in caring for Country



Indigenous-led approaches to strengthening and sharing our knowledge for land and sea management

Best Practice Guidelines from Australian experiences
Edited by Emma Woodward, Rosemary Hill, Pia Harkness and Ricky Archer











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WARNING: Aboriginal and Torres Strait Islander readers are advised that this publication contains many images and names of Aboriginal and Torres Strait Islander people, who may have passed away since this publication was compiled.



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BEST PRACTICE GUIDELINES FROM AUSTRALIAN EXPERIENCES

These Guidelines are a key output from a project of the Australian Government's National Environmental Science Program (NESP), Northern Australia Environmental Resources (NAER) Hub, titled *Knowledge Brokering for Indigenous Land Management*. Building institutional and individual capacity through distilling and sharing best practice is a key goal of the project funders and partners.

The project co-leaders – the North Australian Indigenous Land and Sea Management Alliance and CSIRO – established an Indigenous-majority Project Steering Group to ensure Indigenous leadership of the project (Table i). The Project Steering Group asked "who decides what is best practice and how?" and provided the critical direction that:

Indigenous people must decide what is best practice in working with our knowledge.

The Guidelines are therefore Indigenous-led and based on an open, transparent process established by the Project Steering Group of calling for Indigenous people to submit case studies where:

- Indigenous people are using their Indigenous and traditional knowledge to care for their Country, including in the development of business opportunities and enterprises
- Indigenous people have experienced positive engagement and good outcomes when their Indigenous knowledge has been brought into comanagement or research projects
- Indigenous people and their knowledge have been treated the right way when engaging with others (government, non-government organisations, researchers, industry, etc.)
- Indigenous land managers share lessons learned about knowledge sharing
- Indigenous land managers identify the conditions under which good knowledge sharing can occur (Appendix 1).

Approach to development of the Guidelines

The Project Steering Group decided to adopt the International Union for Conservation of Nature (IUCN) approach to best practice guidelines. The IUCN Best Practice Guidelines Series discusses key concepts, issues and challenges, and grounds these in many case studies, drawing lessons about how to move towards best practice, rather than presenting a recipe. These Guidelines are similar – essentially Guidelines towards best practice. The Guidelines are presented as a current picture of work-in-progress. We recognise that the material does not cover all Indigenous Peoples, individuals and issues in Australia, with greater representation of experiences from northern and central Australia. We look forward to future updates and developments.

The Project Steering Group invited the Australian Committee for IUCN to partner in their development. The NAILSMA/CSIRO/ACIUCN partnership supported the development of the Guidelines through multiple stages of Indigenous leadership (Table ii).

NAILSMA led the call for case studies, seeking feedback from Indigenous groups and their partners involved in land and sea management and related enterprise development across the country. Indigenous authors of these case studies, together with other Indigenous experts invited as highlight chapter co-authors, are the foundation of the Indigenous voice throughout the Guidelines. *Our* and *we* in these Guidelines refer to Australian Aboriginal and Torres Strait Islander people.

Several non-Indigenous staff from NAILSMA and CSIRO provided significant support to the Indigenous case study authors and drafted much of the text for subsequent checking and summarising by Indigenous lead co-authors. The non-Indigenous staff position themselves in this role as allies working for and with Indigenous people: diligent, conscientious, skilful and respectful followers of Indigenous leadership. They have written what they have heard Indigenous people saying, and carefully checked with Indigenous people to make sure that what is written is correct.

Each chapter was independently checked by expert Indigenous highlight co-authors, who provided critical reflections distilled as highlights at the beginning of each chapter. In the attributions, highlight co-authors then became lead author of each chapter, followed by case study co-authors in the order the case studies appear in the chapter, and the NAILSMA and CSIRO staff co-authors. Case study co-authors gave permission for both co-authorship of their case study, and the chapter. Face-to-face discussions were held with Indigenous land and sea rangers through five workshops at the Northern Territory Indigenous Ranger Forum held at Charles Point near Darwin in August 2019. Some 60 individual Indigenous rangers provided high level input, identifying critical considerations about forming new partnerships or engagements involving Indigenous knowledge. The draft document was further reviewed by eight expert reviewers invited by the Australian Committee of the IUCN and a further two Indigenous expert reviewers invited by CSIRO (Table ii).

