

GOVERNING COUNTRY: A LITERATURE REVIEW OF INDIGENOUS GOVERNANCE PRINCIPLES IN INDIGENOUS RANGER GROUPS & INDIGENOUS PROTECTED AREAS

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Governing Country: A literature review of Indigenous governance principles in Indigenous Ranger groups & Indigenous Protected Areas

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Abstract

This paper reports on a literature review of Indigenous governance principles and practices in Indigenous Ranger groups and Indigenous Protected Areas. While existing scholarship has explored the policy frameworks and benefits associated with these programs, there has been less assessment of how Indigenous people govern these initiatives on the ground. I draw on methods of systematic literature review to identify relevant scholarship over the last 40 years and analyse this material using a conceptual framework of Indigenous governance principles. I found that all nine of the defined Indigenous governance principles were evident in the scholarship, often intersecting and overlapping to produce compounding governance strengths. This paper also maps the indicative locations, type of host organisation, and primary funding source for current Indigenous Ranger groups and Indigenous Protected Areas across Australia. This literature review illustrates the infinite potential to care for diverse landscapes, as well as foster Indigenous leadership, governance, and self-determined development, through investment in Indigenous Country governance. I argue that such investment must recognise and actively support the Indigenous governance principles at the heart of these initiatives and their success.

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I would like to acknowledge the Australian Government's Department of Climate Change, Energy, the Environment and Water, and the Australian Government's National Indigenous Australians Agency for assistance in providing geospatial data that partly informs the map of current programs. The final map was supplied by CartoGIS Services, at the Australian National University.

Within this paper I include reflections from my professional experience in this field. These comments are my own views and not the opinion of any group or individual I have worked with.

Acronyms

AIATSIS Australian Institute of Aboriginal and Torres Strait

Islander Studies

ALP Australian Labor Party

ALFA Arnhem Land Fire Abatement (Northern Territory)

Limited

ANU Australian National University

APYLM Anangu Pitjantjatjara Yankunytjatjara Land

Management

BAC Bawinanga Aboriginal Corporation

CAEPR Centre for Aboriginal Economic Policy Research

CDEP Community Development Economic Projects

CLC Central Land Council

CNRM Cultural and Natural Resource Management

DAC Dhimurru Aboriginal Corporation

EPBC Act Environment Protection and Biodiversity

Conservation Act 1999

FPIC free, prior, and informed consent

GAC Girringun Aboriginal Corporation

GBR Great Barrier Reef

ICG Indigenous Community Governance

IDP Indigenous Governance of Development

IPA Indigenous Protected Area

IRP Indigenous Ranger Program

IUCN International Union for Conservation of Nature

KLARNO Kowanyama Land and Natural Resource Office

KLC Kimberley Land Council

MOU Memorandum of Understanding

M&E monitoring and evaluation

NAILSMA North Australian Indigenous Land and Sea

Management Alliance

NIAA National Indigenous Australians Agency

NLC Northern Land Council

NRM Natural Resource Management

NRS National Reserve System

QIWRN	Queensland Indigenous Womens Ranger Network
RNTBC	Registered Native Title Bodies Corporate
STIPADP	Southern Tanami IPA Development Project
TUMRA	Traditional Use of Marine Resources Agreement
UNDRIP	United Nations Declaration on the Rights of Indigenous People
WOC	Working on Country (program)

Foreword

In late 2020, the Centre for Aboriginal Economic Policy Research (CAEPR) and the Australian Indigenous Governance Institute (AIGI) commenced an exciting partnership with several First Nation partners, in a two-year applied research project – *The Indigenous Governance of Development: Self-Determination and Success (IGD) Project* – to explore the ways First Nations in Australia are strengthening and exercising their collective self-governance so they are in the driver's seat for their development agenda.

The first year in 2021 was an extremely productive one for the Project. A high-calibre multi-disciplinary research team of Indigenous and non-Indigenous researchers was assembled, and the Project established a foundation of partnerships with First Nations and their representative organisations. Our research teams are working alongside local communities, native title holders, leaders and their representative organisations. With the ongoing pandemic conditions we have been sensitive to the major COVID-19 pandemic stresses that continue to be faced by our First Nation partners. That has led to many conversations and collaborative innovations in how we do our research work together; we may be becoming adept at zoom yarns, but are also meeting locally 'on country' when we can, to share experiences and insights.

At a time of great uncertainty and policy change in the national political environment, Aboriginal and Torres Strait Islander groups face major challenges in rebuilding their own governance in practically effective, culturally strong ways. This Discussion Paper is part of an IGD Project series, which presents evidence and analyses from the IGD Project's collaborative case studies. Our aim is to make this research count for First Nations, their leaders and community organisations across Australia, so they can use it for their own local purposes. The important matters raised in the papers also have direct relevance for industry and governments, who need to rebuild their own internal capacity and policy frameworks to better support Indigenous self-determined efforts to govern development.

This series of IGD Project Discussion Papers is a taste of the remarkable home-based solutions First Nations and their organisations are designing for their collective self-governance and futures. The papers capture a rich sample of changes, resilience and resurgence, describing examples where Indigenous practices of self-determined governance are being strengthened, and where development with culture and identity is a priority. We understand that the challenge on the road ahead is not merely to take control and put self-determination into practice, but to govern well and fairly on behalf of all the members of a First Nation. That way, chosen development has a better chance of delivering sustained outcomes.

We would like to thank the AIGI Board and staff, the CAEPR project team and staff, and the participating Indigenous nations and organisations who are working in partnership with us to carry out this applied research project. We believe our collective efforts will make a difference in informing constructive First Nations solutions for self-determined governance of development in Australia, and contribute to the formulation of more enabling government policy and industry engagement.

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Director

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Done

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Chair, Board

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Introduction

This year marks two significant milestones in Indigenous Country governance. It is the 40th anniversary of the establishment of the first Indigenous Ranger group in Australia on Palm Island, Queensland (see Smyth, 2011, p. 3), and the 25th anniversary of the first Indigenous Protected Area (IPA) in Australia declared by the Nepabunna Community, Nantawarrina, South Australia. From these early beginnings, today there are over 250 Indigenous Ranger groups and IPAs that operate across a diversity of environments, social and cultural contexts, jurisdictions, land tenures and marine areas. This includes 82 designated IPAs that cover more than 87 million hectares across Australia or 50% of the National Reserve System (NRS) (Australian Government's National Indigenous Australians Agency (NIAA), n.d.) as well as an extensive Sea Country IPA estate (Gould et al. 2021). Indigenous Ranger groups and IPAs are part of a flourishing Indigenous cultural and natural resource management movement that makes critical contributions to the vitality of landscapes and people across Australia. These initiatives have received bipartisan endorsement, positive government reviews, and been upheld internationally as examples of best practice Indigenous-led conservation (Ayonghe & Cuogo, 2021; Fleischhauer & Kammeier, 2007; Social Ventures Australia, 2016; Tran et al., 2020; Urbis, 2012).

Indigenous Ranger groups and IPAs have grown against a backdrop of shifting Indigenous affairs agendas at national, state and territory levels. Today's programs reflect longstanding Indigenous efforts and leadership to care for Country. Indigenous Ranger groups and IPAs are currently poised for expansion. For example, in Queensland, the State Government is currently investing \$24 million and doubling their Indigenous Land and Sea Ranger Program to a total of 200 Ranger positions (Scanlon, 2023). At a national level, the Albanese Labor government has promised to 'double the number of Rangers by the end of the decade to 3,800'1 and 'boost funding for the management of IPAs, providing an additional \$10 million each year' (Australian Labor Party (ALP), *n.d.*, para. 2, para. 5). In April 2022, the NIAA released a consultation draft for an *Indigenous Ranger Sector Strategy* that outlines a national approach for the future of Ranger programs (NIAA 2022). This was followed by a consultation summary report prepared by GHD (2022). The draft *Indigenous Ranger Sector Strategy* refers to an ongoing process of research engagement that I hope to contribute to through this paper.

This paper explores the enactment of Indigenous governance principles within Indigenous Ranger groups and IPAs. This research grew from discussion within the IGD Project around the significance of self-determined governance in Indigenous cultural and natural resource management. From my existing applied experience,² it seemed that Indigenous ways of governing were often at the heart of Indigenous Ranger groups and IPAs. And while the policy frameworks and benefits associated with these initiatives have received scholarly attention, there has been less assessment of how Indigenous governance practices are implemented on the ground (Barber, 2015; Gould et al., 2021; although see Nursey-Bray & Jacobson, 2014; Reed et al., 2021; tebrakunna country et al., 2016). Therefore, at a time when primary data collection is complicated by the COVID-19 pandemic, I set out to review the literature amassed over the past 40 years. This review only tells one part of the story, that is, what is contained within scholarly literature. We know that practices of Indigenous governance occur in place, are dynamic, responsive to local contexts, and at times strategically ewxercised and concealed. Yet as momentum for Indigenous Ranger groups and IPAs has grown, so has a corresponding body of scholarship. In this paper, I bring together evidence, analysis and recommendations contained within the literature over the last 40 years. In doing so, it is important to remember that sources reflect the context at the time of their publication, and there has been significant change in policy and practice during this period. My

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¹ Note this figure reflects Australian Government funded Indigenous Ranger Program positions only and does not account for positions funded by state and territory governments.

² I previously worked with Indigenous Rangers in North Queensland and continue to collaborate with these groups as part of my doctoral research exploring narratives of development in Indigenous Ranger programs.

primary aim has been to harness the insights and Indigenous voices contained within this scholarship to better understand and increase the visibility of Indigenous governance principles and practices.

This paper begins with an introduction to contemporary Indigenous Ranger groups and IPAs. I provide a bird's-eye view of current initiatives across Australia through a map that sets out their indicative locations, type of host organisation, and primary government funding source. I then present a conceptual framework of Indigenous governance principles drawing on the existing literature base. The paper then steps through the methodology, paying attention to how I identified, screened, and analysed literature. I present a basic quantitative analysis of the literature in the results section, before moving to a qualitative analysis of each of the nine identified Indigenous governance principles in the discussion. I conclude with a summary of findings for each principle, broad reflections on this body of scholarship, and future research directions.

Indigenous Ranger groups and IPAs

Indigenous Country governance takes diverse forms across Australia. It extends from Indigenous employment in government bodies, initiatives developed by Indigenous organisations, volunteering in green groups, to the everyday exercise of customary rights and obligations to Country. The term 'Country' means different things to different people. This description from Bock et al. is evocative:

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 (2021, Joordingyoor, para. 5).

Bock et al. tell us that 'Country is alive, it understands' and 'when cultural governance is disrupted, it will impact on Country and Country will impact on people' (2021, Jorrdingyoor, para. 8). There is a growing body of literature that speaks to the spectrum of Country governance occurring across Australia. Some examples include Aboriginal community governance in the 2019–2020 bushfires (Williamson, 2022; see also Ingram 2021), caring for Country in Sydney's urban waterways (Cavanagh, 2016), 'nation building for environmental futures' in South Australia (Hemming et al., 2019), water governance in Western Australia (Poelina et al., 2019), fisheries co-management in Zenadh Kes (Torres Strait) (Thomassin 2019), joint management in Victoria (Carter et al., 2022) and Indigenous-led wetlands management in world heritage areas (Bangalang et al., 2022).

This paper focuses on Indigenous Ranger groups and IPAs. In using the term 'Indigenous Ranger groups', I seek to reflect on-ground Ranger initiatives more broadly, rather than specifically referring to the IRP funded by the Australian Government. In general, I use the term 'program' to refer to government policy and funding activities, and 'initiatives' to refer to on-ground efforts and activities. Indigenous Ranger groups and IPAs have long been interconnected. Smyth defines IPAs as 'areas of land and/or sea that have been voluntarily dedicated by their Indigenous traditional owners, recognized by all tiers of Australian governments as protected areas' (2015, p. 73). IPAs are declared and managed in line with the International Union for Conservation of Nature (IUCN) guidelines as 'land and/or sea especially dedicated to the protection and maintenance of biological diversity and associated cultural resources, and managed through legal or other effective means' (as cited in Szabo & Smyth 2003, p. 3). It is common for IPAs to be managed by Indigenous Rangers, although Rangers do not exclusively work on IPAs and cover a vast range of tenures. Through Ranger groups and IPAs, Indigenous people respond to environmental and development concerns, share knowledge across generations, collaborate with diverse networks, and challenge current land management practice. Each initiative reflects its local context. Indigenous Rangers commonly undertake activities like fire and weed management, biodiversity monitoring, cultural heritage protection, biosecurity surveillance, tourism, junior ranger activities and enterprise

development. Some groups are also oriented to specific landscapes, such as seas, riverways, deserts, and rainforests.

At a national level, funding is primarily sourced through the IRP (previously Working on Country (WOC)) and/or the IPA Program. The policy history of these programs is dealt with extensively by others such as Altman et al. (2011), Altman and Kerins (2012), Bellchambers and Williamson (2021), Gorman and Vemuri (2012), Hunt (2012a), Mackie and Meacheam (2016), May (2010), Ross et al. (2009), Smyth (2011) and Williamson (2021). There is also a growing range of state and territory government funding including the Queensland Government's Indigenous Land and Sea Ranger Program, investment from the Western Australian Government's Department of Biodiversity, Conservation and Attractions, and the Northern Territory Government's Aboriginal Ranger Grants Program. While this literature review relates to these state and territory Indigenous Ranger programs, it does not specifically attend to Indigenous involvement in state and territory protected area management (see Bauman et al., 2013 on this topic). It is worth noting, however, that some IPAs overlap government national parks and/or marine parks, and that Indigenous Ranger groups work across a range of protected areas.

The current extent of Indigenous Ranger groups and IPAs is illustrated in Fig. 1. The dataset that informs Fig. 1. was created using data provided by the Australian Government's Department of Climate Change, Energy, the Environment and Water, and the NIAA, as well as desktop research into state and territory programs.³ It attempts to convey the diversity of current initiatives through visualising their host organisations and funding arrangements. Although Fig. 1 gives a sense of the distribution of current initiatives, pinpointing an approximate location does not accurately reflect the expanse of Country that Indigenous Rangers work across or is covered by IPAs. Further, Fig. 1 only represents initiatives that receive core government funding and have some public online record. I note current efforts by the NIAA to comprehensively map all Ranger programs, including independently funded programs, as part of their *Indigenous Ranger Sector Strategy* (NIAA 2022).

A central proposition of this paper is that Indigenous Ranger groups and IPAs are an example of Indigenous-driven and governed development. Following the work of Smith, this paper takes "development" to mean the ability of people to support themselves over time in ways they desire: to sustain their self-governance and to provide citizens with the opportunity to live productive, satisfying lives' (2021b, p. 226). Furthermore, within this research context, development 'emphasises beneficial change or transformation that makes life better in ways that Indigenous people want' (Smith 2021b, p. 226). In the volume *People on Country: Vital landscapes, Indigenous futures*, Altman (2012b) asserts the national ecological significance of the Indigenous estate and advocates a model of development that provides expanding opportunities to live and work on country. Similarly, in the *People on Country* volume, Kerins frames Caring for Country as an 'uniquely Indigenous development strategy assisting Indigenous people to take ownership of their own future' (2012, p. 41). Their work also cautions against external agendas encroaching on grassroots Indigenous objectives. More recently, research by Addison et al. found that Indigenous Rangers value their programs most in terms of 'control, leadership, empowerment and independence' and 'appropriate economic development' (2019, p. 98). These value referents reinforce that Indigenous ways of governing are critical in how initiatives are understood, established, and implemented by Indigenous people.

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³ Indigenous Ranger groups and IPAs are constantly evolving, meaning it is challenging to produce a comprehensive and up to date account. I have largely relied on information publicly available online. The location points for Australian Government funded programs are taken from Australian Government datasets including *Dedicated Indigenous Protected Areas, Commonwealth of Australia 2022*. Location points for state and territory funded programs are my best estimates. When it was difficult to ascertain locations, the host organisation location was used. Information regarding host organisations was derived from online sources and verified where possible using sites such as the Office of the Registrar of Indigenous Corporations (ORIC) public register, the Australian Charities and Not-For-Profits Commission register, and the Australian Governments' GrantConnect. If strong links were evident between an Indigenous Ranger group and an IPA, such as being listed together on the NIAA website, these programs were represented together as one icon. At times where it was difficult to ascertain if an Indigenous Ranger group receives on-going funding, or is currently active, I chose to represent the group. This map will inevitably contain errors where these errors exist in publicly available information, including not accounting for newly emerging groups and IPAs, or where I inadvertently made an error during research. The dataset could be refined through ground truthing.

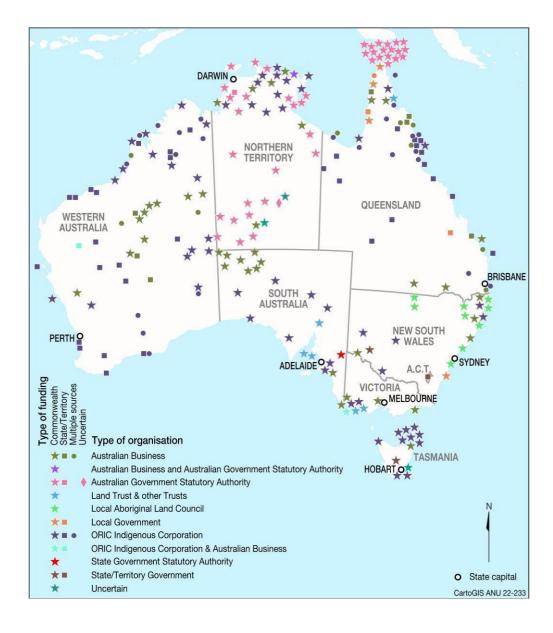


Figure 1 Indigenous Ranger groups and IPAs in Australia, August 2022

Source: Bellchambers and Australian Government data sets including *Dedicated Indigenous Protected Areas, Commonwealth of Australia* 2022. Map supplied by CartoGIS Services, The Australian National University. August 2022.

Indigenous governance

This review builds on understandings of Indigenous governance established in the Indigenous Community Governance (ICG) project, the Indigenous Governance of Development (IGD) project, as well as other relevant scholarship in Australia. Governance involves the exercise of power and entails rights, responsibilities, rules, decision-making, negotiation, planning, and institutions (Smith & Hunt, 2011, p. 2). Inevitably, ideas of governance are culturally loaded, and governance often brings to mind Eurocentric values of democracy and accountability or is associated with value judgments of good or bad (D. E. Smith, 2005, p. 11). The scholarship identifies Indigenous governance as a discrete form of governance 'that operates according to deeply embedded and commonly held Indigenous cultural principles, institutions (or rules), values and ways of behaving' (Smith & Hunt, 2011, p. 2). It often centres on ideas of nation-building and self-determination (see Bauman & Smith, *in press*; Murray & Evans, 2021; Smith 2021a). Indigenous governance exists in an intercultural environment where Indigenous people navigate non-Indigenous law, policy, practice, and institutions (Bauman et al., 2015, p. xiii).

The scholarship on Indigenous Ranger groups and IPAs does not adopt consistent definitions of governance, management, or Indigenous governance. In fact, many authors debate and critically analyse these terms (see Butterly, 2013; Macdonald, 2019; Nursey-Bray & Jacobson, 2014; B. R. Smith, 2005). The literature points out that concepts of governance and management are not culturally neutral and there is an on-going dominance of non-Indigenous viewpoints (Smith & Claudie, 2003). Cantzler quotes an Indigenous Country manager who states:

the word governance is a tricky one – some might even call it a weasel word. In Natural Resource Management when people talk of Indigenous governance more often than not they use blackfella names to refer to whitefella ways (2015, p. 80).

Baker, Davies and Young (2001) note that for non-Indigenous people, these words denote a kind of human control over resources that is not easily reconciled with the reciprocity and connection encompassed in caring for Country. The draft *Indigenous Ranger Sector Strategy* recognises that Ranger programs foster Indigenous governance, stating that 'through delivering ranger projects, organisations develop and strengthen culturally appropriate governance and decision-making frameworks that are also important for achieving communities' aspirations for the future' (NIAA, 2022, p. 7).

In this paper, I approach governance broadly, taking it to involve the collective rules and ways of working together that Indigenous people use to care for Country. As described earlier, Indigenous Country governance takes various forms across Australia as it deals with different actors, legislation, policy, and world views. While common definitions of governance are not shared in the literature, an emphasis on the importance of governance is. For example, Smyth and Jaireth suggest that 'successful governance of Indigenous lands is one of the greatest challenges facing Indigenous people in Australia' (2012, p. 58).

A conceptual framework of Indigenous governance principles

A conceptual framework of Indigenous governance principles was developed drawing on the above research foundation, in particular the work of Bauman and Smith (*in press*) currently underway as part of the IGD Project, as well as discussions with IGD Researchers Diane Smith and Jason Field (pers. comms. 2022). I use this conceptual framework to analyse scholarship on Indigenous Ranger groups and IPAs. The nine principles identified in this conceptual framework are:

- Relational networks
- 2. Cultural legitimacy or authority
- 3. Cultural geographies and networks
- 4. Governing powers
- 5. Institutions
- 6. Subsidiarity of decision making and power
- 7. Capability
- 8. Self-determined choice
- 9. Leadership

Principle 1: Relational networks

Relation networks encompasses the ways that governance is shaped by, and enacted through, variously located interdependent connections. Indigenous people draw on vast relational networks to govern Country in line with emerging, place-based needs and aspirations. As Smith points out, governing agency 'comes, first and foremost, through people and their relationality' (2011, p. 340). This principle relates to the ways governance is anchored as a circuitry of authority and law in ties between people, and between people and Country, which extend into the past and future. Here governance involves the enactment of relationships, roles, and obligations through interdependent connections. Through nodal governance Indigenous people activate networks at different scales and revitalise connections according to the dynamics of their context. At times this results in agreement, and other times disagreement, but the flexibility of nodal governance lends itself to supporting negotiation toward consensus (Smith & Hunt, 2011, p. 7).

