



Safeguarding our sacred islands: Traditional Owner-led Sea Country governance, planning and management in Australia

Ellie Bock^{A,*} , Lorna Hudson^B, Janella Isaac^C, Tanya Vernes^D, Bob Muir^E, Terrence Whap^{F,G},
Melanie Dulfer-Hyams^H, Melinda Mclean^H and David Fell^I

For full list of author affiliations and declarations see end of paper

***Correspondence to:**

Ellie Bock
Regional Advisory and Innovation Network
(RAIN) P/L, PO Box 104, Mena Creek,
Qld 4871, Australia
Email: rainqld@bigpond.com

Handling Editor:

Dorian Moro

Received: 9 March 2021

Accepted: 5 October 2021

Published: 9 November 2021

Cite this:

Bock E *et al.* (2022)
Pacific Conservation Biology, **28**(4), 315–329.
doi:[10.1071/PC21013](https://doi.org/10.1071/PC21013)

© 2022 The Author(s) (or their
employer(s)). Published by
CSIRO Publishing.

This is an open access article distributed
under the Creative Commons Attribution-
NonCommercial-NoDerivatives 4.0
International License ([CC BY-NC-ND](https://creativecommons.org/licenses/by-nc-nd/4.0/)).

OPEN ACCESS

ABSTRACT

This timely collation of case studies, written by and with Traditional Owners of diverse Australian offshore islands, offers direct insights into benefits arising from strategic and participatory action planning for biocultural island conservation and monitoring. We pay respect to the Old People and Elders whose dedicated care of their island homelands means we today can still experience their cultural and natural diversity. We extend greetings to our Pacifica neighbours, and to carers of islands around Earth. Our paper scopes socio-economic benefits arising from planning for islands, for Aboriginal peoples and Torres Strait Islanders, and more generally. Global, national, state and local co-investments support place-specific planning for some islands by Traditional Owners as a starting point toward shared governance and caring for Country. Case studies describe Country planning for Mayala Country in Australia's northwest, Woppaburra experiences within the Great Barrier Reef World Heritage Area and integrated biocultural health monitoring arising from remote island Indigenous Protected Area planning in Torres Strait. New institutional initiatives are also seeking to create solid foundations for more substantive island research collaborations. Across Australia, novel relationships grounded in culturally assured, holistically integrated approaches to island governance and caring for Country involving Traditional Owners and island resource users/managers are creating equity in livelihoods and stronger wellbeing. Australia's innovative Sea Country collaborations, with priorities initiated and led by island Traditional Owners, carry real value for sustained island conservation and provide positive inspirations for global humanity in the accelerating Anthropocene.

Keywords: consent, country-based planning, cultural authority, governance, rights based approach, Saltwater People, self-agency, self-determination.

Cultural warning: this paper contains the names and words of people who are deceased. The cultural and intellectual property of contributing Traditional Owners remains theirs, and that of their descendants, in accordance with their traditional laws/lores and customs.

Australian Traditional Owners¹ abiding rights and interests in their islands and Sea Countries span geological timescales in the tens of millennia and beyond: *before time* or *bepor taim* (Hesp *et al.* 1999; Darwul Wuru Aboriginal Corporation 2014; Torres Strait Invasive Species Advisory Group 2015; TSRA 2016). The Old People survived and thrived, adapting to sea level fluctuations around the Australian continent throughout the Holocene and the late Pleistocene (Veth 2017; Ward *et al.* 2018; Bowler *et al.* 2018). The continuing living connections of Aboriginal peoples and Torres Strait Islander peoples to their diverse ancestral estates are exceptional (e.g. Whap 2001; Dhimurru

¹Whilst recognising and respecting that many people of Aboriginal and/or Torres Strait Islander descent prefer to refer to themselves as custodians, this paper uses the term 'Traditional Owner' (in Zenadth Kes (Torres Strait) the Boeradharaw Kuyk/Boeradhoeraw Kuyku/Ged Kem Le) as applied in all case studies herein, and to add emphasis to the occupation and use of Australia's islands by Saltwater peoples over time. In this paper, a Traditional Owner is a member of an Aboriginal or Torres Strait Islander group with longstanding, continuing, pre-colonial inherited rights and responsibilities to Country, whether or not those rights and responsibilities are currently recognised in Australian law.

Aboriginal Corporation 2015). For Saltwater People, these connections extend over their entire respective Sea Countries: to any offshore island situated therein, as much as to any included inshore or coastal island.

Saltwater People, whose Sea Countries include contemporary offshore islands, see these places as remaining intimate aspects of their traditional obligations and custodial identity: the sacred; the spiritual; the creation; the linguistic; the named; the inherited; the known; the restricted; the past and lived present; the sustenance for all life and human livelihoods; the future of current and unborn generations to come (McNiven 2004; Harrison and McConchie 2009; Bradley et al. 2010). Certain Australian offshore islands extend beyond the realm of the living: as those places where deceased spirits are sent to, or by being sites shaped or made by creation beings or other Ancestors as the direct forebears of Traditional Owners living today (AIATSIS 2009; Maluilgal (Torres Strait Islander) Corporation RNTBC 2017). Unique, prevailing and time transcendent linkages between Australian Traditional Owners and their islands are the lived experiences of Saltwater People to this day. Such resounding legacies are evident throughout all three case studies presented here.

We will not enjoy development without security, we will not enjoy security without development, and we will not enjoy either without respect for human rights. Unless all these causes are advanced, none will succeed. (Annan 2005, p. 6)

Australian offshore islands 'are considered vulnerable to dramatic changes because of their restricted size, physical isolation, often-narrow environmental envelopes, and relatively limited (yet often highly endemic) biodiversity that might facilitate species invasions (Laurance et al. 2011). In the lived experience of Australian Traditional Owners, these vulnerabilities are enhanced, or potentially accelerated, where traditional languages, other place-specific knowledges and related usufructuary² rights (embedding customary and/or traditional use protocols) are destroyed, displaced, disrupted, discarded and/or disregarded through settler society establishment (Brigg and Graham 2020). Security of islands into the future depends on respectful human collaborations in finding shared ways forward given anthropogenic global warming and all that entails for islands, both globally and as named loci (McIntyre-Tamwoy and Buhrich 2012; UNCBD 2014).

The inherent rights of First Nations³ peoples are brought together under the international framework of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). United Nations (UN) best practice guidelines for protected areas, the 2030 Agenda for Sustainable

Development and the Permanent Forum on Indigenous Issues augment UNDRIP's foundational rights based approach. The UN Secretariat of the Convention on Biological Diversity (UNCBD 2014) states:

Never before have islands been so at risk. Their peoples, cultures, oceans and ecosystems are interlinked and threatened by natural disasters, invasive species, unsustainable development and global shocks. These challenges are being compounded by the real and serious threat of climate change. While islands constitute <5% of the Earth's landmass they provide habitat for 40% of all Critically Endangered and Endangered species. More than 80% of all known species extinctions have occurred on islands. Urgent and immediate action is needed to halt and reverse trends to save our precious island ecosystems globally. Now is the time for action: for leadership, commitments and collaborations across all sectors to build a resilient and sustainable future for our islands and the planet.

Australian Traditional Owners implicitly understand these critical threats to their homelands and, as our case studies show, they are leading on-ground actions to safeguard their sacred islands and Sea Countries in the face of an increasingly challenging future.

Biocultural foundations for leading practice island conservation

In its very origins, First Nations' decision making is biocultural, arising from intimate causal relationships between biodiversity and culture at local levels (Maffi and Woodley 2010). The all encompassing nature of Saltwater peoples' identities as embedded in their Sea Countries moves beyond the physical dimensions of landscapes and seascapes; they are *spiritscapes*, where offshore islands' uses over time provide comprehensible pointers to the continuing spatial scale of Saltwater cultural authorities and living connections to Country (McNiven 2004). Generic approaches adopted across settler societies occupying Traditional Owner territories are that islands are geographically isolated assets; with offshore islands perceived as being remote from everywhere else; and considered as 'terrestrial' fragments in a 'marine' space. Modern settler societies are in effect challenged in terms of *thinking for place* as a conscious 'mode of acting in attentive awareness of the interests of a place as a whole, and in doing so realising an ethical relationship with both place and all the beings enfolded in it' (Joy 2018).

²Usufructuary: a term in law relating to the right to use and derive profit from a piece of property belonging to another, provided the property itself remains undiminished and uninjured in any way.

³Increasingly applied in Australia, in this paper the term 'First Nations' is used in the international context.