Sharing and use of this publication

The content of the Guidelines is based on principles of respecting Indigenous ownership of Indigenous knowledge and ensuring free, prior and informed consent (FPIC) for its publication. The case study co-authors provided FPIC to CSIRO and NAILSMA for release of their material as part of this document, while retaining the intellectual property in the copyright of their original production of the case studies, as well as ownership of their Indigenous cultural and intellectual property (ICIP). CSIRO and NAILSMA hold the copyright of other material and the rights to release the case study material within this report. This report is publicly released under a Creative Commons Attribution-NonCommercial-No Derivatives Licence 4.0 Australia (CC BY-NC-ND 4.0), which means [you] can share the share the document provided [you] do not use it commercially, and [you] acknowledge the source. If [you] mix, transform or change the material, it cannot be shared with others without further permission. This licence does not restrict fair citation for academic and educational purposes. Indigenous knowledge not otherwise covered by copyright is intended to be protected by an Indigenous cultural and intellectual property (ICIP) Notice (inside front cover) which asserts our ownership, authority and control over our ICIP and how we wish people to use it.

Table i Members of the Project Steering Group of the Knowledge Brokering for Indigenous Land Management project, Northern Australian Environmental Resources Hub, National Environmental Science Program

Project Steering Group Member	Type of organisation
Kimberley Land Council	Indigenous
	organisation
Nyamba Buru Yawuru	Indigenous
	organisation
Northern Land Council	Indigenous
	organisation
Cape York Partnership (until	Indigenous
July 2018)	organisation
Australian Department of	Government agency
Agriculture, Water and the	
Environment	
Australian Department of the	Government agency
Prime Minister and Cabinet	
Wilinggin Aboriginal Corporation	Indigenous
	organisation
The Nature Conservancy	Environmental
	non-government
	organisation
James Cook University	Research organisation
researchers from related	
NESP projects	

Table ii Timeline of key events in the development of the Guidelines

Event	Timing
Project Steering Group first meeting, adoption of Interim Terms of Reference	October 2016
Project Steering Group decides to adopt the IUCN Best Practice approach, and nvite ACIUCN to partner	December 2016
ACIUCN expresses positive interest to partner in the project, highlighting need for appropriate review and input by members	April 2017
Discussions at the Kimberley Ranger Forum highlight the benefits of learning cogether through case studies	August 2017
Partnership inception meeting (NAILSMA, CSIRO, ACIUCN)	June 2018
NAILSMA sends out national call for Indigenous-led case studies on behalf of partnership with CSIRO and ACIUCN	September 2018
Project Steering Group face-to-face meeting selects Indigenous-led case studies and suggests additional Indigenous groups to approach	October 2018
Liaison with 23 Indigenous case study authors to finalise contributions together with free, prior and informed consent	November 2018 – November 2019
Discussions with the Indigenous Peoples Organisations in IUCN and their support team within the IUCN Commission on Environment, Economic and Social Policy	May 2019
ndigenous highlight co-authors: contributions from six Indigenous experts as chapter leads	June- February 2020
Project Steering Group review of progress and proposed content	July 2019
ndigenous face-to-face review and consultation through five workshops with 23 Ranger groups at the Northern Territory Indigenous Ranger Forum	August 2019
ACIUCN and Indigenous expert review of first draft	September- October 2019
Presentation at the ACIUCN Symposium on Healthy People in a Healthy Environment	October 2019
Revision in response to reviews	October– November 2019
ACIUCN and Indigenous expert review of second draft, including 8-page	November-
summary. Co-authors checking of case studies and chapters	February 2020
Project Steering Group review and approval of final draft	December 2019- February 2020
_aunch of Our Knowledge Our Way Guidelines in caring for Country	July 2020

NAILSMA

The North Australian Indigenous Land and Sea Management Alliance Ltd (NAILSMA) is an Indigenous not-for-profit company operating across north Australia, established in 2004. We work to assist Indigenous people manage their Country sustainably for future generations, drawing on a broad set of skills and interests to address needs from governance, research, monitoring and evaluation, to ecosystem service enterprise development. We operate at local and regional scale and provide Indigenous leadership in the delivery of large-scale and complex programs that meet the environmental, social, cultural, and economic needs of Indigenous people across northern Australia. NAILSMA works with all stakeholders to realise its philosophy of Looking after our Country ... our way to empower Indigenous people to take control of their lands and sea.



