental returns, whilst environmental organizations can leverage private resources and knowledge to enhance operations.³²

However, the environmental sector isn’t ready yet. In Foran’s view, “it isn’t currently equipped to deliver against the demand that’s coming down the pipeline. But it will be, because it must be.” This means that, as well as driving investment momentum, the environmental sector’s rate of innovation must keep pace, so that it can meet the challenge of scaling supply. “We must reimagine the way we deliver environmental impact through proven tools for scale: technology, people, and collaboration.”³³

In the context of the AZ Forest and other large-scale revegetation projects, this means planning how to operationalize at scale, including identifying supply chains for land and seed. An example of how Greening Australia is addressing this is by launching online portals to scale up and quickly connect with interested landholders across the country.³⁴ This will help drive capital to on-the-ground projects much more efficiently, connecting land managers across Australia to market-based instruments and investment opportunities. This will also have a positive environmental impact and provide an economic return to the partner enterprise in the form, for example, of carbon and water quality credits.³⁵

In addition, Greening Australia has entered into a partnership with real estate services provider CBRE, one of the world's largest real estate brokering firms. CBRE will help Greening Australia to source 330,000 hectares (more than 815,000 acres) of land by 2030, in line with Greening Australia's own strategic plan.³⁶



Figure 5: ReefAid birds enjoy weed-free wetlands (Credit Simon Kennedy)

Policy Recommendations

Central to success of driving conservation and climate partnerships are international targets and national policies. The Convention on Biological Diversity (CBD), for example, in combination with the 2015 Paris Agreement on Climate Change, has provided a catalyst for country-level action to deliver on biodiversity and climate change goals, notably through the creation of the National Reserve System to meet international protection targets;³⁷ and the Emissions Reduction Fund to drive down carbon emissions.³⁸

At a more micro level, policies such as the Australian Government's Reef 2050 Water Quality Improvement Plan, and its National Seed Strategy³⁹ have offered some policy backbone and cornerstone funding to environmental and market innovations.

However, much more can be done from a policy standpoint to drive innovation, collaboration and growth in nature-based projects and partnerships. For example, the Australian Government's climate policy has generally focused on reducing new carbon emissions, rather than removing existing emissions. A well-developed program that removes carbon dioxide from the atmosphere, at the same time as maximising biodiversity and improving agricultural co-benefits, is now critical. A trial currently underway to provide stewardship payments to farmers

for managing and restoring their biodiversity is a promising step.⁴⁰

The Australian Land Conservation Alliance and Greening Australia also supports a suite of policy ideas that could be instituted in Australia⁴¹ to advance land conservation and carbon sequestration effort in the country.

With national and international attention on the declining state of our environment, the private land conservation sector stands ready to offer the solutions needed to restore Australia's land, sea and water to halt and reverse nature loss for a healthy and resilient Australia. ALCA's CEO, Dr Jody Gunn, says that "large scale proposals offer the opportunity to drive profound improvements to Australia's environmental outcomes and their sustainability, whilst ensuring that community and livelihoods remain at the center of those efforts."

Conclusion

A recent scientific study⁴² has found that land restoration is "overwhelmingly more powerful than all of the other climate change solutions proposed" in its ability to tackle the global climate crisis. Other studies⁴³ show that natural habitat restoration can provide one-third of the emissions reduction needed by 2030. Pending new investment models and landowner support, there are an estimated 2 billion hectares of degraded land worldwide that could be restored using nature-based solutions.⁴⁴

Greening Australia's remarkably ambitious efforts over the coming decade will be closely watched – and carefully scrutinized – across Australia, especially given Foran's current position as Board Chair of the Australian Land Conservation Alliance (ALCA). The successes and shortcomings of Greening Australia's effort are now and will continue to be reflected in the scope, scale and ambition of the collective ALCA community, which in 2020 worked across more than 3 million square kilometers.⁴⁵

It will be the outcomes of projects described above – as well as numerous others currently underway like the Tasmanian Island Ark⁴⁶ and Officeworks⁴⁷ initiatives – in combination with the existing and future efforts of the entire ALCA community, that can answer the keynote question posed at the 2019 ALCA Congress, held in Adelaide: "How will we Rise to the Challenge – smarter, faster, different, together?"⁴⁸

About the Author

Cecilia Riebl is Policy Advisor at Trust for Nature (Victoria). She engages at local, state and national levels to achieve better outcomes and incentives for landholders wishing to enter into conservation covenants. She works with farmers, traditional owners and entrepreneurs to explore ways in which covenants can be used not just to protect conservation assets on farming land but to recognise and embed sustainable and cultural land management practices. She has previously worked in environmental law and policy in the private, government and NGO sector, and has received a Masters in climate change policy from the University of Cambridge (UK). Cecilia loves canoeing on Australia's many beautiful waterways, gardening, and taking extended walks in nature with her two kelpie pups.

Appendix 1: Study Group Questions

One of the several uses of this case profile is in an academic setting. Following are several questions that an instructor can pose to their study group to engage participants in the details of the narrative.

1. Is this a novel initiative? How have the protagonists adapted the potential of marketing Nature-based solutions to the two different land conservation goals and projects?
2. Is the solution profiled in this case measurably effective and strategically significant for the practice of land and biodiversity conservation and climate change adaptation and mitigation? Why and why not?
3. Is the solution emerging from this case transferable to other jurisdictions and will it endure?
4. Is this a large landscape solution that crosses sectors and political jurisdictions? Who are the key players from various sectors essential to the success of this initiative? What are the key technologies and organizational methodologies?
5. If you were manager of Greening Australia's Nature-Based Solutions projects, what would be your priorities for action in the next year? Over the next ten years?

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