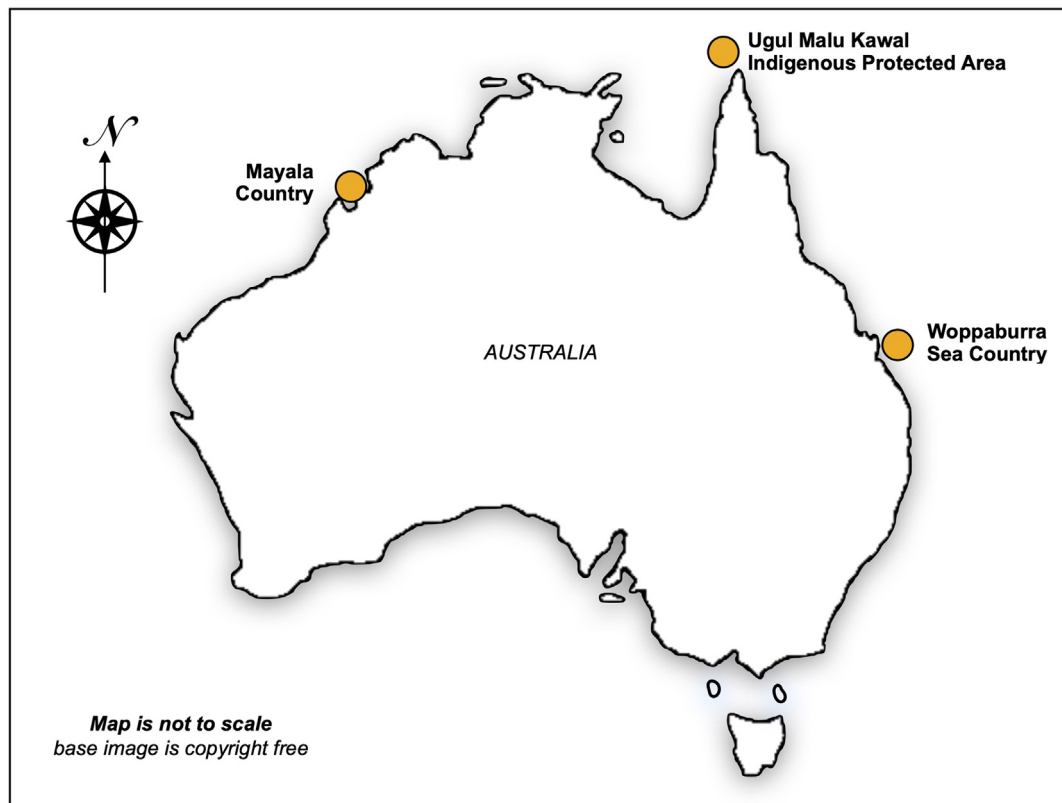


Fig. 1. Map showing the respective locations of the featured Australian case studies.

This paper takes the view that any offshore island visible from the Australian mainland or Tasmania; or any Australian island situated beyond the present-day horizon (when facing out to sea) may well be integral and intrinsic aspects of Traditional Owner Sea Country. For Saltwater peoples, offshore islands do not exist in isolation. Within a Traditional Owner group's ancestral estates, any individual island or group/s of islands exist/s as part of the entirety of Country, imbued with Story as intimately braided continuums of living connections and the *everywhen*.⁴ Islands are not there just to be 'managed': islands remain intrinsically related to individual, moiety, clan, family and/or language group identities. As such, offshore islands fundamentally form part of Australia's Saltwater peoples' living custodial inheritances, irrespective of modern tenured interests or contemporary use rights (cf. Bock *et al.* 2018; Rist *et al.* 2019; Gould *et al.* 2021).

This paper presents three case studies of Traditional Owner governance, planning and caring for islands and Sea Country, from the perspective of the co-authors' personal and professional experiences. Before we come to the individual case studies (Fig. 1) and their insights into what Saltwater People are actioning on, and for, their Sea Countries and

islands today, we should take a moment to reflect on the realities the Old People and Elders faced in fighting for their inherited laws and estates. Exploring Australia's present day island management context and frameworks, we cannot ignore nor pass over the actual consequences of events initiated in 1788: the ensuing depredations; the reverberating dispossession; the manifest and well-documented disadvantages still now limiting equity of opportunity; the serious, substantive inter-generational trauma still being experienced, and the many discriminatory realities still characterising everyday life for Traditional Owners across Australia to this day.

Island tenures were imposed by an invading imperial power: island administration over time became matters for diverse colonial actors, and subsequently for Australia's various state, territory and commonwealth governments. Only in certain northern Australian regions do island communities have their own discrete local government administrations; e.g. Mornington Island, Palm Island, the outer and inner islands of Zenadth Kes. Any island within the present day Australian Contiguous Zone⁵ has a pre-European history: regardless of whether or not an island was inhabited at the

⁴One cannot fix The Dreaming in time: it was, and is, *everywhen*' (Stanner 1979).

⁵The Contiguous Zone is a belt of water contiguous to the territorial sea, the outer limit of which does not exceed 24 nautical miles from the territorial sea baseline (which corresponds with the low water line (Lowest Astronomical Tide) along the coast, including the coasts of islands) (Geoscience Australia).

time Lieutenant Cook – or other maritime predecessors or followers – happened to sail past, drop anchor nearby or step ashore. Sovereignty of their islands has never been ceded by any Aboriginal nation or Zenadth Kes nation: indeed the erroneous notion of *terra nullius*⁶ was overturned on the basis of a Meriam Le man's living connections to their father's fathers' lands on the island of Mer, within the Kemerkermer Meriam nation of Zenadth Kes.

Joordingyoor

Joordingyoor is the Bardi language term for 'moving forward'. This case study presents the personal views of the case study's authors Lorna Hudson, Janella Isaac and Tanya Vernes.

When we was living on Sunday Island we had a lot to do with the other islands. We'd go and camp on the islands, other people would go to the islands to camp. Since people were moved away from the islands to the mainland it's difficult to access. Everyone knew where people came from, even the surrounding islands near Sunday island – everyone knew who came from where. We still want to maintain that now, educate our younger ones. We still have that contact but we have to paddle our own canoe. (Lorna Hudson, Mayala Elder)

Even through the disruption of being moved off Country in the late 1800s, Mayala continued to live in family clusters on nearby Sunday Island visiting and managing their *booroo*, their clan's estate, respecting those who had a voice for the different parts of Country, and accessing Country and its resources according to cultural governance, which has been carried through to today. This cultural framework is the foundation of island management for Mayala People.

Mayala are true Saltwater People. Mayala's Country is comprised entirely of islands, a network of over 300 highly biodiverse islands, reefs, interconnecting seas and complex marine areas covering 382 240 ha off the north-west Kimberley coast, Western Australia. Mayala islands are a refuge for many species including some highly threatened or in decline on the nearby mainland (Mayala Inninalang Aboriginal Corporation RNTBC ICN 9067 2019). The islands, free from feral animals, with few weeds and fewer uncontrolled fires, are biodiversity reservoirs recognised by scientists as increasingly important but fragile, refuge areas for the coming decades.

Country encompasses all the physical aspects of land and sea and sky, everything on, above and below ground; all plants, animals, people, geographic and metaphysical features, undivided and across time. Country is imbued with the deeds and resting places of cultural ancestors, stories,

songlines, spirits of yet to be born children, recreational and historical sites and cultural lore. Everything has a purpose and meaning for its place.

Rather than isolated and disconnected – physically or perceptively – islands are one part of continuous Mayala Country. Standing on an *innalang*, an island of Mayala Country, it is obvious that you are standing on an extension of Country that happens to be above the saltwater. When the tide recedes, more of the same Country is revealed. It was always there, unseen perhaps but not separate. The evidence of a flooded landscape is everywhere on Mayala Country, not least in the sacred sites and stories that are linked above and below the saltwater. Mayala people are the only ones who know these seen and unseen connections.

When you go to Country you have to talk. Otherwise, if you don't do that something will go wrong. (Lorna Hudson, Mayala Elder)

Country is alive, it understands. Living Country is not really understood or applied in mainstream policy or programmes or reflected in western science. Nor is science the only way to know or manage Country. Mayala people's relationship to Living Country is crucial to people and Country health and safety. This means being on Country, speaking to Country, using all the senses to understand the seasonal and navigational indicators. In this Country of powerful tides and dangerous currents, it is important to 'Know where to go and when to go' (Sandy Isaac, Mayala Elder) (desc.).

Mayala Elder Aubrey Tigan (desc.) explained that Mayala *feel* the sound of the waves and the tide. Hearing the sound of the waves hit a particular rock or a certain sound the sea makes as the tide turns acts like traffic lights. These sounds are the indicators or signals for the raft to be placed in the direction to move to the next Island stop. 'They are like traffic lights on a saltwater highway' (Sandy Isaac, Mayala Elder) (desc.).