CSIRO

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is Australia's national science agency and innovation catalyst, solving the greatest challenges through innovative science and technology. CSIRO collaborates with industry, government, universities and research organisations to turn big ideas into disruptive products. CSIRO's collaborative research turns science into solutions for food security and quality; clean energy and resources; health and well-being; resilient and valuable environments; innovative industries; and a secure Australia and region. CSIRO unlocks a better future.



The Australian Committee for IUCN Inc.

The International Union for Conservation of Nature (IUCN) is the world's largest and most diverse environmental network, which brings thousands of people together to develop solutions to the world's most pressing environmental and development challenges – from threatened species and habitats, to climate change and food security. The Australian Committee for IUCN was founded over 40 years ago to advance the network's global mission and programme in Australia by providing a neutral forum that brings different interest groups together to pursue common goals, develop policy advice, share knowledge, build capacity, and work towards a 'just world that values and conserves nature'.



NESP

National Environmental Science Program (NESP) research partnerships with Indigenous communities have demonstrated their value by delivering culturally fit-for-purpose research as well as increasing cultural capacity in the environmental research sector. These partnerships are yielding significant learnings about culturally appropriate pathways to engage Indigenous people, and ensure their views and traditional ecological knowledge is incorporated in research that affects their communities, land and cultural resources. The Indigenous-led and co-developed *Our Knowledge Our Way* Guidelines are a great example of what NESP is aspiring towards in terms of research practice.



NAER Hub

The NESP Northern Australia Environmental Resources (NAER) Hub supports sustainable development in northern Australia and is assisting decision-makers to understand, use, manage and safeguard northern Australia's outstanding natural environment through world-class science. Current research focuses on: landscape-scale studies covering savanna and freshwater ecosystems and biodiversity; land and water planning for new developments, e.g. agriculture and infrastructure; and Indigenous land management including Indigenous Protected Areas.



FOREWORD

Melissa George

Chairperson, NAILSMA

Indigenous knowledge is one of the country's great hidden assets.

NAILSMA has been working for more than a decade to ensure that students and academics not only recognise the value of Indigenous knowledge but deal with it and the people who own it properly. As more Australians start to understand, and value, the leading role that Indigenous people play in land and sea management, it is timely that a guide like this be developed. Ideas about protocol, trust and consent are all rightly highlighted in this guide, but it is worth remembering that listening and allowing Traditional Owners the chance to really lead is the foundation of great practice.

The land and sea sector has had its challenges with Indigenous partnerships, but there have been more peaks than valleys. Unlike other sectors where these matters can seem theoretical, land and sea management forces people to work together to sort out the hard problems of ownership and partnership in real dirt and saltwater. Because of this our sector is presented with an opportunity to lead the way and provide a model for how we deal with the cultural wealth of our Old People. If we can model it properly, others will follow.

Finally, I would remind you that while these guides have value, they are only a starting point. The principles and approaches presented here are only signposts on the road. In the end what matters most is whose hands are on the steering wheel.

Dr Larry Marshall

Chief Executive, CSIRO

CSIRO is delighted to collaborate with the more than 50 partners and contributors supporting the development of the Our Knowledge Our Way Guidelines. These Guidelines give a voice to Australian Indigenous Peoples through detailing what constitutes best practice for working with Indigenous knowledge in caring for Country.

As Australia's national science agency, CSIRO's purpose is to solve the greatest challenges through innovative science and technology. These challenges can only be met through collaborative action involving the community, industry, government and research sectors. One significant challenge we face globally is to enhance the resilience, sustainable use and value of our environments.

Indigenous Australians play a leading role in meeting this challenge, particularly through their management of an extensive Indigenous estate extending across the continent. The Our Knowledge Our Way Guidelines highlight these knowledge-driven efforts and provide insight into the diverse ways in which Indigenous Australians build sustainable futures through their management of land and sea Country. This includes the weaving of Indigenous knowledge and science with western science to develop innovative practices and solutions.