Principle 2: Cultural legitimacy or authority

Cultural legitimacy or authority relates to the enduring primacy of Indigenous ontology and customary law in contemporary Indigenous governance. Bauman and Smith describe how this occurs 'where there is an alignment between the organisational governance structures and leadership, and Indigenous values and ideas of how power and authority should be exercised' (*in press*). This principle is manifest in inherited authority and knowledge by individuals and groups, although it does not denote unchanged tradition. Indigenous people draw on cultural systems in adaptive ways to enact governance in contemporary society (Smith & Hunt, 2011). Governance is seen to be culturally legitimate if it aligns with the perceived 'right way' and Indigenous people believe in its potential to get things done. This principle comes into play when outside intervention does not accommodate Indigenous ways of governing (Smith, 2011, p. 324).

Principle 3: Cultural geographies and networks

Cultural geographies and networks goes to the nexus of kin, culture, and law that shapes Country governance. Bauman and Smith refer to 'consideration of the diverse culturally-based scales, land-ownership relationships and networks that consistently come into play when Indigenous groups consider how best to organise their governance' (*in press*). Deep and distinct relationships with Country provide essential governance rules and structures.

Principle 4: Governing powers

Governing powers speaks to the potential for Indigenous people to have meaningful control, make decisions, resolve disputes, and exercise their rules. This principle entails recognised power sharing with governments, not just responsibility, accountability, consultation, or service delivery (Bauman & Smith, *in press*; Smith & Hunt, 2011, pp. 3, 12). Governing powers require an 'open and equal dialogue with Indigenous people about how they want to govern their own communities' (Smith & Hunt, 2011, p. 14). However, as Smith and Hunt (2011) suggest, the will to share power can be undermined by long-held deficit thinking about Indigenous systems of governance.

Principle 5: Institutions

Institutions relates to the importance of effective institutions for Indigenous people to exercise their ways of governing. Bauman and Smith define institutions as 'where there are credible and practically capable governing laws, rules, regulations, policies and standards that win the trust, support and commitment of group members and external stakeholders alike' (*in press*). The principle of institutions refers to structuring forces, from those of political and legal systems, to social norms and beliefs (D. E. Smith, 2005, p. 14).

Principle 6: Subsidiarity of decision making and power

Subsidiarity of decision making and power refers to the appropriate social level at which governance occurs on the ground. As D. E. Smith states:

Subsidiarity is a process of devolution within a system of decentred federalism which aims to provide the constituent units or parts with more effective control over their own spheres of action, and influence over the determination of the conditions of local action (2005, p. 3).

Subsidiarity is often described as governing as close to the unit of the individual citizen as is appropriate for the circumstances (Sullivan, 2012). This Indigenous principle can come into play and conflict with external aspirations for consultation and decision making to occur as a singular, community wide process (see Davies et al. 2011).

Principle 7: Capability

Capability refers to the full set of resources available for implementing governance. It entails a group of people's skills, understandings, expertise, and ways of working together. This aspect of Indigenous governance is emphasised by Bauman and Smith who state:

Governance is as much about the ability of nations, groups and their organisations to govern as it is about their rights and powers – specifically, the collective capability to decide for themselves what they want for the future and to then implement those decisions (in press).

This principle entails adequate and long-term capabilities to support Indigenous structures and systems of governance (Bauman & Smith, *in press*).

Principle 8: Self-determined choice

Self-determined choice is apparent when 'governance arrangements are determined through the free, prior informed consent (FPIC) of Indigenous people themselves' (Bauman & Smith, *in press*). Governing rules and institutions must emanate from informed choices by Indigenous people if they are to be deemed effective and

legitimate (Smith & Hunt, 2011). The processes of making well informed and self-determined choices can take time. In the report *Building Aboriginal and Torres Strait Islander Governance*, Bauman et al. find that:

a developmental, participatory approach which is strength- and place-based will lead to better outcomes, especially if governance solutions are the product of informed choice and adapted to the range of interests of those who are participating as members of organisations (2015, p. 118).

Principle 9: Leadership

Leadership involves standing strong for a collective vision, inspiring others to achieve shared goals, and succession planning. Smith and Hunt describe how leadership:

requires diplomacy, mediation and negotiation skills, knowledge borne of practical experience, multiple and deep relationships, personal charisma, the ability to balance competing interests and demands, and the capacity to mould consensus and mobilise people to get things done (2011, p. 8).

As Smith describes, 'governance is about more than just leadership, but without visionary, capable and accountable leaders it can quickly deteriorate into dysfunction and lack of direction' (2021c, p. 329). Indigenous leaders can be conceived as 'stewards' who work toward realising community aspirations, while balancing their personal cultural obligations (Bauman et al., 2015, p. 14). Further, Indigenous leadership involves complex intercultural work to uphold culturally legitimate ways of governing across relational networks from the local through to the global (Hill et al., 2011).

Methodology

This paper draws on principles of systematic literature review with methodological modifications to suit my research aims and context. I approached this research with the primary driving question: How are Indigenous Ranger groups and IPAs governed on the ground by the Indigenous people involved? First, I defined the conceptual framework of Indigenous governance principles detailed in the previous section. Following this, I undertook a literature search of two databases, ANU's SuperSearch and Google Scholar, using Boolean operators. This search was supplemented with other relevant literature. All sources were systematically screened to identify material related to exercises of Indigenous governance within Indigenous Ranger groups and IPAs. The literature was then reviewed, coded in Nvivo using the conceptual framework, analysed, and written up. The methodology and analysis is ultimately infomed by a westcentric epistemology and as such has limitations in reflecting Indigenous perspectives and experiences. Wherever possible I have endeavoured to highlight Indigenous voices in the research method.

Identification of literature

I conducted targeted searches in two databases, ANU Library's SuperSearch and Google Scholar, using Boolean operators. Both searches had a pre-set date range of 1983–2022 to cover the entire period since the first recognised Indigenous Ranger group was established. The search was carried out in February 2022 and as such only reflects literature published up to this date.

The first search was conducted using the ANU Library's SuperSearch database, which provides access to the ANU Library's complete collection, using the following Boolean search terms:

("Indigenous Ranger*" OR "Aboriginal Ranger*" OR "Torres Strait Islander Ranger*" OR "Indigenous Protected Area*") AND (self-determin* OR governance OR leadership OR network* OR relation* OR family OR authority OR decision OR power) AND (Australia)

This search returned 2,669 results, reduced to 656 when filtered for scholarly and/or peer-reviewed material. The second search was conducted using Google Scholar and the following Boolean search terms:⁴

("Indigenous Ranger" OR "Indigenous Rangers" OR "Indigenous Protected Area" OR "Indigenous Protected Areas") AND (self-determination OR self-determined OR self-determining OR governance OR leadership OR networks OR networked OR networking OR relations OR relationship OR relationality OR family OR authority OR decision OR power) AND Australia

This search returned 'about 2420' with the first 1000 of these accessible, i.e., 100 pages of references on Google Scholar. Google Scholar does not allow the user to filter for scholarly and/or peer-reviewed material, so this criteria was manually applied during screening. At the end of these searches, 1656 records were imported into the reference management software EndNote 20 and subsequently 257 duplicate records were removed.

Screening

1399 records from Endnote 20 were imported into the systematic review management software Covidence. These records were screened according to the inclusion/exclusion criteria in Table 1. The first level of screening focused on review of record title and abstract according to the above inclusion/exclusion criteria. Jason Field assisted with this process. During the first level of screening 930 titles were found to not meet the inclusion criteria and 4 records were removed as they were not published in English. I then undertook second-level screening which involved review of full text. Five records were excluded at this stage as they could not be accessed. During the second-level screening a further 292 sources were removed based on the inclusion/exclusion criteria. An additional nine relevant sources were identified based on my existing knowledge of the scholarship and included for analysis. At the end of this process, 177 sources were identified for data extraction and analysis.

Table 1 Inclusion/exclusion criteria for the literature review

Inclusion/exclusion criteria	Description	
Type of source	This review was limited to scholarly and peer-reviewed sources and, as a rule, submissions to government were excluded. This was a pragmatic choice driven by time and resource constraints. I recognise the wealth of knowledge that exists within non-academic sources, particularly in this topic area. Within the scholarly and peer-reviewed sources, no exclusion criteria were applied in terms of publication quality, style or methodology.	
Date range	I limited sources to the date range 1983–2022 to cover the entire period since the emergence of the first Indigenous Ranger group.	
Subject matter	The review was limited to material that explicitly dealt with Indigenous Ranger groups or IPAs in Australia and matters of Indigenous governance.	

Data extraction and analysis

A total of 174 sources were uploaded into Nvivo as individual cases with attributes for year of publication and region of focus.⁵ Three hard copy sources were manually coded with case attributes added to the data set. Summaries of the literature by attribute and attribute values are presented in Fig. 2 and Table 2 in the Results section of the paper.

⁴ Unfortunately, Google Scholar does not provide guidance as to how their Boolean operators are best combined. Unlike ANU SuperSearch and other scholarly databases, * is not used as a truncation symbol.

⁵ Note that, for ease of analysis, the number of sources listed here includes two edited volumes where multiple chapters held relevance to the literature review. Individual chapters are referenced accordingly in the discussion section of this paper.

An initial coding scheme was developed in Nvivo with nodes for each of the nine identified principles of Indigenous governance. Child nodes were defined and refined during the coding process in line with emerging themes for each principle. The coding unit selected was sentences to pinpoint specific material relevant to the research focus. Once coding was completed across the 177 sources, the material for each node was extracted, reviewed, and written up. Through this process I sought to make connections across the literature to identify key ideas, issues, and poignant examples, as well as tensions and gaps. Essentially, this analysis aimed to synthesise themes across the 177 sources to produce broader conclusions about how Indigenous governance principles and practices appear and are discussed in the scholarship.

Results

Although the grassroots history of Indigenous Ranger groups has been traced back to 1983, with initiatives gaining momentum throughout the 1990s, these on-ground initiatives are only discussed in academic scholarship from the late 1990s onwards. The earliest sources reviewed were published in 1998 and 1999. These results indicate that early Indigenous Ranger groups were not subject to dedicated scholarly attention and highlights the need for review of grey literature to better understand the emergence of these initiatives. It is possible that my search may not have captured all relevant material where early initiatives adopted different terminology or were only referred to in terms of previous funding paradigms. For example, many early Indigenous Ranger groups were funded through Community Development Economic Projects (CDEP), and I might not have picked up scholarship referring to efforts under this umbrella only. I relied on the word 'Ranger' to identify material, as this term has long been associated with this kind of Indigenous Country governance. Fig. 2 shows a general trend of growth in scholarship over time and illustrates distinct peaks in 2012 (17 sources), 2013 (15 sources), and later in 2019 (15 sources). To some extent, growth in scholarship appears to follow behind the on-ground expansion of Indigenous Ranger groups and IPAs. For example, the peaks in scholarship in 2012 and 2013 could reflect the establishment of WOC in 2007, a program which significantly increased resourcing and recognition for Indigenous Ranger groups (Altman 2012a). Fig. 2 excludes 2022 as only literature published in the first two months of that year was reviewed (6 sources in total).

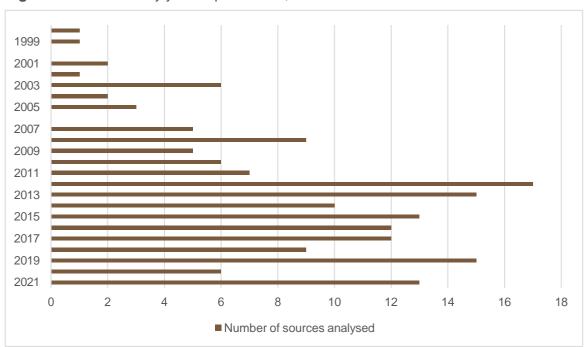


Figure 2 Literature by year of publication, 1998–2021

For this review, I also classified the literature in relation to region of focus and these attributes are summarised in Table 2 below.

Table 2 Literature by region of focus

Region	Number of sources analysed
Australian Capital Territory	0
New South Wales	5
Northern Territory	56
Queensland	19
South Australia	7
Tasmania	1
Victoria	0
Western Australia	13
Multiple – northern Australia	9
Multiple – southern Australia	3
Nationwide	64

In determining region of focus, if a source focused on one state or territory only, it was attributed to that state or territory. If a source discussed examples in multiple states or territories located across northern and southern Australia or referred to IPAs and Indigenous Ranger groups in general terms, it was categorised as 'Nationwide'. If a source referred to multiple examples in either northern or southern Australia it was categorised as 'Multiple - northern Australia' or 'Multiple - southern Australia'. Determining region of focus in this way was a pragmatic choice based on time and resource constraints. Therefore, papers categorised as 'Multiple - northern Australia', 'Multiple - southern Australia' or 'Nationwide' will contain material about individual states or territories that is not reflected in the total count for those states or territories. As such, Table 2 provides a broad guide to the regions featured in the literature rather than a precise, comprehensive account. Still, it does tell us something about the regions most discussed in the literature and allows a level of comparability with the current distribution of Indigenous Ranger groups and IPAs. This comparison is drawn out in Fig. 3 and Fig. 4. Note, for the purposes of this analysis, IPAs that are managed by a specific Indigenous Ranger group are combined and referred to as one initiative. Additionally, to make Fig. 3 and Fig. 4 more directly comparable, I have excluded the categories of 'Nationwide' (64), 'Multiple - northern Australia' (9) and 'Multiple - southern Australia' (3) as detailed in Table 2 (a total of 76 sources). Therefore, as noted for Table 2, the number of references attributed to individual states and territories includes scholarship that only refers to these states and territories.

While noting the above caveats, comparison of Fig. 3 and Fig. 4 illustrates a number of interesting trends. Fig. 3 indicates that the literature has focused most on the Northern Territory (56), Queensland (19), and Western Australia (13), while Fig. 4 shows us that states and territories with the highest number of initiatives are in Queensland (70), Western Australia (63) and Northern Territory (57). The prominence of Northern Territory-focused scholarship does not necessarily reflect the distribution of current initiatives but is likely influenced by the longstanding nature of Northern Territory initiatives and/or other conditions that enable or encourage research in the Northern Territory. We can also see that little or no research has solely focused on Indigenous Ranger groups and IPAs in the Australian Capital Territory (ACT) (0), Victoria (0), Tasmania (1) and New South Wales (5), although there are 2 initiatives in the ACT, 8 in Victoria, 13 in Tasmania, and 21 in New South Wales. Therefore, this analysis suggests scholarship does not reflect the diversity of initiatives operating across these jurisdictions, pointing to a gap in current information. Many of these initiatives are longstanding.

Hunt (2012b) makes the point that many developments in Indigenous Country governance occurred concurrently in southern and northern Australia. While I believe this is an important consideration, and something that we must work to address in scholarly practice, the methodological limitations associated with how region of focus is defined means that these findings must only be taken as broad trends. It is also worth reiterating that this review specifically concerns Indigenous Ranger groups and IPAs and therefore does not take in the broader scholarship on Indigenous Country governance in southern parts of Australia.

Figure 3 Literature by region of focus, 1998–2021 (excluding Multiple – northern Australia, Multiple – southern Australia, and Nationwide)

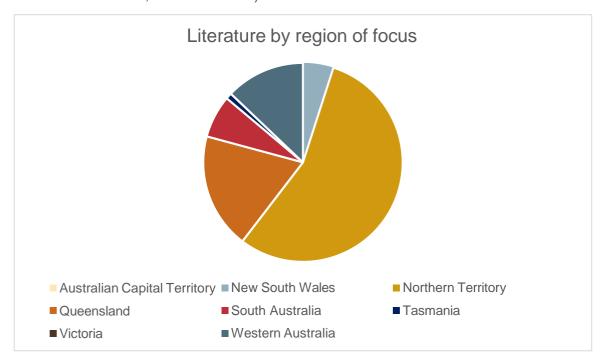
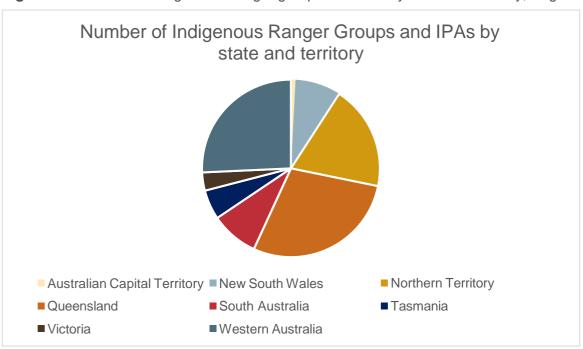


Figure 4 Number of Indigenous Ranger groups and IPAs by state and territory, August 2022



Discussion

This discussion explores how each of the nine Indigenous governance principles outlined in the conceptual framework were evidenced in the literature. For each principle, I present key ideas, issues, and poignant examples, as well as the tensions and gaps that emerged in the scholarship. The following qualitative analysis is presented under a series of subheadings that reflect the child nodes defined during the coding process.

Principle 1: Relational networks

Relational networks encompass the ways that Indigenous governance is shaped by, and enacted through, variously located interdependent connections. Indigenous people draw on vast relational networks to govern Country in line with emerging, place-based needs and aspirations. The literature documents how Indigenous Ranger groups and IPAs are embedded in relational networks from the local to the global. This principle begins by looking at local relational networks, paying attention to the central role of Elders and intergenerational relationships, before turning to regional and national collaborations and external partnerships.

Local relational networks

Indigenous Ranger groups and IPAs are anchored in local relational networks. These networks are visible in structured participatory processes as well as the everyday negotiations that occur around the 'kitchen table' (tebrakunna country et al., 2016, also Gould et al., 2021). Stakeholder feedback on the Indigenous Ranger Sector Strategy notes 'the decision-making authority of traditional owners' and need to engage with traditional owners as part of an 'Indigenous-led approach' (GHD, 2022, p. 8). Although the scholarship documents some concerns that formalised Indigenous Ranger groups and IPAs can function to reduce broader community participation in Country governance (Davies, 1999; Fache, 2014; Gorman & Vemuri, 2012), overwhelmingly the literature describes Indigenous Rangers governing Country through dense community connections. With that said, I note that the personal, flexible, small-scale, and time-sensitive communications that regularly occur within local community – often in parallel to public processes – can easily fly under the radar of outside observers and may not be as readily documented in the academic literature. This observation holds for Indigenous governance more broadly. For example, Smith describes how, from the beginning of colonisation and through to present day, Indigenous governance 'has often seemed invisible, unknowable, and underdeveloped to non-Indigenous Australians' (2008, p. 78).

In discussing the Yugul Mangi Rangers, Macdonald refers to the Ranger Program as 'a means of (re)connecting to Country to meet obligations to kinship, ancestors and Country itself' (2019, p. 242). In Kowanyama, local networks are embraced through an 'open-door policy' where community members have ready access to Ranger activities and data (Davies & Drewien, 2001, p. 51). Such connections are interdependent and mutually reciprocal as traditional owners express the need to support Rangers when morale is low (Maclean et al., 2021). Similarly, Patterson and Hunt report that Banbai people's success in governing Country is 'first and foremost because of our Aboriginal community; they wanted us to succeed and with them backing us it has been encouraging' (2012, p. 210). A Baniyala Elder describes the role of Rangers and their relationship with traditional owners:

This country must be cared for. If rangers come around, they must really strongly believe what the stories are about the country. And I think they are the people to take care, to look after those countries. If they have (a) boat, if they have cars. By the authority of the TO [traditional owner]. The TOs are here in homeland and they should work together (Barber, 2015, p. 37).

The ongoing ways that community ties shape Ranger work is illustrated by a traditional owner in the Northern Territory Top End:

Consultation takes weeks, maybe months, we gotta bear that, and we gotta wait a long time. That's how strong old people are for land, it's very strong for country, it's not necessarily one person. That's what I meant, it's not necessarily one person. All the family got to be involved because that's why it takes so long. I found that because the group runs into problems because they haven't had that consultation. (Sithole et al., 2008, p. 42)

At times, the demands and expectations of local networks emerged in the literature. For example, when community members preferred Indigenous Rangers were based in homelands not towns (Barber, 2015, p. 67), sought greater communication about specific Ranger activities (Austin et al., 2017), or felt that IPA and Ranger resourcing disproportionality benefited some community members over others (Braham, 2007; also Fache, 2014; Muller, 2003; Robinson & Munungquriti, 2001).