To keep people and Country safe, in balance, respectful behaviour to maintain the values of Country requires the 'right knowledge'. This is lifelong education. To know the tides, the complex currents and navigate them safely; keeping food and other resources sustainable, considering the survival of all species that co-exist on islands when hunting, cleaning out the freshwater places and right-way burning under cultural protocols that provides guidance to burn section by section, or avoids whole islands where rare and endangered rock wallabies inhabit – a practice existing long before they were named Nabarlek or Monjon.

When cultural governance is disrupted, it will impact on Country and Country will impact on people.

Knowledge of how to look after Mayala Country was carried in the minds and in the daily actions on Country. Now these

⁶Assumed doctrinal law overturned in the 1992 Mabo decision determined by the High Court of Australia.

unwritten rules need to be put down in black and white that gives guidance on how to manage Country and its people. A Cultural Policy Document will enable people to be governed by its true cultural frameworks within a model that reflects traditional and customary approach towards future endeavours based on present day thinking. Native Title alone does not provide this detail. Marrying a Cultural Policy Document to a Native Title Prescribed Body Corporate Rule Book will support and provide the right balance to help to influence and educate future generations.

Any corporate, government and/or non-government organisation has policies, rules and organisational structures based on a outcomes framework or programme logic. Mayala have the same thing for Country. For example, young people doing burning are governed under that cultural policy. The *Majamajin* (cultural law boss)⁷ is the equivalent of a CEO, providing the guidance and permission for the activity. Closing reefs periodically to enable trochus shells to regrow is another example of ancient practices brought into modern harvesting by Mayala together with neighbouring groups. This ancient method supported the nomadic lifestyle that once would have enabled the regrowth of reef inhabitants to ensure sustainability throughout Mayala Country.

Until mainstream Australia are serious about recognising Indigenous governance as a legitimate management model for Country and make a bridge to enable it, we hear only empty words.

In a public statement on the release of the joint management plan for the Mayala marine park, Mayala Inninalang Aboriginal Corporation communicated their decisions for park management, including zoning for use and marine take, and also asked: ‘...for respect and support from park users and government departments to support these aspirations’. The subtext here is that Traditional Owner authority is always challenged. What is identified as cultural values should not be questioned or challenged by any stakeholders.

Sharing is not a new concept for Australia’s Indigenous Peoples, it is intrinsic to culture and survival mapped out through songlines, *aarnja* (reciprocity) and kinship. In contemporary Australia, sharing has become a negotiation between a much broader suite of interests, some with political power that dwarfs native title. Traditional systems of ownership and governance have been pushed down under the more recent layers of land tenure, protected areas, pearling licences, rights of access for tourism operators or recreational or commercial fishing take.

To reinstate Country, to bring Country back up to the surface as a holistic planning and management scale, Mayala undertook a strategic planning process to develop their own whole of Country plan. The Mayala Country Plan is tenure blind, embeds kinship and cultural governance and communicates

Mayala’s goals and aspirations for continuing to care for, enjoy, use and manage their island Country.

Many Traditional Owners around Australia have utilised Country-based Planning to implement their vision for Country (Smyth 2011). It flips the status quo and avoids Traditional Owner aspirations being squeezed into someone else’s plan or led by a single partner: Traditional Owners invite prospective partners to sign on to their aspirations opening up more diverse partnerships and economic options.

The Country Plan has been a jumping off point for Mayala to build consensus and pursue partnerships and funding to realise their aspirations. With the foresight of the Kimberley Land Council, the Country Planning process was scheduled prior to entering negotiations for joint management of marine parks with the Western Australian government. This enabled Mayala to negotiate from an empowered position with clear, agreed goals and to embed cultural governance in the management framework and resourcing to properly implement the marine park plan – notably including health and connection to Country, not usually considered in conservation. Taking inspiration from neighbouring Traditional Owner groups, the Mayala Country Plan and the draft marine park plan include being on Country as a key performance indicator, to be resourced, implemented and measured as any ecological action would be.

This is action planning that marries contemporary and traditional governance – Mayala are asserting their intrinsic connections by building and connecting, not dividing and separating. We, Mayala, are our own solution.

Country knows Mayala people and Mayala people have responsibility to Country. What matters is for Country to be managed properly through cultural governance. Mayala are finding ways to do this that reinstates Country and traditional governance frameworks. We are ‘paddling our own canoes’ into the future.

‘Joordingyoor’ – carrying the cultural framework from the past and taking it forward into the future – is a concept and a legacy that will benefit all Australians, and all of Country.

Woppaburra’s management of Land and Sea Country

Woppaburra have achieved a significant role in management of our Country (Great Keppel Islands, Central Queensland) by being willing to work with everybody and anybody to get the job done, even if we do not like them.

In 1993, the Aboriginal Flag was raised on the beach of Woppa (Great Keppel Island) in front of the island resort to claim Woppa’s Unallocated State Land for the Woppaburra People, through the Queensland Aboriginal Land Act 1991.

⁷If a *Majamajin* is not present a *Ngkooljin Aamba* (Elder man) or *Oorany* (Elder woman) responsible for that particular part of Country and who carry the old knowledge is the authority.

It took 14 years for the Queensland government to hand back 174 ha on Woppa in 2007, along with the princely sum of AUD250. The Woppaburra Land Trust was formed to manage this land, which remains as wild and untouched as it was on the day of the handover. The current plan is to maintain this property in this state, although this may change in the future with possible opportunities of a low-key environmental resort, and a shop front for our tours and other future business.

Woppaburra culture depends on healthy Country, so Woppaburra People actively seek involvement with natural resource management. For example, Woppaburra are involved with the local Fitzroy Basin Association Committee and the Fitzroy River Coastal Catchments Committee to learn about all available avenues to gain support and funds to help with managing Country. Woppaburra People are also active and involved in the broader community to learn and understand their concerns and to raise our concerns. Through this two-way listening, we have gained further support for Woppaburra with the management of Woppa.

In the early days with no resources except our own energy and a determination to look after our Country, Woppaburra People approached the then Queensland Department of Environment and Heritage (DEH) for assistance to protect the Monkey Point Midden on Woppa, which was being destroyed by 4 wheel-drives (4WDs) going over the midden to take tourists snorkelling on the reef off Monkey Beach. A midden is a cultural site that shows evidence of all the resources that are available in the area and is where Woppaburra People cooked and ate those resources. DEH recognised the site's cultural value and supported with fencing and bollards to stop the 4WDs. As a longer term solution, DEH worked with Woppaburra to design and install a boardwalk built over the midden with a chain walk for the entrances from both beaches. This access combined with interpretive signs containing Woppaburra cultural information and the midden has raised community awareness and cultural understanding of Woppaburra People and middens.

DEH then employed a Woppaburra person for a couple of years as a Marine Parks Ranger, looking after the Parks and also surveying, documenting and protecting cultural artefacts and sites around the Keppel Islands and Keppel Bay. This ranger also worked with approximately 70 schools attending the North Keppel Island Environmental Education Centre, bringing information about Woppaburra culture and the role of a Ranger into curriculums taught there.

With a local island resident and the Queensland Parks and Wildlife Service, Woppaburra were instrumental in establishing Balban Dara Guya (Leekes Creek) Fish Habitat Area at Woppa in 2017. This is the first fish habitat of its kind off the Queensland coast and it protects a significant ecosystem and a significant cultural heritage site for the Woppaburra. Coastal development is prohibited within the FHA to protect fisheries into the future and to reduce habitat loss and declines in water quality flowing into the Great

Barrier Reef but allows for limited appropriate infrastructure along with legal and properly managed commercial, recreational and Indigenous fishing. Woppaburra People also have opportunities by conducting tours with universities, education and tourists to highlight our culture and how we are managing and looking after Country.

Woppaburra People always look around for different funding opportunities to get things done. For example, we obtained a Greening Australia grant to work with government archaeologist Mike Rowland to update the Cultural Heritage Management Plan he had previously developed, through undertaking surveys and confirming sites.

Our responsibilities to Country extend beyond the land into the surrounding Sea Country. The Woppaburra Traditional Use of Marine Resources Agreement (TUMRA) is a reef co-management arrangement between Woppaburra, the Great Barrier Reef Marine Park Authority (GBRMPA) and the Queensland Government. The Woppaburra TUMRA Steering Committee (WTSC) worked with GBRMPA to develop a cultural heritage guidelines and protocol document, to guide GBRMPA to take cultural heritage into account when assessing marine permit applications and also provide engagement directions to government agencies and universities when coming on to our Country for any projects or research ([Great Barrier Reef Marine Park Authority 2021](#)). The protocol explains the division of responsibilities between the WTSC (Sea Country), the Woppaburra Land Trust (the 174 ha property on Woppa) and the Woppaburra Native Title Applicant group (all other Woppaburra matters), and provides contact details. This document has become a precedent for all Traditional Owners and TUMRA groups to look at developing their own protocols and Heritage Guidelines.