Last year I was privileged to lead a delegation of CSIRO people to the Garma Festival, Australia's largest Aboriginal-led cultural exchange, hosted on Country by Yolnu Traditional Owners. I was humbled by the opportunity for personal learning, growth and reflection. We are proud of CSIRO's more than 100 years of science and innovation, but this hardly compares to more than 60,000 years of Indigenous knowledge, science and innovation.

The Guidelines remind us that we have much to learn from Indigenous Peoples and so much more to achieve through working together. For example, knowledge synergies and innovation can occur at the interface of Indigenous and western science. The co-development of new knowledge creates opportunity for transformative learning to better address our environmental challenges. The Guidelines critically remind us that in order to achieve best practice in land and sea management, partners must work together across diverse knowledge systems in the right way: with understanding and respect for local values and governance, cultural protocols and Indigenous cultural and intellectual property. Through supporting Indigenous leadership, governance and protocols we position our country to realise the full potential of Indigenous knowledge systems in the care and management of Australia's lands and sea, for the benefit of all Australians.

These Guidelines are the first Indigenous-led, co-developed attempt to guide a new paradigm for how Indigenous knowledge is engaged in Australia. They align with the commitments made in the CSIRO Reconciliation Action Plan and support best practice approaches to international responsibilities and initiatives. These include the UN Declaration on Rights of Indigenous Peoples, the Nagoya Protocol under the Convention on Biological Diversity, and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

I sincerely encourage all potential partners to learn from the knowledge and practice contained within the Our Knowledge Our Way Guidelines, so you are able to lend support to strong sustainable futures for Indigenous Peoples, culture and Country.

Peter Cochrane

IUCN Councillor, Australian Committee for IUCN

This is a vitally important document. Indigenous-driven and led it distils the knowledge, lessons and understandings of Indigenous land and sea managers from across Australia through diverse case studies to present a set of guidelines for current and future managers and policy-makers.

Recognition and respect is growing in Australia and in many other countries for the deep knowledge and expertise of Indigenous and local communities in the sustainable management and use of natural resources. As humans place ever-increasing demands and pressure on the planet's extraordinary biological diversity, this depth of knowledge and understanding is an essential input for more effective protection and restoration of nature.

The International Union for Conservation of Nature (IUCN), founded over seventy years ago to promote an evidence-based approach to the conservation and sustainable use of the world's natural resources, draws extensively on Indigenous Peoples' knowledge to inform its work, including its Best Practice Guidelines.

The support from the Australian Committee of IUCN for this publication reflects its acknowledgement and respect for Australia's long and rich history of land and sea management by its Indigenous Peoples across a vast and changing continent.

NAILSMA and CSIRO and the many contributors who have shared their knowledge and stories should be very proud of this landmark publication.

Project Steering Group

The Project Steering Group is proud to have supported the development of the Our Knowledge Our Way Guidelines. This Indigenous-led, co-designed body of work incorporates many Indigenous voices. It has created an important opportunity for Australian Indigenous Peoples to determine what is best practice when working with Indigenous knowledge in caring for Country.

As a group we supported the project team in choosing good methods and processes for developing the Guidelines, including an open Australia-wide call for case studies from Indigenous land and sea managers and those involved in Country-based enterprises. The case studies that were submitted are the foundation of the Guidelines. They shine a light on the diverse, dedicated land and sea management work being led by Indigenous Peoples, through enacting their knowledge of Country, and the significant impact this is having across Australia.

Traditional Owner members of our Steering Group see the Guidelines as a good way of getting concepts across to people:

It's good for non-Indigenous people to see what we're doing and how we do it. We're not one mob, we are all from different areas, with different languages, and different views. The Guidelines bring that all together in one place, so people can learn about that ... and understand that we all have different ways, and we have different knowledge.

Potential partners need to be aware of the cultural protocols that govern who can access and share Indigenous knowledge, including the unique governance arrangements that exist for each different language group, community, and family group.

The case studies highlight that partnerships work when there is trust between partners, founded in mutual respect for Indigenous knowledge and Country. Formal agreements that clearly outline obligations and benefit sharing arrangements have been found to be useful in many cases, including in the protection of Indigenous cultural and intellectual property.

