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March 19th, 2019

Sustainability, Being, and Reconciliation: Decolonizing Nature and the Australian Imaginary

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Abstract

Sustainability, Being, and Reconciliation: Decolonizing Nature and the Australian Imaginary

By Kristen Kaufman

The Australian state has implemented intercultural initiatives to include Indigenous ecological knowledges and practices in its natural resource management programming and policies, a practice which is becoming increasingly widespread at an international scale due to the value of Indigenous knowledges and practices in cultivating sustainability. In addition to seeking ecological conservation, intercultural management projects are also meant to deliver upon the Government's initiative to Closing the Gap on Indigenous disadvantage. Successful contemporary intercultural land management programs have potential to contribute to a holistic sustainability that includes decolonization of land, people, history, and state.

In this research, I pose the question: To what extent do Australia's programs and policies on natural resource management embody interculturalism and cultivate a holistically sustainable system? In attempting to understand programmatic outcomes within the larger purpose and implications of intercultural land management practices in Australia, I first engage with Australian history and national identity formation as well as decolonization theory to create a framework for analysis. I then perform content analysis for five case studies using government policies, programs, program assessments, and projects.

Analysis of program rhetoric, strategy, representation, and outcomes indicates that while programs and projects have made significant progress over time in moving towards a holistic sustainability, utilization of western epistemological science in setting goals and methods in top-down program planning can discourage genuine Indigenous participation and can prevent cross-cultural natural resource management grounded in Indigenous governance. Additionally, disconnections between policy and program priorities in reconciliation and natural resource management at the local, regional, and national scales of governance can prevent a productive conceptualization of sustainability that operationalizes parameters for genuine cross-cultural engagement. Finally, while regionally and locally scaled sub-programs that directly prioritize cross-cultural Indigenous land management, including Indigenous Protected Areas and Working on Country, have yielded holistically sustainable results, hesitancies due to violent historical relationships and lack of Indigenous autonomy in setting project priorities can be a roadblock in fostering the comfort necessary for intercultural engagement. Sustainability, Being, and Reconciliation: Decolonizing Nature and the Australian Imaginary

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Kristen Kaufman

Chapter 1: Setting the Stage

Introduction

"We like this earth to stay, because he was staying for ever and ever. We don't want to lose him. We say 'Sacred, leave him."" -Bill Neidjie, 1986¹

> Fuzzy stars, everywhere. They cast light in long shadows even in the dead of the night, in a place where there was no electricity to guide the way. Crisp yet sticky air. Thick with leftover vibrations of the afternoon outback sun. Bugs in chaotic movement on my face. My glasses in their case within the swag, and my arms rigid by my side as I anticipated insects. Around my swag in the sand, two circles. One, we drew with a stick, three times around the length of our swags, creating thick and imposing lines in the sand. The other, sprinkled salt along the dents of the circle we drew. This would divert snakes, the most poisonous of which in the world hailed from this place. With caution and a degree of tension, I let the hazy world around me soak red sand and dust, flies, the scuffles of creatures in the night, and a blur of light shining down from up above.

This was my first night in the red center of Australia. During my time studying in this country, I became exposed to inklings of new modes of being. I cannot stake claim to these feelings I felt in the land, lest I hollowly appropriate the deeply rooted cultural and spiritual associations feelings have with the identities of those people whose lineages have occupied this land for 60,000 years, and further steal. Nonetheless, that feelings are felt cannot be controlled. The Goolarabooloo community in the Kimberly region of Western Australia calls this *liyan*, or feeling (Emmanoil 2015). Through *liyan*, country metaphysically opens up, and one learns from it. According to non-Indigenous environmental scholar Nia Emmanoil, "I hold a deep knowing that many of my

¹ Bill Neidjie is an Indigenous poet and activist from the Kakadu Rainforest of the Australian Northern Territory.

experiences of being with country happen only when I allow myself to be quiet and listen, or see, through feeling" (2015). Indeed, Goolarabooloo storyteller Richard Hunter explains the relationship between liyan and country: "That's how we read the country, through our liyan" (cited in Emmanoil, 2015).

Liyan is just one glimpse into the intricate world of Indigenous knowledges and relationships with the land, which manifest with diversity through space and time among the three hundred Indigenous countries that call Australia home (Australia Institute of Aboriginal and Torres Strait Islander Studies 2019). The deep relationships that can exist between Indigenous Australians and the land—ones of kinship, responsibility, mutual identification, and life-essences—yield exceptionally astute understandings and values of the land and all of the life-forms and systems that are part of it (Birch 2016). Indigenous scholar Mary Graham describes two basic precepts of the Aboriginal world view: "the Land is the Law," and "you are not alone in the world," both of which are widely cited across the scholarship on Australian Aboriginal worldview as well as on-the-ground amidst some Indigenous communities. On her precept that the Land is the Law, Graham describes the following:

The land is a sacred entity, not property or real estate; it is the great mother of all humanity. The Dreaming is a combination of meaning (about life and all reality), and an action guide to living. The two most important kinds of relationships in life are, firstly, those between land and people and, secondly, those amongst people themselves, the second always being contingent upon the first. The land, and how we treat it, is what determines our human-ness. Because land is sacred and must be looked after, the relation between people and land becomes the template for society and social relations. Therefore all meaning comes from land... Just as it is possible to describe some of the ways in which the world seems to behave at a physical level, it may also be possible to describe some of the ways in which the world behaves at a non-physical, or 'spiritial,' level. Aboriginal Law is grounded in a perception of this psychic level of natural behavior.... It implicitly describes the wider emotional, psychological, and perhaps cognitive states of the world to which all human beings are subject, which means that Aboriginal Law is as natural (and as scientific) a system of law as physics... Aboriginal Law refers to a complex relationship between humanity and land which extends to cover every aspect of life (1999).

The Aboriginal Law that Graham describes, which manifests differently across time and space yet operates under the same cosmological foundation, fosters an intrinsic land ethic and kinship system that extends into custodianship of land. Place-based ecological knowledges and practices rising out of this cosmology can be meaningful for sustainability, especially in a country that has faced environmental degradation and exploitation post-colonization (Birch 2016).

Along with the exploitation of land and biodiversity that came with colonization, so too began the human effects of colonization; for example, toxic nuclear waste is deposited near poor, remote Indigenous communities—a form of environmental colonialism (Birch 2016). Consequently, the decolonization of nature and of the Australian state are intertwined agendas, especially as Indigenous ecological knowledges remain place-based and intrinsic, contrary to western-colonial relationships with the land, which emphasize ownership and exploitation (Plumwood 1999). Both the brutal colonial history of Australia and its prospects of environmental turmoil are representative of similar phenomena globally; indeed, denial of gruesome colonial pasts and the threats of environmental harm are both felt globally (Fourmile 2002). The Australian context is therefore a valuable lens through which to examine universal methods of healing.

Today, almost two and a half centuries after British explorer Captain Cook first arrived at New South Wales and raised the Flag of Great Britain in 1788 at New South

Wales, which is now one of the Commonwealth's eight internal states and territories, Indigenous disadvantage is apparent in state statistics (Muecke 2008). While Indigenous Australians constitute only 2.8% of Australia's entire population, they compose 35.5% of Australia's remote population (Australian Bureau of Statistics 2018). The 2013 United Nations Human Development Index, or "happiness" scale, ranked Australia second in the world behind only Norway, yet had the United Nations Index been applied to only Indigenous people in Australia, the ranking would have slipped from 2nd to 132nd place (Georgatos 2015). Contemporary Indigenous Australians face shorter average life expectancy, higher rates of incarceration and suicide, and lower levels of education and employment than do non-Indigenous Australians ("The Gap" 2014). This disharmony is telling of broader issues surrounding histories of colonization, dispossession, and ontological reckonings. Closing the Gap, a program of the Commonwealth's Department of the Prime Minister and Cabinet that began in 2008, "aims to improve the lives of all Aboriginal and Torres Strait Islander Australians... to deliver better health, education, and employment outcomes and to eliminate the gap between Indigenous and non-Indigenous Australians" ("Closing the Gap" 2019). The Commonwealth's initiatives to close this gap are an apparent decolonizing attempt to address Indigenous structural disadvantage.

The subject of this research is Australian state use of Indigenous ecological knowledges and practices in natural resource management (NRM) programming to advance sustainability—both through instigating a culture shift and in applied natural resource management. This practice is becoming increasingly widespread at an international scale as natural resource managers, policy makers, decision makers, and a diverse range of stakeholders recognize the value of Indigenous knowledges and practices in implementing sustainability, or acting and living sustainably (Birch 2016). Due to the intertwined historical roots of contemporary problems, a sustainable future stretches beyond environmental sustainability and includes decolonization of unsustainable paradigms and practices. In this research, I reference a *holistic sustainability* that systematically transcends the standard three-tiered notion of sustainability (environment, economic, and social). According to anthropologist of Indigenous Australia Deborah Bird Rose, relations with land subtend human rights, ecological restoration, and reconciliation (2004), so I additionally place these factors within a framework for sustainability. Sustainability is understood as achieving a changed national paradigmatic land-ethic upon which human rights, ecological restoration, cultural engagement, and reconciliation can thrive. It is movement towards a new political ecology reconciling violent histories with the land and its traditional inhabitants, fostering Indigenous well-being as well as that of all other components—living and nonliving—in the relational system, today and in the future.

The place-basedness, land kinship, and intrinsic value systems placed on the land in many Indigenous communities foster a responsibility to care for country and each other in what constitutes sustainable social and ecological relationships, as evidenced by the longevity of Australian Indigenous communities, though not without challenge, failure, or change over time. However, sustainable modes of thought and the ecological knowledges and practices underpinning them are deeply embedded in complex spiritual, cultural, and social systems that are felt and learned from the moment of birth (Bradley and Johnson 2015), raising questions about who can legitimately engage with Indigenous knowledges and practices and how they can meaningfully do so.

After a history of land dispossession and legal invalidation of Indigenous land rights, specific Australian state policies and programs have risen to cross-culturally use traditional Indigenous ecological knowledges and practices for natural resource management, acknowledging their value for both conservation and Indigenous autonomy. State programs that seek cross-cultural collaboration on natural resource management directly seek to align priorities with the decolonizing Closing the Gap initiative, which further relates them to my conception of holistic sustainability. First through property law and then through land management program and policy, collaborative initiatives to care for the land have potential to constitute not only a philosophical re-consideration of nature and the land, but also a new form of historical respect and remembering. Natural resource management projects that are genuinely intercultural rise out of initiatives to decolonize and to remember. In this project, I consider interculturalism as a collaborative two-way sharing and appropriation of knowledge and practice and gauge its effectiveness as a strategy in the interests of decolonization of both land (nature) and the state, fostering systematic sustainability. The forms of interculturalism examined here constitute a cultural discourse where Indigenous cultural practice and characteristics are operationalized in legal, political, and physical infrastructures of the state, and vice versa. However, while interculturalism is understood in this research as a beneficent strategy for appropriation, attempts to re-legitimize Indigenous practices can still risk harmful appropriation and/or essentialization of Indigenous knowledges.

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Despite state narratives of intercultural progress, Indigenous poverty, systemic racism, ecological disrespect, and degradation of land persist, raising questions around genuine initiatives towards reconciliation. Additionally, despite national efforts to integrate cross-cultural knowledge and management practices into natural resource management and Indigenous commitments to care for country, Indigenous participation in these efforts remains relatively low. A 2016 stakeholder survey on the first phase of the Australian Government's National Landcare Program, which is the over-arching natural resource management (NRM) program and includes Indigenous knowledge participation in its objectives, revealed that out of all priorities, the priority to build Indigenous knowledge and participation received the lowest percentage of priority alignment (27%) across each stakeholder group. However, 50% of members from Indigenous organizations aligned with the priority (Stakeholder Survey 2016). Additionally, less than half of reported projects undertaken related to building Indigenous knowledge and participation, which was the least indicated of all options. Total survey participants were least engaged by percentage with sub-programs specifically related to Indigenous Land Management, including Indigenous Protected Areas and Working on Country, although those two programs were the two highest engaged programs for participants from Indigenous groups. Nonetheless, participants from Indigenous groups only constituted 4% of total survey respondents, disproportionately low given the National Landcare Program objective to enhance Indigenous participation (Stakeholder Survey 2016). Survey statistics suggest challenges to attempts of intercultural integration in Indigenous natural resource management and sustainable planning.

Therefore, in this research, I seek to answer the question: To what extent do Australia's programs and policies on natural resource management embody interculturalism and cultivate a holistically sustainable system? Why is it that crosscultural priorities and commitments to decolonizing Indigenous collaboration are integrated into NRM programming and included in regional initiatives but not always reflected in program outcomes? In attempting to understand these outcomes within the larger purpose and implications of intercultural land management practices in Australia, I first engage with Australian history and national identity formation and existing scholarly theory to create a theoretical framework for analysis. I then perform content analysis of online sources, including government policies, programs, program assessments, and project case studies for assessment according to my established theoretical framework. Successful contemporary intercultural land management programs have potential to contribute to a holistic sustainability that includes decolonization and historical rethinking in addition to social, cultural, economic, and environmental well-being. Evaluation of cross-cultural program effectiveness in fostering holistic sustainability to figure out why participation is low, a discrepancy with program objectives, can reveal important information about best practices or challenges that come with genuine intercultural engagement at the resource management scale.

In Chapter 1, I proceed to discuss my positionality and challenges with language usage and translation, ever important in both anthropology and Indigenous Studies. In Chapter 2 I provide contextual overviews. First, I discuss and conceptualize Australian history through the lens of political ecology to underscore the relationship between historical events and environmental issues and changes, contributing to implications

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about the shared agenda of decolonization of nature and decolonization of the state. I then proceed with a review of the sustainability of Indigenous ecological knowledges and practices in Australia, which underscores ontologically different relationships with nature that must be reconciled for genuine cross-cultural land management. Third, I discuss the historical land rights and policy context of Indigenous land management in Australia, through which I allude to structural barriers to successful Indigenous land management that operate at the national level. In Chapter 3, I introduce my parameters for judging interculturalism and decolonization and proceed with a review of the literature conceptualizing these terms in international scope. I then discuss my methods and provide an overview of my data, including a glossary of all relevant terms and acronyms.

Finally, in Chapter 4, I proceed with my analyses on five case studies selected from Australia's natural resource management programs: 1) Caring for Our Country, the predecessor to the National Landcare Program, 2) Phase 1 of the National Landcare Program, 3) Phase 2 of the National Landcare Program, 4) Regional NRM organizations, and 5) Working on Country. Through analysis of program rhetoric, strategy, representation, and outcomes, I argue that programs and projects have made significant progress over time in aspirations towards a holistic sustainability, but utilization of western science and epistemology in top-down program planning discourages genuine Indigenous participation and prevents cross-cultural natural resource management grounded in Indigenous governance. Additionally, national disconnections between aligned policy and program priorities in sustainability, reconciliation, and natural resource management can prevent a productive conceptualization of sustainability that operationalizes parameters for genuine cross-cultural engagement. Finally, while regionally and communally scaled sub-programs that directly prioritize cross-cultural Indigenous land management, including Indigenous Protected Areas and Working on Country, have yielded holistically sustainable results, hesitancy due to violent historical relationships and lack of Indigenous autonomy in setting project priorities can remain a roadblock in fostering the comfort necessary for intercultural engagement.

Positionality

"White European want to know... asking 'What this story?' This not easy story. No-one else can tell it... Because this story for Aboriginal culture."

-Bill Neidjie, 1986

I walked barefoot in the sand. The first time, I was stunned to see my footprints so clearly—so perfectly human, they almost seemed foreign. My tracks danced in lines, circles, and jumps with the collection of animal and reptile tracks that we spent hours observing in the sand that day—snakes, lizards, dingoes, kangaroos, wallabies, camels, and so on. For millennia earlier, these tracks were intertwined with the footprints and song-lines of the Aboriginal people who inhabited this land.