The scholarship contains an extensive catalogue of on-Country networked consultation and participatory planning. Here I reference a few cases from a rich collection. In Hopevale, Cape York, Indigenous people used local engagement processes to create a Traditional Owner Hunting Plan, including a Turtle and Dugong Hunting and Management Council. In an act of 'reverse-consultation', traditional owners then took the plan to government (Nursey-Bray, 2003). This example demonstrates strong local vision and self-determined control over decision making on matters of local importance. In the east Kimberley, Miriuwung-Gajerrong people rejected existing government guidelines for park management plans and instigated their own participatory model that included visioning, photography, audio recording, and on-Country discussions and workshops (Hill, 2011). Similarly, in northwest South Australia, Anangu people developed the Anangu Pitjantjatjara Yankunytjatjara plan to govern their Country using processes such as cultural mapping, questionnaires, discussion, surveys of traditional ecological knowledge, interviews, and materials in language (Wilson & Woodrow, 2009). Wuthathi people, of Shelburne Bay, Cape York, undertook layered engagement processes across a large geographic area to develop their management strategy. This spanned from small-scale consultations to cultural group meetings and large workshops (Nursey-Bray et al., 2009). Wunambal Gaambera people, on the Kimberley coast, undertook a Healthy Country planning process that involved workshops across 12 traditional owner groups over two years. In a subsequent participatory evaluation, it was reported that 'most people felt part of the healthy Country work as traditional owners of the Country and/or had been involved in some of the activities' (Austin et al., 2017, p. 128). Together these examples illustrate that consultation is not a once-off event nor a singular process that involves all group members. The nature of relational governance means that consultation occurs across distinct but intersecting layers of the network. In this way, consultation progresses over time, building up a consensus or a fuller view of options, and allowing each layer of the network space to deliberate before any substantive decision is made. I return to the role of these participatory process in supporting FPIC in Principle 8: Self-determined choice.

Governing Country activates local relational networks beyond those linking Indigenous community and kin. Indeed, that is the very characteristic of relational networks – they have bridging points that lead into other networks, both Indigenous and non-Indigenous. The literature documents how Indigenous Rangers work closely with local agencies such as fire and emergency services, schools, language centres, Shire Councils, local youth, sporting, and recreational programs. For example, a social network analysis of the Adjumarllarl Rangers' by Woodward (2008) illustrates how fire management relies upon networks with pastoralists, tourism operators and community members. Additionally, the literature suggests that such interpersonal relationships across different local networks can foster meaningful cross-cultural exchanges that benefit both individuals and broader community relations (see Barnes et al., 2020; Hill, 2011; Hunt, 2010).

The role of Elders

Not all individuals are equal in their knowledge, experience, and the influence they exert in relational networks. For example, Elders are often recognised as having deep understandings and a highly valued set of skills for governing Country. In relational networks, Elders are often nodal points of authority and power in determining how Country is properly governed. Therefore, it is not surprising that the literature describes a key role for Elders in the governance of Indigenous Ranger groups and IPAs.

In a community-driven evaluation of Indigenous Ranger groups in the Northern Territory Top End, Sithole et al. (2008, p. xi) found that 'high elder involvement' is critical to success. As knowledge holders, Elders have an influential role in mentoring and teaching Rangers (Barber, 2015; Davies et al., 2011; Ens, Towler, et al., 2012; Hunt, 2010; Marika et al., 2012; Nursey-Bray et al., 2009; Pyke et al., 2018; Yunupingu & Muller, 2009). Across the literature there were descriptions of Elders providing oversight, endorsement, and active involvement in Ranger activities (Altman, 2012b; Ayre et al., 2021; Blackwood et al., 2022; Buchanan & May, 2012; Carmichael et al., 2020; Carmichael et al., 2017; Cole & Wallis, 2019; Daniels et al., 2022; Davies, 1999; Ens, Daniels, et al., 2016; Green et al., 2012; Hunt, 2010; Kerins, 2012; Macdonald, 2019; Marum, 2014; Pyke et al., 2017; Woodward et al., 2020). A lack of input from Elders is identified as a risk and challenge for some Ranger groups (Fache, 2014; Maclean et al., 2021; Sithole et al., 2008). The ongoing authority of Elders provides an operating mandate for Rangers and reinforces the status of Elders. This dynamic is observed by Barber (2015) and highlighted in his interviews with Yirralka Rangers. As one Ranger stated:

We go and let the elders know, what that djama (work) is, what the program is. There are two ways for that work. We ask the elders what is in their mind for their jobs, and we have our own program, our ranger jobs. We work it out, that program, from there (Barber, 2015, p. 53).

Further, according to another Yirralka Ranger:

We are not just listening to the napaki [non-Indigenous people] (as) they don't have the knowledge of the land. The ngalapalmi [old people] got that knowledge of the secret places and the names when we are working along the coast (Barber, 2015, p. 41).

Intergenerational relationships and knowledge transfer

The governing role of Elders is entwined with the importance of intergenerational relationships and knowledge transfer within Indigenous Ranger groups and IPAs (Addison et al., 2019; Barber, 2015; Barnes et al., 2020; Davies et al., 2011; Hill et al., 2014; Sithole et al., 2008; Skroblin et al., 2022; Sloane et al., 2021; Smyth, 2014; Storrs et al., 2002; Szabo & Smyth, 2003; Wilson & Woodrow, 2009). I note that consultation feedback on the *Indigenous Ranger Sector Strategy* emphasises the significance of 'cultural knowledge transfer' (GHD, 2022, p. 7). The transfer of knowledge across generations is a critical component of governing Country. Mechanisms such as storytelling are not only an active mode of learning but an important vehicle to maintain knowledge systems of Country and proper modes of governance. Langton et al. frame IPAs as providing:

an organisation structure which encourages intergenerational dialogue between elders and the youth who are seeking to understand more about their country and the stories and knowledge of the old people. For instance, when traditional owners are able to involve their children in field trips, they are also transferring knowledge across generations and in many cases strengthening the knowledge of local languages (2005, p. 42).

The literature is brimming with stories of Elders, men, women, and children, accompanying Indigenous Rangers on Country and engaging in exchanges of customary knowledge and practice (Altman, 2012b; Braham, 2007; Buchanan & May, 2012; Davies & Marty, 2004; Ens, 2012a; Fogarty, 2012; Green et al., 2012; Hunt, 2012b; Kerins, 2012, 2015; Kerins & Green, 2018; Macdonald, 2019; Maclean et al., 2021; Marika et al., 2012; McKemey & Patterson, 2019; Rostron et al., 2012; Talbot, 2017; Walker, 2010; Williamson, 2014; Wilson & Woodrow, 2009; Wohling, 2001; Woodward, 2019; Woodward et al., 2020). Being on Country is central to practices of intergenerational knowledge transfer and reinforces Country as foundational in the activation and resurgence of customary knowledge, practice, and governance. I return to this in Principle 3: Cultural geographies and networks. Many interactions between Rangers and the younger generation extend to non-Indigenous children. For example, a Senior Ngunnawal Ranger from the Murumbung Yurung Murra Rangers tells Williamson:

When kids come out here, white kids, black kids, we tell them the old stories. We like sharing those stories cause it keeps them alive. If we didn't tell them, they'll die and apart of us dies. That's why we offer them freely to everyone (2014, p. 48).

Rangers regularly engage with non-Indigenous education systems and institutions through initiatives such as 'Junior Rangers', 'Learning on Country', 'Galtha Rom', and 'Two-way Science' (Altman & Fogarty, 2010; Ayre et al., 2021; Caron et al., 2021; Davies & Marty, 2004; Fogarty, 2012; Hill et al., 2013; Hunt, 2010; Maclean et al., 2021; Maclean et al., 2013; Marika et al., 2012; Patterson & Hunt, 2012; Schwab & Fogarty, 2015; Walker, 2010; Woodward et al., 2020).

Regional relational networks

Indigenous Ranger groups and IPAs activate regional-level networks to manage shared species and geographies, tackle landscape-scale environmental challenges, and provide political solidarity in moments of need. These networks often traverse complex institutional and jurisdictional settings. Indigenous regional institutions act as a supra-governing network for Rangers. A common example within the literature is the North Australian Indigenous Land and Sea Management Alliance (NAILSMA). NAILSMA began in 2001 through the leadership of several Indigenous corporations managing land in northern Australia and it has supported Indigenous Ranger groups and IPAs through advocacy, training, data and knowledge sharing (Davies & Marty, 2004; Hill et al., 2013; Kennett et al., 2010; Kennett et al., 2011; McIntyre-Tamwoy et al., 2013; Nursey-Bray & Jacobson, 2014; Smyth, 2011; also Yanner, 2007). Some other examples of regional networks and institutions initiated to govern Country described in the scholarship include:

- the Strategy for Aboriginal Managed Lands in South Australia developed by an alliance of Indigenous landholding organisations that resulted in a tailored Natural Heritage Trust grants program (Baker et al., 2001, pp. 343-344)
- collective advocacy of Sea Country Rangers in Arnhem Land for regional biosecurity management (Muller, 2008b)
- a Mitchell River Catchment Conference spearheaded by Kowanyama Land and Natural Resource Office (KLARNO) to bring together diverse stakeholders (Davies & Drewien, 2001)
- the Murray Lower Darling Rivers Indigenous Nations initiative spurred by 10 traditional owner groups from the Murray River (Hunt, 2012a, 2012b; Smyth, 2011)
- collaboration between three Ranger groups to manage the Arafura Swamp wetlands (Weston et al., 2012)
- the Green Teams Alliance in NSW designed to support and facilitate opportunities for up-and-coming Indigenous Green Teams (Hunt, 2012b)

- the Kimberley Indigenous Saltwater Science Project established in response to externally-run research in the region, which included a Traditional Owner Working Group that identified local research priorities and researchers of choice (Austin, Robinson, Matthews, et al., 2019)
- governance of the Girringun IPA, coordinated through the Girringun Aboriginal Corporation, which brings together eight different representative bodies and groups (Hill et al., 2016)
- the Carpentaria Ghost Net Programme created in response to Indigenous concerns regarding ghost nets in the Gulf of Carpentaria (Hill et al., 2013; Hoffmann et al., 2012)
- the Banbai Rangers, New South Wales, who drew on expertise from Indigenous networks when commencing cultural burns on the Wattleridge IPA (McKemey & Patterson, 2019).

An even greater diversity of networks exists outside the academic literature reviewed, with examples such as the 10 Deserts Project (see 10 Deserts Project, *n.d.*) or the Queensland Indigenous Womens Ranger Network (QIWRN) (see QIWRN, *n.d.*). Importantly, it is Indigenous initiative and affirmation of collective purpose that drives these regional networks. Where regional governance structures are externally imposed, they may not hold the same efficacy and legitimacy for governing Country (see B. R. Smith, 2005; also Kerins, 2015).

While the literature notes how regional, national, and even international networks can be fostered through organised conferences and workshops (see Daniels et al., 2012, p. 182; Marika et al., 2012, p. 137, Woodward 2020 p. 92-94), these initiatives were not described in depth within the academic scholarship. Some examples I have encountered in my professional experience include the annual IPA Managers' Meetings funded by the Australian Government in the early years of the IPA Program; annual conferences for Indigenous Rangers undertaking biosecurity activities across northern Australia (funded by the Australian Government's Department of Agriculture, Fisheries and Forestry); and the annual Queensland Indigenous Land and Sea Ranger Conference convened by the Queensland State Government. The benefits of this kind of peer-to-peer learning were outlined by Indigenous Country Managers at the Kimberley Ranger Forum in 2017 and are reiterated in Commonwealth Scientific and Industrial Research Organisation's (CSIRO) best practice guidelines (see Woodward et al., 2020). The literature points to a role for governments in fostering Indigenous networks by resourcing groups to come together (see Bauman & Smyth, 2007; Bellchambers & Williamson, 2021; Ross et al., 2009; Smyth, 2011). The draft *Indigenous Ranger Sector Strategy* lists 'access to ongoing opportunities for knowledge-sharing and development of communities of practice among ranger groups' as an outcome within the Strong Country theme (NIAA, 2022, p. 29).

External partnerships

Indigenous people have developed expansive relational networks with external actors in their pursuits to govern Country. The draft *Indigenous Ranger Sector Strategy* recognises the role of 'collaborative alliances' and 'Australian and international Indigenous land and water management and biodiversity conservation networks' in the Ranger Sector (NIAA, 2002, p. 15). Over half of the papers reviewed described external partnerships and collaborations. These relational networks span international and national non-government organisations, local, state and territory government, natural resource management (NRM) groups, multinational corporations, industry, local business, research and education institutions. Through such collaborations Indigenous people gain resources, skills, and exert influence (Davies et al., 2011). In very real ways, these networks are necessary to undertake effective Country governance. For example, partnerships and paid contracts provide essential supplementary funding (Barnes et al., 2020; Langton et al., 2005; Marum, 2014; Woodward, 2019) and mobilise governing powers not held by Indigenous people (discussed further in Principle 4: Governing powers). Indigenous people might seek corporate and philanthropic investment to diversify their funding base and strategically gain independence from governments (Addison et al., 2019; Concu, 2013; Kerins, 2013; Kerins,

Green, 2018; Macdonald, 2019; Sadler, 2019; Smith & Claudie, 2003; Yanner, 2007). Long-term relationships with researchers can be pivotal for developing expertise, maintaining robust projects, and finding new avenues to showcase the success of Indigenous Ranger groups and IPAs (Davies, 1999; Lindsay et al., 2022; Williamson, 2021; Woodward, 2019). There is mutual dependence on these connections as external actors seek to access Indigenous lands, fulfil institutional protocols and policy objectives, and meet the requirements of corporate social responsibility.

Indigenous Ranger groups and IPAs are frequently described as a platform to connect diverse people and opportunities (Altman & Kerins, 2012; Gould et al., 2021; Griffiths, 2017; Kerins, 2013; Ross et al., 2009; Sithole et al., 2008; Williamson, 2021). In fact, this has been a core element of IPAs since their inception, as Thackway and Brunckhorst describe:

It is envisaged that the IPA Program will foster agreements between indigenous land managers and other stakeholders including governments and the community to provide resources and technical support to assist indigenous land holders to manage their lands as a protected area (1998, p. 175).

Gould et al. describe Sea Country IPAs as engaging:

in a form of governance, whereby an Indigenous group creates an institutional space within which they can determine appropriate internal decision-making structures and their own cultural and environmental management priorities and strategies. They then create pathways to link this institutional space to external agencies, in order to work collaboratively with other parties where mutual interests and complementary capabilities can be identified (2021, p. 12).

Each IPA has an Advisory Committee that typically includes a range of non-local stakeholders (see Bauman & Smyth, 2007 for a detailed case study). This design was encouraged by government to facilitate partnership development and provide a mechanism for Indigenous people to receive external information and advice (Walker, 2010). Partnership development is often stated as a goal in Indigenous Country plans (see Addison et al., 2019 for examples; also Bauman & Smyth, 2007). A senior Wunambal man describes the importance of broad relational networks to the Wunambal Gaambera Healthy Country Project:

We got to go back to country and look after our place. That's where we get more stronger – from the country and from the spirit in our country. We got to work all together now and find somehow to protect them. Not just the land but the islands too, and look after the songs – keep them alive. That's why we need others to give us a hand to see what to do – business way you know...When we're helping each other we can really go out and do it...I can't do it by myself – I need support too. From people who maybe want to help us – how to set up and all that (Moorcroft et al., 2012, p. 19).

Many papers point to the role that non-Indigenous facilitators, coordinators and knowledge brokers can play in forging and managing external relationships. On the flip side, if these intermediary roles are not properly executed, they can divert power and control away from Indigenous people (see Woodward, 2008 for in-depth analysis; also Davies et al., 2011; Davies et al., 2013; Davies et al., 2018; Ens, Finlayson, et al., 2012; Fache, 2014; Green et al., 2012; Hill et al., 2013; Marum, 2014; Reed et al., 2021; Robinson et al., 2016; Rostron et al., 2012; Sithole et al., 2008; Walker, 2010; Wohling, 2001; Woodward, 2019). As a result, these intermediary roles have the potential to stifle Indigenous ways of governing.

Relational networks exist between Indigenous Country managers across the globe (see Woodward et al., 2020). While these international connections do not appear extensively in the literature, in my experience, they can be meaningful and empowering relationships that enhance Indigenous Country governance. In the scholarship I found examples of knowledge sharing between Native American leaders and traditional owners when KLARNO

at Kowanyama, Western Cape York, was first developed (Davies & Drewien, 2001), and more recently in relation to fisheries (Maclean et al., 2021), as well as between northern Kaanju people and Indigenous people in California in relation to fire management (Burr, 2013). A Djelk Ranger makes the contemporaneous importance of these connections clear:

We have to involve other indigenous people, Indians, Muslim, not only Aborigines. Indigenous people from all over the world; they have got the same problem, with climate change... it is making culture drop down really quickly, all over the world, not only us mob (Carmichael et al., 2017, p. 1208).

Indigenous people are discerning in forming connections that bring valued expertise and opportunities. Sometimes that means *not* taking on projects: 'we knocked back a carbon project, there were too many players, too much risk, logistically and commercially' (Maclean et al., 2021, p. 50). At other times it means growing at a sustainable pace, as a Ranger coordinator states:

we would need to make sure that we grow Girringun properly... to be able to handle that and maintain that because the last thing we want to do is take on any of these things and have them fail (Taylor, 2014, p. 86; see also Hunt, 2012b).

Dhimurru evaluates partners in terms of 'similarly effective and well-established mechanisms for good governance' (Hoffmann et al., 2012, p. 46). Put succinctly: 'partnerships for partnerships sake are "humbug"' (Sithole et al., 2008, pp. 65-66; see also Wohling, 2001). These examples reflect self-determined governance in that Indigenous people exercise strategic decision-making in saying no to partnerships or funding that they evaluate as not serving their objectives.

The literature highlights the importance of respectful relationships that elevate Indigenous interests and recognise Indigenous governing authority. I read about the time it takes to build rapport, the importance of cross-cultural understanding, reciprocity, and flexibility (Bauman & Smyth, 2007; Bock et al., 2021; Davies et al., 2011; Ens, 2012a; Ens, Finlayson, et al., 2012; Hill, 2011; Hill et al., 2013; Hoffmann et al., 2012; Hunt, 2012a; Lindsay et al., 2022; Muller, 2008a; Murley et al., 2022; Nursey-Bray & Rist, 2009; Nursey-Bray et al., 2009; Robinson et al., 2016; Storrs et al., 2002; Taylor, 2015; Wohling, 2001; Woodward, 2019; Woodward et al., 2020; Zurba, 2010). Outsiders must be willing to leave behind conventional ideas of governance, sustainability, preferences for western science, and ultimately, hand over control to Indigenous people (Austin, Robinson, Matthews, et al., 2019; Bauman et al., 2013; Muller, 2014; Wohling, 2001). Time spent together on Country is critical. A Miriuwung-Gajerrong traditional owner explains that 'when you are out on country with people, they can judge if that person is genuine, you know if it's there' (Hill, 2011, p. 80). A Girringun traditional owner urges that 'government needs to go to these places so that they can understand the importance of these places. They need to experience something if they're going to care for it' (Zurba, 2010, p. 61). Through trusting relationships, decision making becomes more inclusive and agreement more likely (Hoffman 2012). Relationships can be strained by pressured timeframes, limited budget, and the imposition of activities that don't align with local objectives for Country governance (Austin, Robinson, Tofa, et al., 2019; Ens, Finlayson, et al., 2012; Macdonald, 2019; Robinson et al., 2016; Zurba, 2010). Importantly, the literature describes how on-Country engagement and relationship building between Indigenous people and government was critical in the development of both WOC and the IPA Program (Mackie & Meacheam, 2016; Szabo & Smyth, 2003).

Principle 2: Cultural legitimacy or authority

Cultural legitimacy or authority relates to the enduring primacy of Indigenous ontology and customary law in contemporary Indigenous governance. This principle was so pervasive that it crosscut each of the other identified Indigenous governance principles. The importance of cultural legitimacy in Indigenous Ranger groups

and IPAs is recognised by Indigenous people as well as government staff and external investors (e.g. Austin, Robinson, Tofa, et al., 2019; Hill et al., 2011; Hill et al., 2013). This section explores how initiatives are underpinned by cultural laws and authority, the primacy of customary knowledge and practice in Ranger activities, and the concept of 'two ways'. Finally, I consider concerns that the disproportionate participation of men in Indigenous Ranger groups and IPAs threatens the cultural legitimacy of these initiatives.

The foundation of Indigenous law

This review found extensive evidence that Indigenous people govern, and aspire to govern, Country in ways that adhere to their local custom and law. I traced the application of traditional law from the Torres Strait, into Cape York, the Wet Tropics, and along the Queensland coast (Bock et al., 2021; Robinson et al., 2016; Smith & Claudie, 2003; Talbot, 2017). Indigenous law circulates in New South Wales, the ACT, throughout Victoria, and down into Tasmania (Hunt, 2012a; *tebrakunna country* et al., 2016; Vivian, 2014; Williamson, 2014). It is enacted in the Western Australian desert, throughout the Kimberley, across Arnhem Land and into the Gulf of Carpentaria (Austin et al., 2017; Carmichael et al., 2017; Kerins & Green, 2018; Muller, 2012; Noble, 2001). Indigenous law is actively used to govern Country in Central and South Australia (Muller, 2003; Pleshet, 2018; Walker, 2010). It is clear that Indigenous law and custom underpins Country governance through Indigenous Ranger groups and IPAs across diverse contexts. The central role of Indigenous law and cultural authority was inscribed by Indigenous delegates in their 1997 definition of the IPA Program:

An Indigenous Protected Area is governed by the continuing responsibilities of Aboriginal and Torres Strait Islander peoples to care for and protect lands and waters for present and future generations (Szabo & Smyth, 2003, p. 4).