By following the protocol document, the Australian Institute of Marine Science ([Australian Institute of Marine Science 2020](#)) engaged through the WTSC regarding proposed research in Sea Country, and this has led to the Keppel Islands Coral Project. This major 5-year partnership between Woppaburra and Australian Institute of Marine Science (AIMS) will deliver real benefits to Woppaburra including employment, and addresses key knowledge gaps in coral reef science that will enable our People to make more informed and scientifically sound decisions for restoration actions in the future. Woppaburra gave Free, Prior and Informed Consent (FPIC) for the project. FPIC is recognised in the UNDRIP and allowed us to give or withhold consent to a project that may affect us or our territories. Once we have given our consent, we can withdraw it at any stage. Furthermore, FPIC positions Woppaburra People as decision makers on our Country and enables our People to negotiate the conditions under which the project will be designed, implemented, monitored and evaluated. This is also embedded within the universal right to self-determination.

Our contributions extend beyond our own Country to the broader region. The WTSC Chair is presently a

member of GBRMPA's Capricorn Coast Local Marine Advisory Committee; and Chair of the Reef Restoration and Adaption Science Traditional Owner Technical Working Group.

Ugul Malu Kawal indigenous protected area

The Torres Strait is a unique region between Papua New Guinea and Australia. It is made up of more than 300 islands, 17 of which are inhabited, spanning across shallow open sea, coral reefs, sand cays and sandbanks. The region's rich and diverse social and cultural systems are interwoven into the diversity of ecological systems across a range of island types with varied geomorphology, vegetation and land use histories. This case study centres on the integrated monitoring of biocultural health and values for informed decision-making by Traditional Owners with respect to the Ugul Malu Kawal Indigenous Protected Area (IPA).

*Ailan Kasom*⁸ and Aboriginal Law/Lore are the fundamental practices of Torres Strait Islanders that govern decision-making and influence the various frameworks used to protect and manage their traditional land and sea estates. As Traditional Owners, Torres Strait Islanders also use a variety of legal and non-legal frameworks to direct and deliver the governance and management of their islands. This includes, but is not limited to, the practice of their cultural rights and obligations; legal rights recognised through national and international law, including the Torres Strait Treaty between Australia and Papua New Guinea and native title rights recognised over the majority of the Torres Strait;⁹ and non-legal frameworks and programs, such as IPA and the Indigenous Ranger Program.

Torres Strait Islanders also ensure that cultural authority is recognised, and protocols are embedded, in collaborative work with their representative bodies, partners and practitioners to support the delivery of land and sea management. These include community representative groups, Registered Native Title Prescribed Bodies Corporate (RNTBCs) as a key representative body for Traditional Owners; local, state and national government agencies; researchers and institutions;

not-for-profit organisations; commercial industries; and other willing partners.

Guda Maluilgal, the Peoples of Boigu, Dauan and Saibai; and Maluilgal, the Peoples of Mabuyag and Badu; are the Traditional Owners¹⁰ of Ugul Malu Kawal (*murky water islands* in Kala Lagaw Ya¹¹) – a region of the top western Torres Strait that holds deep spiritual significance for all Torres Strait Islanders. Traditional Owners of Ugul Malu Kawal have complemented their native title rights and interests in this sacred place with the dedication of three islands as the Ugul Malu Kawal IPA for the protection of their biocultural resources and significant natural and cultural places and values. Ugul Malu Kawal IPA is dedicated, protected and managed in accordance with Cultural Protocols and internationally recognised protected area guidelines and criteria established by the [International Union for the Conservation of Nature \(IUCN\) \(2021\)](#).¹² The IPA's Plan of Management is implemented by Maluilgal¹³ (Torres Strait Islander) Corporation RNTBC (Maluilgal RNTBC) on behalf of Traditional Owner rights and interests, and supported by their partners through collaborative management arrangements. A central process for Maluilgal RNTBC is delivering information back to Traditional Owners to ensure their rights and interests are incorporated into decision-making.

Warul Kawa/Leberen (Deliverance Island), is a remote vegetated coral cay of 48 ha located in the top western part of Torres Strait. It was the first island to be dedicated as part of Ugul Malu Kawal IPA in 2001 and is recognised for the cultural, historical and economic significance to its Traditional Owners (Waia *et al.* 2001; Maluilgal (Torres Strait Islanders) Registered Native Title Body Corporate and Arafura Consulting 2013; Maluilgal (Torres Strait Islander) Corporation RNTBC 2017). These intrinsic values are complimented by a host of ecological and conservation values (Limpus *et al.* 1989; Kwan *et al.* 1999; MacFarlane and Hitchcock 2008; D. G. Fell, unpubl. data; Maluilgal (Torres Strait Islanders) Registered Native Title Body Corporate and Arafura Consulting 2013; J. J. Watson, unpubl. data; Watson and Hitchcock 2015). These values include supporting one of the world's largest populations of

⁸*Ailan Kastom* (Island Custom) is enshrined in the *Aboriginal and Torres Strait Islander Act 2005*. *Ailan Kastom* means the body of customs, traditions, observances and beliefs of some or all of the Torres Strait Islanders living in the Torres Strait area, and includes such customs, traditions, observances and beliefs relating to particular persons, areas, objects or relationships (TSRA 2016, p. 18).

⁹Native title rights are recognised over majority of Torres Strait land and sea estates, including exclusive native title rights for 13 inhabited outer islands and the majority of inner islands.

¹⁰Native title rights and interests for the Saibai, Dauan, Mabuyag, Badu and Boigu Peoples are recognised through the *Nona on behalf of the Saibai, Dauan, Mabuyag, Badu and Boigu Peoples v Queensland* [FCA 1118] native title determination (in short, *Buru & Warul Kawa*) and administered on behalf of native title holders by Maluilgal (Torres Strait Islanders) Corporation RNTBC. Traditional Owners for the native title determination *Buru & Warul Kawa 2005* – the People of Saibai, Dauan, Mabuyag, Badu and Boigu – are also referred to as Guda Maluilgal and Maluilgal.

¹¹Kala Lagaw Ya is the language spoken in the central and western regions of the Torres Strait.

¹²Indigenous Protected Areas (IPAs) are areas of land and/or sea dedicated by Indigenous Traditional Owners, and governed and managed by legal and other effective means in accordance with IUCN protected area guidelines and recognised by the Australian Government as part of Australia's protected area estate (Rist *et al.* 2019). Ugul Malu Kawal IPA is managed under Category VI of the IUCN Protected Area Guidelines, *protected areas with sustainable use of natural resources*.

¹³Speakers of Kala Lagaw Ya will use the term *Maluilgal* when referencing that belonging to Guda Maluilgal and Maluilgal. For example, the term 'Maluilgal RNTBC' will be used in the context of Maluilgal RNTBC's role or purpose of belonging to Traditional Owners, Guda Maluilgal and Maluilgal.

nesting *Wone* (flatback turtle, *Natator depressus*); migratory waders, including *Karlu* (eastern curlew, *Numenius madagascariensis*); endangered stands of Piner (bird lime tree, *Pisonia grandis*); *Ubar* (wongai, *Manilkara kauki*) forests; sea bird breeding grounds; and significant *Aiway* (pelican, *Pelecanus conspicillatus*) rookeries (Maluilgal (Torres Strait Islander) Corporation RNTBC 2017).

Following the detection of *Makas* (black rat, *Rattus rattus*) on Warul Kawa in 2011, the management of invasive rodents on the island has been identified as a priority for Traditional Owners, with the impacts identified as catastrophic for the islands natural and cultural values (N. Waller, unpubl. data; D. G. Fell and A. Greenhalgh, unpubl. data; Maluilgal (Torres Strait Islander) Corporation RNTBC 2017; A. Samaniego, unpubl. data).

The Maluilgal RNTBC are working with the Torres Strait Regional Authority (TSRA) Land and Sea Management Unit and Indigenous Ranger Program to design and develop culturally appropriate research, monitoring and management methods to assess and address the impacts and management of *Makas*.

Steps towards the development of a monitoring method began early 2019 through a scheduled visit to the IPA, led by Traditional Owners as part of their IPA management activities. This also allowed for the trialling of western science monitoring methods required for external funding from the Queensland Government's Natural Resources Investment Program that TSRA had secured to support the eradication of *Makas*. The visit enabled Traditional Owners ecologists and the TSRA to discuss the impacts of *Makas*, the indicators of island health, monitoring and management approaches. This process further developed recognition of the island's significant cultural and natural values. Language was used to recognise biocultural landscapes, and the values and utility of plants and animals, and seasonal indicators. These provided a context to better understanding the impact of *Makas* on the biocultural health of the island and surrounding Sea Country.