We truly hope that these Guidelines prove to be a useful tool to assist sharing and learning between Indigenous land and sea managers; and to educate current and future partners about the diversity of Indigenous knowledge and its applications in caring for Country, and the tools and processes that might support mutually beneficial partnerships that realise good outcomes for people and Country.

Professor Michael Douglas

Leader, NESP Northern Australian Environmental Resources Hub

The NESP Northern Hub has been delighted to support the development of the *Our Knowledge Our Way* Guidelines. The Northern Hub and its predecessors have a long history of working with Indigenous Peoples across northern Australia, and we have always sought ways to foster stronger partnerships and better research outcomes. We have had some great successes, but any improvements have come mostly through a slow process of trial and error.

Now, as the issues confronting environmental managers increase in both scale and urgency, there is growing recognition of the value of Indigenous knowledge in providing solutions to the challenges we face. We need a step change in how we work together. The Guidelines are a game-changing response to this need. They bring together a wealth of insight and practical advice on how to recognise, strengthen and share knowledge for Country.

Led by Indigenous people and based on shared experiences from a diverse range of case studies, the Guidelines will be a vital part of research that is more inclusive, equitable and useful for everyone.



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ACRONYMS

ACCU	Australian Carbon Credit Units	IYIL	International Year of Indigenous Languages	
AIATSIS	Australian Institute for Aboriginal and Torres	KISSP	Kimberley Indigenous Saltwater Science Project	
A1 A	Strait Islander Studies	LCIPP	Local Communities and Indigenous Peoples Platform (for the UNFCCC)	
ALA	Atlas of Living Australia	MDWg	Mirima Dawang Woorlab-gerring Language and	
ВОМ	Bureau of Meteorology	MDITY	Culture Centre	
CBD	Convention on Biological Diversity	MLT	Mobile Language Team	
СОР	Conference of Parties	MTWAC NAER	Melythina Tiakana Warrana (Heart of Country)	
CSIRO	Commonwealth Scientific and Industrial Research Organisation		Aboriginal Corporation Northern Australia Environmental	
DDLMB	Dhelkunya Dja Land Management Board		Resources (Hub)	
DDW	Dja Dja Wurrung	NAILSMA	North Australian Indigenous Land and Sea Management Alliance	
DDWCAC	Dja Dja Wurrung Clans Aboriginal Corporation	NESP	National Environmental Science Program	
DSS	Desert Support Services	NGO	Non-government organisation	
EMRIP	Expert Mechanism on the Rights of Indigenous Peoples	NRM	Natural resource management	
ENGO	Environmental non-governmental organisation	NRS	National Reserve System	
FPIC	Free, prior and informed consent	PBC	Prescribed Body Corporate	
ICIP	Indigenous cultural and intellectual property	RNTBC	Registered Native Title Body Corporate	
ICOMOS	International Council on Monuments and Sites	TEK	Traditional ecological knowledge	
IIFBES	International Indigenous Forum on Biodiversity and Ecosystem Services	TSRA	Torres Strait Regional Authority	
		UN	United Nations	
IK	Indigenous knowledge	UNDP	United Nations Development Program	
ILK	Indigenous and local knowledge	UNDRIP	United Nations Declaration on the Rights of	
ILSMPs	Indigenous land and sea management programs		Indigenous Peoples	
IP	Intellectual property	UNFCCC	United Nations Framework Convention on Climate Change	
IPA	Indigenous Protected Area	UNHRC	United National Human Rights Commission	
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services	UNPFII	United Nations Permanent Forum on Indigenous Issues	
IPO	Indigenous People's Oganisations	WAMSI	Western Australia Marine Science Institute	
IUCN	International Union for Conservation of Nature	WIN	World Indigenous Network (World Network of Indigenous Peoples and Local Community Land and Sea Managers)	

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Contributing authors of Chapter 1: Anne Poelina, Torres Webb, Dhimurru Aboriginal Corporation, Aunty Shaa Smith, Neeyan Smith, Sarah Wright, Paul Hodge, Lara Daley, Kimberley Land Council and Bardi Jawi Niimidiman Aboriginal Corporation, Emma Woodward, Peter Yates, Rosemary Hill.