When I first left for Australia two years ago, I anticipated that the country would

feel much the same as home. In an effort to make my education abroad place-based rather than just something I could learn at my home university, I petitioned for some classes in the Australian Indigenous Studies department at University of Melbourne to be approved for anthropology credit at my home university. I anticipated that these classes would be anthropological in nature, a study of Indigenous culture and Australian Aboriginality. This anticipation could not have been more wrong. I was thrown deep and unsuspecting into tense discussions around colonization, Indigenous genocide, contemporary racism and abuse, white amnesia, white guilt, and Australian nation building. I was intellectually, emotionally, and practically unprepared. My peers were Indigenous students and white Australians who were dedicating their entire degrees—and lives—to decolonization and changing Australia. Justly, my voice made the least sound, and was the least heard, in the class. Oftentimes, I felt scared and ill equipped to speak. I was, and still am, a learner and explorer in this space.

My studies abroad, which included courses entitled Australian Environmental Philosophy, Aboriginal Land, Law, and Philosophy, and Indigenous Art and Changing the Nation, had a profound impact on me and are what ultimately inspired this research. I am not the voice of authority in this work, nor do I claim to be. However, as a white American in the colonial state, and someone who hopes to live a life dedicated to enhancing holistic sustainability, I am a character in this story, and I feel an emerging responsibility to learn how to decolonize myself, my work, and my nation-state.

Thinking about my own tracks in the sand, and the indescribable feelings of connection I felt during my time in the Australian outback, I can't help but question my authority of feeling. According to ethnographer Stephen Muecke, "it would be inappropriate for me, or any other whitefella, to set himself or herself up as an authority giving the meaning of things on behalf of Aborigines—for instance, with a complex concept like the Dreaming" (2011). As a non-Indigenous white American, what right do I have to connect to and with this sacred, ancient land? What right do I have to connect to the land of the place I call home? Which land is my homeland? If Muecke's contention that "the long-standing whitefella yearning for connection with country is linked to the reconciliation movement" holds true, then there is a decolonizing path down which I can connect with country in a sustainable way that is mutually beneficial to all parties

involved, wherein agency and decision-making is placed with the traditional holders of knowledge (2011).

My language is limited in allowing me to write about experiences being with, learning from, and connecting to place. Emmanoil similarly raises the question of whether or not it is a white person's place to have *liyan* in Australian land, connecting to country in this way, which western modes of thought arguably cannot fully grasp and through which Indigenous people have connected to the land—that is now stolen and exploited—for millennia (2015). Nonetheless, it is a means through which to stretch the parameters of ways of knowing and being in the land beyond those that the universality of western epistemology covers, and is an important method for decolonizing it. An opening up of country for non-indigenous people to feel *liyan* would need to be done at Indigenous discretion and on Indigenous terms, with non-indigenous people attempting to engage with Indigenous ways of knowing not through an unquestioned Western analytic frame of thinking, but through an unsettlement from this frame (Emmanoil 2015).

Indigenous Australian scholar Irene Watson mentions that, "non-indigenous peoples are much further removed from the knowledge and philosophy of their own indigenous identities and relationships to the land than indigenous people are. It is a two thousand year track back for many non-indigenous people to the source of their own indigeneity" (1997). Watson's words make me question the definition of terms used throughout this paper, such as Indigenous and non-indigenous and western and non-western. In grappling with the politics of settlers and solidarity with Indigenous people, decolonization scholars Snelgrove et al (2014) examine their own ancestral histories, a

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task I proceed to undertake. I am non-indigenous to the land that I call home, and so my ancestral history and life today is entangled with the global structures of settler colonialism, capitalism, and white supremacy (Snelgrove et al 2014). My maternal grandmother's family has been in the country since the American Revolution. My mother's family has recently emigrated from Greece, where they have been for as far back as we know. My Greek identity is the strongest identity that I have, and I feel it deeply. Before she passed, my Yiayia (grandma) imbued me with spiritual, cultural, and linguistic Greek knowledge that I hold in my heart. From my father's side, I do not have any of these feelings or cultural identifications; American is felt as normal, or default. This makes sense if non-indigeneity begins with colonization—the movement and settlement of people elsewhere. Fittingly, the dual sides of my ancestral history are emblematic of a colonial legacy that erases culture over time, washing it away with the tide of history.

Given this central aspect of my identity, I include Indigenous voices in this research with hopes to combat the risks of speaking on behalf of another group, misrepresenting another group, and/or prioritizing my voice, which has been prioritized historically at the violent detriment of the voices of Indigenous people. I additionally consider and prioritize decolonizing research methodologies. Throughout this learning process I acknowledge that my biases and worldviews influence my perceptions, language, and arguments, and it is a priority of mine not to other or make exotic cultural difference. While my position as an American allows me to gauge big picture phenomena from a semi-impersonalized distance, I acknowledge my responsibilities to Indigenous justice and decolonizing methodologies in this research and recognize that I cannot understand, nor can I claim to, knowledges that are only learned in a lifetime. As Gurindji elder Old Jimmy of the Victoria River district in the Northern Territory would put it, "A European school requires only a decade to complete but an Aboriginal school [which is based on the earth] takes a life-time to complete" (quoted in Hokari 2002).

The Problem with Language

"I speak English for you, so you can listen... so you can know... you will understand. If I put my words (language) in same place, You won't understand. Our story is in the land... It is written in those sacred places. My children will look after those places, That's the law"

-Bill Neidjie, 1986

Bill Neidjie was the last initiated member of the Gagadju people of the Kakadu rainforest in the Northern Territory, and as an elder was anxious to hand on his knowledge to anyone who would listen (Plumwood 1991). One of the brutalities of colonization in Australia is the loss of knowledge due to genocide of culture, language, and the people who maintain them (Fourmile 2002). Certain knowledge maintained through intergenerational oral histories—stories passed down over millennia—is lost (Somerville 2013). The preservation of such knowledge proves difficult. Translation from an Australian Indigenous language to English is lacking, as there is disjunction between vocabularies, syntax, and structures of these languages, which is in turn reflective of the different modes of being, paradigms, and worldviews of the people who speak these languages. Here, I will raise questions about contesting language, systems, and histories that are important to consider, but whose answers are complicated and arguably evasive.

A recurring problem in my research arose with language. Much of the western eye contributes to a damaging periodization of time-"ancient" as opposed to "modern" cultures, as ethnographer Stephen Muecke would describe for colonial societies such as Australia (2011). Use of the word traditional can exclude Indigenous people and their worldviews from contemporaneity, and in doing so essentialize indigeneity to a static repository of the past, unchanging and inherently pre-modern with implied inferiority. As Muecke would put it: "On what grounds are [Aboriginal people] excluded from their own versions of modernism, which I have defined as inventive and rapid adaptation to changes? Nothing suggests that Aborigines were stuck in the Stone Age and not always changing and adapting to circumstance... the modern does nothing much more than divide the achievements of colonial Australia from the richness of Indigenous civilization" (2008). Typically, those who are already seen as modern are the ones who invent its criteria, which raises further questions about narrow understandings of modern (Muecke 2011). Is not everyone who lives on this planet today, modern? Concerns about essentializing indigineity to the past contest with concerns about further forcing indigineity into the present, which can be seen as an invalidating, erasing, westernizing, or colonizing force. As Muecke contends, to say that colonialism has destroyed a culture upon observing lost Indigenous knowledge and practice in modern indigeneity is as offensive and invalidating as assuming culture has not changed. Muecke further emphasizes that Indigenous culture should be seen as dynamic, having rapidly changed, evolved, and survived in ultimately new forms despite traumatic stressors (2011). These concerns are relevant in consideration of cross-cultural natural resource management

programs, wherein a spectrum of traditional and contemporary Indigenous knowledges may be exposed and operationalized at the intercultural level.

Bioethicist Margaret Somerville describes that in many Indigenous Australian countries, "the notion of language as shaping our relationship to land is fundamental... Language and people are mutually constituted in place" (2013). Given the role of language in constituting place and being constituted by place in representations of people's relationship with the environment, wilderness, story, dreaming, and country are just a few examples of words whose connotations do not easily translate between languages. Anthropologist of Australian indigeneity, Deborah Bird Rose, stresses that in many Indigenous countries, there is no such thing as wilderness; all land is touched (1988). Similarly, Indigenous scholar and activist Judy Atkinson stresses, "This land called Australia was no wilderness. For those people who have lived and loved here since creation times, the land is more than a physical place. It is a moral sphere, the seat of life and emotions, and a place of the heart" (2002). All land is part of an active, pulsing relationship, which is in direct contest with a common justification of colonization—the land as *terra nullius*, or nobody's land. By this logic, land is uninhabited and wild, ripe for god-willing laborious land use in the form of western agriculture. This is fitting considering that the concept of freedom has a western history unknown to traditional Aboriginal systems of thought where there is no such thing as free country (Muecke 2011). Even the Indigenous words translating to "earth," which in the English language carries both literal and cultural connotations, are richly symbolic in Indigenous languages, oftentimes meaning one's own "shoulder" or "side" (Atkinson 2002).

Aboriginal stories include song, music, dance, paint, and performance; they are holistic in a way that English definitions do not cover. Histories of features of the land and its inhabitants are etched into the sand in the form of song-lines that track and share the story of the land, fundamentally different from the English storyline as the skeleton of a cultural narrative structure (Somerville 2013). Australian Indigenous dreaming, meanwhile, is often spoken about in western discourse in absolutist terms, representing place as an object rather than as having life-giving relations (Muecke 2011). The thread of relationships between people and all things in country, including country itself, wherein no object is inanimate and all are kin, is known as the Dreaming. Here, the term has nothing to do with sleep, but rather the relationships between people, their country, and the law embedded in that country (Bradley and Johnson 2015). Even when understanding the terms Dreamtime or Dreaming abstractly through an English lens (not as literal sleep), the incorrect connotations of an imaginary or unreal time remain. While Dreaming is the English word used to describe this phenomenon in Aboriginal English, the translation is severely lacking, and someone unfamiliar with the phenomenon cannot fully feel or understand it with this term. The problems with language do disservice to the diverse ways that different Australian Indigenous nations may see place and country (Bradley and Johnson 2015), even as addressing these language disjunctions can involve essentializing indegeneity to something static, traditional, or other.

My research involves personal decisions about language. One such decision concerns regards to presentation and positionality of cited scholars. Identity of a scholar influences his or her positionality with regards to this subject, which is something I take into account when citing scholars and the information they present. When I introduce a scholar, I designate whether or not he or she identifies as Indigenous with the descriptors "Indigenous scholar," or "non-indigenous scholar," and I designate if he or she specializes in Indigenous Studies with the descriptor "scholar of Indigenous Studies" or "indigeneity." Otherwise, confusion can arise as to whether or not the scholar is Indigenous or simply specializes in Indigenous Studies. I also decided to use the phrase "Indigenous ecological knowledges" rather than the more common buzzwords of Traditional Ecological Knowledge and Traditional Ecological Practice (TEK and TEP), so as not to essentialize Indigenous knowledge to a static entity from the past, with the plural to designate the diversity of time and place from where knowledges come. Indigenous activist Henrietta Fourmile fittingly justifies such a decision: "TEK is far more than a simple compilation of facts. It is the basis for local decision-making in areas of contemporary life, including natural resource management, nutrition, food preparation, health, education, and community and social organization. TEK is holistic, inherently dynamic, constantly evolving through experimentation and innovation, fresh insight, and external stimuli. Notions of traditional societies which see them as unchanging and static should be resisted" (1999).

Additional terms used frequently in this paper that require discussion are Indigenous and indigeneity. I am American born and non-indigenous to that land. When does a person lose his or her indigeneity, and is it essentializing to assume indigeneity (or, non-indigeneity) of people whose lives are integrated into western society, even if they are indigenous to the land? The western and non-western binary, connected to matters of indigeneity and often utilized in academic thinking, can also serve as a harmful means through which to understand indigeneity because it restricts that aspect of identity to two categories. According to Snelgrove et al, "the framework of settler colonialism has fostered over-characterizations of binary positions. [There are noted] common charges against settler colonial studies: it affirms a binary of Indigenous and Non-Indigenous that, at times, has the effect of treating settler colonialism as a meta-structure, thus erasing both its contingency and the dynamics that constitute racist, patriarchal, homonationalist, ablest, and capitalist settler colonialism" (2014). However, I use these binaries to validate traumatic colonial pasts in which they are grounded. As Snelgrove notes, the binaries are fundamental as the logics that uphold them cannot be ignored (2014). Additionally, I acknowledge ambiguity of terms such as the "state" and the "government," which are literally non-sentient and cannot be attached to specific individuals. The 'us' versus 'them' monologues that arise out of such terms are totalizing and culturally othering even when seeking to erase difference (Rose 2004), such as through governmental decolonizing initiatives. In the other, we see women, nature, and savage, all of whom become inherent absences in the larger scheme compared to what is seen as the default, or normal. With use of such words, I mean to open up a space for necessary dialogue that requires difference and seeks relationships across otherness (Rose 2004).

Finally, sustainability is a contested and complicated term, especially as it contrasts to unsustainability. I acknowledge that the conception of holistic sustainability used in this paper comes from my western education and can still create a fundamental ontological challenge for this research: Indigenous conceptions of sustainability might misalign with my term as defined, even though it has decolonization as its mission. Additionally, in this research large-scale and threatening environmental, economic, and social unsustainability is seen as arising from the philosophical and economic systems of colonization. However, I must qualify that it is incorrect to assume that unsustainability aligns perfectly with colonization; not all Indigenous communities traditionally fostered sustainability, and not all aspects of colonization work against sustainability.

Additionally, sustainability as it is more traditionally defined and engaged with can in some cases function as a further colonizing force. The time, money, and education that sustainable behavior and infrastructure requires—both at the individual and the national levels—can foster a colonial elitism. Meanwhile, in the context of development, sustainable projects working towards environmental and paradigmatic sustainability can be used as a justification or excuse for colonizing behaviors. Colonial outcomes of sustainability are at odds with my conception of sustainability wherein decolonization of people, state, and land is a requirement that is fundamental to the success of the more traditional notions of sustainability—environmental, economic, and social well being. I plan for my expansion and use of the concept to holistically encompass decolonization will underscore the intertwined agendas of traditional sustainability and decolonization and function to decolonizes traditional exercises in sustainability.

Chapter 2: Constructing a Narrative

History and Building a Nation

"First people come to us, They started and run our life.... quick. They bring drink. First they should ask about fish, cave dreaming, but... They rush in. They make school... teach. Now Aborigine losing it, Losing everything. Nearly all dead my people, My old people gone.

--Bill Neidjie, 1986

The history described in Bill Neidjie's reflections on colonization does not match the Australian history textbooks. Non-Indigenous Australian scholar Chris Healy would describe this as "The Great Australian Silence" in history (2008). Reflected in Neidjie's words is a western failure to respect and to learn. Rather than inquire about existing environmental knowledges and practices, settlers replaced them with western school, a re-textualization that constituted possession of the land, its people, and its management. In turn came deathly Indigenous dispossession. A historical reading of Australia that synthesizes ongoing colonization of people, land, nature, and ideology in the process of national identity formation is salient for this research.

To provide relevant historical background, I draw upon Muecke: "Let's conceive of history-making as occurring within a political ecology. This is a living and growing system where 'actual relations' refers to things that are articulated for all sorts of purposes that further the continuation of the system. A political ecology of a field like history will... allow all sorts of agents to participate in history-making... even elusive concepts like 'atmosphere' or 'mood.' We might thus experiment with the elements of a living ecology to see what ingredients cause the system to thrive, or not" (2011). Political ecology is here understood as examination of the relationships between historical events and environmental changes and issues. To examine the histories and legacies of colonization through the lens of political ecology ties seemingly separate issues together into a bigger picture and further contextualizes my notion of holistic sustainability, with necessary consideration of the intertwined political, social, historical, and cultural issues surrounding land management and conservation. Such a reading, wherein the land itself functions as ground zero for colonization, upon which all other acts of violence were justified and executed, makes evident the necessity of a fundamental re-thinking about relationships with the land and each other, through which

the land is decolonized and environmental sustainability as well as Indigenous wellbeing can grow.