A key learning from the monitoring practice was that field based methods to assess island health must be suitable to the landowners. Western science methods primarily focused on detecting changes in vegetation health and therefore required collection of a host of technical data. Traditional Owners, including TSRA Rangers, were however, also interested in defining a broader scope of impacts affecting their island. These included the impacts of *Makas* to cultural values such as places and important plant and animal resources, and the loss of land and its vegetation cover by erosion and inundation from rising sea levels (D. G. Fell, unpubl. data). As such, western science methods did not adequately reflect Traditional Owner cultural protocols, nor incorporate the deep and rich body of Traditional Knowledge necessary to inform community and decisions around management.

Consequently, there was an opportunity to acknowledge, value and incorporate cultural values within a whole-of-island monitoring framework. Following amendments to the methodology, and permissions granted by the Maluilgal RNTBC, a follow-up visit was carried out in late 2019. A network of permanent monitoring stations around the perimeter of the island were established by Traditional Owners and the TSRA. The stations provide a focus point for Traditional Owners and TSRA Rangers to more formally detect changes that might be occurring on their island over time. The method adapted parts of the western science monitoring format available within the Queensland Government BioCAT methodology.

The acknowledgement and incorporation of Traditional Ecological Knowledge within the monitoring format was a foundation for Traditional Owners to identify their landscapes and vegetation, and to identify local indicators of impact and change. Observation and assessment included the capture of digital photos and video recording in language at each monitoring station within a web-based data collection form. It recorded the health of culturally important trees, local *Makas* impacts (such as damage to seeds and bark), the presence and abundance of certain fauna species that would be impacted by *Makas* (ground skinks and nesting birds), and the extent and impacts of coastal erosion from climate change. Reporting outputs provided information available for ongoing island visits and to inform Maluilgal RNTBC and community.

The collection and delivery of monitoring data and information to Traditional Owners is critical for their informed decision-making in assessing a potential and successful eradication of *Makas*. This has been complimented by further information sharing with Traditional Owners, including the provision of a literature review responding to specific enquiries from Maluilgal RNTBC, and a series of information sharing meetings with Guda Maluilgal and Maluilgal communities. Information sharing with community was delivered in collaboration with Maluilgal RNTBC, the TSRA and a rat eradication specialist. Facilitators brought a diverse collection of knowledge and information to each meeting, providing members of the community with both cultural and scientific insight necessary to understand and assess the benefits and risks of the proposed project. It also provided the opportunity for those involved in the project planning to better understand the impressions and concerns of community. This added value to the project as community are directly involved as Traditional Owners in the decisions and design of the proposed project.

In asserting and practising their rights and interests for the protection and management of traditional estates, Traditional Owners for Ugul Malu Kawal have collaborated with partners to identify and address the cultural values, processes, indicators and risks that any mainstream natural resource management project (such as the eradication of an invasive species) must incorporate. Monitoring methodologies must be able to

integrate findings in a way that Traditional Owners can implement and use for their decision making. Additionally, the ability for Traditional Owners to work with partners in better understanding and negotiating the design of monitoring, evaluation, review and learning processes will benefit both mutual and individual outcomes.

Science is a valuable knowledge system applied to management and decision-making processes but, in cases where other systems (such as cultural systems) are present, it will not be the dominant practice. It is through establishing and practising biocultural monitoring that Traditional Owners can amalgamate both Traditional Knowledge and western science data to assess and inform their decision-making against the cultural values that are inherent in the landscape and peoples to whom these are connected to. This has allowed a more practical pathway wherein Traditional Owners have ownership over monitoring, managing and communicating decisions active on their land and sea estates.

Bringing together divergent worldviews at a time of exponentially accelerating change

Traditional Owners are not stakeholders. We consider ourselves people who have been in the natural environment for thousands of years... For the last 240 odd years we've become a stakeholder in our sea and land Country... we are not stakeholders. We are the people who have inherent rights and responsibilities to looking after our land and our Sea Country... when you use the word 'stakeholder', that's a person you may or may not want to talk to... You must come and speak to us about things you want to do on our land and Sea Country. Its very important for that to happen. (Forester 2018).

Australian islands are imbued with the living and lived realities of Aboriginal peoples and Torres Strait Islanders. Recent research into contemporary island management in Australia points to the need for a better understanding and assessment of socio-economic benefits arising from island conservation activities (Moro *et al.* 2018). Contemporary published works focused on island conservation in Australia can highlight these living connections and their benefits (Rist *et al.* 2019). As our case studies also show, for success in shared island care it is critical to first establish the basis for a properly empowered collaboration: equity in decision-making, meaningful timeframes, solid resourcing and no hidden agendas.

Indigenous worldviews contrast strongly with western worldviews underpinning both resource exploitation-driven economics and science-based conservation (Fig. 2)

(Indigenous Corporate Training 2016). Both inhabited and uninhabited islands have provided, and continue to provide, social and economic bounties to their respective Traditional Owners. Island custodianship remains a core aspect of Saltwater peoples' identity across Australia to this day. Over the millennia, and regardless of sea level changes and the varying distances of Raine Island from the coast, Wuthathi People have still always maintained a robust physical, spiritual, and cultural connection to their expansive yet highly interconnected Sea Country. This connectivity is reinforced through wide-ranging sea travel and complex Story and songlines; with Raine Island being a particularly important ceremony place. Wuthathi People are very proud of their Sea Country traditions, which include links to several other regional offshore islands such as the Sir Charles Hardy Group and the Saunders Islands, in addition to Raine Island and its associated cays (Wuthathi Aboriginal Corporation RNTBC, pers. comm., 2021). Elsewhere, a senior Djiru Traditional Owner of north-eastern Australia stated to one of the authors (EB) that their Sea Country was in fact still today part of a vast plain extending out from the Great Dividing Range, where kangaroos roamed before the seas rose, and that they were taught this knowledge as Djiru law and tradition.

Substantial oral histories, historical records and archaeological evidence from southern Australia further speak to intensive long-term use and occupation of offshore islands by Traditional Owners (Hesp *et al.* 1999; Harrison and McConchie 2009). Conversely, their contemporary socio-economic benefits and values to Traditional Owners today reflect diverse ongoing customary obligations directly related to Sea Country and all its biocultural aspects:

- Culturally assured access, governance and sustained caring for Sea Country;
- Ecologically and culturally viable resource sustainability, access and use;
- Recognised rights and interests including, but not limited to, those arising from native title determinations and agreements, and other statutory or non-statutory agreements including collaborative partnerships; and
- The ability to generate viable livelihoods for island Traditional Owners themselves, based on their own principles and priorities.

When setting out to define socio-economic benefits generated by the direct involvement of Aboriginal peoples and Torres Strait Islanders in the conservation or other management of their offshore islands, consider, amongst other matters:

- The necessity of Traditional Owner empowerment in governance (decision-making);
- Their cultural mandate to lead and undertake island conservation in their own right;

EIGHT DIFFERENCES BETWEEN INDIGENOUS AND WESTERN WORLDVIEWS

INDIGENOUS WORLDVIEWS

Spiritually oriented society. System based on beliefs and spiritual world.

There can be **many truths**; truths are dependent on individual experiences.

Society operates in a state of relatedness. **Everything and everyone is related**. There is real belief that people, objects and the environment are all connected. Law, kinship and spirituality reinforces this connectedness. **Identity comes from connectedness**.

The **land is sacred** and is usually given by a creator or supreme being.

Time is non-linear, cyclical in nature. **Time is measured in cyclical events**. The seasons are central to this cyclical concept.

Feeling conformable is measured by the **quality of your relationships** with people.

Human beings are not the most important in the world.

Amassing wealth is important for the **good of the community**.



WESTERN WORLDVIEWS

Scientific, skeptical. Requiring proof as a basis of belief.

There is only one truth, based on science or western style law.

Compartmentalised society, becoming more so.

The **land and its resources should be available for development and extraction** for the benefit of humans.

Time is usually linearly structured and future oriented. The framework of weeks, months, years etc reinforces the linear structure.

Feeling conformable is measured by **how successful you feel you have been** in achieving your goals.

Human beings are the most important in the world.

Amassing wealth is for **personal gain**.

adapted from Indigenous Corporate Training Inc. (2016)
<https://www.ictinc.ca/blog/indigenous-peoples-worldviews-vs-western-worldviews>
graphic images: no copyright CCO 1.0 Universal Creative Commons

Fig. 2. Eight differences between Indigenous and Western Worldviews (*emphasis added*).

- The tangible physical and mental health and well-being benefits arising for Australia's most disadvantaged peoples and their communities; and
- The documented direct benefits to local communities¹⁴ from permanent substantive employment in all aspects of caring for Country, including Rangers of all genders.