Contributing authors of Chapter 2: Barry Hunter, Aunty Shaa Smith, Neeyan Smith, Sarah Wright, Paul Hodge, Lara Daley, Peter Yates, Amelia Turner, Mia Mulladad, Rachel Perkins, Myf Turpin, Veronica Arbon, Eleanor McCall, Clint Bracknell, Melinda McLean, Vic McGrath, Masigalgal Rangers, Masigalgal RNTBC, Doris Yethun Burarrwaŋa, Bentley James, Mick Bourke, Nathan Wong, Yiyili Aboriginal Community School Board, John Hill, Wiluna Martu Rangers, Birriliburu Rangers, Kate Cherry, Darug Ngurra, Uncle Lex Dadd, Aunty Corina Norman-Dadd, Paul Glass, Paul Hodge, Sandie Suchet-Pearson, Marnie Graham, Rebecca Scott, Jessica Lemire, Harriet Narwal, NAILSMA, Waanyi Garawa, Rosemary Hill, Pia Harkness, Emma Woodward.

Contributing authors of Chapter 3: Graham Atkinson, Patricia Marrfurra McTaggart, Gerry Turpin, Rachel Buissereth, Bush Medijina®, Lisa McMurray, Rowan Foley, Nyangumarta Warrarn Aboriginal Corporation RNTBC, Yamatji Marlpa Aboriginal Corporation, Dr Aunty Patsy Cameron, Les Schultz, Cissy Gore-Birch, Emma Woodward, Dennis Chungalla, Heather Wungundin, Mary Aiken, Jean Malay, Bernadette Williams, Tim Cranbell, Josephine Forrest, Marmingee Hand, Ross James, Elizabeth Jingle, Olive Knight, Nathan Lennard, Valerie Lennard, Ileen Malay, Lindsay Malay, Wallace Midmee, Stuart Morton, Chloe Nulgit, Patricia Riley, Ina Shadforth, Jane Bieundurry, George Brooking, Sherika Brooking, Willy Brumby, Victor Bulmer, Virgil Cherel, Ashley Clifton, Sam Cox, Matt Dawson, Alistair Hobbs, Duran Hobbs, Camelia Juboy, Patricia Juboy, Annette Kogolo, Barry Lennard, Con Lennard, Deon Lennard, Nelita Malay, Zenneth Malay, David Marshall, Herbert Marshall, Lezeka Millindee, Diane Mowaljarlai, Andrea Myers, Thomas Nnarda, Joy Nuggett, Lloyd Nulgit, Pansy Nulgit, Anne Poelina, Daniel Poudrill, Joe Ross, Jimmy Shandley, Sandy Skeen, Gordon Smith, Mervyn Street, Pauline Thomas, Bronson Wongawol, Harry Yungabun, Fitzroy High School Students (Arosha Sunfly, Cyntala Cook, Kaunell Shaw, Taliesha Collard, Yvonne Collard), Rosemary Hill, Ilisapeci Lyons, Nat Raisbeck-Brown, Pia Harkness.

Contributing authors of Chapter 4: Bradley Moggridge, Robert Dann, Emma Woodward, Prasert Trakansuphakon, Chaiprasert Phokha, Nutdani Trakansuphakon, Pernilla Malmer, Maria Tengö, Rosemary Hill, Pia Harkness.

Contributing authors of Chapter 5: Linda Ford, Emma Woodward, Rosemary Hill, Maria Tengö, Pia Harkness.

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CONVENTIONS

- These Guidelines incorporate diverse land and sea management-related interests across Australia, and the numerous individuals and groups that have contributed to its development choose to identify in diverse ways. The Guidelines therefore adopt the terms Aboriginal and Torres Strait Islander Peoples; Indigenous Australians; Indigenous Peoples; and First Nations Peoples to refer to the huge number of unique individuals, family groups, clans, language groups and others, who are descendants of Australia's First Peoples. Indigenous people, Aboriginal and/or Torres Strait Islander people refers to individuals.
- Country is upper case throughout when it refers to the traditional land and sea territories of Australia's Aboriginal and Torres Strait Islander Peoples, except where it occurs within a direct quote.
- *Indigenous* is upper case throughout in accordance with Australian academic protocols.
- Elders, Old People and Traditional Owners are upper case throughout.
- We in these Guidelines refers to Indigenous
 Australians writing about our knowledge, except
 where otherwise indicated. Both Indigenous and
 non-Indigenous authors have contributed to
 writing these Guidelines. All of the text has been
 reviewed and co-authored with Indigenous people,
 so that we are confident that the Guidelines
 genuinely reflect Indigenous-led voices about Our
 Knowledge Our Way.