My reading of Australian history is grounded in scholarship regarding the notion of *terra nullius*, representing the concept of "nobody's land" or "empty land," as a philosophical justification for colonization (Coram 2017). Despite existing Indigenous philosophical readings of the land, wherein intricate kinship with the land fosters keen and place-based awareness of ecological systems, intimate relationships with the flora, fauna, and nonliving elements of these systems, and ultimately a responsibility to care for country that is understood through the lens of Indigenous law (Bradley and Johnson 2015), *terra nullius* conceptually prevailed at the time of settlement (Coram 2017). The responsibility to care for country, so fundamental to Indigenous life and spiritualities, is rendered inoperable on settled lands where property ownership is placed with colonial entities. The responsibility to care for country functions as a deep reading of ecological and social history, out of which a place-based embodied archive arises through which to understand one's surroundings and one's place within the ecological system and its history, at odds with the philosophical conception of *terra nullius*.

Scholars writing on reconciling perspectives of history-making argue that the concept of *terra nullius* is a violent tool for erasure. For example, Indigenous activist Mark Cunningham describes, "through the process of mapping, early European explorers were able to create an image on paper of the Australian landscape as a tabula rasa that directly translated into a conceptualization of the land itself as *terra nullius*. With a few deft pen strokes, Aboriginal people were physically and culturally erased from the

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landscape, and hence from history, legitimating the silent and violent process of colonization. This erasure still exists in the way landscape is marked today" (n.d.). Similarly, according to Indigenous scholar Judy Atkinson, "This land that was called terra nullius (land of no peoples) by British colonisers after 1788 [in order to legitimize its invasion and dispossession], was in fact a living, breathing, landscape inhabited by between 300,000 and 1 million people" (2002). Terra nullius is here read as a justification for colonization. According to the scholarship about this justification, if at the time of settlement the Indigenous peoples of a place had not properly appropriated the territory in the manner that settler groups believed was correct, then it was settler responsibility to use the land industriously at the will of God, and *terra nullius* functions as a zero degree starting point for productivity (Coram 2017). In this logic, settler populations used the land laboriously, mixing their labor with land that was nobody's land according to Western law, and thus coming to own that land through natural right to property and industrious use (Coram 2017). Under this assessments of *terra nullius*, the concept served to erase Indigenous presence, conceptualizing emptiness and a necessity for laborious engagement.

Some scholars argue that *terra nullius* as a justification for colonization also set the stage for the operationalization of western notions of ownership, which proved violent to traditional land-ethics inscribed in the land. Industrious use would have included agriculture, which philosophically gave rise to property rights (Coram 2017). Indigenous systems of land-use such as firestick farming and trapping did not constitute laborious land-use according to this liberal Lockean philosophy as they were not considered productive (Coram 2017). Occupation was further invalidated if it did not consist of remnants of physical infrastructures, and infrastructures associated with laborious exploitation of natural resources were put in place. For many Indigenous Australians at the time of colonization, whose spiritualities and modes of being were deeply dependent on and intertwined with land kinship and whose social health and knowledge base were contingent upon healthy ecological relationships, the harsh exploitation of the land justified through liberal concepts of laborious and productive land use were especially violent (Muecke 2008). Nature became conceptualized as an entity that could be possessed and owned, separate from the existence of the human, a notion that had yet to see fruition in the existing political ecology. The dichotomy of humans versus nature (functioning to other nature) as opposed to humans being one with nature is not only a source of unsustainability; it is an ideological precursor to colonizing state concepts such as legal ownership and functions as a source of originary state violence.

Scholars argue that ideological underpinnings of *terra nullius* continue to breathe in Australia today. Perceived emptiness—the creation of a blank slate of history—is paramount in the creation of physical, legal, and ideological structures that construct dominant narratives of history, functioning to forget, erase, inscribe, or selectively ignore both the cultural histories of place as well as place-based embodied archives of the land. For example, Australian scholar Ruth Barcan describes "Big Things" as "implicated in the process of naming 'empty' spaces, in 'the classical image of an Australian space as structured by a void or absence which needs to be filled in" (1997). Big Things come in numerous forms: large statues of flora and fauna placed alongside the roads of rural towns, memorials, statues of settlers, or historical monuments, and "work allegorically, effacing, most notably, Aboriginal definitions of regional, tribal, spiritual, linguistic, or other space," (Barcan 1997)—indeed, washing away the embodied archive of the land, the song lines and Dreaming historically and spiritually embedded in the land. In crafting history, Big Things also craft narratives about the land. Agricultural Big Things are common, such as a fruit or vegetable, and reinforce western notions of laborious agricultural land-use as the dominant and perpetuated narrative of place; the beginning of history of place. Barcan's reading of the prevalence of agricultural Big Things with regards to health of the land proves salient:

What labour, what flow of capital, what environmental practice, what appropriation of land, goes into the production of, say, a shiny orange? The social and temporal relation of the fruit to the land is obscured in favour of the static and spatial relation of thing to thing—the place of a Big Thing in the network. Under this postmodern sign, some material and historical conditions are deflected by the fruit-as-spectacle: environmental questions histories of land clearance and degradation, soil erosion, pesticides; labour conditions and contexts—the sometimes unacknowledged stories of Aboriginal farm workers, the unpaid labour of women, or the toll exacted on rural workers by city dwellers whose demand for perfect fruit and veg at minimal prices all year round determines what can be grown, how, and how profitably (Barcan 1997).

Driving a few hundred kilometers inland from the coast of Western Australia, I saw the Big Things that Barcan described—still in existence twenty years after Barcan's publication. Huge statues of peaches, apples, pears, or fish dominate otherwise barren landscapes near small and isolated towns, distracting from colonial violence to the land and its natural resources, testifying to a noble agricultural history and crafting specific narratives about natural resource management and engagement with the land, even as the federal government attempts to operationalize intercultural forms agriculture with its National Landcare Program.

Manmade structures are not the only Big Things inscribed into the Australian landscape and used to craft narrative. Physical markers of the land such as rocks—

ranging from Uluru² to the Twelve Apostles off of Great Ocean Road³—are used to create specific national narrative identities. Three kilometers away from one such small and remote agricultural Western Australia town is a site known as the Three Sisters, representing what Birch would describe as "an overtly fictional view of pioneer history" (1999). The large rocks have been memorialized to commemorate the Levi sisters, who were 1850s gold rush settlers and lived at the site, which eventually became protected by Land Act legislation in 1879 and gained heritage title to prevent vandalism (Birch 1999). The site is now a popular tourist destination, nationally renowned as the self-claimed "first successful attempt at nature conservation in Australia" (Birch 1999). This claim effectively erases the deeply felt and intimate responsibility to care for country of the traditional Indigenous occupants of the land, for whom kinship with the land constitutes a moral and material continuity running between humans and non-humans (Muecke 2011). Ironically, the Three Sisters monument has since become a popular graffiti tourist site. According to Birch, "this practice of tagging so-called natural features has a strong tradition and history within European settler society and must be understood as yet another attempt to claim land within a European consciousness... a patriotic attempt to take possession of the landscape with a can of 'Australian Export' paint" (1999). Insofar as history occurs within a political ecology, large natural structures participate in history making; however, they yield very different historical narratives based on the politics of the relationship in question and are capitalized upon to foster the nation's tourism industry.

² A large sandstone monolith in the Northern Territory's remote Red Center, sacred to Indigenous Australians and now an iconic tourist destination

³ A collection of limestone stacks off of the shore of Victoria, also popular tourist destination

In dialogue about history and progress, some scholars perceive national Australian national identity as also constructed through narratives of triumph and conquest. According to Newton, "the notion of an empty land (terra nullius) provides a 'founding forgetting,' while history for the pioneering settlers is valorized" (2016). Birch would further argue that Terra nullius is not only originary violence; it is ongoing. Memorials to pioneer settlers litter the country, such as Jane Duff, who aided her two brothers while lost in the bush for nine days in 1864 (Birch 1999). Birch argues that not only does memorial to Jane Duff claim control over Indigenous landscapes, it "represents the seeming triumph of colonialism, of its ability to overcome and conquer land lyrically described ad nauseam as 'harsh and empty'" (Birch 1999), and such memorials only selectively commemorate Australian history. While Jane Duff is not forgotten, the countless members of the Stolen Generation have been erased: "the stories of other children create 'discomfort' if they are remembered at all. Both prior to and following Jane Duff becoming a lost child in the bush, Aboriginal children were being removed from their families and communities. A visitor can drive many hundreds of kilometres of the western district along the same roads that took Aboriginal children from their families—firstly on foot, then on horseback, in coaches, trains and finally in the back of police cars—with no knowledge of this history...The ideology that supported the abduction of Aboriginal children is a Pandora's box that few want opened. But until it is, there will be no history of the western district that is able to reflect its true past" (Birch 1999).

In her scholarship on reconciliation, non-Indigenous political scientist Fiona Nicoll acknowledges that at times beneficent intentions of assimilation, acculturation, or modernization backed actions underlying the stolen generation. Still, in discussion of the Koori people of New South Whales, Nicoll describes "the inability of middle-class white Australians to understand why stolen children might prefer to live in impoverished conditions with other Kooris to an isolated and often exploited existence among affluent whites, [assuming] the perspective of 'know-alls' (2004), and that "Aboriginal continuing resistance to invasion and assimilation is evident in the fact that Kooris who were removed from their families identify so strongly as members of stolen generations rather than as people 'saved' from the fate of what [a foster mother] described as a 'despised race" (2004). In conversation with such considerations, Atkinson raises the questions: "what were the effects on the people as their lands were stolen and desecrated, relationships destroyed, children taken and violated, lore and ceremonies devalued and dishonored? What long-term impacts have these separate yet inter-related tragedies had on the survivors?" (2002). The interpretations and concerns put forth by Nicoll and Atkinson concerning the Stolen Generation allude to the outcome—despite any diversity of intent—of destruction to Aboriginal families, cultures, languages, and connectivities, and underscore the phenomenon's function of communal and cultural erasure through which the land was actively inscribed as *terra nullius*, emptiness ripe for appropriation, exploitation, and conquering.

Barcan argues that Big Things, prevalent throughout Australia, collectively capitalize on the notion of *terra nullius* to erase actual place-based histories and in turn construct new narrative identities that both deny and perpetuate the past. *Terra nullius* becomes ground zero for history-making, through which "Big Things testify to a fear that we have no history. Of course, the fear that we have no history hides the history that we fear—that is, the history of colonial invasion, appropriation of the land and the attempted subjugation of Aboriginal people. Constructing monuments that invent regional identities
is a logical extension of *Terra Nullius*" (Barcan 1996). According to Indigenous scholar Irene Watson, "The impact of *terra nullius* surrounds us: violations of our law, ecological destruction of our lands and waters, dispossession from our territories and the colonization of our being. *Terra nullius* has not stopped; the violations of our law continue, the ecological destruction of the earth our mother continues with a vengeance, we are still struggling to return to the land, and the assimilator-integrator model is still being forced upon us. [*Terra nullius*] is my struggle against extinguishment" (1997). Watson's assertion reflects the colonizing violence of Australian-history making as occurring against both Indigenous occupants and the land itself.

The ongoing inscription of *terra nullius* into the land enables a version of Australian history in which Australia is a sovereign colonial state whose national identity is grounded in ideologies of mateship, including courage, bravery, and good-spirited camaraderie. Preferred historical narratives are reflective of nation-wide amnesia to a violent past and inability to confront guilt (Maddison 2011). Indeed, the country's national holiday, Australia Day, is a commemoration of the day that British explorer Captain Cook and his ships first arrived at New South Wales and raised the Flag of Great Britain in 1788, and statues in his honor can be found across the Australian landscape as additionally domineering Big Things (Muecke 2008). Subsequent Australian national identity development neglects to acknowledge the Indigenous genocide that followed. With mass murder and decease of Indigenous people came cultural genocide, as well as a flurry of structural racism, violence, and Indigenous dispossession through the nineteenth and twentieth centuries (Nicoll 2004). According to Indigenous scholar Judy Atkinson, "…knowing and understanding what has happened since 1788, and how what has happened has changed Aboriginal relationships and life experience [is important]… Large-scale epidemics, massacres, removals of whole populations to detainment camps called reserves, removals of children, splitting apart of family groups, physical and cultural genocide—these formed layers of traumatic impacts down the generations" (2002). Scholars writing on history through the lens of political ecology, while not monopolizing historical or uncontested interpretations of the national history, introduce important theory for understanding the role that *terra nullius* came to play in subsequent legal battles for Indigenous land rights, Indigenous natural resource management, and the current state of Australia and its inhabitants today.

Today, the Australian government requires initiatives to close the gap of Indigenous disadvantage across all Departments, which in the Department of the Environment and Energy manifests through intercultural approaches to land management. It is out of sanitized versions of national history that Australian decolonization scholars and theorists propose intercultural methodologies for reversing national amnesia, fostering mutual memory, and reversing environmental degradation produced as a result of visioning the land as *terra nullius*. To consider both the conventional historical narratives and the unimagined cultural and/or spiritual histories of the land is important for gauging meaningful system-based decolonizing initiatives today, and is a necessity for successful development of intercultural programs in natural resource management and Indigenous engagement. Historical awareness, recognition of violence and erasure from the past, and accompanying acknowledgement of dominant colonial power structures through grappling with their historical roots similarly rises as a salient strategy for crosscultural natural resource management.

Indigenous Ecological Knowledges and Practices

"We come from earth... Bones. We go to earth... Ashes. Earth... Like your father or brother or mother, Because you born from earth. You got to come back to earth. That's your bone, your blood. It's in this earth, Same as for tree"

-Bill Neidjie, 1986

At the end of the twentieth century, Bill Neidjie lived during a time of uncertainty, and his poems—an attempt of preservation—openly discussed his disillusionment with his community's collective loss of traditional knowledge, the dwindling of elders, and of young children moving to cities and failing to maintain knowledge that was passed down over dozens of generations (1986). The job of the elders to educate youth with sacred, spiritual, linguistic, and medicinal knowledge of the earth was oftentimes not as easily fulfilled, and the life long learning process that Old Jimmy described as Aboriginal school suffered (Hokari 2002). While the degree of this varies throughout Australia, the phenomenon is representative of long-lasting colonizing effects. Still, we see that Bill Neidjie spoke of an intricate environmental philosophy in which kinship with nature is maintained (1986). In this section, I provide insight into the nature of Indigenous ecological knowledges and practices as they yield a land-ethic at odds with western propriety ownership. The knowledges I discuss are not placed specifically in time; whether they represent either historical or contemporary philosophies is variable through space, as are the knowledges themselves. In fact, this is a challenge to cross-cultural engagement in NRM programs on the ground, where different local and

regional NRM groups, all operating under the same national frameworks, engage with different types of uniquely Indigenous knowledges—some lost, some assimilated, some ontologically foreign.

Knowledge is dynamic through space and time, and some scholars argue that the common assumptions that all has been tragically lost post colonization, or that Indigenous knowledges statically exist today in the same fashion as they have in the past, are both incorrect. According to environmental historian Cameron Muir, "Indigenous knowledge is not unchanging, and policies and laws should not suspend it in a particular moment in time" (Muir et al 2010). Muir posits that knowledge is not a static repository of information from the past that can be easily extracted for use, nor did it only just begin to change upon colonization, and that before colonization, Indigenous knowledges developed considerably through time (2010). For example, Birch describes that changes wrought at the end of the Ice Age 8,000 to 10,000 years ago are reflected in Indigenous storytelling, Dreamings, knowledge retention, and astronomy through time (2016). Muir provides an additional example about essentializations of Indigenous knowledges in the contemporary narrative historical identity: "A single panel [of a historical mural depicting a timeline of Australian history] is devoted to Aboriginal life and Dreaming before colonization... this mural is typical of perceptions of Indigenous culture as timeliness and of Western culture erasing traditional culture. Forty thousand years can be represented in one panel because traditional culture is unchanging; history begins with the arrival of white settlers" (et al 2010).