As a further reference, specific recommendations for improved economic engagement and opportunities for Great Barrier Reef Traditional Owners are detailed in the *Traditional Owners of the Great Barrier Reef: The Next Generation of Reef 2050 Actions* report prepared for the Australian Government by a multidisciplinary consortium engaging directly with Reef Traditional Owners (Commonwealth of Australia 2018) and drawing on over 20 years of Reef Traditional Owner consultations, localised action planning and caring for Sea Country. Specific highlighting of Country-based planning in these recommendations is instructive: as a form of strategic, participatory planning for Country, this approach is focused on bringing the modern patchwork of tenures imposed over

Country into a 'tenure blind' treatment – as explained in this paper's Joordinyoor case study. Traditional Owners themselves determine their priority strategic partnerships, and only then engage in targeted negotiation with statutory agencies and managers to formalise on-ground collaborations.

The *Great Barrier Reef Marine Park Act 1975* Regulations enables statutory recognition of an intra-Traditional Owner negotiated and agreed *Traditional Use of Marine Resources Agreement* (TUMRA). Together with the Woppaburra TUMRA described earlier in this paper, a total of nine accredited TUMRAs are in effect at the time of writing. A TUMRA may set out certain agreed traditional marine resource take and/or conservation management arrangements, specify particular cultural heritage management requirements stipulated by the Traditional Owners, and underpin Sea Country management resourcing involving statutory agencies such as GBRMPA (Smyth et al. 2016). Traditional Owners have been able to leverage considerable gains from the legal effect of TUMRAs under the Regulations, including enablement of Sea Country IPAs dedicated within the World Heritage Area that are

¹⁴Social return on investment analysis of Indigenous Protected Areas (SVA (Social Ventures Australia Consulting) 2016).

managed on a collaborative basis, such as the Girringun Region IPA¹⁵ and the Eastern Kuku Yalanji IPA.¹⁶

Traditional Owner driven priority setting and self-agency is reflected across the diverse learnings shared by the Joordinyoor, Woppaburra and Ugul Malu Kawal IPA case studies underpinning this paper. Our case studies also lay out how critical respectful relationships are for generating and sustaining effective island biocultural or two-way conservation efforts. Negotiations must take into account cultural assurance: the right people speaking for the right Country, from the start of any processes. As pointed out in both the Joordinyoor and Woppaburra case studies, this may well require efforts additional to statutory native title provisions. As the Ugul Malu Kawal IPA case study demonstrates, progressing Traditional Owner priorities benefits island conservation partners in a shared relationship grounded in Traditional Owner worldviews.

More generally however, Traditional Owners' primary roles, place-related responsibilities and opportunities to readily access, care for and derive meaningful livelihoods from their islands and their Sea Country remain limited (Commonwealth of Australia 1997; HREOC 2007; Commonwealth of Australia 2018). Many Australian Traditional Owners have called for a rigorous consideration of first sovereignty through formally negotiated national and state/territory treaties, including compensation, to change the way business works for their peoples, their communities and on Country. In the interim, specific barriers remain in place hindering a greater assertion of Traditional Owner socio-economic decision-making control and benefit-sharing more generally, for example:

- A labyrinth of legislated constraints and a myriad of regulatory restrictions;
- Chronic under-resourcing of cultural, environmental and remedial work on Country;
- Lack of/limited Traditional Owner capital to self-determine island use and care; and
- At times divisive outcomes arising for Traditional Owner communities from adversarial judicial processes, including native title, that may run counter to consensus brokerage.

An UNDRIP rights-based approach may assist in securing equity in socio-economic benefits for Traditional Owners in the Australian context. Critical outstanding elements to give effect to such a rights based approach include the urgent need to implement holistically integrated requirements to redress Indigenous disadvantage. Despite some progress – and notably so in locally empowered on-Country land and

sea management – progress on treaty-making between Australian Traditional Owners and Australian State, Territory or national governments continues to be highly challenging to policy makers, with the realisation of pan-Australian equality and inclusion remaining a work in progress (Murphy *et al.* 2017; Brigg and Graham 2020). It is not the authors' intention to enter into this debate, but to point out that the accepted international norms articulated in UNDRIP are considered universal human rights, and as such remain fundamental to Traditional Owner assertions of their interests across the entirety of their Countries.

As the Joordinyoor, Woppaburra and Ugul Malu Kawal IPA case studies describe, at least five critical drivers can power relatively rapid, positive change in achieving real and lasting equity in socio-economic outcomes for Traditional Owners from island conservation efforts:

1. Recognition that effective island conservation governance, planning and management arises from holistic Sea Country governance, planning and management, respecting and embedding the Traditional Owner view of Country as an integral whole;
2. Culturally assured governance: fully identify/approach, empower and involve the right people for the right Country from the start of a shared project;
3. Empowered collaboration grounded in FPIC and equitable resourcing of effort;
4. Transparently pre-negotiated and equitably shared returns from island-based research work, biocultural monitoring and/or infrastructure developments; and
5. Agreed cyclical evaluations informing genuinely collaborative review processes.

Aligned worldviews directly inform the mechanics of collaboration, the setting of shared priorities, the meaningful creation and implementation of action planning around island conservation to achieve real empowerment and lasting positive impacts. Equally critical is the approach adopted by non-Traditional Owner institutions and entities with interests in islands, their use, and their protection and/or conservation. As a recent example, the AIMS *Indigenous Partnerships Plan* seeks to develop a strong foundation in working together with Traditional Owners 'to weave together two vast knowledge systems to generate the best possible solutions to current environmental challenges, as well as a sustainable world for future generations (Evans-Illidge *et al.* 2020). The IPP was developed on a collaborative basis together with Traditional Owners,¹⁷ and also in recognition that a

¹⁵First accredited in 2006, the Girringun TUMRA is agreed between six affiliated Saltwater Traditional Owner groups. Girringun Aboriginal Corporation. <https://www.girringun.com>. [Accessed 10 July 2021].

¹⁶Jabalbina Aboriginal Corporation RNTBC. <http://www.jabalbina.com.au>. [Accessed 10 July 2021].

¹⁷The IPP states that although tiers are named after precious metals of value within western worldviews [i.e. bronze, silver, gold, platinum], the hierarchy implicit within the tiered structure reflects that '... the amount of effort and investment in engagement progressively increases: ... there is a shift along

partnership may not always be appropriate either; for example, some groups may have other priorities or concerns; may not wish to partner with that agency at particular times; or partnering opportunities may be limited for certain projects with an emphasis on desktop work or laboratory studies. Collaboratively developed by the North Australia Indigenous Land and Sea Management Alliance, the Commonwealth Scientific and Industrial Research Organisation and the Australian Committee of the International Committee for the Conservation of Nature, the *Our Knowledge Our Way* guidelines were also launched in 2020, highlighting some 23 case studies informed by Indigenous individuals, organisations and their management partners (Woodward et al. 2020). As our case studies and other caring for Country initiatives around Australia demonstrate, relationships established between Traditional Owners and their collaborators on Country are increasingly generating multiple benefits and innovations arising from collaborative two-way learning and applied Sea Country and marine research (Depczynski et al. 2019; Woodward et al. 2020).

Conclusions

Internationally and within Australia, Traditional Owner self-determination and strategic self-agency in conservation collaborations on Country, and in self-driven participatory planning, can combine to create innovation in island protection and care, empowering Traditional Owners directly. The success of IPAs as a policy innovation in the marine space and associated biocultural and other conservation benefits is increasingly well documented. Collaborations in the shared management marine space are applying remote technologies for *in situ* Sea Country observation, mapping and monitoring. Novel livelihoods opportunities grounded in cultural governance and cultural authority can evolve and thrive. Shared knowledge and effort give rise to shared learnings and mutual solidarity. Similar positive outcomes are evident in Hawai'i (SPREP 2020) and across Pacific Islands nations (Winter et al. 2021).

The Joordingoor, the Woppaburra and the Ugul Malu Kawal IPA case studies reflect leading practice contemporary island conservation grounded in evolving collaborative relations. The key learnings of Mayala, Woppaburra, Guda Maluilgal and Maluilgal Traditional Owners revolve in essence around the self-determined agency of their people in ensuring the long-term health of their Sea Country and islands. Their self-agency arises from living cultural governance and authority intimately embedded in place: their islands and Sea Country. It is the Traditional Owners who engage with their nominated partners in shared conser-

vation, protection and monitoring: they are hosting their guests and working with them on Country.