Proper Country governance must empower the 'right to speak for country' (Davies et al., 2011, p. 421). I read how tensions arise when Indigenous law and governance is not accounted for or supported by outside actors (Corrigan & Hay-Edie, 2013; Green et al., 2012). For example, a senior Warlpiri IPA Committee Member suggests 'yapa law is always there...it has always been there but the government doesn't want to know our law, but they can learn it through the IPA' (Walker, 2010, p. 162). This principle is evoked when non-Indigenous systems are seen to impinge upon Indigenous protocols for governing Country. Sithole et al. document instances of this, including the following reflection from a traditional owner in the Northern Territory Top End:

We should come up with our own term, not rangers. It is a contemporary word that come into our world, we thought it was a good thing. Ranger for Balanda is caretaker, for Yolnu it's a way of life. I don't want a shirt like them rangers; I wanted to do my own things, my own way with my mob (2008, p. 22).

Across the scholarship I noted how Indigenous people direct Ranger groups and IPAs toward cultural obligations to care for Country. Marika et al. state that:

Many of the senior people did not see the ranger program or the Indigenous Protected Area as something new; they saw them as another way of continuing their traditional responsibility to care for country in a physical way (2012, pp. 137-138).

Rangers are often charged with protecting culturally significant geographies. The Boigu Island community sought to designate Warul Kawa (Deliverance Island) as an IPA based on its spiritually significant hunting and fishing places (Kwan et al., 2001). Bama people have embedded Indigenous law and knowledge in the Eastern Kuku Yalanji IPA Management Plan (Talbot, 2017). However, achieving this goal is not always easy in practice, as one Bama man suggests:

It's a huge burden to understand where those old people come from and [the] setting [up of] this organisation, but how do we pass it on? It's a huge burden I carry at the moment (Talbot, 2017, p. 121).

This statement speaks not only to the important role of Indigenous custom and law, but to the responsibility that comes with properly sustaining and enacting it within Country governance. It indicates that those working in Indigenous Ranger groups and IPAs have obligations to ensure the cultural legitimacy of programs as judged by local Indigenous community and Elders.

Bock et al. (2021) articulate how Mayala people, on the Kimberley coast of Western Australia, govern Country through their distinct set of cultural rules. It is illustrative to quote their work at length:

Any corporate, government and/or non-government organisation has policies, rules and organisational structures based on a [sic] 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) is the equivalent of a CEO [Chief Executive Officer], 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 (Bock et al., 2021, Joordingyoor, para. 13).

In governing Country, Mayala ultimately follow the framework of 'Joordingyoor', which has been passed down generations and will continue into the future (Bock et al., 2021; see also Hill et al., 2012; Marika et al., 2012; Wilson & Woodrow, 2009). For Wunambal Gaambera people, Wanjina Wunggurr Law is so influential in governing Country that maintaining law was named a conservation target in itself (Moorcroft et al., 2012). Statements of cultural legitimacy or authority resound across the literature and are best conveyed through the words of Indigenous people. I have collected a series of these statements in Quotes Box 1. At times these quotes have been trimmed so that a greater number of voices can be included.

Loss of cultural knowledge and practice is a concern raised by Indigenous people across the literature. The cultural legitimacy or authority of Indigenous Ranger groups and IPAs means they are a commonly valued as a mechanism to keep cultural knowledge and governance strong. This was clear in Principle 1: Relational networks which discussed the role of Elders and practices of intergenerational knowledge transfer. Ranger activities regularly incorporate the documentation and dissemination of cultural knowledge, from cultural mapping, to supporting ceremony, producing field guides in language, and recording songs. Often senior Indigenous cultural advisors are engaged to ensure work is undertaken in the proper way. Many Ranger groups actively promote language revival, for example, as evidenced by the work of Gumbaynggirr people in the Gumma IPA, New South Wales (Farr et al., 2016; Hunt, 2010; for other examples see Macdonald, 2019; Woodward et al., 2020). The importance of 'strengthening language' is conveyed in consultation feedback on the draft *Indigenous Ranger Sector Strategy* (GHD, 2022, p.7). One large-scale project recorded Indigenous ecological knowledge in Central Land Council (CLC) region, which involved around 1600 Indigenous people from 13 language groups, resulting in the production of 87 DVDs (Hill et al. 2013). Efforts to keep cultural knowledge and governance strong are not only evident in these kinds of targeted projects but are woven throughout the daily practices of Indigenous Rangers.

Quote Box 1 Statements of cultural legitimacy or authority

'Because it is our Country, we've gotta look after it...In our ceremony way, we come from that Country' – Senior Yugul Mangi Elder (Macdonald, 2019, p. 237)

'We operate within the larger structure [ACT Parks and Conservation] and the people up top see the Murumbung Rangers as just another staff member, but they aren't. They have additional cultural responsibilities and obligation to abide by as part of their daily work.' – Deb Melaluca, Murumbung Yurung Murra Rangers (Williamson, 2014, p. 53)

'That is the most important – the ranger program as a structure for learning, for passing on the cultural values.' – Homeland-based Yirralka Ranger (Barber, 2015, p. 33)

'I look after Country because it's something that's in my heart. I think it's something that our Old People would be proud of, that what we're doing today is what they would have done but probably just in a different way' – Bunya Bunya Man (Wilson et al., 2018, p. 340)

'Keeping our culture strong, that makes us the person we are – Wunambal. If we don't look after country – that makes us nobody. We need to hang onto that and teach our younger generations so they can follow our footsteps. We got to keep it alive all the time.' Sylvester Mangolomara, Wunambal Gaambera traditional owner and Senior Cultural Advisor to the Uunguu Rangers (Moorcroft et al., 2012, p. 22)

'Dambimangari Country is managed by our rules and Dambimangari should have the last word over Dambimangari Country' – Dambimangari Healthy Country Plan 2012–2022 (Woodward et al., 2020, p. 72)

'We the old people hope that Dhuwa and Yirritja land will continue to be looked after through the connection of yothu yindi. All the land is Yirritja and Dhuwa. Our songs, our law, our sacred art, our stories are embedded in the land, which is the foundation of our knowledge. That's how we see the land.' – Roy Dadaynga Marika (cited in Dhimurru 2007, p. n.p., cited in Muller, 2008a, p. 404)

'There is a synergy between the land management projects that APY [Anangu Pitjantjatjara Yankunytjatjara] facilitates and biodiversity outcomes, even though the starting point for APYLM [Anangu Pitjantjatjara Yankunytjatjara Land Management] is Tjukurpa [customary law] and the aim is managing country for family, not for biodiversity.' – Frank Young, Director of APYLM and Waturu traditional owner, with Lexie Knight (coordinator of APYLM) at the Australian Rangeland Society Conference (Davies & Marty, 2004, p. 171)

We want to act with respect to country, uphold traditional responsibilities and recognize and respect the rights of Traditional Owners.' Yanunijarra, p. 8, Ngurrarawarnti Wulyu Martarnupurru 2012–2022 – Ngurrara Healthy Country Plan 2012–2022 (Addison et al., 2019, p. 97)

'We have been thinking about our land for a long time – most of our old people are gone. We need to make sure that our plans for the future involve the deep knowledge of our elders from the past. When we think about our plans, we never lose sight of this.' – Dion Creek, Kaantju traditional owner, Kalan Director (Barber et al., 2017, p. 20)

'We can see the new journey. But the culture, don't forget the country, the land, the djalkiri [foundation], where the songlines start, where the stories are, where the ancestors, that is the important' – Yinimala Gumana, Yolnu Ranger, 2011 Western Australia Indigenous Arts Award (Morphy & Morphy, 2013, p. 175)

Primacy of customary practice and knowledge

Indigenous Rangers incorporate customary practice and knowledge into their everyday work in locally negotiated ways. These practices vary across activities, landscapes, cultural and social dynamics. Arguably, the principle of cultural legitimacy or authority is at play in Jon Altman's hybrid economy model. This model speaks to the continuing role of customary practice in Indigenous livelihoods, alongside market and state sector activities (see Altman, 2012b; Altman & Branchut, 2008; Altman & Cochrane, 2003; Altman et al., 2011; also Buchanan & May, 2012; Kerins & Green, 2018; Wilson et al., 2018). For example, Altman and Fogarty (2010) point to the hybrid economy in action when Indigenous people harvest wildlife during Ranger activities (also Altman, 2012b). The literature contains many examples of hunting animals or collecting foods for personal and community consumption during Ranger work (e.g. see Braham, 2007; Buchanan & May, 2012; Ens, Daniels, et al., 2016; Griffiths, 2017; Williamson, 2014; Wohling, 2001). In Country governance, Rangers use local and customary knowledge and are guided by indicators in the landscape, such as the condition of plants and behaviour of animals (Hill et al., 2013; Maclean et al., 2012; Verschuuren et al., 2015; Williamson, 2014). Important species are often referred to using local names (for example see Sloane et al., 2021). Wohling (2001) describes how Anangu people undertake 'tracking transects' by walking Country in single file. With an Elder in lead, Rangers and participants transverse meaningful tracks and learn cultural stories. Rangers found that 'tracking transects' were an effective animal survey technique in comparison to standard pit traps (Wohling, 2001). As indicated in discussion of intergenerational relationships in Principle 1: Relational networks, this case reiterates storytelling on Country as a key governance strength.

Elements of ceremony, dance, storytelling, and song often feature during activities on Country. However, the ways that customary practice and knowledge informs Country management can also be subtle, and not as immediately obvious to an outside observer. This underlines a point made earlier, that Indigenous ways of governing may fly under the radar if they do not mirror familiar western governance systems. For example, Yolnu Country managers understand that landscapes are shaped through relations between law, people, and the agency of Country (Robinson & Munungguritj, 2001; also see Macdonald, 2019; Sloane et al., 2021). A senior cultural adviser at Dhimurru details this interconnectivity:

I care for the fire. The fire burnt the traditional way...Take about two, three year for the right time got to be burnt. Got to look for animal. Kill animal, few, not much...That's the law for the Yolnu people. That's their ceremony ground, ceremony area, traditional way. All right, we look after around the country, all around the beach. At the time turtles coming out, lay eggs, don't take the eggs. Let them grow...We take care of all the animals from sea to bush...the landcare, all around Dhimurru country, our country. (Yunupingu 1995, p. 65–66 cited in Robinson & Munungguriti, 2001, p. 102)

The cultural knowledge, authority, and governance that informs fire management is often discussed in the literature. For example, fire is a central part of being on Country for Anangu people and doing fire in the right way ensures "mai wiru tjuta munu kuka ananyi" (lots of bush foods and game animals for hunting)' (Macdonald, 2019, p. 176; see also Yanner, 2007). Uunguu Rangers undertake 'firewalks' with traditional owners over several days (Moorcroft et al., 2012). Across their IPA, Karajarri Rangers use knowledge contained in *Pukarri* (Dreaming) stories to undertake *jungku minjanakuwiku* (prescribed burns) and prevent *yura* (wildfires) (Blackwood et al., 2022). In fire management, having the right people, drawing on customary knowledge, and following cultural protocol matters (Bock et al., 2021; Daniels et al., 2012; Ens, 2012b; Kerins, 2012; McKemey & Patterson, 2019; Rostron et al., 2012; also see Dja Dja Wurrung initiatives as discussed in Woodward et al., 2020). Fache and Moizo (2015) raise an apparent contradiction that traditional fire management is executed by Indigenous Rangers using modern technology in line with contemporary concerns such as carbon abatement (see also Altman et al., 2020). However, across much of the scholarship, new skills and strategies were adopted

within Indigenous cultural frameworks and aspirations. This dynamic is often explored through the metaphor of two ways.

Two ways

The intercultural nature of Indigenous Ranger groups and IPAs is reflected in the phrases 'two ways', 'both ways', 'two toolkits' or walking in 'two worlds'. These phrases capture an adaptive principle that Indigenous people evoke in working with non-Indigenous systems. 'Two ways' denotes how Indigenous people draw on western science, training, technologies, and governance practice, in tandem with customary systems. Intercultural committees, institutions, school programs, and collaborative research are all examples of Indigenous Rangers working two ways. In their community-driven evaluation, Sithole et al. found that 'Indigenous Knowledge is a very important cornerstone of caring for country, and effort must be made to ensure that integration of Western and Indigenous knowledge systems occurs' (2008, p. x). There is a depth of scholarship exploring this concept within Indigenous Ranger groups and IPAs that I cannot adequately address here (see, e.g., Muller, 2012). However, it is important to make clear that two ways typically involves the continued prioritisation of Indigenous systems. A Yolnu traditional owner gives an example to Morphy and Morphy as to how Indigenous cultural viewpoints are packaged within western mechanisms:

Yo, ga ngayi-na yurru ranger-yu-na yuta-ku-ma-ya yurru rommirri-ya-ma-ya, djorra'-lili-ya-ma-ya yurru-ya miny'tji-mirriya-ma-ya, miny'tji ng''apaki'-kurru-na. Marr yurru ng''apaki-y dharanga-n yaka yurru galki-thi wo yura-ma yurru wo dhal'yu-n nganya yurru w''anga-na, dhuwala way [Yes, the rangers will make a new body of law in a document using white people's (meaningful) patterns. So that white people will understand if (one) cannot come close or if (one) is allowed to, or if a place is closed off, like that] (2013, p. 181).

As Morphy and Morphy (2013, p. 181) suggest, this demonstrates that Yolnu are 'selectively embracing new technologies to protect the autonomy of their system of law and their relationships to country'. In this way, non-Indigenous practices and skills can be used to maintain and strengthen Indigenous ways of governing Country.

The role of women

The literature points to local concerns when men are disproportionately involved in Indigenous Ranger groups and IPAs (see Green et al., 2012; Muller, 2003; Sithole et al., 2008; Walker, 2010; Williamson, 2021). Similarly, consultation feedback on the *Indigenous Ranger Sector Strategy* suggests 'a need for a stronger focus on women' (GHD, 2022, p. 11). In line with the broader anthropological scholarship regarding gender roles in caring of Country, the literature reviewed here describes differentiated but complimentary roles and responsibilities for men and women in governing Country (e.g. see Altman & Fogarty, 2010; Barber, 2015; Daniels et al., 2022; Macdonald, 2019; Sithole et al., 2008). As such, the cultural legitimacy or authority of Indigenous Ranger groups and IPAs can be called into question if they do not provide adequate opportunities for the involvement of both men and women.

Marika et al. emphasise the central role of female Rangers within the Yirralka Program and that 'women hold knowledge that is important, not only for land management but for our future development' (2012, p. 141, see also Rostron et al., 2012). The Yugul Mangi Rangers provide an important example of an Indigenous Ranger group started by, and initially only engaging, females (MacDonald 2019). The significant role for women in governing Country is conveyed by a Yirralka Ranger:

The reason for the miyalk [female] rangers is the country belongs to both. The songlines, the dreaming sites. We want to pass on the knowledge of the old women, their knowledge – maari-gutharra – and family connections (Barber, 2015, p. 39).

Similarly, a senior Walpiri man on the Northern Tanami IPA Committee suggests that 'we have responsibilities on both sides ... men and women' (Davies et al., 2018, p. 46). Some have noted that employment of a male non-Indigenous Ranger coordinator may result in increased male participation in programs (Davies, 1999; Davies et al., 2018; Walker, 2010).

Indigenous women, both as Rangers and advocates, have played an important role in success and growth of contemporary Ranger groups and IPAs. In 2018, Country Needs People (a national not-for-profit alliance) released *Strong Women on Country: The success of women caring for country as Indigenous rangers and on Indigenous Protected Areas*. This report documents work undertaken by female Rangers across Australia and highlights diverse stories of success. Last year, female Indigenous Rangers were recognised on the international stage as QIWRN (referred to in Principle 1: Relational networks) was awarded the 2022 Earthshot Prize of \$1.78 million to invest in the next generation of Indigenous women to care for the Great Barrier Reef (Great Barrier Reef Foundation, 2022). It is positive to see increasingly participation of women in Indigenous Ranger groups and IPAs (also see Barber, 2015; Davies et al., 2018; Farr et al., 2016) and this may strengthen opportunities to govern Country in culturally legitimate ways.

Principle 3: Cultural geographies and networks

Cultural geographies and networks goes to the nexus of kin, culture, and law that shapes Country governance. Deep and distinct relationships with Country provide essential governance rules and structures. In this principle, I consider how Indigenous Ranger groups and IPAs afford valuable opportunities for Indigenous people to be on Country, and in doing so, activate and strengthen cultural geographies and networks. I explore how this Indigenous principle often contrasts with non-Indigenous systems of science, management, and legislation that compartmentalise Country. Finally, I discuss the innovation of Country-based planning and how this is used to support Indigenous ways of governing in Indigenous Ranger groups and IPAs.

Being on Country

Being on Country is at the core of Indigenous Ranger groups and IPAs and the enactment of Country governance. Robinson and Munungguritj describe this in relation to Dhimurru:

As Yolngu rangers constantly insist, the essence of Dhimurru's purpose is for Yolngu to be 'out here in country' where they can watch, listen, and take part in the communicating system (2001, p. 103).

Since the earliest days of IPAs, Indigenous Country managers have asserted the social and cultural benefits of 'getting Traditional Owners back on Country, often after long absences' (Szabo & Smyth, 2003, p. 8). For Mayala people, 'being on Country' is so crucial that it is identified as a key performance indicator in the Mayala Country Plan (Bock et al., 2021; see also Barnes et al., 2020). A previous Ranger in Ngukurr valued her job because 'ai leigi [I like] outdoors, ai nomo leigi [I don't like] work indoors all the time' (Macdonald, 2019; also Daniels et al., 2022; Maclean et al., 2021; Muller, 2003). In a similar vein, a Yirralka Ranger states:

I like to stay with the ranger job, keeping an eye out for the country, the sacred area. Staying at home, because I am from here (and) my father is from here (Barber, 2015, p. 43).

Arguably, consultation feedback on the *Indigenous Ranger Sector Strategy* points to the importance of being on Country, as stakeholders question the focus on technology within the Strong Country theme and suggest that 'actions should be more focussed on connecting to, and caring for Country' (GHD, 2022, p.6).

As discussed in the proceeding sections, time on Country creates rich opportunities to share customary knowledge and practice both within Indigenous Ranger groups and across the broader community. Ranger activities afford new and expanded opportunities to spend time on Country and visit significant sites. Such onground activity is governed by local rules surrounding cultural responsibility, proper conduct and access, thereby strengthening Indigenous ways of governing (Green et al., 2012; Kerins, 2012; Sangha & Russell-Smith, 2017). Country holds knowledge, as a former Senior Dhimurru Ranger states: 'the knowledge is there for them [Rangers] in the country' (Ayre et al., 2021, Knowledge practices of 'Knowing and being known by Yolŋu country', para. 4). In their work with Yolŋu knowledge holders, Ayre et al. found that 'Yolŋu land/water itself was also identified as an active participant in Yolŋu ranger work' (2021, Knowledge practices of 'Knowing and being known by Yolŋu country', para. 7). As such Country holds governing agency.

The importance of physical presence on Country reflects deep ancestral bonds between people and place (McIntyre-Tamwoy et al., 2013, pp. 98-99). Country is 'home' (Hunt, 2010; Macdonald, 2019; Marika et al., 2012) or as a Warlpiri man puts it: 'Our country is family because our spirits go back there' (Davies et al., 2018, p. 44). For a Bawaka Country Elder, Laklak Burarrwanga, Country 'is our kin and we have rights and responsibilities here. It's about who we are, where we are' (Nursey-Bray & Jacobson, 2014, p. 36). Country is a living entity that relies on the presence of people. It is common to hear phrases such as 'Country needs its people' and 'if country is healthy, people are healthy' (Cooke, 2012; Davies et al., 2011; Patterson & Hunt, 2012; Sangha & Russell-Smith, 2017). This relational dynamic is evident within Indigenous Ranger groups and IPAs. For example, a Banbai traditional owner, who worked on the Wattleridge IPA, suggests that 'the best part of it, working at Banbai, is having your own home, it's yours, you can be part of protecting it and keeping it exactly how it should be' (Hunt, 2010, p. 10). Further, a Yirralka Ranger stated that 'if we work for the country it will look after us. We (will) help each other, strengthen each other' (Barber, 2015, p. 34). The literature confirms strong connectivity between being on Country, Indigenous health, and social and cultural wellbeing (Burgess et al., 2008; Burgess et al., 2007; Davies et al., 2011; Jones et al., 2018; Larson et al., 2019; Rostron et al., 2012; Schultz et al., 2018; Wright et al., 2021). For example, Larson et al. found that the wellbeing of Indigenous people engaged in Country management was associated with 'knowing that country is being looked after the right way' and 'having legal right/access to the country' (2019, p. 97).

Past and ongoing colonialisation has caused ruptures in relationships between Indigenous people and their Country. When Indigenous people cannot be on their Country, the literature reviewed describes Country as 'orphaned' (Altman et al., 2020; Altman & Branchut, 2008; Cooke, 2012) or 'empty' (Altman et al., 2020; Griffiths, 2017; Jupp et al., 2015). The emotion and ontology evoked in these sentiments is illustrated by a Ranger from Ngukurr who describes local people living off Country:

Make you sorry. Make you cry. Like me, I feel that, make me feel sorry when I go to other outstation and seeing the owner back home and Country's just sitting down and waiting for people to come home (Macdonald, 2019, p. 270).

Disconnect between people and country has serious ramifications for Country governance and the maintenance of cultural sites (Austin et al., 2017; Green et al., 2012; Marika et al., 2012). It can cause Country to become 'sick' (Cooke, 2012; Jupp et al., 2015; Muller, 2008a). As a Warlpiri IPA Management Committee member suggests 'without people it's dry that country, that's true. The country is no good when there's no people living there' (Walker, 2010, p. 111; see also Pyke et al., 2021). Another Warlpiri IPA Management Committee member told Davies et al.:

Without people it's a dry country, it gets sick and boring. Oh with people it is normal life. It is kuntukuntu [good condition, growing fresh after fire] again. The country is not dead. That country is alive in spirit ... because it is not just land, it is alive (2018, p. 44).