Knowledge additionally transformed post colonization, of which scholars argue that failure to recognize can essentialize contemporary indigeneity to something ancient and traditional. (Muir et al 2010). As Muir relays, such perception of time has significant implications for law and policy related to Indigenous land rights and governance: "Native Title legalization requires Indigenous people to not only prove that they owned the land (according to western notions of ownership), but that they prove continuing practice of 'traditional' customs" (et al 2010). Finally, assumption that all knowledge has been destroyed or lost can perpetuate the image of the Indigenous Australian as the abject person whose culture was destroyed upon colonization, which Indigenous activist Fourmile similarly discusses in her work: "TEK is holistic, inherently dynamic, constantly evolving through experimentation and innovation, fresh insight, and external stimuli. Notions of traditional societies which see them as unchanging and static should be resisted" (2002). In this light, my subsequent discussion on Indigenous ecological knowledges and their sustainabilities references contemporary interviews of people from specific Indigenous countries, but does not claim to essentialize the knowledge to indigeniety through physical space and intangible time. I qualify that philosophies described below are not universal within Australia.

To read country through *liyan* reveals relationships, as Goolarabooloo storyteller Richard Hunter describes (Emmanoil 2015). These relationships interweave everything in an animated system—land, human, flora, fauna, sea, and sky (Bradley and Johnson 2015). These relationships are also representative of intricate and nuanced knowledge of the land. Reading country, feeling country, and being with country within a systemic ecology all teach one about the land and the interconnected relationships within it. Indeed, "land is a story place" (Atkinson 2002). In turn, these relationships form the basis for being and acting in the world, and can either be nourishing or harmful based on their quality. Thus, the trend emerges among Australian Indigenous countries: the land is the law, and you are not alone (Graham 1999). Old Jimmy's words ring true: "My book is on this earth" (Hokari 2002).

Some examples of these relationships are provided below:

- "When the black kites are flying over the dunes, the salmon are running" (Emmanoil 2015)
- "To the Yanyuwa people, rolling coastal clouds indicate that flying foxes and certain bird species are about to start their seasonal migration" (Djarra 2015)
- "When the march flies start biting, the crocodiles are laying their eggs" (Muir et al 2010)

These learned relationships create ordered and sequenced connection within understandings of the land and yield highly specific knowledge of flora, fauna, and climate. Such highly specific knowledge in turn yields advanced practices with regards to conservation, biodiversity, and habitat management. "Within this communication system, country tells you what is going on; it calls for action and invites engagement. One call leads to another, so that action is both a response and a message" (Muir et al 2010). Humans are deeply embedded in the ecosystem, and so their actions influence ecological outcomes and vice versa.

Ecological relationships, of which humans are intimately a part of and play a role in influencing, involve kinship with flora, fauna, and the land itself. Bill Neidjie relays this with his expression that the earth is like a father or brother, and the tree is bone and blood (1986). With kinship to the land and its diverse life forms comes a responsibility to protect it. Beyond just people, other species and non-living elements of the land become incorporated into social structures, and it then holds that good social relationships are vital for good ecological relationships and vice versa, as the two are deeply intertwined. In Muir's words: "knowledge to sustain ecological processes and the social roles and responsibilities between people, other living creatures, and the wider environment produce each other" (2010). Consequently, Indigenous knowledges and modes of being produce a land-ethic that promotes holistic sustainability. Muecke additionally describes how humans entertain fundamentally different sorts of relationships with non-humans, which can have a magical force. This contagious magic is inscribed in an embodied archive of the land, upon which communities draw upon for Dreamtimes stories and histories. Muecke draws upon the anthropological term of totemism to explain what is meant when someone such as Bill Neidjie says "tree is me." Rather than representation, such a philosophy constitutes a moral and material continuity running between humans and non-humans. Essentially, the same internal stuff is running through the person and their totem (Muecke 2011). Arising out of these relationships is a political ecology of history wherein atmosphere, sea, or trees are valid history-makers, all relationships are considered, and an embodied archive lives in the land.

Kinship with land and other species is manifested in a diversity of ways throughout Australia. These kinship relationships might incorporate other species and non-living elements of the environment into social structures, familial structures, or spiritual structures. Sullivan, an Indigenous scholar who has written in the field, describes his kinship relationship with the Yellowbelly or Golden Perch fish as creating responsibility for everything connected with its well being, including the water, the reeds, and other stakeholders in the ecological system beyond just the fish itself (Muir et al 2010). This is not unlike how some are socialized to feel a responsibility to care for family members and ensure their wellbeing. Another example is seen in spiritual histories; according to Indigenous elder and scholar Mary Graham, Ancestral beings made human and land for people to look after the land (Atkinson 2002). Dinah of the Yanyuwa people of the southwest coast of Carpentaria speaks of the sea as her mother in the sense that her biological mother's spirit came from the Ancestor of the sea, making Dinah a guardian for her mother the sea, including its physical reality and the knowledge, or Law, that is derived from it (Bradley and Johnson 2015). Additionally, each of the four clans that comprise the Yanyuwa people represent four different types of universeessence that make-up everything, and each original Ancestor carried one of these distinctive essences. Each of the four clans represents a relative for Yanyuwa people, such as parents or grandparents, and Dinah's clan is closely interrelated with every other clan, where marriage within clan is not allowed. "Thus, Dinah is related to all things in Yanyuwa country; she is part of a multitude of invisible threads of connection; she stands in a matrix that sees her able to call all people and all animate and inanimate things in Yanyuwa country as kin; thus, if they are kin there can be no animation, thus all things, the sea included, are sentient" (Bradley and Johnson 2015).

The term land ethic, first coined in philosopher Aldo Leopold's *A Sand County Almanac,* conceptualizes the relationships between people and the land as intertwined and introduces moral codes out of which relationships of care between humans and land can thrive (1949). Although Leopold first introduced this concept in the mid-twentieth century, the conception of land and human as part of a relational community is applicable in cosmologies through time. The land and species kinship discussed foster an intrinsic land ethic that encourages the conception of nature as a gift, rather than a resource for extraction or exploitation, which is the view of many western philosophical land-ethics. The gift—whether it is water, land, animal, plant, or insect—is part of the life-force that brings the world into being (Muir et al 2010), and does not imply ownership, but rather two-way stewardship. "Land and its people [connect] across lifespans, interacting, relating, moving, growing, nourishing and being nourished, transforming and being transformed, in [an] evolutionary process" (Atkinson 2002). Nature allows for life to flourish, and is therefore a gift. Failure to fulfill responsibilities of respect and care for symbolic kin and gifts leads to bad relationships and sickness. Mutual nourishment between land and human (and all else in the system) fails. To quote Bill Neidjie, "If you feel sore.../ headache, sore body, / that mean somebody killing tree or grass. / You feel because your body in that tree or earth./ Nobody can tell you, / you got to feel it yourself. /Tree might be sick.../ you feel it/ ...you get weak.../ because tree going bit by bit.../ dying" (1986). Stories passed down through generations ensure that people retain the knowledge for how to allow life to flourish (Muir et al 2010). For Indigenous folks such as Atkinson and Neidjie, loss of story that fosters such respect and mutual nourishment is said to cause failure of life to flourish, which is reflected in the social affects of the genocide of oral knowledges passed down through generations and lost with colonization.

Traditionally, Dreamings and song-lines were a primary means through which an Aboriginal Australian could learn from the earth, engage in *being with* the earth, and pass down knowledge. Dreamings are seen as sources and sites of the law, incised in the land and revealing of the relationships between people, the country, and the Law embedded in that country (Bradley and Johnson 2015). Song-lines demonstrate knowledge that relates to country and an Indigenous person's relationship to it; they are sung narratives that travel through country, bringing all into a line—living, non-living, people names, land names, winds, and seasonal events. In fact, some elders have knowledge of over 400 kilometers of song, which beyond acting as road maps to survival on the land, also foster physical, spiritual, and emotional survival (Bradley and Johnson 2015). These songs are more than just environmental narratives of country. While "country" remains the best translation in English, like "earth," it is richly symbolic:

Country, which is also the sea, is spoken about [in songs] in the same way that people talk about their living human relatives; people cry about country, they worry about country, they listen to country, and they visit country, and long to visit country. In return, country can feel, hear, and think; country can also accept and reject, be hard or easy, just as living people can be to each other, so it is no surprise that sometimes people will also address each other as country, that is, as close relatives who bring to that relationship all of their past experience, their present and their future. So when people talk about singing their country, all of these relationships are present. It is not just a song about the environment. (Bradley and Johnson 2015).

For Indigenous communities still in touch with their dreaming, dreamings and song-lines are crucial elements in ecological adaptation to the land (Callicot 1994), in turn becoming points of consideration in Indigenous land governance, natural resource management, and well being initiatives. The deep abiding investment in place that they foster, along with mutual dependency with other creatures, are the grounds for a contextualized environmental ethics with a high degree of local place basedness and sensitivity to the land (Callicot 1994). Country that some might call *terra nullius*, or unsettled no body's land, might be charted in as much detail as a city street directory by a local Indigenous community; the number of Indigenous place names exceeds that of names bestowed by colonizers (Muecke in Vincent 2007). The quantity of place names is telling of a high degree of place based knowledge that yields advanced understanding of

the intricate ecological and climatic relationships discussed above. Indigenous worldviews and paradigms that subscribe to this degree of place basedness at a given place and time are therefore holistically sustainable lenses through which to engage with the world and behave. In addition to higher degrees of localized knowledge than in western worldviews, the increased sensitivity that is a product of such worldviews enables better responses to the local effects of global climate change and ability to better deal with ecological shifts (Birch 2016).

Place-based awareness translates into good practices. Just as Australian flora and fauna are diverse across space given that Australia is the largest island in the world, so too are Indigenous ecological practices. Practices that the diversity of ecological worldviews foster include fire-stick farming with detailed scientific methodology, soil and water conservation, flexible resource rotation, species switching, biodiversity protection, nutrition and food preparation, soil fertility enhancement, management of game and fisheries, and facilitated resilience (Birch 2016, Fourmile 2002). Fittingly, it is often said that biological diversity cannot be conserved without cultural diversity (Fourmile 2002). Engagement with cultural diversity is therefore a fundamental component in conservation initiatives such as in natural resource management and conservation of biodiversity. Still, the Indigenous ecological knowledges discussed in this section embody ontologically different relationships with nature than those produced under western propriety philosophy and ecological science, and must be reconciled for genuine cross-cultural land management. The movement towards Indigenous land rights first began in 1962, when Yolgnu people from the Yirrkala settlement in northeast Arnhem Land (Northern Territory) presented the Australian Parliament with a bark petition protesting to have their land rights returned ("Land Rights" 2019). It was not until after additional protests against mining activity in 1971 that the NT Supreme Court acknowledged Yolgnu relationship with the land and the complexity of laws the Yolgnu people used to govern the land. However, the Yolgnu still lost due to discriminatory legal principles. After this acknowledgement, the Australian Government began legislation to return Crown land to Indigenous people, as well as purchasing privately owned land in the early 1970s to benefit Indigenous communities. Although the *Aboriginal Land Rights (Northern Territory) Act 1976* eventually resulted in the return of almost 50% of NT land to Indigenous communities, significant limitations remained on land claims ("Land Rights" 2019).

It was not until the late twentieth century that *terra nullius*, once used to justify the dispossession of Indigenous communities from their traditional lands, was first legally challenged. In *Mabo v Queensland (No 2)* 1992, the High Court of Australia first recognized Native Title in Australia, or "the recognition by Australian law that Indigenous people have rights and interests to their land that come from their traditional laws and customs," land rights that subsequently co-exist with non-Indigenous proprietary rights (*Mabo* 1992). *Mabo v Queensland (No 2)* held that *terra nullius* did not apply in circumstances where there were already inhabitants present, even if regarded as "uncivilized" or "non-laborious" at the time, and set the precedent for Australian Indigenous communities to become legally recognized as the traditional and ongoing custodians of their lands. After this landmark case, Indigenous communities began to prepare Native Title claims to finally maintain formal sovereignty over their traditional lands. According to Indigenous scholar Irene Watson, however, "many people might argue that *terra nullius* was put to rest by the High Court in the Native Title decision. This decision was celebrated as being an initiative in reconciliation when it overturned the application of *terra nullius* to Australia's law of real property. However, the High Court did not fully reject the terra nullius doctrine. This was avoided through their failure to question the legitimacy of the British occupation of Australia... in reaching this conclusion the High Court sanctioned colonialism, dispossession and disempowerment... as a legitimate 'act of state'" (1997). The concession, therefore, affirmed the legitimacy of colonization of the state.

Watson's claim raises a fundamental challenge for this paper. First, because the partial rights granted under Native Title co-exist with non-Indigenous proprietary rights, the collaborative land and resource management initiatives that rise in part out of Native Title grants do not place ultimate authority with Indigenous communities. Second, the initiatives rising out of and enabled by Native Title grants are still contingent on the legitimacy and the authority of the state, along with the grants themselves. While the existence of the authority of the state is compromising, it also allows for a two-way intercultural engagement, as the ongoing legitimacy of the state is what sets the stage for intercultural natural resource management in what constitutes a two-way knowledge production. Consequently, although Native Title still forces Indigenous sovereignty into western systems of recognition, it has become an important channel through which Indigenous communities can care for country. After the Mabo case, the Australian Government passed the *Native Title Act 1993* allowing for further applications for Native

Title recognition, and it was in this context that the Yorta Yorta people of present-day northwestern Victoria and southern New South Wales submitted a Native Title claim in 1994, which became an almost five-year battle for autonomy (Curthoys 2007). Indigenous Countries that have received Native Title oftentimes become the governing bodies for regional natural resource management projects, making the Native Title industry a precursor to Indigenous participation under the Caring for Our Country and National Landcare Programs and therefore a necessary consideration in understanding intercultural initiatives in Indigenous natural resource management programs. I will use the Yorta Yorta Native Title Claim (YYNTC) to explore the contrasting notions of white proprietary ownership that are ontologically at odds with the Indigenous ecological knowledges discussed in the prior section and make evident the challenges this creates for natural resource management programs.

In December 1998, Justice Olney, the primary judge of the Federal Court for the YYNTC, found that "the facts in this case lead inevitably to the conclusion that before the end of the 19th century, the ancestors through whom the claimants claim title had ceased to occupy their traditional lands in accordance with their traditional laws and customs. The tide of history has indeed washed away any real acknowledgement of their traditional lands in accordance with their traditional laws and any real observance of their traditional customs" (Curthoys 2007). In his reflections on the outcome of the 1994-2003 YYNTC, Yorta Yorta claimant Wayne Atkinson described that "following Justice Olney's judgment, the fiction of *terra nullius*, rejected by *Mabo* as having 'no place' as a barrier to Indigenous land justice in 'contemporary law' (*Mabo* 1992), has now been replaced by the 'tide euphemism'" (2003). Atkinson explains that because the euphemism

attempts to brush away injustices, it serves to justify continued land theft, ultimately claiming that "the 'Native Title Industry' has usurped Indigenous voices and has empowered itself on the backs of Indigenous claimants" (1997).