The Mayala Cultural Policy Document will provide Mayala Traditional Owners with a trans-generational cultural governance blueprint to care for and protect Mayala Country. The separate but aligned Mayala Country Plan considers some 300 islands, reefs and saltwaters off the northwest Australian coast as an entirety of Country – intimately interconnected with the Mayala peoples, cultural law and language – with being on Country a key performance indicator. These statements of Mayala Traditional Owner intent became the launching point for empowered negotiations with statutory decision-making and management agencies for protected areas now established in Mayala Sea Country. Malaya-paddled canoes are really moving forward!

Woppaburra Traditional Owners apply their self-agency to effectively engage with other resource managers on their Country and establish mutually beneficial two-way listening. Through their TUMRA Steering Committee, Woppaburra have developed precedent-setting cultural heritage guidelines and a place-specific protocols document, used as a model by other Great Barrier Reef TUMRA groups in their own Sea Country-related negotiations. Woppaburra self-agency authorises and guides research and restoration in their Sea Country. Declaration of Balban Dara Guya (Leeke's Creek) Fish Habitat Area at Woppa shows just how serious Woppaburra are about getting all statutory Sea Country managers to their table.

Guda Maluilgal and Maluilgal work together to protect and care for their sacred islands of the Ugul Malu Kawal IPA in north-western Zenadth Kes. Earlier planning was reviewed and updated, leading to incorporation of cultural values into a whole of island monitoring framework, grounded in a set of clear cultural protocols adopted by all IPA management partners. These are among the remotest islands of northern Australia, with favourable conditions suitable for on-island work extremely limited each year. Essential effort to address invasive pests like Makas on Warul Kawa/Leberen (Deliverance Island) must be operationalised appropriately in this place of utmost spiritual significance to all Torres Strait Islanders, with Rangers representing all five communities well resourced and supported.

The authors acknowledge and pay respect to the many island Traditional Owners caring for their Sea Countries around Australia. Our case studies, and the other examples given from Australian contemporary planning for Country practice, show that Traditional Owners can, and are, rapidly moving forward beyond mere words. Innovation in island conservation for biocultural sustainability is thriving against the odds, weaving together expansive knowledge systems to connect divergent worldviews. Successful shared conservation between island Traditional Owners and their partners

this continuum from AIMS driven projects, through to equal partnerships, through to Traditional Owner driven projects' (Evans Range Expand Illidge et al. 2020).

will require substantial ongoing and future investment to ensure their continuity into the future, and not only in terms of the Commonwealth's IPA and Indigenous Rangers programs. State/Territory governments should also grow their own, complementary Ranger initiatives, as the success of the Queensland Indigenous Land and Sea Rangers attests. Our paper provides an impression of the inspirational groundwork being laid by current generations and their Elders in finding viable pathways for the livelihoods of future generations in respecting, protecting and caring for Australia's islands and Sea Country.

Footnote

The integrity of this paper rests upon the case studies being written by Traditional Owners, or by a group of Traditional Owners and their self-nominated non-Indigenous co-authors, on the basis of trusting and proven long-term collaboration. Our paper is not intended as an academic research article, rather the authors consider this paper to be a perspective. In this respect, our paper seeks to honour the cultural obligations of Traditional Owners to speak only on matters they consider they have a right to, under their own cultural Lore or Law, with case studies endorsed through self-determined authorisation/governance processes. No contributing author, including the lead author, represents any academic or other formal research entity in making their contribution as long-standing Indigenous or non-Indigenous practitioners.

References

- AIATSIS (2009) In 'The Gunitjmarra land justice story'. (Ed. JK Weir). (Native Title Research Unit, Australian Institute of Aboriginal and Torres Strait Islander Studies: Barton)
- Annan K (2005) In larger freedom: towards development, security and human rights for all. United Nations Document: A/59/2005. United Nations, New York.
- Australian Institute of Marine Science (2020) Australian Institute of Marine Science Strategy 2025. Available at https://www.aims.gov.au/sites/default/files/AIMS_Strategy-2025-Web.pdf. [Accessed 10 January 2021]
- Brigg M, Graham M (2020) The ongoing destruction of Indigenous Australia demonstrates the need for Aboriginal ethics. Available at <https://www.abc.net.au/religion/stop-destroying-indigenous-sites-and-lives-morgan-brigg-and-mar/12355284>. [Accessed 18 November 2020]
- Bock E, Rist P, Vigilante T, Waina N (2018) Indigenous protected areas and islands. In 'Australian island arks conservation, management and opportunities. Chapter 8'. (Eds D Moro, D Bell, S Bryant) pp. 115–129. (CSIRO Publishing: Melbourne)
- Bowler JM, Price DM, Sherwood JE, Carey SP (2018) The Moyjil site, south-west Victoria, Australia: fire and environment in a 120,000-year coastal midden – nature or people? *Proceedings of the Royal Society of Victoria* **130**, 71–93. doi:10.1071/RS18007
- Bradley J, Norman D, Norman L, Miller J, Friday G, Yanyuwa Families (2010) 'Singing saltwater country: journey to the songlines of Carpentaria.' (Allen & Unwin: Crows Nest)
- Commonwealth of Australia (1997) Bringing them home. Report of the national inquiry into the separation of Aboriginal and Torres Strait Islander children from their families. (Human Rights and Equal Opportunity Commission: Sydney)
- Commonwealth of Australia (2018) Traditional owners of the Great Barrier Reef: the next generation of Reef 2050 actions. Report to Australian Government.
- Darwul Wuru Aboriginal Corporation (2014) 'Yirrganydji Kulpul-Wu Maminal "Looking After Yirrganydji Sea Country" Yirrganydji Sea Country Plan.' (Darwul Wuru Aboriginal Corporation)
- Depczynski M, Cook K, Cure K, Evans-Illidge L, Forester T, George K, Gould J, Howard A, Oades D, Underwood J, Wyatt M (2019) Marine monitoring of Australia's Indigenous Sea Country using Remote Technologies. *Journal of Ocean Technology* **14**, 60–75.
- Dhimurru Aboriginal Corporation (2015) 'Dhimurru Indigenous Protected Area (IPA) management plan 2015 to 2022.' (Dhimurru Aboriginal Corporation: Nhulunbuy, Northern Territory)
- Evans-Illidge E, Forester T, Depczynski M, Duggan E, Souter D (2020) 'AIMS indigenous partnerships plan – from engagement to partnerships.' (Australian Institute of Marine Science: Townsville)
- Forester MT (2018) 'A journey to greater Traditional Owner engagement in marine science'. People. Policy. Place. Seminar series. (Northern Institute, Charles Darwin University: Darwin) Available at <https://vimeo.com/299586701>. [Accessed 21 September 2020]
- Gould J, Smyth D, Rassip W, Rist P, Oxenham K (2021) Recognising the contribution of Indigenous Protected Areas to marine protected area management in Australia. *Maritime Studies* **20**, 5–26. doi:10.1007/s40152-020-00212-z
- Great Barrier Reef Marine Park Authority (2021) 'Woppaburra Traditional Owner heritage assessment guidelines.' (Great Barrier Reef Marine Park Authority)
- Harrison DM, McConchie P (2009) 'My people's dreaming: an Aboriginal Elder speaks on life, land, spirit and forgiveness.' (Harper Collins: Sydney)
- Hesp PA, Murray-Wallace CV, Dortch CE (1999) Aboriginal occupation on Rottne Island, Western Australia, provisionally dated by Aspartic Acid Racemisation assay of land snails to greater 50 ka. *Australian Archaeology* **49**, 7–12. doi:10.1080/03122417.1999.11681647
- HREOC (2007) 'Us taken-away kids: commemorating the 10th anniversary of the bringing them home report.' (Social Justice Unit, Human Rights and Equal Opportunity Commission: Sydney)
- Indigenous Corporate Training (2016) Working effectively with indigenous peoples blog. Available at <https://www.ictinc.ca/blog/indigenous-peoples-worldviews-vs-western-worldviews>. [Accessed 30 November 2020]
- International Union for the Conservation of Nature (IUCN) (2021). 'Best practice guidelines for protected area managers series. Online resources.' (International Union for the Conservation of Nature World Commission on Protected Areas). Available at <https://www.iucn.org/theme/protected-areas/resources/iucn-wcpa-best-practice-guidelines-protected-area-managers-series>
- Joy R (2018) Thinking for place in Australia: owning the occupation. *Coolabah* **24/25**, 7–29.
- Kwan D, Freebody K, MacFarlane W, McGrath V, Hitchcock G, Rose D (1999) Environmental and cultural survey of Deliverance Island. Report to Torres Strait Island Co-ordinating Council.
- Laurance WF, Dell B, Turton SM, Lawes MJ, Hutley LB, McCallum H, Dale P, Bird M, Hardy G, Prideux G, Gawne B, McMahon CR, Yu R, Heron J-M, Schwarzkopf L, Krockenberger A, Setterfield SA, Douglas M, Silvester E, Mahony M, Vella K, Saikia U, Wahren C-H, Xu Z, Smith B, Cocklin C (2011) The 10 Australian ecosystems most vulnerable to tipping points. *Biological Conservation* **144**, 1472–1480. doi:10.1016/j.biocon.2011.01.016
- Limpus CJ, Zeller D, Kwan D, MacFarlane W (1989) Sea-turtle rookeries in northwestern Torres Strait. *Australian Wildlife Research* **16**, 517–525. doi:10.1071/WR980517
- MacFarlane W, Hitchcock G (2008) Birds of Warul Kawa (Deliverance Island) and Kerr Islet, north-western Torres Strait. *The Sunbird* **38**, 1–12.
- Maffi L, Woodley E (2010) 'Biocultural diversity conservation a global sourcebook.' (Earthscan: London and Washington)
- Maluigal (Torres Strait Islanders) Registered Native Title Body Corporate and Arafura Consulting (2013) 'Warul Kawa Indigenous Protected Area draft plan of management.' (Arafura Consulting: Melbourne)
- Maluigal (Torres Strait Islander) Corporation RNTBC (2017) Ugul Malu Kawal Indigenous Protected Area Plan of Management. Maluigal (Torres Strait Islander) Corporation RNTBC on behalf of Koey