Similarly, a Martu Elder describes the impact of colonisation and removal of Indigenous people from Country:

When we were cooking up food in the mission [in Jigalong when people were moved off Country], there was no one cooking up food for all the animals [using fire to encourage food plants]. When we came back [to Country], all the animals were gone. (Skroblin et al., 2022, p. 132)

Conversely, Country flourishes when Indigenous presence is reinstated and strengthened. Reflecting on the Nantawarrina IPA, a traditional owner conveyed that:

The way we benefit we see how things come back you know we see the trees and the bushes that once wasn't there all coming back. It makes country good it makes us feel good that things are coming back (Braham, 2007, p. 42).

Likewise, a Waanyi/Garawa Ranger expressed that 'it's good to get out, get rid of plants and animals that don't belong. And also seeing how Country recovers from burning – watching the Country become healthy again' (Williamson, 2014, p. 45). Returning to areas that are no longer regularly visited holds particular importance. A *Ngandi Jungayi* (traditional manager) spoke of visiting a significant area that she hadn't been to 'since I was born' (Ens, Scott, et al., 2016, p. 2903). She described how:

I been want him to see that place really badly...so I've seen it now and I am happy I've been out there with my son. It's a great experience for kids. For little kids like my little daughter now, my niece and the two little boys of [my sister]. All that mob it's all been really good for that mob so they can learn. Learn about both ways – blekbala [Indigenous] way and munanga [non-Indigenous] way (Ens, Daniels, et al., 2016, p. 2903).

Moreover, regaining ownership of Country can be transformative for Indigenous people. A Banbai traditional owner and member of the Wattleridge IPA Management Committee described this to Hunt:

My grandchildren do not know what it's like to grow up without land – I didn't grow up owning land, nor my Mum. It changes how we think, how we do things. We've got land. Now we have to reacquaint ourselves with our custodial role of land management (2010, p. 10).

The literature conveys infinite potential for the protection and regeneration of cultural landscapes when Indigenous people are supported to be on and govern their Country.

The distinctions and boundaries of non-Indigenous systems

The connectivity inherent in Indigenous cultural geographies and networks often juxtaposes non-Indigenous spatial boundaries and management systems (Moorcroft et al., 2012, p. 21). As this principle makes clear, Indigenous Country is a continuous network of people and places linked through customary law, rather than a collection of differentiated blocks, properties, or bioregions (see Baker et al., 2001; Kerins & Green, 2018). This is reflected in consultation feedback on the draft *Indigenous Ranger Sector Strategy* which underlines that Country and culture cannot be separated (GHD 2022). Gorman and Vemuri describe the ways non-Indigenous systems deal with Country and how 'over time land in Australia has been scientifically categorised, zoned and classified and land management practices assigned and actions performed according to perceived monetary, scenic or conservation values' (2012, p. 64). These management frameworks, and related decision-making

processes, are not grounded in lived experience and connection to Country but rather influenced by broader political forces and implemented at arm's length (Gorman & Vemuri, 2012; also Kerins, 2012).

I found many cases where non-Indigenous management and governance conflicts with Indigenous views of Country. For example, a Ngemba man describes a complex knowledge system that connects people, water, and landscapes, stating that 'you've got to understand [water] as an understanding of the landscape and yourself in it' (Maclean et al., 2012, p. 35). This does not sit neatly with current management approaches: 'today we cut everything up, hence the argument about "what is cultural flow"?' (Maclean et al., 2012, p. 35). Across the literature Indigenous people asserted the connectedness of people, land, fresh water, sea, and islands (for example, Altman & Branchut, 2008; Altman & Cochrane, 2003; Bock et al., 2021; Butterly, 2013; Butterly & Richardson, 2016; Concu & May, 2013; Gould et al., 2021; Hunt, 2012b; Marika et al., 2012; Muller, 2008a; Nursey-Bray & Jacobson, 2014; Verschuuren et al., 2015; Yunupingu & Muller, 2009). Yunupingu and Muller describe this well:

Yolngu do not draw a line in ownership of estates between the land and the sea. There are many animals that live in the saltwater and the freshwater. I am from the Gumatj clan and we have the crocodile as our totem, but within our clan there are saltwater crocodile people and freshwater crocodile people. But Gumatj have just one totem. There is no separation there whatsoever. Some people own freshwater country, some people own saltwater country, but ownership of country does not stop at the shore for us (2009, p. 161).

While the NRS, and consequently IPAs, are driven by the identification and prioritisation of specific biogeographic regions (Concu & May, 2013), there is a growing recognition of Indigenous viewpoints and relationships with Country as the basis for governance and management. Country-based planning provides an excellent case in point.

Country-based planning

The literature documents how Indigenous people have developed and advocated for more holistic models of Country governance. For example, Country-based planning is adopted by many Indigenous Ranger groups and IPAs, and effectively works to reinstate the primacy of cultural geographies and networks in governing Country. Reflecting on this innovation, Smyth suggests that Country-based planning has been 'out-competing, or at least coexisting with, the introduced governance and management scales that have dominated the Australian landscape and seascape for the last two centuries' (2014, p. 7). In straightforward terms, a 'Country-based plan is simply a plan for the Country of a particular Indigenous group, as defined and selected by that group' (Smyth, 2015, p. 77). These plans have become central resources for governing Country in contemporary settings. Indigenous people may scale-up plans to cover a larger area by incorporating several clans or a broadly defined group such as language group; or create a plan focused on a single smaller landholding group and area (Smyth, 2015). Such scales reflect subsidiarity of power and decision making discussed in Principle 6.

Country-based planning has become a bedrock of IPAs and is used by many Indigenous Rangers groups. When the IPA program commenced, only land legally held under exclusive Indigenous tenure was eligible for inclusion (Gould et al., 2021). However, today the IPA program has transformed to encompass land subject to various tenures including Sea Country. Consequently, IPAs are now commonly referred to as 'tenure-blind' (Bock et al., 2021; Godden & Cowell, 2016; Gould et al., 2021; Hill et al., 2016; Kennett et al., 2015; Macdonald, 2019; Smyth, 2011, 2014; Taylor, 2014; tebrakunna country et al., 2016). The first multi-tenure IPA was designated by the Mandingalbay Yidinji people in 2011 (see Smyth, 2015). Eastern Yalanji traditional owners, in far north Queensland, dedicated their IPA in a three-stage process based on clan estates (Hill et al. 2016). Their

IPA traverses various tenures in order to 'Put Country back together' (Hill et al., 2016, p. 26). When planning is 'blind' to non-Indigenous tenure, Indigenous categories of Country come into resolution.

Further, by virtue of encompassing multiple tenures, Country-based plans provide a platform for collaboration on the terms of Indigenous people. As Bock et al. suggest, Country-based planning essentially:

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 (2021, Joordingyoor, para. 18).

The importance of using Indigenous categories of Country as a governance framework is clear – it de-emphasises non-Indigenous interests and validates the enduring status of Indigenous ontology and ancestral estates. This is articulated by Macdonald:

The strength of such plans is that they do not rely on the colonial nation-state for authority, but stem from the authority of the relationships of Indigenous peoples to place and each other (2019, p. 30).

The draft *Indigenous Ranger Sector Strategy* does not refer to Country-based planning but notes that 'Indigenous ranger organisations seek to achieve sustainable Country management through Healthy Country planning' along with other mechanisms such as two-way science and partnerships (NIAA, 2022, p. 18). As part of its national approach, the draft strategy discusses 'implementation plans' where 'detailed actions will be refined for delivery through organisational, agency, multi-stakeholder or regional implementation plans, depending on the circumstances' (NIAA, 2022, p. 10). It also refers to ranger organisations developing strategic plans under the theme of Strong Economy (Business).

The literature frames Country-based plans as a critical governing tool for documenting Indigenous vision, relationships with Country, and culturally legitimate management pathways. In this way, these plans can shift power to Indigenous people and enable governance grounded in cultural geographies and networks. However, as Godden and Cowell point out, the transition to Country-based planning 'is neither comprehensive nor is its implementation unproblematic' (2016, p. 692). The following section, Principle 4: Governing powers, discusses how non-Indigenous systems of land ownership and management can undercut Indigenous Country governance.

Principle 4: Governing powers

Governing powers speaks to the potential for Indigenous people to have meaningful control, make decisions, resolve disputes, and exercise their rules. Indigenous governing power is shaped by myriad legal and non-legal mechanisms, located across multiple jurisdictions, which vary across Australia (see Bauman et al., 2013). A sample of mechanisms discussed in the literature spans international agreements such as the Torres Strait Treaty between Australia and Papua New Guinea, the Convention on Biological Diversity, and the World Heritage Convention, to legally recognised land rights, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), *Great Barrier Reef Marine Park Act 1975*, Traditional Use of Marine Resources Agreement (TUMRA), Cultural Heritage and Scared Sites legislation, NRM policies, and local government powers as well as a range of agreements, Memorandum of Understanding (MOU) and advisory roles. These layers of rules and authority create a complex landscape for governing Country. While, at times, they may produce 'blame shifting' and confusion (Marum, 2014), it is also clear that Indigenous people strategically leverage opportunities to gain power and protections for Country in this intercultural context (Hill et al., 2013; Macdonald, 2019; Reed et al., 2021; Rist et al., 2019). In this principle, I first consider how Indigenous Ranger groups and IPAs can be a mechanism for enabling greater local control and self-

determination in Country governance. I then canvass key limitations to this control such as external recognition of land ownership and limited authority and power held by Indigenous Rangers.

Enabling local control

The literature contains many examples of Indigenous Ranger groups and IPAs being associated with Indigenous control, autonomy, and self-determined governance (see Austin et al., 2018; Austin et al., 2017; Ayre et al., 2021; Barber, 2015; Bauman & Smyth, 2007; Bock et al., 2021; Davies & Drewien, 2001; Grace, 2016; Hill et al., 2012; Hunt, 2010; Talbot, 2017). For example, one traditional owner told Braham that the Nantawarrina IPA 'means a lot to us, at least we got part of our land back and we run it ourselves in the community' (2007, p. 35). A senior Warlpiri man expressed to Walker the significance of the Northern Tanami IPA dedication: 'the government knows we are already doing it...our country, our dreaming, our ceremony' (2010, p. 161). Ranger programs can provide an important mechanism for Indigenous people to access their traditional lands, enact cultural authority, and reinstate proper governance protocols. Indigenous people often use management plans as a platform to assert their sovereignty. For example, Yolnu people used the Dhimmuru Sea Country Plan to declare rights and interests in the absence of legal recognition (Butterly, 2013) and Ngarrindjeri Elders aspire for the Yarluwar-ruwe (Land and Sea Country) Plan to 'act as a form of treaty' (Smyth et al., 2016, p. 18, citing Hemming & Rigney 2008).

The scholarship suggests that IPAs offer a higher degree of Indigenous control and empowerment when compared to joint management regimes (Carmichael et al., 2020; Lyver et al., 2014) and Indigenous Land Use Agreements (Farr et al., 2016; Hill et al., 2016, see Bauman & Smyth, 2007 for comparative case studies). Shortly after the IPA program commenced, Davies stated that government funding for Indigenous-led participatory conservation was a 'breakthrough in Australian indigenous affairs policy' (1999, p. 61). Although the power sharing intent of IPAs is often lauded, as Lyver et al. (2014) points out, there has been little examination of how this program addresses Indigenous priorities in practice. Reed et al. (2021) make a similar point in relation to Indigenous Rangers. The voluntary and non-legislative nature of the Indigenous Ranger groups and IPAs can both enable and constrain Indigenous governing powers. In a positive way, this status creates flexibility for adaptive and collaborative program implementation, opportunities across multiple tenures, and scope to exercise Indigenous governance and traditional law (Hill et al., 2014; Rist et al., 2019). These qualities can enable local control in governing Country. On the other hand, initiatives remain vulnerable to changing government commitments and do not offer legal protection, meaning that Indigenous people often rely on protections provided by existing land tenure or other legislation (Bock et al., 2018; Concu & May, 2013; Goolmeer et al., 2022; Gould et al., 2021; Grace, 2016; Smyth & Jaireth, 2012).

The role of land ownership

The governing powers available to Indigenous people are significantly influenced by external recognition of land ownership. Early Ranger groups and IPAs were typically associated with Indigenous-owned land where certain areas of Indigenous decision-making power were externally recognised. Today, as discussed in Principle 3: Cultural geographies and networks, there is a growing trend of tenure-blind Country-based management. Indigenous people have long aspired to govern their Country irrespective of externally imposed title and boundaries. During the design of the IPA program, Indigenous delegates advocated for a program that encompassed 'both Aboriginal-owned land voluntarily declared a protected area as well as existing protected areas that are, or have the ability to be, cooperatively managed' (Smyth, 2001b, p. 89). In this scenario, government acts as a 'good neighbour' and Indigenous people retain control (Langton et al., 2005). While legal recognition of land ownership does not automatically translate into financial resources for governing Country (Hunt, 2012b; Marika et al., 2012; Weir & Duff, 2017), or extend to power over resources such as subsurface

minerals (Altman, 2012b), it does provide greater governing powers. Without secure land title Indigenous people may rely more on partnerships, commercial contracts, or the purchase of land (for examples see Hunt, 2010, 2012b). The insecurity this generates is conveyed by a Miriuwung-Gajerrong traditional owner: 'we put the cultural framework agreement, we put rangers in place...but on the government's side, they never hand the land back yet' (Hill, 2011, p. 78). While Indigenous Ranger groups and IPAs increasingly operate across a range of land tenures, external recognition of Indigenous title continues to provide a valuable platform for self-determined Country governance.

Calls for greater power and acts of self-determination

Indigenous people continue to advocate for greater decision-making power, recognition of their customary law, and policy influence to effectively govern Country (Butterly, 2013; Davies et al., 2013; Gorman & Vemuri, 2012; Jackson & Palmer, 2015; Kerins & Green, 2018; Marika & Roeger, 2012; Szabo & Smyth, 2003; Walker, 2010; Yanner, 2007; Zurba, 2010). The literature contains many examples where Indigenous governance continues to be marginalised by unquestioned dominance of non-Indigenous systems (Bock et al., 2021; Cantzler, 2015; Muller, 2014; Searle & Muller, 2019; Smith & Claudie, 2003). For example, an Anangu Ranger told Wohling that he perceives his IPA job is more "keeping Europeans happy" rather than as managing his country' (2001, p. 159). Yunupingu and Muller (2009) write of government reluctance to support Indigenous-led strategies for governing Country. Government 'have instead sought, through consultation and planning processes, to gain Yolnu "participation" in their initiatives' (Yunupingu & Muller, 2009, p. 163). Goolmeer et al. advocate for the EPBC Act to recognise the magnitude of the Indigenous estate and position Indigenous knowledge and governance systems as the 'essential foundation for decision-making' (2022, p. 37).

The scholarship documents on-going calls to resource and empower Indigenous Rangers to undertake compliance activities and exercise equivalent powers to their government counterparts. A series of these concerns are repeated in Quote Box 2. Although Rangers have undertaken various forms of compliance training (Gould et al., 2021; Smyth, 2001a) and developed permit systems on Country (Bock et al., 2018; Concu & May, 2013; Marika & Roeger, 2012); many Indigenous Rangers have limited implementation power on the ground. The literature also notes the need for Rangers to have powers to enforce cultural protocols such as restricting access to certain places (see Williamson 2014).

Across northern Australia, there is a long history of Indigenous Rangers undertaking joint patrols with bodies such as Fisheries and Border Force. In terms of legislated enforcement powers, recent advances have been made in the Northern Territory with reform of the *Territory Parks and Wildlife Conservation Act 1976* to explicitly recognise the role for Aboriginal Rangers as Conservation Officers. Amongst these amendments is Section 93A(2) that states: 'Aboriginal rangers are recognised as being highly qualified for providing the functions of conservation officers because of their traditional, cultural and technical skills' (*Territory Parks and Wildlife Conservation Act 1976*, p. 73). In Queensland, in the 1990s, Kowanyama Indigenous Ranger John Clarke was appointed a Fisheries Inspector under the *Fisheries Act 1994* (Kowanyama Community News 1993; Go Camping Australia 1994). This appears to have been an isolated case rather than part of a broader Queensland Government commitment to assign powers to Indigenous Rangers. However, more recently, Indigenous Rangers in Far North Queensland working along the Great Barrier Reef have undertaken compliance training allowing them to be appointed as formal Marine Park Inspectors (Australian Government, 2017).⁶

⁶ This occurred through collaboration between the Australian Government's 'Specialised Indigenous Ranger Program' and the Great Barrier Reef Marine Park Authority (Australian Government, 2017).

Quote Box 2 Calls for greater power

'Yirralka should have the real power, like police. The residents, we go by their will. We got that boat training, but no powers for (dealing with) the fishermen.' – Yirralka Ranger (Barber, 2015, p. 69)

'We work with the fisheries police, get a better understanding with government people. We learn about how the government laws work. They say they have the power, that we are just the eyes and ears. We say it is the other way around, we already had that power. We've got to be strong, for the land and the sea. We are the ones living in the homelands. They should give us the power, and the authority to say yes and no.' – Yirralka Ranger (Barber, 2015, p. 69)

'We put up a sign telling people not to climb there [Gibraltar Rocks], but they do anyway. If we had our way, people wouldn't be allowed to climb that place, it's a very special place.' – Murumbung Yurung Murra Ranger (Williamson, 2014, p. 52)

'We want authority! We want to be able to go out and search people's boats and kick them out if we need.' – Li-Anthawirriyarra Ranger (Williamson, 2014, p. 53)

'[Doing more with] Fisheries. And doing more with the water police. Going out on the water with them. Sometimes we go out and do marine obs[ervations]. You might find a float in the crab pot, only thing we can do is write it in our notes and give them [water police] a call – they have to sort it out. But if we work with them, we can do the paperwork, and take the crab pot away. So we can do more. Me and [Participant 6] have our Cert. 3. We want to learn more about how to step up into the next role and then teach the other guys who have done their Cert. 2.' – Larrakia Ranger (Maclean et al., 2021, p. 57)

'To get more powers – fisheries [powers]. Like rangers to have more of a presence and like, people taking note and not doing the wrong thing. Many people muck around and do the wrong thing, [and] they see us and just think we are "only rangers they won't do anything". It would be good to have powers so that when people see us, [they think] "we better do the right thing here, otherwise..." – Larrakia Ranger (Maclean et al., 2021, p. 57)

'We have many problems, we report it and there is no action. We need some support? They don't do nothing, so who should we complain to? I am pretty well frustrated.' – Participant, Aboriginal Voices Workshop (Sithole et al., 2008, p. 27)

'A bit difficult for me, because you gotta have power to arrest people. Always frustrating for us, try to negotiate how we can work together better with government. With inland we worried that boats might come in with something. Unless you monitor and enforce it doesn't mean nothing' – Participant, Aboriginal Voices Workshop (Sithole et al., 2008, p. 64)

'We need more infrastructure like better boats, better equipment and training for our younger people to become compliance officers with fisheries so we can ask people to leave' – Girringun traditional owner (Zurba, 2010, p. 122)

It is notable that a survey of Commonwealth, state, and territory legislation by Szabo and Smyth 20 years ago indicated 'adequate opportunities for devolving law enforcement to appropriately trained individuals outside of government agencies' (2003, p. 14). The draft *Indigenous Ranger Sector Strategy* does not specifically address powers held by Rangers but does include the following proposed lead actions within the Strong Country theme: '1.6 Work with stakeholders to promote and implement identified land and water management opportunities for Indigenous rangers' and '1.7 Address institutional, regulatory and other identified barriers to Indigenous rangers' land and water management participation' (NIAA, 2022, p. 29). I suggest there is scope for the proposed cross-jurisdictional working group to systematically consider the regulatory and legal powers held by Indigenous Rangers, and the barriers and opportunities to expand on these. Indigenous Ranger groups and IPAs could then assess and select pathways for securing greater powers in line with local aspirations. Such a process would utilise the Australian Government's previous investment in developing compliance skills through the Capacity Building for Indigenous Rangers (Jobs, Land and Economy Program) grants.

Calls for greater governing power exist alongside sovereign Indigenous actions. As Kaanju people, Cape York, declare in response to dominant western management regimes: 'we got our own management' (B. R. Smith, 2005). When the Kaanju people applied for an IPA, in reply to the question if 'the land management activity proposed relates to Indigenous held land', they stated, 'Yes, the land management activity will be undertaken on our homelands that we hold under traditional Kaanju laws and customs' (Smith & Claudie, 2003, p. 13). Yanner describes the lack of government services protecting Country in the Queensland Gulf and how Indigenous people are filling this gap:

We're forcing them through our numbers in the Gulf and through our political staunchness that 'no you can't come into our region and set any of those services up. You want a customs or quarantine anywhere in the Lower Gulf you gotta hire our people and resource them properly...we'll do it because it because it's our country.' What it gives us long term politically is, rather than being dependent on the government, they're dependent on us... (2007, p. 5)

In some cases, sheer remoteness and lack of government oversight aids more autonomous governance (e.g. see Burr, 2013). Ultimately, Indigenous Rangers exercise the powers that flow from their customary law regardless of state recognition (Bock et al., 2021; Cantzler, 2015; Rist et al., 2019; Williamson, 2014). As such, on the ground, Indigenous people continue to pursue self-determined ways of governing despite the external systems and rules that may impact governing power.