As Justice Olney relayed in his decision, Native Title was denied to the Yorta Yorta on the grounds that Yorta Yorta connection to the land had not been continuous both physically and "in accordance with traditional laws and customs" (Moreton-Robinson 2015), which is another criteria for the grant of Native Title. According to Indigenous feminist scholar Aileen Moreton-Robinson, "the idea that you have to have a physical presence on the land to enjoy one's entitlements is based on conceptions of white property ownership, which requires evidence of human occupation in the form of fences, title deeds, or residences... Only white possession and occupation of land was validated and therefore privileged as a basis for property rights" (2015). A biased reading of the law in favor of liberal understandings of land and ownership functioned to bar Indigenous land justice. Ironically, any discontinuity in connection to the land arose as a direct result of the violence of colonization and forced assimilation. A positive feedback loop emerges: land claims and colonization justified through the concept of *terra nullius* create the cultural ruptures that are then used to further disempower Indigenous land rights and sovereignty; originary violence is ongoing and ingrained. Contemporary attempts to reconcile through two-way exchange of philosophy, knowledge, and practice cannot succeed without an embodied denouncement of not only terra nullius, but also the tide euphemism. Intercultural use of Indigenous ecological knowledges for both sustainability and decolonization is contingent upon the validation of the histories of land occupation out of which these knowledges rose.

Denial of the YYNTC also played out in assessment of oral versus written testimony in the YYNTC, with "one judge [stating] 'the documentary record is a government record, it can sometimes be a private record like a diary or something, whereas Aboriginal record will be an oral record, and subject to variations, and subject to all the frailties of orality'" (Curthoys 2007). Justice Olney, meanwhile, expressed a clear view that documentary sources are the only way to access events outside of living memory (Curthoys 2007). Subjectivities that inevitably exist in written records as wellthe bias of the archive-were overlooked in favor of the western, or supposedly right, way of conducting the law and measuring evidence. Justice Olney's aforementioned court case claim about the loss of connection with traditional lands in accordance with traditional laws and customs essentially claims that Indigneous Australians do not have a proper sense of history, and therefore no proper archive, further validating only the written archive and reinforcing the notion of terra nullius. Here, I call attention to a similar irony to that previously discussed-according to case Justice Callinan, "the Yorta Yorta were disadvantaged by loss of traditional knowledge and practice because of dislocation and past exploitation; and... they need to rely extensively upon the spoken word of their forbearers..." (Moreton-Robinson 2015). As the state of the law only validated written sources, the oral evidence of the Yorta Yorta did not hold up in court and ultimately contributed to denial of Native Title. Property law is a channel for forgetting and remembering. It is these philosophical contradictions that continue to perpetuate notions of land as terra nullius and pose a barrier to Indigenous land justice, caring for country, and recognition of embodied forms of history. Consequently, intercultural collaborations must still grapple with these philosophical contradictions and historical realities to prove successful.

As of 2014, 249 Native Title determinations constitute 27% of the country, and the Indigenous Land Corporation has assisted Indigenous communities in purchasing 250 properties within Australia ("Land care" 2012). However, this form of ownership comes in recognition of the fact that dislocated and/or dispossessed communities cannot assert native title rights—the rights of pastoralists, mining companies, federal government, and private owners supersede Native Title rights in the case of conflict ("Land care" 2012). Consequently, even in situations where the embodied archive, its knowledges, and its histories are validated, full Indigenous sovereignty appears elusive. The embodied archive of and within the Australian landscape, at odds with typical notions of a written historical archive that is created, used, and reproduced by the state, remain only partially validated, as Watson suggests, even as state intercultural natural resource management is dependent on its validation. Therefore, paradigmatic shift is necessary to explore the diverse roles of this embodied archive and its implications in identity formation, historical healing, and conservation. As the march for land rights continues, a precursor to intercultural considerations of the land is intercultural consideration of history. The lens of political ecology enables a shift in reading history. Instead of written sources that reinforce philosophical notions of the group in power, the knowledge archive of the land validates its histories, and it is out of this knowledge that diverse stakeholders can begin to engage with a different sense responsibility and ability to care for country.

Political structures for Indigenous land rights, including Native Title, subsequently gave way to formal political structures for Indigenous land management after the Indigenous landcare movement began to rise in the eighties (Indigenous Land Management 2013). As of 2019, Australia's Department of Environment and Energy is the governing body that oversees Indigenous land management programming and policy, as well as land rights through collaborative initiatives regarding Heritage Title. Prior to the implementation of the Department of the Environment and Energy in 2016, the Department of the Environment (2013-2016) and the Department of Sustainability, Environment, Water, Population, and Communities (2010-2013) oversaw natural resource management programming and Indigenous participation, with both departments producing program reports used in my research analysis. Interestingly, governance of both environment and heritage were for a length of time directly combined through the 1998-2007 Department of the Environment and Heritage, directly linking issues of Indigenous heritage rights and land management ("History" 2019).

Today the Department of the Environment and Energy continues to work closely with Indigenous heritage laws as it navigates land rights, heritage claims, and native title through its structures on sustainability, resource management, and cultural/natural places of heritage. The Department of the Environment and Energy cites the following Indigenous heritage laws as bearing upon Indigenous land management: *Aboriginal Land Rights (NT) 1976, Aboriginal and TSI Heritage Protection Act 1984, Protection of Movable Cultural Heritage Act 1986, the Native Title Act 1993, and the Environmental Protection and Biodiversity Conservation Act of 1999 (EPBC), which is the Government's key piece of environmental legislation. An Indigenous Advisory Committee advises the Minister of the DEE on operation of the EPBC using knowledge of land, conservation, and biodiversity, which indirectly translates into land management programming ("Indigenous Advisory Committee" 2019). However, Department of Environment and Energy structures for Indigenous land rights and management are not* foolproof; according to the Department of Environment and Energy, "Indigenous heritage can be protected under state or territory heritage laws to varying degrees. Usually state and territory laws automatically protect various types of areas or objects, while enabling developers to apply for a permit or certificate to allow them to proceed with activities that might affect Indigenous heritage" ("Indigenous Heritage Laws" 2019).

Primary sustainability legislation in Australia includes the National Strategy for Ecological Sustainable Development (ESD) 1992, which organizes the broad strategic and policy framework structuring decisions related to the pursuit of ESD, which the Act defines as "using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased" (Steering Committee 1992). In addition to the conception of sustainable ecological development, the goal, objectives, and guiding principles of Strategy do not include issues related to Indigenous communities or Indigenous ecological governance, and only one relatively short section of the Strategy (3.22) explicitly opens room for Indigenous participation, calling for full Indigenous participation in community progress towards ESD ("National Strategy for ESD" 2019).

The language is also vague, calling for the incorporation of Indigenous land, heritage, economic, cultural, and employment concerns in resource allocation decisions, but not in management decisions. The "incorporation" of Indigenous concerns is a far leap from provision of Indigenous autonomy in Department of Environment and Energy decisions. Word choice ranging from the plan to "have regard to" and "be aware of" traditional Indigenous dependence on resource and ecosystem management, rather than "prioritizing," or "collaborating" on this perceived dependence, embodies considerations rather than actions, which may further bar genuine intercultural Indigenous engagement. Likewise, the call to "encourage greater recognition" of Indigenous knowledges, practices, and values relevant to ESD does not strategically seek to collaboratively utilize these knowledges and values in a cross-cultural methodology towards sustainability ("National Strategy for ESD" 1992). The 1992 Strategy, while ahead of its time in its conception of sustainability, did not acknowledge colonial histories associated with the need for ESD in its language. Still, the section references collaboration with the Council for Aboriginal Reconciliation and seeks to strengthen consultative arrangements and Indigenous participation in the formulation of ESD related policies and programs as well as dispute-resolution arrangements regarding settlement of land and NRM concerns ("National Strategy for ESD" 1992), which ultimately gave rise to the EPBC Act of 1999 and subsequent programming related to Indigenous land management.

One of the earlier contemporary land management program enabled through such laws, Indigenous Protected Areas, began in 1997 under what was then the Department of the Environment, and provided a formal channel for Indigenous groups to own and manage their traditional land that became marked as protected areas for biodiversity conservation within the Australian National Reserve System ("Indigenous Protected Areas" 2019). The closely associated Working on Country program began in 2007 under the Department of the Environment and Water Resources. Working on Country is unique relative to other land management programs due to its targeted commitment to Indigenous land management in the form of Indigenous rangers and desired outcomes focused on Indigenous cultural, social, economic, and ecological well-being rather than

western notions of environmental conservation (Ryan et al 2012). Working on Country eventually became a component of the 2008-2013 Caring for our Country Program, which was later absorbed into the 2013-Present National Landcare Program, the overarching management program under which sub-programs such as Working on Country and Indigenous Protected Areas are funded today that directly supports and operates under the EPBC of 1999. The first Phase of the National Landcare Program occurred from 2013-2018 and the ongoing second phase began in 2018 with the introduction of a Regional Land Partnerships Program. Under the National Landcare Program, 56 regional Natural Resource Management organizations are funded and in operation, which in turn fund local NRM projects and groups. Indigenous land management within national, regional, and community scale policy and program is contingent upon Indigenous land rights, either designated through the creation of an Indigenous Protected Area (which oftentimes necessarily accompanies a region's Working on Country initiative), Native Title, or another form of recognition of land rights, as it is Aboriginal Traditional Owner Corporations, Aboriginal Landcare Groups, local Aboriginal Land Councils, and/or Native Title Corporations that organize and exercise Indigenous land management at regional and communal levels ("NRM Organizations" 2019).

Chapter 3: Reconciling Ideas

Frameworks for Interculturalism and Decolonization

Historian David Lowenthal describes the phenomenon of forgetting in Australia: "'The White nation appears not to want to understand its [pioneer settler] forebears,' writes an anthropologist. It is far easier to 'disinherit them, than to try to unravel the uncomfortable fact that it was mostly reasonable and humane men and women who took

part in the processes and policies that we now see as repugnant" (2015). While the discomfort described might instead be attributed to inheritance of repugnant acts, Lownthal's reference nonetheless alludes to the need for a new remembering, even as new remembering requires discomfort. Lowenthal goes on to provide an example of the confrontation of this discomfort: "Australian Prime Minister Paul Keating assumed accountability for past settler injuries to Aborigines: 'We took the traditional lands and smashed the traditional ways of life. We brought the diseases. We committed the murders. We took the children from their mothers. We practiced discrimination and exclusion. It was our ignorance and our prejudice. And our failure to imagine these things being done to us" (2015). Fittingly, scholar James Curran described this speech as re-defining Australian national identity (2015). According to Lowenthal, "when nations, like individuals, try to ...ignore [the past's] impact...they are likely to become sick, and their affirmations to become obsessions,' hence the widespread consensus about confronting horrific histories" (2015). This is not unlike the fetishization of Big Things in Australia that scholars have argued deny the embodied archive and affirm amnesiac state narratives. Scholars such as Maddison argue that anxiety over the past fosters collective memory and national identity that individuals and the state can feel good about, even as it paradoxically serves as a reminder about that which is unremembered, "for it is terrifying for those of us who rest our superiority as a nation on its founding as a 'rational legal state' to recognize how we 'imbue violence with the greatest legitimating force there could be" (Taussig quoted in Silverblatt 2004).

In response to anxieties over sanitized histories, the Australian state has sought to utilize the embodied archive through setting priorities that Include Indigenous engagement and use of Indigenous knowledge in its natural resource management programs. Practices in interculturalism that rise out of this use have potential to serve as methods for holistic sustainability, including social reconciliation or decolonization. Interculturalism in turn has potential to serve the ongoing process of building a nation, in changing narratives, and in remembering histories. Interculturalism involves the use of one knowledge form in the context of another and vice versa, which in this research manifests through the programmatic attempts to foster Indigenous natural resource management sovereignty, knowledge, and/or participation. While the existence of such programs validate the embodied archive of the land in seeking adaption of Indigenous knowledges and practices for NRM, this management is still enabled and structured within policies and programs of the Western colonial state. Therefore, an intercultural approach is not only actively sought, it is at some fundamental level logically inevitable, and so I will analyze to what extent programs of interest successfully embody a holistically sustainable intercultural approach. In this section, I draw upon coursework from my graduate seminar to explore scholarship on decolonization and interculturalism with international scope. In light of the scholarship, I consider the nature of meaningful cross-cultural knowledge exchange as well as frameworks for gauging intercultural impact, which I will subsequently use to examine the success of NRM programs of interest with regards to the necessary intercultural appropriation that occurs and my conception of a holistic sustainability.

As previously noted, the conception of sustainability engaged in this paper includes decolonization, of both state and nature, as a connected and fundamental component. Interculturalism in the context of natural resource management is contingent upon the sustainability of ecological knowledges, practices, and paradigms subject for appropriation, and therefore inherently contributes to a decolonizing agenda. Indigenous New Zealand scholar Linda Tuhiwai Smith defines decolonization as more than just a euphemism wherein the instruments of government are handed over. Rather, it is a "long term process involving the bureaucratic, cultural, linguistic, and psychological divesting of colonial power" (1999). What does decolonization look like, and how does it come about? The answers to these questions are vague and contested. However, Rose theorizes a necessary ontological shift in worldview, out of which infrastructural and practical changes can emerge. According to Rose, "the change from an Aboriginal worldview to a western worldview requires a 180-degree shift which reorients human life so that it faces the future rather than the source." (2004), not unlike Tuhiwai Smith's psychological divesting. The shift in temporal and spatial orientation wrought through colonization then warrants a re-orientation within decolonization, dependent on Indigenous teaching, sharing, validation, and participation, out of which sustainable relationships with the land can grow.

Three common criteria in Australian decolonization discourse are presence, relationships, and resilience. Rose concludes on such criteria with an apt definition of decolonization in her book, *Reports from a Wild Country: Ethics for Decolonization*:

In seeking to sustain the connections between social and ecological decolonization... The ethical challenge of decolonization illuminates a ground for powerful presence. Against domination it asserts relationality, against control it asserts mutuality, against hyperseparation it asserts connectivity, and against claims that rely on an imagined future it asserts engaged responsiveness in the present... I have argued for a particular kind of presence-to-the-world. I mean this presence to be situated in history and in place, and I mean it to be available to social and ecological 'others.' Attentive and alert to the here and now of life, the kind of presence I argue for, in addition to being situated and available, is relational, connective, mutual, and committed.... I proposed that work that facilitates resilience may be one of the most powerful and life-affirming

forms of reconciliation available to us. Presence in the engaged mode I have been arguing for is closely akin to the connectivities of flourishing and resilient life processes... In considering the possibilities for ethical action, I come to use the term decolonization in an extremely strong sense to mean the unmaking of the regimes of violence that promote the disconnection of moral accountability from time and place (2004).

Through Rose's argument, relationality, mutuality, connectivity, and presence are characteristics of decolonization. However, the meaning of these terms is dynamic and contested, leaving parameters for decolonization open-ended and porous. Fittingly, Rose describes reconciliation, a component of decolonization, as a journey, wherein "there is no tribunal, no final determinations of guilt, innocence, and clemency, and no formal declarations for closure. Rather, there is this ongoing domain of our lives in which we sustain an open commitment to social and cultural change. Reconciliation consists of efforts to acknowledge the harm of the past and its links to the present, to undo some of this painful history and to work towards new relations between and among us—relations as yet not fully imagined" (2004). Through the lens of presence, the place-basedness of Indigenous ontologies fosters holistic sustainability with intimate reconciliation. Rising out of the need for sustainable paradigm shift, sustainable land management, and the emerging pull for state decolonization and freedom from guilt, government policies and programs attempt to utilize these Indigenous ecological knowledges—to pull from the embodied archive of the land.

Such intercultural initiatives can involve cherry-picking specific knowledges without regard for the larger worldviews in which they are embedded, and at times without dialogue, ultimately cumulating in what critics have described as an appropriation and theft of knowledge. Indigenous activist Henrietta Fourmile problematizes a common example: The use of traditional knowledge increases the efficiency of screening plants for medicinal properties by more than 400 percent, significantly cutting research costs and the time involved... [however] international intellectual property systems based on Western notions which recognize intellectual property as private property still refuse to acknowledge or accommodate our communally based intellectual property rights in our traditional knowledge. Consequently, the phenomenon of biopiracy, whereby Western corporations are stealing centuries of collective knowledge and innovation carried out by indigenous and local communities worldwide, is reaching epidemic proportions. (2002).