- Mabaygal and Badulgal, Boigulgal, Dauanalgal, Goemulgal and Saibailgal Traditional Property Owners of Warul Kawa/Leberen, Awaial Kawa/Kiss Ilan and NorWes Sandbank/Turu Cay in association with Torres Strait Regional Authority Land and Sea Management Unit.
- Mayala Inninalang Aboriginal Corporation RNTBC ICN 9067 (2019) 'Mayala Country plan 2019–2029.' (Mayala Inninalang Aboriginal Corporation RNTBC)
- McIntyre-Tamwoy S, Buhrich A (2012) Lost in the wash: predicting the impact of losing Aboriginal Coastal Sites in Australia. *The International Journal of Climate Change: Impacts and Responses* 3, 53–66.
- McNiven IJ (2004) Saltwater People: spiritscapes, maritime rituals and the archaeology of Australian Indigenous Seascapes. *World Archaeology* 35, 329–349. doi:10.1080/0043824042000185757
- Moro D, Bell D, Bryant S (2018) 'Australian island arks conservation, management and opportunities.' (CSIRO: Melbourne, Vic.)
- Murphy L, Graham M, Brigg M (2017) The Uluru Statement: we never ceded sovereignty, but can we join yours? *NITV News* 23. Available at <http://www.kooriweb.org/foley/news/2000s/2020/nitv22june2020.pdf>. [Accessed 10 July 2021]
- Rist P, Rassip W, Yunupingu D, Wearne J, Gould J, Dulfer-Hyams M, Bock E, Smyth D (2019) Indigenous Protected Areas in Sea Country: indigenous-driven collaborative marine protected areas in Australia. *Aquatic Conservation Marine Freshwater Ecosystems* 29, 138–151. doi:10.1002/aqc.3052
- Smyth D (2011) Guidelines for Country-based Planning. Available at https://www.dermotsmyth.com.au/wp-content/uploads/2019/01/Guidelines_for_Country_Based_Planning.pdf. [Accessed 13 February 2021]
- Smyth D, Gould J, Ayre M, Bock E, Dulfer-Hyams M (2016) Indigenous-driven co-governance of sea country through collaborative planning and Indigenous Protected Areas. *Indigenous Law Bulletin* 8, 15–20.
- SPREP (2020) 'Pacific ecosystem-based adaptation to climate change: strengthening and protecting natural ecosystem services to enhance resilience to climate change.' (Secretariat of the Pacific Regional Environment Program (SPREP): Apia, Samoa)
- Stanner WEH (1979) 'White man got no dreaming: essays, 1938–1973.' (Australian National University Press: Canberra)
- SVA (Social Ventures Australia Consulting) (2016) 'Consolidated report on Indigenous Protected Areas following social return on investment analyses.' (Department of the Prime Minister and Cabinet: Canberra)
- Torres Strait Invasive Species Advisory Group (2015) Torres Strait Regional Biosecurity Plan 2018–2023. Report prepared by the Land and Sea Management Unit, TSRA, April 2018.
- TSRA (2016) Land and Sea Management Strategy for Torres Strait 2016–2026. Report prepared by the Land and Sea Management Unit, Torres Strait Regional Authority, p. 104.
- UNCBD (2014) 'Island biodiversity – island bright spots in conservation & sustainability.' (Secretariat of the Convention on Biological Diversity: Montreal)
- Veth P (2017) Breaking through the radiocarbon barrier: Madjedbebe and the new chronology for Aboriginal occupation of Australia. *Australian Archaeology* 83(3), 165–167. doi:10.1080/03122417.2017.1408543
- Waia T, Garnier H, Dau E (2001) Declaration of Warul Kawa Indigenous Protected Area. *Torres News* No. 434, 23 February–1 March.
- Ward I, Smyth D, Veth P, McDonald J, McNeair S (2018) Recognition and value of submerged prehistoric landscape resources in Australia. *Ocean & Coastal Management* 160, 167–174. doi:10.1016/j.ocecoaman.2018.04.013
- Watson JJ, Hitchcock G (2015) Avifauna of Deliverance Island (Warul Kawa) and Kerr Islet (Awaial Kawa), North-Western Torres Strait. *The Sunbird* 45, 65–67.
- Whap G (2001) A Torres Strait Islander perspective on the concept of Indigenous knowledge. *The Australian Journal of Indigenous Education* 29, 22–29. doi:10.1017/S1326011100001368
- Winter KB, Vaughan MB, Kurashima N, Giardina C, Quiocho K, Chang K, Akutagawa M, Beamer K, Berkes F (2021) Empowering Indigenous agency through community-driven collaborative management to achieve effective conservation: Hawai'i as an example. *Pacific Conservation Biology* doi:10.1071/PC20009
- Woodward E, Hill R, Harkness P, Archer R (2020) 'Our Knowledge Our Way in caring for Country: indigenous-led approaches to strengthening and sharing our knowledge for land and sea management. Best Practice Guidelines from Australian experiences.' (NAILSMA and CSIRO)

Data availability. The data that support this study cannot be publicly shared due to cultural, ethical or privacy reasons. Data may be shared upon reasonable written request to the corresponding author, and where deemed appropriate by the relevant case study authors.

Conflicts of interest. The lead author declares that, at the time of writing, RAIN P/L is engaged by the Wuthathi Aboriginal Corporation RNTBC. The co-authors declare no conflicts of interest.

Declaration of funding. Torres Strait co-authors give recognition to the Queensland Government's Natural Resources Investment Program and the Commonwealth National Indigenous Australians Agency's Indigenous Protected Area Program funders of monitoring and planning activities for the Ugul Malu Kawa Indigenous Protected Area.

Acknowledgements. The authors thank the reviewers of this paper, and the editors of the Special Issue: Action Planning for Offshore Island Conservation and Management in Australia.

The Ugul Malu Kawa IPA case study was co-authored and reviewed by Traditional Owners and land and sea management practitioners and specialists, and respectfully acknowledges the Traditional Owners of the knowledge, material, practices and information provided in this case study – Guda Maluilgal, the peoples of Boigu, Dauan and Saibai; Maluilgal, the peoples of Mabuyag and Badu; and all other Torres Strait Islanders whose knowledge, material, practices and information are mentioned. Special thanks to the Maluilgal (Torres Strait Islander) Corporation RNTBC Directors and Ranger Groups – Malu Kiai, Simakal, Mura Buway, Mabuygiw and Mura Badhulgal – for their work in driving the collaborative partnerships.

Author affiliations

^ARegional Advisory and Innovation Network (RAIN) P/L, PO Box 104, Mena Creek, Qld 4871, Australia.

^BMayala Traditional Owner and Elder, One Arm Point, WA, Australia.

^CMayala Traditional Owner, One Arm Point, WA, Australia.

^DPinanyi Consulting, Melbourne, Vic. 3793, Australia.

^EWoppaburra Traditional Owner, Mount Morgan, Qld 4714, Australia.

^FGoemulgal Director for Maluilgal (Torres Strait Islanders) Corporation RNTBC, Mabuiag Island, Torres Strait, Mabuiag, Qld, Australia.

^GTorres Strait Regional Authority Land and Sea Management Unit, Torres Strait, Thursday Island, Qld, Australia.

^HTorres Strait Regional Authority Land and Sea Management Unit, Torres Strait, Thursday Island, Qld, Australia.

^IPrincipal Ecologist, David Fell Environmental Pty Ltd, Alstonville, NSW, Australia.