Principle 5: Institutions

This principle refers to structuring forces, from political and legal systems, to social norms and beliefs (D. E. Smith, 2005, p. 14). Institutions can play a critical role in enabling self-determined Country governance when they uphold culturally legitimate protocols, authority structures, and decision-making systems (see Bock et al., 2021). At the same time, institutions must deal with various national, state, territory, and local government rules. As such, institutions often mediate between external partners and Indigenous constituents, as well as within local communities. This principle emphasises the importance of effective institutions that enable Indigenous people to exercise their ways of governing.

Indigenous Ranger groups and IPAs have long been associated with Indigenous organisations. The dataset informing Fig. 1. indicates that Indigenous corporations, registered with Office of the Registrar of Indigenous Corporations (ORIC), are the most common form of host organisation, but that Indigenous Ranger groups and IPAs currently operate across a diverse range of institutional contexts. In this principle, I draw links between the scholarship reviewed and the institutions featured in Fig. 1. I discuss how effective institutions offer stable, long-term employment, and support a level of flexibility and autonomy for Indigenous Rangers to direct their daily

work. Finally, I consider how the rules set down in funding agreements are negotiated alongside norms and systems on the ground, and present monitoring and evaluation (M&E) as an example where contrasting viewpoints come into resolution.

Organisations hosting Indigenous Ranger groups and IPAs

Indigenous organisations have been instrumental in supporting Indigenous-led Country governance since the emergence of Indigenous Ranger groups and IPAs (see Davies, 1999 for an early discussion). The literature provides evidence of Indigenous people designing and running institutions that are capable of effectively governing Country through Indigenous governance principles across urban, rural, and remote settings. I discuss the grassroots nature of these institutions in Principle 8. Self-determined choice. In their review of Indigenous Ranger groups, van Bueren et al. found that 'the most successful groups operate with the administrative support of well-organised, capable Indigenous organisations' (2015, p. 32). However, in line with the broader scholarship regarding Indigenous community governance, the literature I reviewed described how chronic underfunding of Indigenous corporations creates challenges for implementing Indigenous Ranger groups and IPAs (e.g. see Hill et al., 2013; May, 2010). Greater resourcing is critical for the development of innovative institutions and systems that can support self-determined governance and development on Country (see also Altman & Cochrane, 2003). I elaborate on the point of resourcing in Principle 7. Capability. Additionally, it is noted that government may favour funding Indigenous organisations with an established track record, thereby disadvantaging and limiting opportunities for newly emerging organisations (see Altman, 2012a).

As Fig. 1. makes clear, current Indigenous Ranger groups and IPAs are hosted by a range of organisations. An overview of this dataset is included in Table 3. below. Almost half of all Indigenous Ranger groups and IPAs are hosted by Indigenous corporations (46.88%) registered with ORIC, followed by Australian businesses (22.40%) and Australian Government statutory authorities (18.25%). The remaining 30 initiatives or 12.47% of total programs are hosted by various organisation types including collaborative arrangements. It is important to note that all organisation types have the potential to permit a high degree of Indigenous control in governing Country. The idiosyncratic nature of each institution and arrangement means that it is difficult to make any general statements about host organisation types.

 Table 3
 Indigenous Ranger groups and IPA host organisations, August 2022

Type of host organisation	# programs	% total programs
Office of the Registrar of Indigenous Corporations (ORIC) corporations	113	46.88%
Australian business	54	22.40%
Australian Government statutory authority	44	18.25%
Local Aboriginal Land Council (New South Wales)	9	3.73%
Local government	7	2.90%
Land trust & other trusts	6	2.48%
State/territory government	3	1.24%
ORIC Indigenous Corporation & Australian business	2	.82%
State government statutory authority	1	.41%
Australian business & Australian Government statutory authority	1	.41%
Uncertain	1	.41%

The scholarship does not span all the organisation types evidenced in Table 3. I used a text search query in Nvivo (and supplementary manual search of hardcopy materials) to gain a snapshot of institutions discussed in the scholarship. Australian Government statutory authorities were well represented with approximately 46 sources that referenced the Northern Land Council (NLC), 15 that referenced the CLC, and 9 that referenced the Torres Strait Regional Authority. ORIC Indigenous corporations also featured highly in the literature, and were often analysed in greater depth, with approximately 18 sources that referenced the Kimberley Land Council (KLC), 17 that referenced Girringun Aboriginal Corporation (GAC), 15 that referenced Dhimurru Aboriginal Corporation (DAC) and 13 that referenced Bawinanga Aboriginal Corporation (BAC). Some examples of analysis of institutions include Altman and Cochrane (2003) and Rostron et al. (2012) on BAC; Ayre et al. (2021), Bauman and Smyth (2007), Hoffmann et al. (2012), and Muller (2008a) on DAC; Barber (2015) on Laynhapuy Homelands Association; Sithole et al. (2008), Kerins (2012) and Marum (2014) on the NLC; Zurba (2010) and Maclean et al. (2013) on GAC; Hunt (2010) on Banbai Business Enterprises (Banbai BE) and Ngurrala Aboriginal Corporation; Macdonald (2019) on Anangu Pitjantjatjara Yankunytjatjara Land Management (APYLM); Maclean et al. (2021) on KLARNO; Barber et al. (2017) on Kalan Enterprises; as well as Altman et al. (2020) on Arnhem Land Fire Abatement (Northern Territory) Limited (ALFA).

My analysis of current initiatives indicates that many institutions are operating at a regional level and host multiple Ranger programs. For example, in the Northern Territory the CLC hosts 17 groups and the NLC hosts 15, in Tasmania 9 of the 11 initiatives are hosted by the Tasmanian Aboriginal Corporation, in Western Australia the KLC hosts 9 groups, and in South Australia APYLM hosts 8 groups. Such regional arrangements can bring benefits through economies of scale and provide Indigenous Rangers with access to infrastructure, insurances, expertise, networks, and services that would not be possible at smaller institutions. However, regional arrangements also have the potential to constrain individual group autonomy and may lead some to seek greater independence and control (see Altman, 2012a; Barber et al., 2017; Cooke, 2012; Green et al., 2012; Macdonald, 2019; Smith & Claudie 2003; Williamson, 2014). As evidenced in Principle 1: Relational networks, Indigenous Ranger groups and IPAs often undertake collaboration across complex institutional settings that generate new institutional forms.

While noting that the scholarship focuses on Australian Government statutory authorities and ORIC Indigenous corporations, a fairly consistent pattern of institutional structures and processes supporting Indigenous Ranger groups and IPAs emerged, namely:

- a Country management plan that has resulted from participatory planning with traditional owners
- a board of traditional owners that define and oversee the strategic direction of programs
- an IPA or management committee, comprised of various Indigenous and non-Indigenous stakeholders, that provide input and guidance for program implementation
- more specialised and 'hands-on' committees or groups were established by many initiatives to deal with specific aspects of program implementation, monitoring or evaluation
- senior traditional owners that provide cultural guidance and oversight as required for work on Country
- a Ranger coordinator or facilitator that operates at the interface of host organisations, external partners, and the Ranger Group
- a Head or Senior Indigenous Ranger embedded within, and providing leadership for, a team of Indigenous Rangers working on Country
- a team of Indigenous Rangers that undertake work on Country

Many of these structures flow from government funding requirements (see Smyth et al., 2016; Szabo & Smyth, 2003) although each is shaped by local context and needs. If operating effectively, it appears these structures

can support culturally legitimate ways of working and provide accountability mechanisms for both Indigenous constituents and external systems.

Flexible work and long-term positions

In the scholarship, effective institutions were described as supporting a level of flexibility and autonomy for Ranger groups to direct their daily work (see Macdonald, 2019). This flexibility means that institutions can accommodate and strengthen local ways of working that maintain relational networks and cultural geographies. The importance of 'flexibility around cultural obligations' for Rangers is raised in consultation feedback on the *Indigenous Ranger Sector Strategy* (GHD, 2022, p. 8). As an example from the literature, Banabi BE in NSW offers an adaptive work environment in which employees can attend to family and cultural matters as these arise (Hunt, 2010; see also Altman, 2012b; Bauman & Smyth, 2007; Marika & Roeger, 2012; Rostron et al., 2012; Sithole et al., 2008; Skroblin et al., 2022; Smyth, 2014). Early Ranger employment arrangements under CDEP are often described in the literature as flexible in that Indigenous people can take time out to fulfill cultural obligations, or conversely, take on extra 'top up' hours (Gorman & Vemuri, 2012, p. 69). Casual employment options remain critical for many groups to engage cultural advisors or periodically expand to meet specific project needs. However, it is clear that long-term, full-time employment with associated benefits and external recognition is highly valued (Hunt, 2010; Sithole et al., 2008; Williamson, 2014; also Muller, 2003; Smyth, 2014; Zurba, 2010).

Defining rules

The implementation of Indigenous Ranger programs and IPAs is shaped by the priorities and rules set in funding agreements and contracts, the structures and processes of host institutions, as well as norms and systems on the ground. At best, the literature describes how these come together with 'synergy' between Indigenous and non-Indigenous systems (Davies & Marty, 2004, p. 171), where programs act as a meeting place to understand and negotiate differing values (Smyth, 2011). However, when government goals and bureaucratic processes dominate, Ranger programs might be seen as 'a form of bureaucratic participation' (Fache, 2014, p. 267). Across the literature I saw tensions arise when non-Indigenous concerns and norms were privileged over local priorities and ways of working (Fache, 2014; Macdonald, 2019; Muller, 2008a; Preuss & Dixon, 2012). For example, an emphasis on program outcomes related to weeds, fire, and ferals, can obscure the integrated landscape approach and customary systems that underpin Country governance (Pyke et al., 2017). Many papers identified implementation issues when non-Indigenous land management priorities took primacy over Indigenous understandings and goals for governing Country (Altman & Whitehead, 2003; Austin, Robinson, Matthews, et al., 2019; Barber, 2015; Barbour & Schlesinger, 2012; Bauman et al., 2013; Butterly, 2020; Concu & May, 2013; Cooke, 2012; Davies et al., 2013; Davies et al., 2018; Dobbs et al., 2016; Ens, 2012a; Ens, Finlayson, et al., 2012; Fache, 2014; Gould et al., 2021; Hunt, 2012b; Marika et al., 2012; Muller, 2008a, 2008b, 2014; Searle & Muller, 2019; Sithole et al., 2008; Walker, 2010; Weir & Duff, 2017; Zurba, 2010).

In the scholarship, I found increasing reference to contractual agreements, MOUs, protocols, and guidelines in governing Country. These formal mechanisms exist both between host organisations and external partners (e.g. see Taylor, 2014), as well as within and between Indigenous people and organisations (e.g. see Hunt, 2010). Many institutions rely on documented guidelines or rules to shape internal processes. For example, the operations of the DAC, and the Dhimurru Rangers, are guided by a strong vision statement. As a former Board member told Ayre et al.:

Having that Vision Statement, where every time we have a Board meeting, one of us [Dhimurru Board member or Yolnu ranger] reads it. It's good. Because it reminds me of when the Dalapal [Yolnu elders] work together (2021, Knowledge practices of 'Mobilizing the Dhimurru Vision Statement', para. 3).

The Girringun Board follows a Committee Code of Conduct that lays out ways of working such as 'remain flexible and willing to explore options' and 'treat other members with respect and integrity' (Taylor, 2014, p. 75; see also Marika & Roeger, 2012). The Mayala people are developing a Cultural Policy Document that will define previously 'unwritten' cultural rules and sit alongside their Native Title Prescribed Body Corporate Rule Book (Bock et al., 2021, Joordingyoor, para. 12). Not surprisingly, in the scholarship, protocols and agreements were often discussed in relation to research (Ens, Finlayson, et al., 2012; Murley et al., 2022; Skroblin et al., 2022; Sloane et al., 2021; Wohling, 2001; Woodward, 2019; see also Reed et al., 2021 on research practice). The role of protocols and agreements to guide collaboration appear to be increasingly important with the growing and diversifying investments in Country governance. Such documents potentially function to articulate Indigenous vision and ways of governing. As a Bunya Bunya traditional owner states:

I'd like to see, with Bunya Bunya taking control of our own Country, we need Traditional Owner terms and conditions. That has to get filtered through all avenues starting with council, first of all, Government, and with real estates as well, and property developers ... So we put our RAP out and [say] this is how we, the Traditional Owners, are willing to work with key organisations. (Wilson et al., 2018, p. 344)

Measuring success

The rules by which Ranger work is defined, measured, and evaluated shapes Country governance. M&E frameworks are an area where contrasting rules and ideals of success often come into resolution. Ayre et al. provide an apt description of this:

In the context of ICNRM [Indigenous Cultural and Natural Resource Management], the power dynamics between non-Indigenous and Indigenous knowledge systems in environmental M&E are such that the knowledge base for planning, implementing, and assessing SES [Social-Ecological Systems] management is primarily based in non-Indigenous categories and valuations (2021, Monitoring and evaluation and Indigenous cultural and natural resource management (ICNRM), para. 1).

The literature notes challenges in accurately capturing and conveying intangible and overlapping values of Indigenous Ranger groups and IPAs to an external audience (Austin et al., 2017; Ayre et al., 2021; Barber, 2015; Farr et al., 2016; Muller, 2014). Within the scholarship, I saw growing efforts to make the spectrum of cultural, social, economic, and health benefits of Ranger and IPA programs visible, with many advances through collaborative research. From an implementation perspective, the literature records a persistent focus on biophysical indicators and systems like the Australian Government's Monitoring, Evaluation, Reporting and Improvement framework (see Altman, 2011; Altman et al., 2011; Bock et al., 2018; Ens, 2012b; Ens, Towler, et al., 2012; Smyth, 2014 on these challenges; as well as Ayre et al., 2021; Barber & Jackson, 2017 on emerging developments). However, I note the most recent *IPA monitoring and evaluation guidelines* require 'simple indicators' that are a 'mix of environmental, cultural (including strengthening and integrating IEK [Indigenous Ecological Knowledge] with Western Science), social (community capacity and wellbeing) and economic (jobs and Indigenous enterprises) factors' (Australian Government, 2015, p. 1-2).

The scholarship contains powerful examples of Indigenous people developing innovative and locally meaningful M&E systems. Earlier I noted self-determined targets such as the Mayala people's key performance indicator of being on Country (Bock et al., 2021) or the Wunambal Gaambera peoples conservation target of maintaining Wanjina Wunggurr Law (Moorcroft et al., 2012). Other in-depth examples include the Uunguu Monitoring and Evaluation Committee, who use self-assessment, Ranger reports, traditional owner evaluation, and independent review to evaluate progress against their Healthy Country plan and inform future management adaptations (Austin et al., 2017; also Moorcroft et al., 2012). Further, Yolnu people have developed an evaluation framework for Ranger work based on the criteria of 'knowing and being known by Yolnu country', 'mobilizing the Dhimurru

Vision Statement', and 'being ralpa' i.e. enacting leadership and working with dedication (Ayre et al., 2021). While the *IPA monitoring and evaluation guidelines* advocate for M&E frameworks to be developed through 'participatory community consultation, involving the 'right' people who can 'speak for country', in a culturally appropriate timeframe' (Australian Government, 2015, p. 1), it is unclear if specific resourcing has been made available to support these processes. The importance of resourcing consultation and participatory planning processes is described in relation to dedicating IPAs in Principle 8. Self-determined choice. While Indigenousled frameworks can powerfully articulate local rules and values for Ranger work, as Farr et al. (2016) note, many groups do not have the resources develop these independently. The draft *Indigenous Ranger Sector Strategy* does not delve into the subject of locally designed and Indigenous-led M&E but does seek input into practical measures of success for the Strategy (NIAA, 2022).

Principle 6: Subsidiarity of decision making and power

Subsidiarity of decision making and power refers to the appropriate social level at which governance occurs on the ground. At times this principle can conflict with external aspirations for decision making to be a community wide process. As Davies et al. state, this non-Indigenous view does not recognise that 'the primary social networks of Aboriginal people that are based around family or kinship groups' (2011, pp. 423-424). Similarly, tebrakunna country et al. (2016) emphasise the family unit as central in decision making:

Indigenous peoples still hold knowledge of country and protected areas within the family structure, therefore being at odds with contemporary governance structures where Indigenous worldviews are assumed to be homogenous – devoid of kinship and family (2016, p. 83).

Across the literature there are examples where governing Country entailed the necessary and appropriate involvement of specific groups, clans, families, or persons based on their relationship to Country. A common example was the constitution of local advisory groups or management boards (Ayre et al., 2021; Barber, 2015; Bauman & Smyth, 2007; Davies et al., 2018; Gould et al., 2021; Hill, 2011; Hoffmann et al., 2012; Hunt, 2010; Langton et al., 2005; Macdonald, 2019; Marika & Roeger, 2012; Moorcroft et al., 2012; Rist et al., 2019; Robinson et al., 2016; Taylor, 2014; Walker, 2010; Weir & Duff, 2017; Zurba, 2010). Preuss and Dixon describe Indigenous governance in the Southern Tanami IPA Development Project (STIPADP) in Central Australia:

Governance in the STIPADP was based on the principle of subsidiarity, which means authority and responsibility being held at the lowest effective level possible, in our case the regional management committees. Decision-making within all committees followed and will continue to abide by yapa [Warlpiri people] decision-making structures of deliberation and consensus, to better enable adaptive management (2012, p. 13).

The principle of subsidiarity is also evident in Indigenous-led governance of Wunambal Gaambera Country in the Kimberley:

Local governance structures were supported in numerous ways, including establishing a steering group made up of a majority of senior Traditional Owners and convening a working group representing each family group, to develop objectives, strategies and actions, some of which were specific to each graa [ancestral estate] (Moorcroft et al., 2012, p. 21).

Similarly, Miriuwung-Gajerrong people in the Kimberley have an estate ownership structure of Dawang and their contemporary corporation is governed by representatives from all sixteen appropriate Dawang (Hill 2011). In southwest Victoria, contemporary Gunditjmara organisations continue to 'reflect long-held Gunditjmara values and preferences for decision-making' including the provision of power and autonomy to clan estates (Vivian, 2014, p. 107, see also B. R. Smith, 2005).

The principle of subsidiarity means that Country governance can be scaled up to meet landscape scale objectives or management across large geographic regions. Through the principle of subsidiarity, smaller groups can draw on relation networks to create larger groups, while retaining their own local governing authority (Smith 2011). An example of this comes from ALFA, an Indigenous-owned not-for-profit that coordinates fire management for carbon abatement across Arnhem Land. ALFA's board is comprised of members nominated from one of eight wards, a design which Altman et al. suggest 'recognises the need for joined-up Western forms of company governance alongside the enduring customary pressures for localism and regional representation' (2020, p. 562). In a similar way, GAC exercises adaptive governance through an institutional arrangement that:

enables Aboriginal people to work collectively at a scale beyond that of traditional decision-making (the single language group, sometimes negotiating with neighbours), but commensurate with local decision-making (nine closely knit language groups, based in a small region) and customary decision-making styles (Maclean et al., 2013, p. 102).

Subsidiarity in Ranger practices

The principle of subsidiarity is also evident in the daily practices of Rangers. Throughout the literature I found examples of Rangers consulting, working with, or employing people and families based on their rights or responsibilities within a management area (Austin et al., 2018; Bock et al., 2018; Gorman & Vemuri, 2012; Gould et al., 2021; Hunt, 2010; Macdonald, 2019; Pyke et al., 2017; Robinson et al., 2016; Schwab & Fogarty, 2015; Smith & Claudie, 2003; Smyth, 2011; Smyth & Jaireth, 2012; Talbot, 2017; Zurba, 2010). Muller describes this practice as a kind of local accountability where 'the "checks and balances" required through kin relationships and land responsibilities establish rigorous accountability frameworks for land and its management' (2008a, p. 403).

Additionally, the principle of subsidiarity may direct the structure of Ranger groups, i.e. how many Rangers should be employed and from what clans (Hill, 2011; Macdonald, 2019). A Senior Ranger from the Yugul Mangi Rangers in Ngukurr describes this to Macdonald (2019, p. 238):

When we set up the Ranger program we had to have all of the moieties represented to make sure all the right people are involved. We can't make decisions on our own. It's like passing a bill in parliament, where you have the senate and the house [of representatives] and all that. For my Country I have to have the mingirringi – the land owner – the junggayi, and my abuji – my nephews and their kids – and gagu – my nieces and their kids – if I want to make any decisions.

An individual Ranger may be employed partly because their cultural identity enables the proper management of Country (see Williamson, 2014; Woodward, 2008). An example of this is given by a Yirralka Ranger:

He [Djambawa] said: 'you should do the ranger job, because you know about the story [of] all the country – all the monuk (sea) coming through, and how you cross with the boat. That is what he said to me: 'you know the painting, the sacred area.' (Barber, 2015, p. 37)

In their community-based evaluation, Sithole et al. (2008) found concerns that participation in Ranger programs based only on personal interest can create an imbalance in representation across clans. Respondents emphasised the importance of having 'the right people' for Country in Ranger groups as determined through community consultation processes (Sithole et al. 2008). The principle of subsidiarity of decision making and power is evident across the literature from the constitution of Boards to the everyday work of Rangers.

Principle 7: Capability

Principle 7: Capability refers to the full set of resources available to Indigenous people to implement governance in practice. Indigenous people bring a rich collection of existing capabilities to Country governance. Indigenous Ranger groups and IPAs are often characterised as a mechanism to enhance individual and community capability, and in particular, support burgeoning community enterprises and development initiatives. With that said, the literature documents a need for targeted and accessible training, including skills development for leadership and governance, to enhance Country governance. The scholarship documents how lack of resourcing, from vehicles to infrastructure and staffing, creates challenges for implementing work on Country. It also illustrates how short-term, narrow, and limited funding negatively impacts effective Country governance.