Indeed, while some initiatives are in line with frameworks and proposals for decolonization, some are at risk of perpetuating the forces and traumas of colonization. Indigenous scholar and activist Tony Birch discusses problematic commodification: "if relationships between Indigenous and non-indigenous communities are to prosper the repository of intellectual wealth held by Indigenous people must be engaged with in an equitable manner, rather than it become an exercise in "cherry-picking" by outside experts with little understanding and respect for the potential of genuine exchange, such as through the concept of 'two-way learning'" (2016). Birch also cites Leanne Simpson, a Canadian Indigenous scholar, to describe how collaboration with outsiders can dilute traditional ecological knowledge and undermine original objectives of an "anti-colonial" strategy, wherein knowledge becomes accessible through "...sanitizing [knowledge] of the ugliness of colonization and injustice so that scientists can engage with knowledge but not the people who own and live that knowledge," (Simpson quoted in Birch 2016). Birch ultimately advocates a shift in the individual and collective psyche in Australia for meaningful and valuable cross-cultural interactions that avoid cherry-picking or historical knowledge dilution (2016). Muir similarly advocate this in his claim that serious intent to learn from Indigenous knowledge for ecology must not construct traditional knowledge

as static data, arguing that "[Indigenous knowledges] challenges many of the standards of Western science. It is not a toolkit for management, but an ethic for living" (2010).

The ease of cherry-picking is one of many challenges to thoughtful decolonization. While any use can be a sign of progress in that Indigenous knowledges are placed within the sphere of knowledge production and no longer relegated to invalid categories of ignorance, superstition, or error, the difficulties in reconciling ontological perspectives remain prominent. In their discussion on Venezuelan state use of Indigenous knowledge, Briggs and Mantini-Briggs convey a fundamental challenge with such attempts: "proponents of multiple ontologies and natureculture (nonbinary) perspectives might underestimate how contemporary afflictions require complex and sometimes fatal ontological balancing acts" (2016). Briggs and Mantini-Briggs also describe that "at the same time that we are similarly convinced of the transformative power of indigenous perspectives, we worry that romantic projections of indigenous conceptions of buen vivir, as currently proliferating in scholarly, media, and policy realms, can risk the sorts of appropriations of dominant constructions of indigenous healing for curing the ills of modernity that Michael Taussig (1987) identifies with the fetishization of the figure of 'the shaman'" (2016). Their reference of Quechuan phrase Sumak kawsay or "good living" in state constitutions, lauded as decolonizing, is a prime example with its homogenizing romanticization and cherry-picking of Indigenous knowledges and perspectives in "curing the ills of modernity" (Briggs 2016). Lowenthal, raises an additional issue: "the heritage past is confined to the in-group. Tribal rules make it a restricted, secret possession. Created to generate and protect group interests, it benefits them only if withheld from others. Secrecy is power" (2015). Indeed, certain knowledges are sacred and can only be known by few. Lownenthal goes on to claim: "sharing or even showing a legacy to outsiders vitiates its virtue and potency... its value inheres in being opaque to outsiders. White Australian embrace of Aboriginal 'dreamtime' landscapes demeans their worth in tribal eyes" (2015). Concerns about respect to cultural privacy serve as an additional challenge to decolonizing cross-cultural engagement.

Interculturalism as a strategy in cultural revitalization and two-way cultural engagement has become an international initiative linked to decolonization and therefore falls underneath my conception of holistic sustainability. The questions then rise: what does meaningful, communicative collaborative knowledge exchange look like? What are the frameworks for gauging interculturalism and its impact? Many scholars recommend or methodologically engage with some form of dialogue as a necessary component to interculturalism and, more loftily, to reconciliation. Briggs and Mantini-Briggs suggest collaboration—such as between a healer and a nurse—that places Indigenous knowledge production at the core (2016). Maddison, in the context of Australia, similarly advocates adaptive work that moves towards alternatives through dialogical engagement with the past and constitutional reform (2011). She quotes Rose to convey the necessity of developing "a moral presence for ourselves that engages with our moral relationship with the past, acknowledges our violence, and works dialogically towards alternatives" (2011) as a preface to intercultural work and method for re-structuring dominant state narratives. This necessitates two-way discussion of colonialism, its brutalities, and its contemporary effects. According to these scholars, rather than continuing to prioritize the judgments of governmental bodies when developing initiatives that involve Indigenous voices, knowledges, lands, and responsibilities—and presenting such initiatives through sanitized progressive monologues-dialogue about history must occur.

Muir, meanwhile, argues for re-centering epistemological and societal perspectives as a strategy for cross-cultural collaboration, suggesting:

Adaptive management might have some similarities to Aboriginal ecological management practices but it does not take other species as relatives, it does not allow for non-human sentience, it is not founded on the dynamics of love and respect. This is the ontological divide that needs to be negotiated for strong partnerships between resilience and adaptive management and Indigenous knowledge... Instead of perceiving society's current circumstances as a Western system that is starting to 'bring in' some Indigenous knowledge, we imagine it from the other side: that the non-Indigenous society and system has been accommodated into the more situated and longer established Indigenous system (2010).

Under this proposal, meetings do not "take place within Western frameworks for what constitutes negotiation. This is part of the ethics of respect" (2010). Such meetings allow for diverse perspectives to work together to re-structure state memory, identity, and narrative. Muir's proposal recalls the Colombian concepts of *educacion propia*, or the educational planning focused on Indigenous culture as the enveloping conceptual framework, and *propio*, *lo*, a politically grounded strategy for cultural revitalization and appropriation in which the Indigenous culture provides the framework for reinterpreting other cultures (Rappaport 2005). Bradley and Johnson, in their writing on Australian Indigenous ecological knowledges, similarly describe an epistemological shift: "if we are to attempt a cross-cultural or transcultural rendering of place and knowledge or even attempt to understand the intersubjective position of an Indigenous view of place, space and associated knowledge we must be prepared to challenge the very essence of the western academic tradition; the so called objective premise. The premise of objectivity is predicated on the understanding of an unknowing subject and a social authority, an authority derived from Western ways of knowing" (2015).

Indigenous resource manager Wayne Barbour also alludes to the epistemological divide in his discussion on why heavy focus on dominant ecological conservation paradigms is another challenge to successful cross-cultural programming in natural resource management:

The value of Indigenous people's knowledge is becoming more widely recognised, especially in land management, and there is hope that combining academic ecological knowledge with Indigenous knowledge will achieve enhanced outcomes for the environment, but the question of what 'better land management' means for the different partners involved is rarely addressed. The concept of 'good' land management is already set, typically based on ideas derived from the dominant mainstream culture. Often we have seen that Indigenous knowledge is only valued at the stage of project implementation or contribution of knowledge to a research question that has already been set (e.g. research on endangered species). We need to take a step back. If we really want to share knowledge, we need to discuss what the cross-cultural priorities for land management are, value different worldviews and respect the equal legitimacy of different knowledges grounded in these ontologies (Barbour 2012).

Barbour's discussion suggests a need for Indigenous presence and autonomy from project conception rather than only after priorities are set, as landcare goals might fundamentally misalign and in turn prevent successful interculturalism.

Meanwhile, Briggs and Mantini-Briggs site Catherine Walsh, who distinguishes between two modes of interculturality in Venezuelan state incorporation of buen vivir and advocates for a critical perspective in cross-cultural initiative (2016). According to Briggs and Mantini-Briggs, Walsh describes "functional interculturality," meaning assimilations of the concept that reproduce the power of dominant structures," and "critical interculturality,' the use of Indigenous concepts to question existing structures and advance social, political, and epistemic change" (2016). Functional interculturality might include the incorporation of decontextualized phrases that sum up homogenous Indigenous cosmovisions, such as buen vivir, dreamtime, or cherry-picked flora knowledge. The critical perspective consequently functions as a potential strategy for interculturality, wherein existing structures (and their historical roots) are literally broken down through validation of Indigenous knowledge and two-way management autonomy. Briggs and Mantini-Briggs also describe knowledge access as a necessary factor, citing an example where Indigenous contributions to state projects did not warrant rights to see the final product; the written account remained the final word, the final exclusive embodiment of knowledge (2016), which appears to reproduce dominant power structures. Taylor, meanwhile, writes on methodologies for cultural transmission, including transculturations, which "address fundamental issues of transmission... on a grand-trans-scale that notes cultural movements, shifts, reciprocities. It too has a potentially liberatory role because it allows the 'minor' culture (in the sense of the positionally marginalized) an impact on the dominant one, which may embody the change described under critical interculturality, although the interactions are not, strictly speaking, dialogic, or dialectical" (2003).

Joanne Rappaport brings new considerations to the table surrounding the connotations of phenomena that are typically thought of as colonizing, including appropriation and essentialism. In her book *Intercultural Utopias: Public Intellectuals, Cultural Experimentation and Ethnic Pluralism in Colombia,* Joanne Rappaport explores frameworks for understanding interculturalism and its outcomes, using it as a lens through which to examine the activist movements of Colombia's Indigenous communities. Rappaport defines interculturalism as a "strategy for intercultural appropriation in the interests of cultural revitalization, political mobilization, and the achievement of social equality in an ethnically plural context" (2005). Rappaport describes a selective appropriation of concepts across cultures that helps to build "a pluralistic dialogue among equals" (2005). In building a new dialogue, new state narratives are also built—ones that acknowledge past harms and actively seek to grapple with them. In Rappaport's interculturalism, worldviews are reconciled and Indigenous practice is re-legitimized through Indigneous participation. Unlike the potentially vulturistic forms appropriation previously described, which embody the typically negative connotation of the concept, Rappaport uses the term appropriation in a beneficent light to describe interculturalism, raising questions about the nature of appropriation. Rappaport similarly discusses certain critiques of essentialist discourses and cites Charles L. Briggs to question if there is value in criticizing native rights movements for their essentialist discourses, as doing so can do a political disservice in delegitimizing their objectives: "Briggs (1996) suggests that constructivist analyses of indigenous cultural activism that critique essentialism from an academic standpoint are made possible only by the resources, prestige, and distance afforded by our comfortable positions in foreign universities, privileges that are not enjoyed by local actors" (2005). Rappaport's discussion, while perhaps at odds with connotations Birch or Muir abide by, can open new spaces for dialogical intercultural engagement and advocacy.

In consideration of essentialism, another question arises concerning how interculturalism complicates the sometimes essentialist categories of traditional/modern, as well as parameters for understanding modernity. On one hand, interculturalism can successfully enable Indigenous peoples to autonomously define their own versions of modernity. On the other, the re-conceptualization of non-indigenous models (e.g. land management) to embody Indigenous-inspired alternatives (e.g. caring for country) is oftentimes argued as moving backwards (Birch 2016), despite the potential for positive holistic sustainability outcomes. Interculturalism can then serve to break down the modern/traditional binary and the accompanying negative perceptions of "traditional"— the desire for civilized modernity—subscription to which has lead to historical harms. To acknowledge the ills of modernity, as Briggs and Mantini-Briggs described, and to learn new modes of thought outside of the traditional parameters of knowledge and modernity, opens up space for the construction of alternative memories, identities, and narratives about country. All of the above considerations structure the parameters I use for defining and analyzing intercultural initiatives in my research.

Beyond interculturalism, there is also the issue of Indigenous sovereignty and governance as they relate to alternative to reconciliation. In her discussion of reconciling Indigenous law-ways and the embodied archive supporting them with state legal channels, Indigenous activist Watson describes Indigenous self-determination, a decolonizing process separate from reconciliation through which "Indigenous Peoples express to the world who we are. And by what path or process we should proceed in gaining respect and recognition as Peoples and custodians of the earth our mother" (1997). Meanwhile, in *Unsettling Accounts: Neither Truth nor Reconciliation in Confession in State Violence*, Leigh A. Payne proposes a contentious coexistence, describing reconciliation as lofty and elusive (2014). Closely associated with remorse, reconciliation runs the risk of washing over genuine conversation in attempt to be free of guilt (Payne 2014). While Maddison proposes, "unsettling ourselves," Payne proposes "unsettling accounts," wherein contentious debate over truth, memory, and justice unsettles accounts of the past rather than settling or reconciling them as a result of

unsettlement of the self. Although this opens contentious space for Indigenous selfdetermination, Watson posits that when Indigenous people assert their sovereignty through self-determination, resisting genocide and ethnocide and the continued plunder of their territories, they are "viewed as childlike, irrational, and not fully comprehending international law, politics, and international relations" (1997). Where this is the case, ideological clashes in attempts for self-determination may highlight a need for contentious dialogue.

Payne's proposal is also at odds with that of Rose. Rose's argument for connectivity, relationality, and resilience embodies reconciliation through trust and harmony, stretching far beyond Payne's proposal of "coexistence," let alone contentious coexistence. Under Payne's theory, however, contention may serve as a challenge to successful collaboration in cross-cultural program management for long-term projects that require healthy working relationships. Consequently, in my parameters for analysis I advocate for Rose's requirements of relationality, connectivity, and resilience, Rose's strategy of ontological re-centering, the commonly proposed dialogical approach, Muir strategy of epistemological re-centering, Briggs, Mantini-Briggs, and Birch's advocacy of two-way learning rather than cherry-picking, Barbour's strategy of early Indigenous participation and goal setting, and Walsh's conception of critical interculturality. In line with Rappaport's discussions, I will also attempt to consider channel, context, and outcome of knowledge appropriation or essentialization before inscribing negative connotation.

In line with the complexity of the scholarship, the ongoing process of dialogue paradoxically takes the stakeholder closer to understanding the messy realities of history

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and its diverse players, yet simultaneously raises further questions due to contradictions about the same story that arise through conversation with diverse players. The contradictions within the written as opposed to oral sources and the academic readings of history as opposed to embodied archives produce infinite historical possibilities upon which state power can selectively act upon. To truly eliminate *terra nullius* and the sovereign entities built upon it, to recognize Indigenous land rights and management through intercultural validation of the land as embodied archive of memory and knowledge, and to reverse the violence of Indigenous commodification and concealment through questioning dominant narratives seems to require policy and program that not only constitute meaningful collaboration and knowledge exchange, but also constitute a relational presence, a re-oriented land-ethic. Actual Indigenous sovereignty over land rights and management within a western colonial state serves to reconstruct a new national identity at an innately present, connected, intercultural level.

I will use five criteria to streamline analysis of my five cross-cultural case study programs: goals, methods, community impact, participation, and resource transfer. Each criterion may include both program strategies (e.g. goal setting, methods planning, channels for participation and resource transfer, desired community impacts) as well as actual outcomes (goals achieved, challenges, degree of participation, actual community impact, etc.) and are framed at a more nuanced level with regards to the scholarship assessed above. Ideas underscoring criteria are borrowed from the cited thinkers and strategically put together to constitute my framework for analysis. Additionally, each criterion is intertwined with the rest (e.g. where participation is also a goal and methods are to foster it). As is implied in my discussion of the scholarship on decolonization and interculturalism, assessment criteria and accompanying parameters for best practice are thought to contribute to decolonizing cross-cultural natural resource management projects

that contribute to my conception of holistic sustainability. My analysis will include

examination of program strategy and assessment rhetoric as well as stakeholder

outcomes. I will discuss each criterion in turn for each case study and address the larger

questions, but I will only address sub-bullets where the data is sufficient and relevant.