Our purpose in producing these Best Practice Guidelines from Australian experiences is to support learning, by both ourselves and our partners, about good ways of using our Indigenous knowledge to look after our land and sea Country.

Our Indigenous knowledge connects us to our Country and our cultures. Our knowledge is owned by us as Traditional Owners and is diverse across Australia. The vision for Our Knowledge Our Way in caring for Country, established by the Indigenous-majority Steering Group, is:

- Indigenous people are empowered to look after Country our way
- Improved environmental conditions and multiple social, cultural and economic benefits come from effective Indigenous adaptive management of Country.

The Guidelines are Indigenous-led and co-developed, respecting the principle that:

Indigenous people must decide what is best practice in working with our knowledge

Indigenous leadership of the Guidelines is through:

- Indigenous-led Project Steering Group
- Indigenous-led case studies
- Indigenous lead co-authors for each chapter
- Indigenous review, consultation and input
- Face-to-face discussions about the Guidelines at meetings and workshops.

EXECUTIVE SUMMARY

Our 23 case studies from Australian experiences show that Our Knowledge Our Way in caring for Country can be supported by:

- Strengthening Indigenous knowledge
- Strong partnerships
- Sharing and weaving knowledge
- Indigenous networks.



STRENGTHENING INDIGENOUS **KNOWLEDGE**

Holding and strengthening Indigenous knowledge for Country involves having the rights to Country, listening to Country, interpreting that knowledge, and communicating it to others.

Indigenous knowledge is different between groups. It comes from Country, from our ancestors and ancestral beings present in Country today. Our kinship relationships connect us as Aboriginal and Torres Strait Islander Peoples within a network of other people, plants, animals and features in the landscape. Connection is maintained through our knowledge and through our actions to care for our Country. Culture and Country are spoken about together. Keeping our Indigenous knowledge strong and vibrant requires access to our Country and strong cultural governance of our knowledge.

Keeping knowledge strong through access to Country

Access to our land and sea Country is the foundation of keeping our Indigenous knowledge strong. We need to be on our Country to sing, dance, tell stories, collect bush tucker, practise art, and to speak our language to the plants, animals and ancestral beings in our landscapes and seascapes. While colonisation has severely impacted our access to Country, we use different legal and agreement-making approaches to keep our connections as much as possible.

Strong cultural governance of knowledge

The United Nations Declaration on the Rights of Indigenous Peoples, and other international laws and policies, recognise our rights to self-governance and autonomy.

This means:

- Decision-making about knowledge needs to respect and follow each group's customary governance, and cultural protocols. This usually requires collective decision-making by key people, including Elders
- New organisations resulting from government policies need to be resourced and supported to strengthen, not weaken, cultural norms of knowledge governance
- New laws are needed to provide protection for Indigenous cultural and intellectual property (ICIP)
- Agreements can provide for both customary law and Australian nation-state legal protection when sharing knowledge.

Keep and revitalise knowledge, language and culture

Our knowledge is kept alive and is passed on through language, song, dance, art, story, through being on Country, hunting and harvesting and through many other cultural practices. Opportunities to continue these practices are essential to the survival of our culture.

We are educating our youth through Indigenous-led bilingual education, learning on Country and two-way science programs. New and emerging digital technologies can engage youth, and record and revitalise knowledge, provided knowledge protocols are followed.

BUILDING STRONG PARTNERSHIPS

Partnerships that enable the building of respect and appreciation for Indigenous knowledge are desired – particularly where they support an Indigenous voice in decision-making processes that affect us. Respect for Indigenous knowledge, culture and Country are critical for the development of trust and relationship-building, which underpin strong partnerships.

Trust and relationships in knowledge work

Custodians of knowledge feel an obligation and responsibility to the ancestors to treat knowledge the right way. It takes time for trust to build between knowledge holders and outsiders before knowledge might be shared.