Indigenous capability

Throughout the scholarship it is evident that Indigenous people bring distinct and diverse capabilities to governing Country. Ancestral connections to place and collective knowledge are a key foundation of these capabilities and qualities that are often fostered through Indigenous Ranger groups and IPAs. Such Indigenous capabilities are distinct from long held narratives of 'capacity building' within Indigenous affairs. Ens and Turpin rebut this dominant discourse in relation to Country management stating:

Gone are the days of talking about building the capacity of Aboriginal people; now, the common discourse in cross-cultural work is 'both-ways' capacity building – building the capacity of all participants to understand, value, deploy and empower practices from all participating cultures (2022, pp. 8-9).

This idea is backed-up by a government employee working in partnership with the Girringun Rangers:

Capacity is the wrong word! Girringun has increased capability to work with government to address a whole range of issues. They are a land and sea centre. They are a centre of excellence in what they provide to government. We need them. Girringun by in large [sic] have just been the shining light especially in the GBR [Great Barrier Reef] (Zurba, 2010, p. 106).

Training and governance capabilities

Notwithstanding existing Indigenous capability, the literature documents a need for Rangers to access relevant training that is timely, affordable, and consistent with the literacy and numeracy skills of participants (see Braham, 2007; Hunt, 2012b; Macdonald, 2019; Sithole et al., 2008; Storrs et al., 2002; Zurba, 2010). This is recognised as a challenge in the draft *Indigenous Ranger Sector Strategy* (NIAA, 2022, p. 18). Further, training should build on existing Indigenous capabilities. For example, Rangers from the Northern Territory Top End that Sithole et al. (2008) spoke with raised issue with standard training approaches that marginalise Indigenous knowledges and skills (see also Gorman & Vemuri, 2012; Hunt, 2010; Muller, 2008b).

The literature advocates for training and skills development that will support the growth of Indigenous-led Country governance, including leadership and governance training (see Altman, 2012a; Altman et al., 2011; Gorman & Vemuri, 2017; Williamson, 2021; Woodward, 2019). Such training should be approached 'developmentally', i.e. sensitive to the current position of Indigenous groups and the unique path they chart toward their aspirations (see Bauman & Smith, *in press*; also van Bueren et al., 2015 for discussion of Ranger Group 'development phases'). Similarly, the draft *Indigenous Ranger Sector Strategy* notes that 'different ranger organisations and individual rangers have varied organisational, skills and economic development needs and aspirations' (NIAA, 2022, p.16).

Importantly, as Rangers acquire new skills, such developments should be recognised through increased salary, job security and scope of powers (see Sithole et al., 2008 for discussion). A proposed action in the draft *Indigenous Ranger Sector Strategy* under Strong Economy (Jobs) is to '3.5 Ensure that Indigenous rangers operate under employment awards that link remuneration to qualifications' (NIAA, 2022, p. 35). Subsequent consultation feedback showed support for a 'national award pay scale' (GHD, 2022, p.13).

Aspirations for greater governing capabilities are commonly documented in Country plans. For example, Yolnu aim for 'formal training and skill development with the ultimate goal being to have local Yolnu people in all positions' (Barber, 2015, p. 8). Girringun traditional owners outline a capacity building strategy to ensure Ranger engagement is not a 'token gesture' (Nursey-Bray & Rist, 2009, p. 121; see also Austin et al., 2017; Barber, 2015; Hunt, 2010; Maclean et al., 2021). However, realisation of these goals is often challenged by program budgets, as expressed by an Anangu traditional owner:

People want to work but there is no money, the IPA can only ever cover casual wages so they can't employ rangers. We are being strong by staying in the Grandfathers' and Grandmothers' land. We will be strong, but we need some money...The money story for the IPAs is a problem. When all the 5 IPAs are up and running, there will be 3 managers who will oversee them all, and there will be no other full-time positions. Can't we have some Anangu in those full-time positions? Are there any trainee-positions available for Anangu? There has to be some effort to put local people in these positions. There hasn't been any effort to train Anangu for the IPA positions (Bardsley & Wiseman 2012a, p. 721, cited in Bardsley & Wiseman, 2016, p. 66).

Resourcing for work on Country

The scholarship features cases where on-ground capability was constrained by a lack of resources. This included equipment, technology, infrastructure, vehicles and boats, as well as adequate budgets to undertake maintenance and replace assets as needed. Such resourcing is clearly fundamental to Rangers' ability to enact independent operations on Country. As one Bunya Bunya traditional owner states: 'We want our own work vehicles, like the mainstream people. We're still driving around in my family car (4WD) [and have been] for the last seven years' (Wilson et al., 2018, p. 341). Similarly, in Coen, Kalan operations are underwritten by use of personal vehicles and community provision of childcare (Maclean et al. 2021; see also Cooke, 2012; Hunt, 2012b; Williamson, 2014). Ens, Finlayson, et al. (2012) note that funding squarely focused on Indigenous employment can often result in inadequate operational budgets.

Accessing and working on Country can be a resource intensive activity, especially in areas that are remote, impacted by seasonal variability, or otherwise hard to access. The literature documents difficulties to accessing Country due to inadequate resources, infrastructure, or transport (Addison et al., 2019; Altman & Whitehead, 2003; Green et al., 2012; Hill et al., 2013; Macdonald, 2019; Sithole et al., 2008; Smith & Claudie, 2003). A lack of regular access to Country can compound challenges as access routes deteriorate over time (Altman & Branchut, 2008; Kerins & Green, 2018). The ability to spend time on Country and enact governance is even more challenging for widely dispersed populations. This has been documented by Researchers on the IGD Project working with the Boonthamurra Nation in southwest Queensland. In this case, it was a priority for Boonthamurra people to come together on Country at Eromanga and talk about their collective governance, however this process required 'considerable planning, logistics, funding, and hard work' as Boonthamurra people live across the state of Queensland (Australian Indigenous Governance Institute (AIGI) & CAEPR 2022, p. 2). Similarly, as Smyth and Jaireth explain:

Many Indigenous people now live far removed from their traditional Country for which they retain customary rights, interests, obligations and responsibilities, making it very difficult for under-resourced

Indigenous organisations to ensure the ongoing engagement of the appropriate Indigenous people in decision-making for Country (2012, p. 58).

Further, large-scale, and complex environmental issues often require significant manpower and Ranger groups may not have the staff to tackle these challenges. For example, a Ngemba traditional owner states in relation to their IPA in Brewarrina:

More money would be good for hands on work. For example we have put up bird boxes but we don't have enough man power to check the boxes – the boys are spending most of their time checking fencing, keeping cattle out and so on, so they don't have the chance to see if the birds are using the boxes: are they multiplying or are they dying (Maclean et al., 2012, p. 45).

The need for more Rangers is reiterated by a government staff member working with Girringun who suggests it is 'phenomenal what they can do with more people on the ground. More rangers equals increased capacity' (Zurba, 2010, p. 118). In general, the demand for funding for Indigenous Ranger groups and IPAs is greater than current government investment (Grace, 2016; Smyth, 2011).

Effective Country governance also navigates broader socioeconomic challenges faced by many Indigenous people (Hill et al., 2013; Hunt, 2010; Sithole et al., 2008; Wilson & Woodrow, 2009). For example, in Laura, Cape York, Cole and Wallis suggest that an expanded Ranger workforce is constrained by limited local housing (2019; see also Marika et al., 2012; Marika & Roeger, 2012). A lack of government support for Indigenous people to live on Country can undermine the viability of Indigenous Ranger groups and IPAs. This point is conveyed by a Djelk Ranger:

Right now the government is talking about closing all the community outstations, and that's where we are going to have a big problem; how are people going to look after their land? (Carmichael et al., 2017, p. 1210; see also Green et al., 2012; Rostron et al., 2012).

Rangers enhancing community capability

Despite the forementioned challenges, within the literature Indigenous Ranger groups and IPAs are commonly framed as a source of governing and development capability for people and communities. This view is also reflected throughout the draft *Indigenous Ranger Sector Strategy*, particularly within the Strong Economy theme (NIAA, 20022). Capability manifests on an individual level as Rangers gain qualifications and work experience that opens up future employment opportunities (Braham, 2007; Hunt, 2010; Maclean et al., 2021). A Yirralka Ranger conveyed this to Barber:

That's what I feel, like I can go and get another job. That is what I am feeling. Like I can jump to this job, jump to another job, learn about all kind of things (2015, p. 49).

In a similar way, a female participant in the Banbai BE program told Hunt, 'you can come here unskilled and they've cut and polished you by the time you've finished – it opens so many doors' (2010, p. 15). Marika et al. write about the potential of the Yirralka Ranger Program:

In the future we see not only Yolngu rangers but Yolngu ecologists, biologists and, why not, geographic information system specialists. These are all opportunities that are open to us through caring for country (2012, p. 141).

It is reported that this increased capability extends beyond the individual – it typically remains within the community, meaning that Indigenous Ranger groups and IPAs can foster leadership, mentoring, knowledge

transfer and governance capacity that has wide reaching local benefits (Barber et al., 2017; Braham, 2007; Sithole et al., 2008). Smyth notes this dynamic with many Indigenous Rangers going on to hold 'senior administrative and governance roles in their communities' (2014, p. 4). Further, programs can provide valuable resources leveraged for broader community goals. As a Yanunijarra traditional owner explained to Addison et al.:

No funding and it's hard for PBC [Prescribed Body Corporate] now to get funding. The government only put \$50,000 a year for PBC to run their meetings, four meetings a year and it's not enough to put anything together... Yeah, because PBC have no money we piggyback on our ranger program (2019, p. 101).

Further, Indigenous Ranger groups and IPAs can be a platform to attract additional grants, fee-for-service and a starting point for business development. van Bueren et al. (2015) reported that around 40% of Ranger groups undertook commercial activities. Under the Strong Economy (Business) theme, the draft *Indigenous Ranger Sector Strategy* states that 'many Indigenous ranger organisations and communities are diversifying their incomes and resources through commercial partnerships and fee-for-service activities' but also recognises that 'building business skills, management expertise, technical advice and business acumen are challenges faced by ranger organisations, especially in regional and remote areas' (NIAA, 2022, p. 18). The draft strategy lists proposed actions such as facilitating procurement of ranger services, tailored business support, and ensuring 'that Indigenous ranger funding programs are designed to accommodate increasing organisational capability and business development by ranger organisations' (NIAA, 2022, p. 37).

Opportunities that have (or could) grow from Indigenous Ranger groups and IPAs identified in the literature include: tourism including safari hunting, bush products, art centres, research, nurseries, commercial flora and fauna harvest, pastoralism, cultural heritage services, cultural awareness training, environmental services such as compliance, biosecurity, emergency management and carbon abatement (Addison et al., 2019; Altman, 2012a, 2012b; Austin et al., 2018; Barber, 2015; Braham, 2007; Cole & Wallis, 2019; Concu, 2013; Daniels et al., 2012; Gorman & Vemuri, 2012, 2017; Green et al., 2012; Hunt, 2012b; Kennett et al., 2015; Kerins, 2015; Kerins & Green, 2018; Macdonald, 2019; Nikolakis et al., 2016; Rostron et al., 2012; Russell-Smith et al., 2019; Sangha et al., 2019; Smith & Claudie, 2003; Storrs et al., 2002; van Bueren et al., 2015; Walker, 2010; Weston et al., 2012; Wilson & Woodrow, 2009; Zurba, 2010). Among these endeavours, carbon abatement was the most frequently referenced (in over half of the papers reviewed), with ALFA being a commonly cited example.

Although Indigenous Ranger groups and IPAs are often characterised as a springboard for development opportunities and enterprise building, I found a scarcity of scholarship detailing how Indigenous people have grown and implemented such initiatives on the ground. This may in part reflect the selected literature search terms. There is some literature that explores the mechanisms needed to increase commercial engagement (for example see Barber et al., 2017; Gorman & Vemuri, 2017; also Dale et al. 2020). The recent release of a 'how-to' guide and final report on *Enabling investment in Indigenous on-country development* through CSIRO has made a notable contribution to this gap in scholarship (see Barber et al. 2022; Barber et al., 2021). Importantly, as Rangers increasingly become the 'go to' for all manner of initiatives, there is a concurrent need to carefully manage their limited resources, increase investment and uphold local priorities (see Hoffmann et al., 2012; Maclean et al., 2013).

Short-term and limited funding

The literature speaks to chronic challenges in governing Country due to a lack of long-term and flexible funding. A similar finding was reported in Reed et al.'s (2021) international review. There was reference to challenges with funding in over half of the papers I reviewed. The short-term nature of funding is identified as a particular

issue as it increases transaction costs, undermines staff retention, impedes long-term planning, partnership building, institutional capacity and enterprise development (Altman & Cochrane, 2003; Altman et al., 2011; Austin et al., 2017; Bauman & Smyth, 2007; Braham, 2007; Butterly, 2020; Davies, 1999; Ens, 2012a; Ens & Turpin, 2022; Green et al., 2012; Griffiths, 2017; Hunt, 2012a, 2012b; Kerins, 2012, 2013; Lindsay et al., 2022; Marum, 2014; May, 2010; Szabo & Smyth, 2003; Taylor, 2014; Taylor, 2015; Walker, 2010; Weston et al., 2012; Williamson, 2014, 2021; Woodward, 2008, 2019). Similar concerns were raised during consultation regarding the *Indigenous Ranger Sector Strategy* (GHD, 2022, p. 11). Short-term funding is incongruent with the timelines of governing Country. Referring to government cycles, a Girringun traditional owner said 'trees last longer than 4 years' (Robinson et al., 2016, p. 123). Further, the literature points to the need for flexible, broad-based funding that can be used on the ground to meet the needs of diverse Indigenous Ranger groups and IPAs (e.g. Altman & Whitehead, 2003; Barber, 2015; Maclean et al., 2013; Storrs et al., 2002; Taylor, 2015).

Many have pointed to the limited funding IPAs receive in comparison to other protected areas within the NRS (Farr et al., 2016; Hill et al., 2016; Kerins, 2012; Ross et al., 2009; Walker, 2010). As Gould et al. (2021) discuss, Sea Country IPAs face particular challenges as they are not recognised in the NRS which only deals with terrestrial areas, or in the National Representative System of Marine Protected Areas which is the marine equivalent (see also Smyth, 2009; Rist & Smyth 2013; Smyth & Isherwood, 2016 on Sea Country IPAs). Gould et al. state that:

Inclusion within the Government's IPA program brings potentially significant levels of funding, although the funding formula reflects the program's original terrestrial focus: some funds are provided to support the management of marine areas, although these are not scaled up as the area increases, as terrestrial funding is (2019, p. 10).

The funding arrangements described place obvious limits on Indigenous control and self-determination in governing Country and the ability to properly execute management plans. Indigenous Ranger groups and IPAs typically depend on multiple grants to survive (Bauman & Smyth, 2007; Marum, 2014). For example, May (2010) describes how the Wagiman Guwardagun Ranger Program relied on 15 different grants between 2003 and 2005. Similarly, Kerins (2012) reflects on the administrative burden experienced in the NLC's Caring for Country Unit and a case where one coordinator of a small Ranger group was managing over 12 different grants all with different reporting requirements. Maclean et al. recount that 'if Kalan Enterprises only had WoC funding, it would employ 5 people not 15' (2021, p. 50). Changes in funding can dramatically impact staffing. Hunt (2010) notes for Banbai BE that employee levels dropped from nearly 30 to 18 due to loss of funding (also Patterson & Hunt, 2012). As Muller suggests, ultimately, 'the rhetoric of the importance of Indigenous rangers is therefore not commensurate with funding for their operations' (2014, p. 137; see also Bauman et al., 2013; Griffiths, 2017).

With that said, several papers identified that multiyear and streamlined funding was key to the success of Indigenous Ranger groups and IPAs, even if there remains room for improvement (Hill et al., 2013; see also Davies et al., 2013; Hoffmann et al., 2012; Mackie & Meacheam, 2016; Marika & Roeger, 2012; van Bueren et al., 2015). It is important to note the recent and substantial increases in government support for these programs, as well as the on-going Indigenous advocacy that has driven this. In particular, the establishment of seven-year funding agreements for Indigenous Rangers from 2021 to 2028 has been a critical step in investing in the long-term capability of Indigenous people to govern Country.

Principle 8: Self-determined choice

Principle 8: Self-determined choice speaks to the importance of Indigenous people exercising FPIC and having the ability to put self-determined governance arrangements in place. Writing in the context of academic research, Kwaymullina (2016) describes how the concept of FPIC, as articulated in the United Nations

Declaration on the Rights of Indigenous People (UNDRIP), has become the international touchstone for ethical engagement with Indigenous people. Importantly, Kwaymullina (2016) underlines that judgments about the validity of FPIC must rest with Indigenous people. FPIC is a critical element of self-determined Indigenous Country governance. The concept of self-determination is at the centre of our collective work in the IGD Project and as a group our definition follows the framing of UNDRIP. Bauman and Smith refer to this definition as 'the right of Indigenous peoples to freely determine, make decisions about, and assume responsibility for their political, socioeconomic and cultural destiny, and what takes place on their lands and in their affairs' (*in press*). Drieberg, Sutherland and Smith (*in press*) use the work of Megan Davis (2011) to emphasise that self-determination requires more than holding power but rather goes to the ability to exercise power. In this principle, I consider the ways that the scholarship deals with FPIC and how IPAs have been characterised as enabling self-determined choice. I then discuss the broader relationship between contemporary Country governance and Indigenous self-determination.

Free, prior and informed consent

Indigenous people have crafted processes and systems to facilitate self-determined choice in governing Country. This was evident throughout examples on-Country networked consultation and participatory planning discussed in Principle 1: Relational networks. The scholarship has also directly referred to FPIC. For example, in discussing ALFA, Altman et al. (2020) describe processes of consultation with Indigenous people across about 300 land-owning groups to obtain their FPIC for savanna burning activities. The importance of self-determined choice for Gunditjmara people is conveyed by Vivian:

The Gunditimara commitment to transparent, deliberative decision-making, with a focus on full, prior and informed consent, cannot be overstated. The research team repeatedly heard from Gunditi Mirring office holders, personnel and other Gunditimara people the phrase, 'there is a process' (2014, p. 110).

Requirements for Indigenous FPIC are increasingly inscribed in non-Indigenous systems. Bauman and Smyth assert that Indigenous FPIC is critical for respectful and effective protected area management even if such processes are 'complex and time-consuming' (2007, p. xiv). Within the literature, FPIC is often discussed in relation to research collaborations with Indigenous Rangers (Dobbs et al., 2016; Hill, 2011; Robinson et al., 2021; Sloane et al., 2021). Imperatives for FPIC also flow from land rights legislation, which are then incorporated into Ranger practice, as Pleshet (2018) notes for the *Anangu Pitjantjatjara Yankunytjatjara Land Rights Act 1981*. Austin, Robinson, Tofa, et al. (2019) found that investors in Country management perceived 'informed Indigenous consent' as a key indicator of success in their partnerships with Indigenous people. However, the literature also contains cases where dominant non-Indigenous systems do not accommodate the right for Indigenous people to refuse consent (see Kerins, 2015). For example, in eastern Cape York, Barber et al. (2017) describe the absence of Indigenous FPIC within environmental regulations, namely vegetation management and negotiations for World Heritage listings (also Bock et al., 2018; Smyth & Jaireth, 2012; but note recent progress in this area with Budj Bim World Heritage Site, see Brondízio et al., 2021).

IPAs and self-determined choice

Across the literature, self-determined choice was discussed most frequently in relation to IPAs, and in particular, the processes involved in dedicating an IPA. The role of Indigenous FPIC in dedicating and managing IPAs contrasts Australia's other protected area frameworks (Hitchcock et al., 2015; Smyth & Jaireth, 2012). Smyth refers to the dedication of the first IPA by the Adnyamathanha people in 1998 as 'the first occasion in Australia that any form of protected area had been established with the consent of Indigenous landowners' (2015, p. 74). The idea of IPAs enabling self-determined choice is described by Langton et al.:

The IPAs provide a basis whereby indigenous people can have informed choices about how they exercise their rights and interests in their traditional lifeways and also in creating the capacity for a sustainable economic base for their communities within the modern market economy (2005, p. 42).

Scholarship has highlighted the voluntary nature of IPAs and the participatory processes involved in the dedication of an IPA (Bauman et al., 2013; Bauman & Smyth, 2007; Bock et al., 2018; Davies et al., 2013; Ens, Finlayson, et al., 2012; Fleischhauer & Kammeier, 2007; Gould et al., 2021; Hill et al., 2011; Langton et al., 2005; Muller, 2003; Preuss & Dixon, 2012; Smyth et al., 2016; Smyth & Jaireth, 2012; Walker, 2010; Zurba, 2010). Designating an IPA involves a staged process with on-going consultation over a number of years. These participatory processes are typically overseen by a facilitator, who acts in the interests of the Indigenous landholding group and must confirm the FPIC of group members (Hill et al., 2011). The first step of this process is:

Advice: Traditional owners consider the costs and benefits of establishing an indigenous protected area or cooperative management arrangement in consultation with advisers, land councils and government agencies (Thackway & Brunckhorst, 1998, p. 175).