Below I outline the five criteria examined for analysis of intercultural initiatives in

natural resource management, including criteria questions as well as outlines of best

practice for each criterion as is concluded in the above discussion on parameters for

interculturalism:

- 1. **Goals:** What are the stated goals, desired strategic outcomes, and rhetoric of the program? Do project goals of Indigenous and non-Indigenous stakeholders/participants diverge? Who sets project goals? What are considerations in setting the project goals?
 - a) Goals are discussed between Indigenous and non-Indigenous stakeholders and acknowledged if different
 - **b**) Goals are not rooted in western ideologies without consultation
 - c) Both Indigenous and non-Indigenous stakeholders are given equitable consideration in setting goals
 - d) Dialogical and equitable collaboration and participation in planning, objectives, agenda, practice, and assessment
- 2. Methods: What are the methods used for achieving interculturalism? What are the methods used in implementation of the program and/or project? Do the methods of Indigenous and non-Indigenous stakeholders diverge? Who sets the methods?
 - a) Historical awareness, acknowledgement, and consideration
 - b) Establishment of mutual trust
 - c) Establishment of mutual respect of knowledge and background through which dialogue must not necessarily occur within western frameworks for negotiation
 - d) Local community engagement and local agenda setting
 - e) Both Indigenous and non-Indigenous stakeholders are given equitable consideration in the planning and implementation process and have equal presence and investment.
- **3. Participation:** What is the extent of Indigenous participation? Do Indigenous stakeholders participate from the beginning? What is the program's participatory structure at different scales of governance, and is it effective?
 - a) Indigenous and non-Indigenous stakeholders have equal presence, participation, and investment
 - **b)** Local Indigenous participation from project conception, including priority setting, rather than just in project implementation
- c) Indigenous sovereignty and/or self-determination in the planning and implementation process
- 4. **Resource Transfer:** Are knowledges and practices adequately transferred in two directions between Indigenous and non-Indigenous stakeholders? Do program projects provide new forms of livelihood and professional resources to both Indigenous and non-Indigenous stakeholders? Are resources adequately transferred across scales and entities of governance?
 - a) Incorporation of western scientific understanding and planning into Indigenous cosmologies rather than the other way around
 - **b)** An ethical presence grounded in feeling through which alternative ethics can develop, rather than tool-kit management
 - c) Two-way ontological expansion through two-way knowledge exchange
 - **d)** Mutual resource gains with regards to the cultivation of spiritual, economic, and/or professional well-being
- **5.** Community Impact: What are the holistic community benefits to both Indigenous and non-indigenous stakeholders?
 - a) Establishment of sustainable (in terms of lifetime) cross-cultural connectivity
 - **b)** Indigenous knowledge and participation contribute to the breaking down of dominant and colonial power structures, narratives, and their historical roots
 - c) Indigenous knowledge and participation contribute to closing the gap of Indigenous disadvantage that exists as a result of histories and contemporary power structures and/or paradigm
 - **d)** Social, spiritual, economic, linguistic, and cultural benefits to Indigenous stakeholders

Methods

During her fieldwork, Rose's Aboriginal teachers conveyed their belief that "Whitefellas" were in a state of epistemological crisis about past and about place. To perform research about interculturalism and decolonization within western epistemological structures, as is the case with this project, is its own epistemological crisis. Consequently, for a research project about movements towards reconciliation, engaging with decolonizing research methodologies was one of my priorities. In consideration of methods for data collection and analysis, I thought most heavily with Indigenous New Zealand scholar Linda Tuhiwai Smith's *Decolonizing Methodologies*, proposed to replace certain western academic methods (1999). Tuhiwai Smith takes an anti-positivistic stance, with emphasis that research should be first and foremost focused on "organic and Indigenous approaches to research," including social justice and relevance, seeking to yield positive difference on that which is researched (1999). Positivist knowledge is assumed to be objective and universal to humanity, based on supposed natural cultural phenomena that are discoverable through proper method. To decolonize my research and analysis, I attempted not to abide by positivist notions of research and data in the form of knowledge collection. Knowledge is not mine to collect, to have, or to keep. Rather, I engage with knowledge experiencing. As I sort through the experiences and outcomes of policies and programs, knowledge is felt and learned. It pulls me along threads out of which I can attempt to glean meaning. Fittingly, this is line with the land-ethic through which value is felt rather than extorted, where subjects understand nature and learn from nature through experience and connectivity rather than solely through science.

Tuhiwai Smith is likewise critical of methodologies that seek to gather data on or relating to Indigenous people in a random and ad hoc manner, without authority. Positivist assumptions that objective knowledge and/or facts exist and can be uncovered risk consideration of people as data or objects of analysis. Thus, positionality and reflexivity are essential to my methods. I proceed with the assumption that objective knowledge does not exist and my own subjectivities are constantly interacting with those that I encounter, constituting intersubjectivity that requires attention as I seek to perform empirical anthropological analysis from a disassociated difference. I am embedded in the systems of feelings and relationships that are fundamental to my research question as well as the epistemological land-ethic that grounds intercultural sustainability efforts. Critics of Tuhiwai Smith's agenda might argue that certain parameters set up a blockade, making research impenetrable to non-Indigenous folks, in turn disallowing for ongoing negotiation that is fundamental to the research. As I reflected on this, I realized that through engaging decolonizing methodologies, this research project itself is an intercultural initiative—a dialogical crossroads between Indigenous knowledges and agendas and the structures through which they manifest, not unlike the National Landcare Program of the Australian Government.

I also made effort not to gather data on people, but rather on state policy, relationships, outcomes, and perspectives serving to validate diverse voices around the topic of interest. With consideration of a topic of relevance to numerous stakeholders, I seek to empirically establish myself as a voice of authority within my own work while acknowledging my lack of authority to make claims on, about, or for Indigenous people. According to Indigenous Australian natural resource manager Wayne Barbour, "In Australia, the majority of the writing about ecological projects involving Indigenous people, or opinions about how to get cross-cultural collaborations to work better, is from non-Indigenous academic researchers' perspectives... Rarely is an Indigenous voice at the fore-front, and ideas about how Indigenous Australians think about academic versions of ecology or the interaction with ecological scientists are not often voiced" (Barbour 2012). With this in mind, I draw upon quotes from Indigenous stakeholders—not as data, but as participants-to introduce their perspectives and bring light to their voices rather than attempt to speak on their behalf. Additionally, my use of available digital resources and materials allows me to learn the lay of the land-to do my homework, if you willbefore engaging with human subjects.

My formal process of data collection started with a broad sweep of all materials and resources about, within, and related to the Australian Department of Environment and Energy both on its website, through the National Library of Victoria, and through the Australia Government Web Archive. I catalogued and sorted through the strategies, legislation, policies, historical governance structures, and programs both historically and today that are related to sustainability, natural resource management, and Indigenous communities through the Department of the Environment and Energy, creating a mental roadmap as I went to capture the lay of the virtual land. Although the Department of Agriculture and Water Resources was also a relevant governing body over my programs of interest, I decided to focus solely on the Department of the Environment and Energy to be able gain a more nuanced picture of political operations. However, I did contextualize the DEE within the larger operations of the Australian Government and its infrastructures for the inclusion Indigenous voices. Through my Department of the Environment and Energy sweep I gathered data on the National Strategy for ESD, the EPBC Act of 1999 and its Matters of National Significance, and the relevant histories, laws, and programs regarding National Heritage.

My sweep also connected me to the Australian Institute for Aboriginal and Torres Strait Islander Peoples and Reconciliation Australia, through which I gathered data on the Indigenous Governance Program and Indigenous Governance toolkit as sources of comparative analysis, particularly the thematic frameworks for cultural governance as well as nation building and development. For a list of all miscellaneous government and affiliated resources referenced for analysis, please view the appendices.⁴ My final step was to do a broad sweep of all webpages and resources related to the National Landcare Program, Caring for our Country, Regional Land Partnerships, Working on Country, Indigenous Protected Areas, and a few regional NRM organizations, through which I acquired surveys, program logics, program reviews, program reports, telephone interviews, and community consultation data. In triangulating sources through a digital lens, I engage from a pixelated distance with publicly available resources to perform my analysis. My final step in data collection was to seek resources that did not constitute government voices or representations, for which I did a semi-unsuccessful sweep of Australian news articles, twitter accounts, blog posts, media releases and updates, local NRM newsletters, testimonials and even Program Facebook reviews, with hopes to be able to introduce a triangulation of perspectives on the Programs.

Data selection was a challenge due to the extreme breadth and depth of available virtual materials. For each program, NRM organization, and other landcare participating bodies or grant recipients within the National Landcare Program, there was a plethora of case studies. I had to make a decision about what constitutes a case study and how to best engage with and present data: either I could use sub-programs themselves as case studies, as I observed in journal articles on the Working on Country and Caring for our Country, or I could use specific regional NRM projects as program case studies. I ultimately decided that due to the large quantity of projects provided as case studies (thousands were available between all channels), my selection could not be sufficiently strategic. I decided instead to use over-arching programs as case studies, which would enable me to look at

⁴ Please view Appendix G for miscellaneous and government resources referenced for analysis.

big picture state agendas in the context of Australian nation building, remembering, and narrative identity through examination of key guiding documents and reactions. My analysis is based on program planning, delivery, connectivity, and ideology rather than the success of specific NRM projects.

While the National Landcare Program is currently the umbrella NRM program, my use of sub-programs as case studies, including Working on Country and the National Landcare Program's predecessor program Caring for our Country, creates channels for comparative analysis across different temporal, geographical, and governmental scales. However, I qualify that my analysis cannot be as in-depth as if I had just focused on one sub-program, all accompanying documents, and project case studies within the program, as I had to perform a high degree of selectivity in actually utilizing collected data. With these sources, I seek to glean narratives emerging out of selected intercultural programs that can explain sustainability outcomes. In my analysis, data is not quantitatively measured (there are minimal numbers available to measure). Rather, I examine program rhetoric, strategies, language, and outcomes with consideration of the frameworks established for my question. I gauge representations, rhetoric, and outcomes on selected programs to understand their role in producing holistically sustainable results and in remembering and unraveling, hoping to arrive at a full picture through analysis.

However, my methodologies are not without limitations. There are many projects and online sources about these projects, so through selection my sample of projects and sources is inherently biased. However, my methodology of purposive sampling enables me to strategically select data that tells me what I want to know, although it might not necessarily be representative of the larger or more nuanced body of knowledge. An additional challenge encountered is my vast physical distance from my region of interest. Due to this distance, my research is impersonal, raising questions about accessibility and sharability. Also, despite my location over 8,000 miles away from continental Australia, the body of work I produce is skewed by my opinions and political standings. Even as I acknowledge that I am inevitably embedded in my analysis and seek to empirically disassociate, I must also consider my position in physical space. For me, my physical distance from my region of interest creates the illusion of detachment despite the fact that my programs of analysis are intertwined with real people's real lives, most of whom I do not know and have not anthropologically engaged with. Because my project lacks participant observation, interviews, and methodologies for physical observation, reflexivity is all the more important.

With lack of the aforementioned methodologies of anthropology, my analysis constitutes a more alternative form of anthropology. Both the anthropology of policy and digital ethnography have risen within the discipline over the past 10-15 years. According to a pioneer of policy anthropology Susan Wright, "policy is a significant organizing concept in society" (2006). Wright additionally sites both Susan Reinhold and Sally Falk Moore to discuss how "[policy is] a window onto changing forms of governance and regimes of power, [a window] through which to see processes of political transformation, or to analyze what the present is producing" (2006). In following the interactive flow of events through different sites, ranging from projects themselves, policies, and media, one can describe in ethnographic detail how something came about, giving equal weight to the viewpoints of each stakeholder (2006). Additionally, text, video, and images comprise the digital field site and can reveal social relations and behavior patterns at numerous geographical scales, from the national to the intellectual (2006). It is with such methodologies that I proceed to analyze the impact of state intercultural projects on stakeholder relationships with the land and progress toward a holistically sustainable system.

Data Overview

In my analysis, I use the following Programs as case studies: Caring For Our Country, the National Landcare Program Phase 1 and Phase 2, selected samples from Regional NRM Organizations, and Working on County. Operations of Caring for our Country, Working on Country, and Regional NRM Organizations fall under the funding and governance of the larger National Landcare Program, which functions as a point of analysis through which to comparatively gauge landcare programming and governance at multiple geographical and legislative scales. Each Program used as a case study primarily serves to enhance sustainable natural resource management and is selected because it seeks at some level to incorporate Indigenous knowledge and participation through fundamentally intercultural models of governance, wherein Indigenous groups can exercise NRM governance over their lands in collaboration with western governing structures of the lands. In addition to actual structural and goal-oriented analyses, my analysis of government sources is reflexive of the fact that sources contain perspectives of stakeholders within the Australian Government and are selected for public representation. Certain Reports and planning documents are specifically centered around methodologies for Indigenous NRM while others are focused on large-scale environmental sustainability objectives.

Information on the background of each program comes from online web pages as well as the Department of the Environment and Energy, which itself provides another scale of examination. Online webpages for each program include links to media releases, press releases, community discussion forums, and case studies ranging from large-scale (e.g. an Indigenous Protected Area) to small-scale ranger projects and other Indigenous engagement projects happening under Working on Country or within one of the 56 NRM regions. Analysis of Australian Government NRM policy and programming is additionally compared to Reconciliation Australia planning documents for connectivity and/or discrepancy and to place within the larger context of nation building.

Please view page 158 of the appendices for a glossary of terms and acronyms used in analysis of programs, meant to delineate the who, what, when, where, why, and how of this research.⁵ Unless otherwise noted, definitions are derived verbatim from the Glossary of the 2008-2013 Caring For Our Country Achievements Report (2013) and convey the definitions understood in Australian Government planning. While acronyms are provided and used within the Glossary, for clarity I have opted only to use three acronyms in my analysis: NRM (Natural Resource Management), MERI (Monitoring, Evaluation, Reporting, and Improvement Framework), and *EPBC Act 1999 (Environment Protection and Biodiversity Conservation Act 1999)*. Where otherwise noted, definitions are retrieved from the cited sources. Government definitions as displayed below in the glossary also serve as points of analysis.

⁵ See appendix A, page 158, for glossary of terms operationalized in my program analysis as well as in program rhetoric and implementation.

Caring for our Country (2008-2014)

Overview

The Caring for our Country funding program began in 2008 with the goal "to achieve an environment that is healthier, better protected, well managed, resilient, and provides essential ecosystem services in a changing climate" (National Landcare Network Review n.d.). Caring for our Country is built upon what was originally the National Heritage Trust Program, which ceased to operate in June 2008 and was then functionally transitioned and incorporated into the Caring for our Country Program along with the integration and/or creation of other NRM programs: the Landcare and Environmental Stewardship Program, National Wildlife Corridors, and Working on Country (Achievements Report Introduction 2013). In its first five years, Caring for our Country provided over \$2 billion in funding to stakeholders, and in 2013 was combined with the National Landcare Program, which continues to deliver upon Caring for our Country initiatives that were in place before July 2014 ("Previous Programmes" 2019). Caring for our Country was set at the national level and functioned to meet objectives of The National Heritage Trust Act of Australia 1997, The Natural Resources Management (Financial Assistance) Act 1992, and Matters of National Environmental Significance under the EPBC Act 1999.

From 2008-2013, Caring for our Country had its own MERI Framework of data collection through which to measure progress towards achieving program outcomes. In its evaluation to improve delivery, the Australian Government also invested in strategic

research projects across thematic areas, which are stored in publicly accessible digital archives. From 2014-2018, Caring for our Country consisted of two streams under the National Landcare Program and its program-specific MERI framework: Sustainable Environment and Sustainable Agriculture. The Sustainable Environment stream, administered through the Department of Environment and of relevance to this research, functioned to conserve the health and resilience of national environmental assets. Caring for our Country strategic objectives regarding this stream were directly guided by legislative responsibilities under the *EPBC Act of 1999*. Government sources utilized in analysis of Caring for our Country implementation and design over time can be viewed in the Appendices. ⁶

Goals

According to the National Landcare Network, the stated goal of Caring for our Country at its onset in 2008 was "to achieve an environment that is healthier, better protected, well managed, resilient, and provides essential ecosystem services in a changing climate" (Quoted in National Landcare Network Submission n.d.). In its review of Caring for our Country, however, the Network advocated greater emphasis on cultivating community-based support and involvement, instead proposing the goal: "to foster a community that is aware, engaged, and active in caring for their environment, so that it is healthier, better protected, well managed, resilient, and provides essential ecosystem services in a changing climate" (National Landcare Network Submission n.d.). This divergence in goal setting between national planners and Landcare Network stakeholders from the regional scale indicates both a stakeholder value of community

⁶ See appendix B for list of government sources utilized in analysis of CFOC implementation over time (and its subsequent integrated models)

engagement for NRM as well as a perceived greater need for goal rhetoric that encourages local and community engagement.