We seek engagements and partnerships where we think our knowledge will be treated the right way. This can mean taking a very slow approach to building a partnership, and testing partners to see if they are respectful and trustworthy, before knowledge is shared.

Taking the time and interest to build relationships between people will underpin positive experiences in knowledge sharing. Relationship-building demands that all partners recognise and respect multiple cultural backgrounds and knowledges in creating a safe space for sharing.

Protocols

Our knowledge protocols are vital to positive experiences in sharing knowledge. It is our business to know and follow our own cultural protocols when sharing knowledge within and outside of different Traditional Owner groups.

Other protocols can be negotiated between Indigenous and non-Indigenous partners to facilitate sharing of knowledge the right way, and these can operate at many scales. Protocols can include: agreement on the activities, responsibilities and contributions of each partner; acknowledgement and consideration of background Intellectual property (IP); and how the research IP will be shared. Formalised research agreements between institutions offer a higher level of protection to IP because they are binding.

Consent for sharing knowledge

Free, prior and informed consent (FPIC) is critical to the sharing of knowledge. The UN Declaration on the Rights of Indigenous Peoples, and many other international and national laws and policies, recognise FPIC as the best-practice approach to engaging with Indigenous knowledge.

FPIC requires that individuals and groups are provided with sufficient accessible information to enable full consideration of the risks and benefits of a proposed project, prior to them making a decision about whether or not to consent to that proposal. Partners should ensure that their project budgets accommodate payment of interpreters where appropriate, to ensure Indigenous partners are adequately informed before giving consent. The requirement for consent entitles Indigenous Peoples to determine the outcome of decision-making that affects them.



SHARING AND WEAVING KNOWLEDGE

Indigenous managers often weave knowledge to manage new and complex land and sea management issues. Externally funded Indigenous land and sea management ranger programs sometimes draw on western science to build ecological monitoring and evaluation programs into their work plans. Sometimes scientific rigour lends support to the development of land and sea management-based enterprises – for example, in developing a methodology for traditional burning regimes to offset carbon emissions.

All knowledge sharing is based on first strengthening and preparing the knowledge systems that will be shared. Four subsequent steps can help: *Communicate*, *Discuss*, *Bring together* and *Apply*.

Communicate: involves presenting knowledge from one knowledge system into a format that can be understood by a different knowledge system e.g. seasonal calendar.

Discuss: requires us to talk together and interact around our different knowledges. 'Boundary objects' that people from different knowledge systems can connect through, like the 3D catchment model, can help discussions.

Bring together: after discussions and negotiations, we can bring our different knowledge systems together, for example in Indigenous Protected Area management plans.

Apply: the final step in weaving knowledge is application of the new, (partly) woven knowledge, which has been shown to deliver many co-benefits.

Communication tools for sharing and weaving knowledge

- Indigenous-led and co-developed tools are most appropriate for sharing and weaving knowledge
- Tools that promote the inter-generational transfer of knowledge are highly valued

The case studies demonstrate that co-created tools can facilitate the communication of specific messages, and can be used amongst Indigenous participants and government scientists to facilitate relationship building and promote discussion. Co-produced communication tools can promote learning about culture and language, as well as assist understanding across knowledge systems.

INDIGENOUS LAND AND SEA NETWORKS FOR SHARING KNOWLEDGE

Global networks that promote Indigenous-led knowledge practices and their application to international environmental challenges include the UN Permanent Forum on Indigenous Issues, the International Indigenous Forum on Biodiversity and Ecosystem Services and the Indigenous and Local Knowledge Centres of Distinction. These networks are important as they offer peer-to-peer learning opportunities for Indigenous land and sea management practitioners. They support:

- Learning about good partners, projects and approaches to keeping knowledge strong, our way
- Learning from others about best practice protocols and processes for managing partnerships
- Building strength and inspiration through solidarity.

In recent years there have been great opportunities at the national level for us to build strength in knowledge through peer-to-peer learning. In recent years, Indigenous Ranger Forums have been held to promote knowledge sharing amongst rangers and land and sea management-related partners across northern Australia. At the 2019 Ranger Forum, held on Kenbi Country, rangers discussed the importance of the Guidelines in the context of building knowledge between ranger groups. The idea of a national Indigenous land and sea network has been discussed and needs exploring further.