During this period, Indigenous people may seek specific legal, policy and conservation advice, as well as travel to meet with others who manage existing IPAs (Szabo & Smyth, 2003; e.g. see Patterson & Hunt, 2012). In describing the consultation that led to an IPA declaration at Nabbarla Kunindawabba, Rostron et al. write that 'talking through changes to how country is used and managed takes time but the results are worth the wait' (2012, p. 170). Farr et al. (2016) report that in 2010/2011, 40% of all IPA funding was allocated to consultation processes. The authors note that such consultation processes themselves build local Indigenous governance capacity, a quality that the Australian Government requires if a group is to receive IPA funding (Farr et al., 2016). Similar, though less comprehensive or well resourced, participatory processes are described in relation to the WOC program (now IRP) (van Bueren et al., 2015).

While IPAs rely upon Indigenous FPIC, there remain limits to the exercise of self-determined choice. For example, IPA nominations compete against others within a designated pool of funding and must meet criteria defined by government (Hunt, 2012b). Barbour and Schlesinger (2012) reflect on the challenges for exercising self-determined choice when Ranger workplans are populated with non-Indigenous land management practices and priorities. Muller describes the limitations for exercising self-determination in land and sea management:

Self-determination that is allowed to exist only within predetermined frameworks and administered through Western accountability systems can never be truly determined by Indigenous groups themselves. Unless there is an explicit space for self-determined and self-managed accountability systems and processes, Indigenous land and sea management will always be limited to agency within the prescribed programs or on the fringes (2014, p. 139).

Moreover, Zurba (2010) reminds us that the IPA framework emerged from the Australian Government's desire to establish a NRS that represented the diversity of Australia's bioregions. This government project necessitated the inclusion of Indigenous-owned land. Although the IPA framework has continued to develop and be shaped by Indigenous people since it was first established, its foundational purpose and function related to Australia's NRS remains (Zurba, 2010; see also Gould et al., 2021).

Indigenous self-determination

It is evident that self-determination has been enacted throughout the history of Indigenous leadership in governing Country. Gould et al. point out that 'IPAs are simultaneously a policy construct and a grassroots movement that address Indigenous peoples' and governments' overlapping interests in protecting Australia's

natural and cultural values' (2021, Introduction, para. 1). The literature contains myriad stories of Indigenous people establishing community-based initiatives to govern Country and references to the grassroots history of Indigenous Ranger groups and IPAs (Baker et al., 2001; Barber, 2015; Cantzler, 2015; Cole & Wallis, 2019; Concu, 2013; Daniels et al., 2012; Davies et al., 2011; Green et al., 2012; Hill et al., 2013; Hoffmann et al., 2012; Hunt, 2010; Jupp et al., 2015; Kennett et al., 2015; Kerins, 2013; Kerins & Green, 2018; Macdonald, 2019; Marika et al., 2012; Muller, 2012; Nursey-Bray & Rist, 2009; Patterson & Hunt, 2012; Robinson & Munungguritj, 2001; Rostron et al., 2012; B. R. Smith, 2005; Smith & Claudie, 2003; Storrs et al., 2002; Vemuri & Gorman, 2010; Williamson, 2021; Woodward et al., 2020).

Many early Ranger groups developed in parallel with Indigenous homelands movements (Altman, 2011; Altman & Cochrane, 2003; Altman & Whitehead, 2003; Davies et al., 2018; Kerins, 2013; Rostron et al., 2012; Sithole et al., 2008; Smith & Claudie, 2003). While other initiatives have developed within government structures, and in the absence of recognised land rights, as Williamson (2021) describes for Indigenous fire management practices in the ACT (also see Neale et al., 2019). Importantly, the literature frames these initiatives as originating from within Indigenous communities, with subsequent investments from government or other parties (Altman et al., 2011; Altman & Fogarty, 2010; May, 2010; Smyth, 2011, 2014; Smyth & Jaireth, 2012; Williamson, 2021). The Queensland Government's Indigenous Land and Sea Ranger Program website reiterates this view:

The Queensland Indigenous Land and Sea Ranger Program exists due to the advocacy of First Nations communities over many decades. The Department of Environment and Science remains committed to partnerships that honour their efforts (2023, para. 1).

This grassroots dynamic is also recognised by the Australian Government and the draft *Indigenous Ranger Sector Strategy* suggests that 'Indigenous-led initiatives will be encouraged, facilitated and built upon' (NIAA, 2022, p. 22). Williamson aptly describes the relationship between Country governance and self-determination: 'Cultural land management programs are only established when the community says it is a priority, thus facilitating self-determination as both an input and an outcome' (2021, p. 6). I note that consultation feedback on the *Indigenous Ranger Sector Strategy* suggested the strategy should be more aligned with principles of self-determination (GHD, 2022, p. 8).

The literature discusses Country governance in relation to Indigenous rights, including reference to the Australian Government's responsibility to deliver on Indigenous rights to self-determination. A number of papers highlight a role for Indigenous Ranger groups and IPAs in realising the goals outlined in the UNDRIP (Bauman et al., 2013; Bock et al., 2021; Kennett et al., 2010; Muller, 2014; Reed et al., 2021; Taylor, 2015; Yunupingu & Muller, 2009). CSIRO's recently released guidelines, *Our knowledge our way in caring for Country: Indigenous-led approaches to strengthening and sharing our knowledge for land and sea management,* discuss UNDRIP in relation to Indigenous Country governance at length (see Woodward et al., 2020; also Corrigan & Hay-Edie, 2013, for an international example). Rist et al. assert that:

The experience of IPAs in Australia suggests that indigenous peoples can lead the process of implementing these UNDRIP provisions through innovative application of the IUCN protected area definition and guidelines (2019, p. 150).

The potential for, and enactment of, self-determined governance through Indigenous Ranger groups and IPAs is evident in the scholarship and holds insights relevant to Indigenous policy more broadly.

Principle 9: Leadership

Principle 9: Leadership involves standing strong for a collective vision, inspiring others to achieve shared goals, and succession planning. The scholarship reviewed did not explicitly deal with leadership in great depth (see Williamson, 2014, on a related point), however, we can see a thread of Indigenous leadership throughout this paper. This is evident in the role of Elders in supporting programs, the work of influential actors who have fought for governing powers, designed culturally-sound governance institutions, and developed Indigenous Ranger groups and IPAs from the ground up. In this final principle, I explore how the literature portrays leadership within Ranger groups and IPAs, as well as the challenges and opportunities that exist for growing Indigenous leadership in Country governance.

Indigenous leadership in Indigenous Ranger groups and IPAs

Throughout the literature, leadership was often grounded in customary land ownership systems, strongly evoking Principle 2: Cultural authority or legitimacy. The role of land-owners and Elders in mentoring Rangers and providing oversight of Country governance is testament to this. Therefore, in a similar vein as Principle 6: Subsidiarity of decision making and power, leadership can be thought of as Country-based. It is the key people that speak for Country who provide guidance for projects, act on management boards, and work as Rangers. Therefore, unlike many forms of contemporary Indigenous leadership that respond to non-Indigenous systems, within Country governance there are clear opportunities to appoint and nurture leaders according to Indigenous law and protocols. At the same time, Indigenous leaders are frequently called upon to engage with non-Indigenous systems to represent local interests and manage external relationships (see Yunupingu & Muller, 2009). As such, Indigenous leaders are often exemplars of working 'two ways' (Walker, 2010), a relational and intercultural quality discussed in Principle 2 (see also Ayre et al., 2021; Burr, 2013; Maclean et al., 2013; Woodward, 2019).

Strong and capable leadership is instrumental in effective Country governance (van Bueren et al., 2015; Wilson & Woodrow, 2009). Leadership takes different forms across Australia, as it is shaped by cultural contexts, local issues, and individual gualities. Sithole et al. found that 'a strong and local charismatic leader' (2008, p. xi) has been critical to the establishment and success of many Indigenous Ranger groups in the Northern Territory Top End. Research by Addison et al. found that Indigenous people valued Ranger groups most in terms of 'control, leadership, empowerment and independence' (2019, p. 98). Hunt reports that leadership within the Banbai BE 'though low key, is strong, clear and respected' (2010, p. 22). Within the Djelk Ranger Program, Carmichael et al. note that leadership relies on consultation through relational networks and is thus 'shared, communal and consensual' (2017, p. 1212). The authors suggest this leadership style can effectively support community-driven ways of working (Carmichael et al., 2017). Also writing about the Djelk Ranger Program, Hill et al. describe how operations navigate the power held by Indigenous elites through their cultural authority as well as emerging Indigenous elites who gain power through these 'modernizing projects' (2012, Table 3). Marika and Roeger state that 'the most important principle underpinning Dhimurru's success is Yolngu leadership' (2012, p. 123). In the absence of strong leadership, Indigenous people may encounter challenges in meeting their collective goals. For example, Ngemba people identify the need for greater leadership capacity to support Indigenous water governance (Maclean et al., 2012). Additionally, the cultural legitimacy of Ranger groups may be vulnerable when responsibility for cultural leadership is vested with a single individual (see Williamson, 2014).

It is common to hear Rangers described as leaders in their communities and role models for the next generation. A key measure within a Yolngu designed evaluation framework was 'being ralpa' which includes 'being a role model and demonstrating pride and leadership' (Ayre et al., 2021, Knowledge practices of 'Being ralpa', para. 1). Within the literature many Rangers described their role in reference to community leadership. One Yirralka Ranger emphasised that:

We are doing something for the community, doing something for the land. If people recognise you through your work, you can be proud. Proud of what we are - proud to be black (Barber, 2015, p. 35).

Likewise, a Wulaign Ranger stated that being a Ranger 'makes us happy and proud...makes them old people happy, those old people proud too' (Walker, 2010, p. 161). A Raukkan NRM Ranger and Elder described that:

It is a big privilege to be working here. I was born and bred here; it means a lot to put back into the community. That's what makes us who we are...I love working, I was working in Western society since I was 18 years old and I forgot about my country. Being able to work here has made my life. Coming back to my grass roots, I am proud of what I have done (van Bueren et al., 2015, p. 24 citing Urbis 2012).

In these examples, Indigenous leadership in governing Country has community and land-owning group interests at its core (see Hunt 2010). Across the literature Indigenous people expressed a strong desire to see young people follow in the footsteps of current Rangers and flourish as leaders in governing Country. These motivations are expressed through the intergenerational networks that characterise Indigenous Ranger groups and IPAs discussed in Principle 1. For example, a Yirralka Ranger stated that:

I am always talking to kids – they know me—- I am on the front. They've seen me, what my role is, and they know me. We have to keep playing that role until the kids are ready (then) he can take my role. What I learn from this djama [work] gets me stronger. The government roles change, our role is passing knowledge to our kids, so they can see widely—- see the community and the world (Barber, 2015, p. 41).

Further, a Djelk Ranger reflects on how the dream of becoming a Ranger increased his attendance at school: 'soon as I was a schoolboy, I was turning up everyday...That was my first job, ranger. I love this work, being on country, looking after country' (Griffiths, 2017, p. 241; see also Hunt, 2012b). Within the literature, and as evidenced in the above quotes, Ranger work is widely recognised as a way to build self-confidence and pride (Ayre et al., 2021; Barber, 2015; Barnes et al., 2020; Daniels et al., 2012; Daniels et al., 2022; Davies et al., 2018; Ens, 2012a; Ens, Towler, et al., 2012; Hill et al., 2014; Hunt, 2010; Kerins, 2012; Marum, 2014; Patterson & Hunt, 2012; Sithole et al., 2008; Smyth, 2011; Taylor-Bragge et al., 2021; Walker, 2010; Wilson & Woodrow, 2009). However, targeted support is also necessary if Ranger programs are to realise their potential as incubators of leadership.

Mentoring and leadership development

Sithole et al. report that some Indigenous people have disengaged from Ranger groups due to 'inadequate mentoring support' and 'stress from responsibilities and meeting multiple expectations' (2008, p. 47). It is common for Indigenous leaders in Country governance to fulfil multiple other community roles, such as acting as ceremonial leaders (Muller, 2014) or holding decision-making positions in local organisations (Davies et al., 2018). Indigenous leaders often balance these local commitments alongside 'the pressures of representing Indigenous interests on multiple committees and advisory groups and being available as a consistent contact point for government, ministers, and the media' (Woodward, 2019, p. 156; see also Nursey-Bray & Jacobson, 2014). At times the commitments of Ranger work mean that personal cultural obligations are neglected. For example, one Djelk Ranger states:

I'm not spending much time in my area; most of the time I go out to other places to work. I don't have a [private] vehicle to get out there [to personal sites] to see whether the country's being damaged or not (Carmichael et al., 2017, p. 1205).

Therefore, leaders in Country governance must be supported to balance competing demands, maintain their local connectivity, and avoid burnout (Woodward, 2019).

The literature suggests that further investment is needed to foster and expand the Indigenous leadership already exercised in Country governance. This growing sector requires capacity building and leadership development through both Indigenous and non-Indigenous expertise (see Altman & Fogarty, 2010). Sithole et al. refer to 'leaders in waiting' within Ranger programs (2008, p. 50). Their evaluation found that individuals from at least half of the Ranger groups they spoke to felt they could run their own groups now or in the near future. For example, one Ranger stated:

I started ranger work in 2000, been doing ranger for 5 years now. First as normal ranger now land manager as I am learning so I can take over the manager's job...With my new crew they need more training with their English and training to become a ranger and learn more visits with other ranger groups and more ides from...2 or 3 more years I will be ready to take over (Sithole et al., 2008, p. 72).

Similarly, a Li-Anthawirriyarra Ranger told Williamson:

I would like to be Ranger Coordinator one day, but only if I had lead-up training first. I don't want to be here in 10 years' time doing the same thing... (2014, p. 52).

Williamson highlights the many young Indigenous people who are ready to undertake leadership training and that such 'programs would be most effective if formed as part of an overarching strategy to future proof these programs by investing in long-term leadership' (2014, p. 58). Leadership development, as well as opportunities to exercise leadership skills across relational networks, are critical to the long-term stability and success of Ranger groups (Woodward, 2008).

Conclusion

This literature review has found that Indigenous Ranger groups and IPAs are underpinned by Indigenous governance principles and practices. Indigenous ways of governing and local vision for Country shine through against a complex backdrop of legislation, policy, funding, and partnerships. This was particularly evident in Indigenous authored work and qualitative research with Indigenous people. This inquiry has reiterated that today's Indigenous Ranger groups and IPAs have their roots in community-driven action and continue to be a powerful mechanism for Indigenous people to govern Country in culturally legitimate and adaptive ways. All nine of the Indigenous governance principles defined in the conceptual framework resonated in the scholarship, often intersecting and overlapping to produce compounding governance benefits and strengths. In fact, these principles appeared so vividly that it is clear they are instrumental in how programs are governed by Indigenous people on the ground. This is evident in the following summary of findings for each principle:

1. Relational networks: This literature review highlights the central importance of relational networks in governing Country. At the local level, there were rich examples of layered community engagement, intergenerational knowledge transfer on Country, and a consistent role for Elders as nodal points of authority and power. Regional networks were commonly galvanised to address broader environmental, social, and cultural issues impacting Country and provide political solidarity. Indigenous people have established networks with diverse actors, from the local to the global, to effectively draw in resources, expertise, and social capital. The literature points to a role for governments in fostering relational networks by resourcing Indigenous people to come together and I note that this objective is included within the draft Indigenous Ranger Sector Strategy (NIAA, 2022).

- 2. Cultural legitimacy or authority: Governing Country in culturally legitimate ways appears foremost in the literature. Narratives of cultural legitimacy were so pervasive that they crosscut each of the nine Indigenous governance principles. This principle is clear in the primacy of customary knowledge and practice in Ranger activities. It also comes into play if Indigenous Ranger groups and IPAs do not provide opportunities for both men and women to enact roles in caring for Country. The intercultural and relational concept of 'two ways' is often used to describe how Rangers draw on both Indigenous and non-Indigenous practices and knowledge systems. Cultural legitimacy remains important within this concept as the maintenance of Indigenous worldviews and governance systems are prioritised.
- 3. Cultural geographies and networks: Throughout the literature, customary land ownership structures and reciprocal relationships between people and Country shaped governance practices. Indigenous Ranger groups and IPAs afford valuable opportunities to be on Country and enact local systems of governance. Indigenous cultural geographies and networks often contrast non-Indigenous systems of science, management, and legislation. However, Indigenous-led innovations such as Country-based planning have created opportunities to enact governance on a scale that is locally meaningful.
- 4. **Governing powers:** The literature documents myriad legal and non-legal mechanisms, located across various jurisdictions, that shape Indigenous peoples' power to govern Country. Recognised land rights provide significant opportunity and power to actualise self-determined Country governance. However, it was also clear that, in the absence of externally recognised rights, Indigenous people are empowered to govern Country according to their customary law. Throughout the scholarship, there were calls from Indigenous people for greater power, including provision of enforcement powers to Rangers. I suggest the *Indigenous Ranger Sector Strategy* could systematically consider the regulatory and legal powers held by Indigenous Rangers and identify and create pathways for groups to expand on these in line with local aspirations.
- 5. **Institutions:** This research highlights the central role of Indigenous organisations in supporting Indigenous Ranger groups and IPAs, as well as the diverse range of institutions and collaborative arrangements that host groups. Effective institutions supported stable, long-term employment, and a level of flexibility and autonomy for Ranger groups to direct their daily work. Institutions play a key role in navigating the rules set down in funding agreements and contracts, alongside norms and systems on the ground. The literature contains examples of agreements and protocols that Indigenous people have developed to support more self-determined Country governance as well as innovative Indigenous-led M&E systems.
- 6. Subsidiarity of decision making and power: Across the literature, there were examples where governing Country entailed the necessary and appropriate involvement of specific groups, clans, families, or persons based on their relationship to Country. This was often evident in the formation of Boards and Committees. The principle of subsidiarity also shaped the structure of Ranger groups (i.e. how many Rangers should be employed and from what clans), as well as their daily practices such as working with specific families based on their rights or responsibilities within a management area.
- 7. **Capability:** The literature shows that Indigenous people bring distinct and diverse capabilities to Country governance. It is also clear that capability within Indigenous Ranger groups and IPAs can be limited by a lack of appropriate training, resourcing, limited operations budgets, as well as short-term and narrow funding. Recent developments such as the Australian Government's seven-year contracts are a positive investment in longer term capability. In the scholarship, Indigenous Ranger groups and IPAs are often described as a mechanism to enhance both individual and community capability, and in particular, as a springboard for enterprise building and community development initiatives. On-going investment, including leadership and governance skills development, is essential if this potential is to be realised.
- 8. **Self-determined choice:** Ideas of self-determined choice appear most clearly in the scholarship in relation to processes of designating an IPA. More broadly, the grassroots nature of Indigenous Ranger groups and IPAs reflects self-determination in Country governance. The literature points to the potential for Indigenous

Ranger groups and IPAs to be a mechanism to realise Indigenous rights to self-determination as outlined in UNDRIP.

9. Leadership: Throughout the literature, leadership was often grounded in traditional land ownership and cultural custodianship. At the same time, Indigenous leaders are adept at working 'two ways' and play important roles in engaging with non-Indigenous people, networks, and systems. It is common to hear Rangers described as leaders in their communities and role models for the next generation. The literature documents strong Indigenous leadership within Indigenous Ranger groups and IPAs, as well as ready opportunities for investment to expand Indigenous leadership and safeguard against burnout in this growing sector.

In writing up this review I have aimed to highlight the Indigenous voices and perspectives featured in the academic record. At one level, this was not hard to do – there were clear messages from Indigenous people about the primacy of their governance principles. At another level, I found a paucity of literature dealing with Indigenous Country governance through Indigenous Ranger groups and IPAs in southern parts of Australia. Adequately reflecting experiences in these regions would have required big steps outside of the identified inclusion/exclusion criteria, even though there are Indigenous Ranger groups and IPAs operating in these areas. While, to some extent, this trend may reflect the long history and prevalence of programs in northern Australia, it may also be taken as a comment on research practice. There is a clear gap in scholarly understandings of how Indigenous Ranger groups and IPAs are being governed by Indigenous people in southern Australia.

This review points to another disconnect between on-ground practice and academic scholarship. As indicated in the results section of this paper, there is a time lapse between the establishment of on ground initiatives and the discussion of these in peer-reviewed literature. This finding indicates that early Indigenous Ranger groups were not subject to dedicated scholarly attention and highlights the need for review of grey literature to better understand the emergence of these initiatives. Moreover, the absence of early dedicated scholarship points to the central role of Indigenous leaders, communities, and those working to support their efforts, in forging and advancing this sector.

This literature review has highlighted the grassroots objectives and acts of self-determination at the centre of Indigenous Ranger groups and IPAs. Subsequent investment from government and others has aided these initiatives to grow into the flourishing sector we see today. Indigenous-led innovations, such as Country-based planning, have transformed current environmental governance paradigms. There is a parallel with burgeoning Indigenous M&E systems and myriad opportunities to invest in locally designed and driven ways to measure success. Such work will elevate and support the realisation of local aspirations, increase community control, and build on the existing strength of Indigenous ways of governing.

This paper has reiterated that Indigenous Ranger groups and IPAs can be conceptualised as a form of Indigenous-driven development. For this potential to be fully realised, there is a need for long-term, flexible, and increased funding, as well as devolution of power to Indigenous people including greater enforcement powers to Rangers. This literature review demonstrates that principles of Indigenous governance are a keystone of Indigenous Ranger groups and IPAs. I argue that it is incumbent upon those investing in these initiatives to support the Indigenous governance principles that animate activities on the ground, as well as calls from Indigenous people for greater self-determination and power in governing their Country.

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