Beyond the stated goal, Caring for our Country had six national priority areas: the National Reserve System, Biodiversity and Natural Icons, Coastal Environments and Critical Aquatic Habitats, Sustainable Farm Practices, Northern and Remote Australia, and Community Skills, Knowledge, and Engagement (Report on the Review 2012). The national priority area guiding program funding that most actively seeks to include Indigenous participation is the sixth and final priority, "Community Skills, Knowledge, and Engagement. According to the program's Review team in their Report on the program review, "Caring for our Country recognizes that community engagement and building knowledge and skills with the community is vital if we are to protect and restore our unique and valuable environment and productive resource base. It is appropriate that the Australian Government, through its natural resource management initiatives, respects traditional ecological knowledge of Indigenous peoples and recognizes the ongoing and invaluable contribution Indigenous communities make to natural resource management" (2012), indicating Indigenous knowledges and/or engagements are considered in setting project goals to the end of environment restoration and ecological natural resource management.

However, stakeholder opinions from the consultation process on this priority included the need for greater clarity about Indigenous targets and guidelines under Caring for our Country, specifically the traditional ecological knowledge targets along with the need to contract arrangements to ensure that ongoing control and management of traditional ecological knowledge ultimately resides within local Indigenous groups

(Report on the Review 2012). Based on these feedback trends, it seems that that goals for Indigenous participation under this priority might be ambiguous, particularly with regards to engagement with knowledge. If targets surrounding traditional ecological knowledge are vague, then so too is how knowledge is used and who uses it, such as Indigenous autonomy in setting project goals and sharing ecological knowledge, running risks for practices of cherry-picking on the ground. An additional trend in stakeholder feedback was that "the government may need to consider the strong perception amongst Indigenous groups that traditional ecological knowledge is worthy of funding as an important element in preserving cultural diversity, not just as a means for natural resource management" (2012). This might indicate that there was still an ontological divergence in in priority setting, grounded in ethical connectivity. While guiding frameworks primarily prioritize Indigenous community engagement as it can benefit the environment (as is evidenced in the language quoted in the prior paragraph from the Review on the Report), the intertwined nature of environmental benefits and cultural and/or social benefits, which is grounded in an ethical presence rather than management toolkit, might still be in development.

Additionally, the review team states in its report that "...It is important to note [Caring for our Country's] place as one of the principal mechanisms by which the Australian Government is able to meet commitments made under international conventions to protect the environment and natural resources. Caring for our Country's support for the declaration of Indigenous Protected Areas... also contributes to meeting Australia's obligations under the International Convention on Cultural Diversity and the Convention on Biological Diversity" (2012). Although international priorities include both ecological and cultural benefits, the review team's emphasis on this requirement as rationale for cross-cultural Indigenous participation as a priority may lose the larger goals of holistic sustainability outcomes.

In the review process, stakeholders also noted problems in priority setting, including that national priorities did not agree with regional priorities, targets were not integrated across all NRM problems and were at times set arbitrarily, lack of coordination about priority setting at different scales of governance, too many targets, and the need for signoff from multiple departments (Vella et al 2015). Comments suggest that national priority setting for on-the-ground projects using a rigid framework is incompatible with local priorities and underscore a need for re-organization, with greater community autonomy in planning from the onset. Lisa Robins, a natural resource manager and educator, similarly claims that Caring for our Country narrowed the agenda for natural resource management (2011). Robins instead proposed broad objectives and targets for NRM and community capacity building (2011), which rather than set a large quantity of targets at the umbrella level that might not easily translate to local management needs, opens up the space for local autonomy in goal-setting.

Finally, concerning open-call funding projects under Caring for our Country, divergences sometimes existed between management project goals and those of Indigenous participants. Barbour discusses this issue:

There have been assumptions that weed management is important before the program even starts, and this is based on contemporary mainstream views about land management. This assumption is not challenged or even stated upfront. That stage is skipped and focus, instead, is on how to implement management... Some Indigenous people struggle with the notion of managing and destroying weeds because it does not fit their world view or objectives. Some Indigenous people, generally those who have been exposed to Western concepts of NRM, share the Western conservationist view that weeds are undesirable, foreign, invasive species, while others,

who may not have been exposed to these ideas, do not know what a weed is. Other Indigenous people may see introduced species as weeds (whether or not they are considered to be weeds by others) from their own cultural perspective, because of damage caused to country or sites of significance by these plants (2012).

Barbour's discussion of the epistemological divergences that may underscore project goal setting indicates need for Indigenous involvement in the planning and priority-setting stages, rather than just implementation, to foster true cross-culturalism. Projects that only involve Indigenous participants in the implementation stage, such as through teaching weed spraying techniques, fail to acknowledge the range of ontologies, historical influences, and dialogical opportunity that is fundamental to meaningful crosscultural engagement.

Methods

Definitions used in the provided Glossary that do not contain a separate citation were contrived from the Caring for our Country Glossary on NRM-related terms. They convey the definitions understood and operationalized in Australian Government planning, implementation, and analysis and are fundamental to guiding NRM implementation and methodologies.

Definitions such as biodiversity, ecosystem, ecological communities, ecosystem services, fragmentation, resilience, and stewardship are all enmeshed within western scientific ecological theory. Within Caring for our Country methodology, an ecosystem is understood as "A biological community of interacting organisms and their physical environment. Ecosystems are identified at various scales," while ecosystem services are defined as "the benefits essential to human survival and wellbeing that natural ecosystems provide through their structures and functional processes" (Caring for our Country Glossary n.d.). Aside from the lack of translation for these words and the scientific paradigms they are embedded in, members of an Indigenous Australian community in touch with traditional epistemologies might conceptualize an ecosystem as Dreamtime—the originary creation system in which all else is relationally enmeshed (Rose 1988). Meanwhile, conceptualization of ecosystem services, while essential for survival, implies nature as having instrumental rather than intrinsic value to the human and operates within western notions of land as something to exploit or take advantage of. While reconcilable and not necessarily a stand-alone ethic under conceptualization of ecosystem services, this view of nature and its services is at odds with traditional Indigenous responsibilities to care for the land to receive care in return in what constitutes a two-way kinship relationship (Muir 2010).

Connectivity is defined as "the location and spatial distribution of natural areas in the landscape to provide species and populations with access to resources (food, breeding sites, and shelter); increase habitat availability and facilitate population processes (dispersal, migration, expansion and contraction); and enable ecological processes to occur (evolution, water, fire, and nutrients)" in the Caring for our Country glossary. This definition seems ontologically at odds with Mary Graham's guiding precept for Indigenous ecological knowledge, "you are not alone in the world" (1999), through which connectivity is more than just environmentally beneficent spatial distribution, it is a deeply felt kinship system that extends into land, reveals relationships salient for management, and helps to provide harmonious outcomes for all components of an ecosystem (1999). Terms such as fragmentation, resilience, and stewardship, meanwhile, ironically exist in both ecological science and in reconciliation and sustainability discourse, respectively. While habitat fragmentation is understood in scientific terms as "the isolation, breaking up or reduction in size of habitats or vegetation" in government projects, scholars such as Rose describe fragmentation as a western-knowledge methodology to master the world through knowledge systems that dissect, classify, and remake to produce technologies that fuel desire, citing it as an ill of postcolonial modernity (2004). In traditional Indigenous Australian cosmologies, habitat fragmentation, if occurring as a negative result of human activity, might be interpreted as a sickness of both the land and the self (Muir 2010). Meanwhile what ecological science defines as land stewardship, "conservation of the environment through sustainable practices," might read as a spiritual responsibility to a local Indigenous community (Bradley and Johnson 2015).

These definitions highlight how government descriptions relating to ecology, knowledge, and sustainability used in project implementation might be at odds with analogous conceptions falling under the Indigenous knowledges that Caring for our Country seeks to engage with. Guiding terms used in Caring for our Country that embody and prioritize mainstream conservation methods, especially where project priorities are being passed down from the national level as previously discussed, may miss possibilities for engagement with or prioritization of other management ethics that may exist on a space and time spectrum. A more fluid allowance for local methodologies that include initial dialogical acknowledgement of history would better fit into the framework for methods setting. However, further research would be required to compare program rhetoric from the national scale with processes and outcomes from actual examples implemented under the umbrella-level planning.

The contrast in views is clear in this review of Caring for our Country: "A range of Indigenous stakeholders at various forums said that notwithstanding the success of Working on Country, the current targets in the open call do not fully suit Indigenous values and aspirations and fail to capture their spiritual connection to country. Some regional representatives also commented that it had been difficult in some cases to weave some very specific Indigenous targets into on-ground natural resource management activities" (Caring for our Country Review Team 2012). Barbour additionally describes the challenges rising out of emphasis on scientific paradigm in collaborative management initiatives: "…Despite the genuine desire of many ecologists to work together with Indigenous people to gain collective better understandings of country, the process of data collection, investigation, and reporting, based on a positivist-reductionist paradigm, often still excludes or marginalizes Indigenous people because it is incompatible with the more holistic nature of Indigenous ecological knowledge and Indigenous ideas about research" (Barbour and Schlesinger 2012).

Despite these criticisms, Caring for our Country's Report on Indigenous Land Management discusses at length success factor for Indigenous land management, which include factors such as "Indigenous governance and co-governance arrangements that respond to customary institutions," "relationships of trust, respect, and mutuality," "collaborative two-way knowledge engagement," and "Indigenous-driven planning (cultural, country based, and comprehensive)" (Hill et al 2013). The Caring for our

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Country Report also discusses barriers to Indigenous land management, such as "limited respect, recognition, and practical support for Indigenous knowledge and worldviews, limitations of native title, recognition of rights and access to traditional lands and waters," and "socioeconomic and educational disadvantage faced by Indigenous peoples" (Hill et all 2013). Methodologies for each success factor are discussed at length in the report, along with specific case studies that embody best practice for each success factor.

One such project that embodies cross-cultural approaches to Indigenous governance in natural resources management selected for the Report is Ngarrindjeri planning. According to the Report,

[The project] is underpinned by their nation-building strategy. The Ngarrindjeri have established a regional authority to represent their communities and organisations, and pursue a pathway of healing, development, and negotiating rights to carry Ngarrindjeri culture and society into the future. The Ngarrindjeri Nation Yarluwar-ruwe Plan [2007] was prepared to help government agencies, natural resource managers, researchers, and the wider Australian community to better understand and recognize rights and responsibilities to country. It sets down Ngarrindjeri vision for country and opportunities for partnerships and has underpinned the successful development of many land management activities, including revegetation, seed collection and propagation, weed control..." (Hill et al 2013).

Under this plan, collaborative custom-based management of local areas, such as the Murray Bridge Railway Precinct and Hume Reserve, could flourish, which has been attributed to the local cultivated conception that "rehabilitation of country [is] a primary pathway towards wellbeing, based on a just and productive relationship with the broader Australian economy and society, together with the cultural and spiritual dimensions of well being" (Birckhead et al quoted in Hill et al). This case study speaks to a multitude of my proposed methods dimensions for cross-cultural NRM programs, including historical awareness, dialogue, and local agenda setting. However, while case studies all fall under Caring for our Country and allude to my framework for success, they generally occur at the regional level within Indigenous Protected Areas or Working on Country and were selected for representation.

The Report underscores that Caring for our Country acknowledges, considers, and recognizes the need for such factors in Indigenous land management and can identify them as best practice that should be further pursued. In the report, Indigenous governance arrangements are described in part as "most effective where Indigenous people initiate the institutions themselves on the basis of informed consent, where traditional nodal leaders are respected and empowered, where the local views about cultural legitimacy are taken into account, and where external agencies engage through supportive and facilitating approaches" (Hill et al 2013). The program further acknowledges that Indigenous-driven planning is a success factor: "[stakeholders] transformed a conservation planning method that typically puts conservation planners and facilitators into the driving seat to take on board Indigenous governance structures, local protocols, and priorities that enabled the Indigenous people to drive the process. Core concepts about ecological processes and systems were adapted to include categories defined by Wunambal Gaambera Traditional Owners and incorporate Indigenous knowledge. The resulting plan and process are widely respected as a good outcome and model for others" (Hill et al 2013).

Finally, even as program methods and outcomes at the national scale are grounded in western ecological science paradigm, as is evidenced in the definitions employed, the program's report on Indigenous land management acknowledges this as a problem in intercultural NRM: "Indigenous people often still experience a sense of domination by western science and conservation paradigms in two-way NRM engagements and struggle to achieve what they perceive as real equity," acknowledging that "addressing underlying power imbalances and rights recognition is a key to achieving equitable engagement" (Hill et al 2013). While the available case studies were selected for embodying such practices and are not necessarily representative of the larger methods employed, the document nonetheless signifies progress at the national scale in working towards holistically sustainable interculturalism.

Participation

When the Caring for our Country program was first announced as the successor program to Phase Two of the National Heritage Trust, backlash emerged among stakeholders due to participatory changes at local and regional scales of governance, namely the shift from regional to national focus. External stakeholders held a range of opinions, with one natural resource manager publishing news opinion piece in reaction to the initial program rollout, arguing that at the time of roll-out in 2008, "some are cynically suggesting, with back-to-back labor governments now lined up at state and federal levels, that there is a push to undermine the regional groups from state agencies seeking a bigger slice of the pie," ultimately concluding that "the Government is undermining the good will of the community" (Siewart 2008).

Siewart's initial frustrations about opportunities for funding and participation are reflected in subsequent feedback. The common criticism was that under the predecessor National Heritage Trust II, funding programs were directed at local and regional scales for NRM, but that Caring for our Country shifted the focus to the national level at the expense of the other scales of governance, disenfranchising those performing projects on the ground such as landholders and local communities (Landcare Network Submisison n.d.). According to the Network, "with the shift in focus of the Caring for our Country program, the community no longer felt connected to the outcomes or activities within their areas. In fact, it made the whole Regional Arrangements process appear redundant as Regional NRM bodies were no longer implementing locally 'owned' Regional Plans, but were seen as just another arm of government" (Landcare Network Submission n.d.). This programmatic change functioned to shift funding away from regional and local bodies and instead organize it at the national scale, which feedback seems to suggest has barred local participation in planning and implementation.

The Landcare Network additionally argued that although "community" is a vital component of on-ground NRM, "the setting of National priorities disengaged much of the Landcare community, as issues relevant to their local and regional priorities do not fall within the Business Plan targets (or the targets are seen as remote and 'top down')" (n.d.) and that the national priorities, in their rigidity, inhibited certain regions from applying for project funding, such as parts of Western Queensland and Eastern Western Australia as they do not fall within limits for funding parameters (n.d.). This issue alludes to the previously discussed regarding misalignment of program priorities at different scales of governance, preventing Indigenous participation in priority setting. Similarly, the Network alludes to challenges experienced in Caring for our Country's efforts towards "landscape scale change" due to only accounting for the biophysical landscape rather than the social landscape and its connections, which embodies the previously noted emphases on ecological rather than holistic benefits of participation. The Network

ultimately concluded that "there will not be permanent change in the management of natural resources unless the 'social norms' of the managers change first. The 'people factor' is central to NRM" (n.d.), recommending participation of all landcare structures at all scales of governance (n.d.).

Additional stakeholders expressed dissatisfaction with connectivity to local bodies. An anonymous Indigenous stakeholder expressed that "there is a high level of frustration among many local groups that their particular needs are not being addressed by their regional representatives, while the regional representatives feel that they are not fully meeting the requirements of existing programs" (Indigenous Livelihoods 2012), not unlike his anonymous peer: "whole-of-government programs for Aboriginal development as they are conceived in Australia will fail because they remain top-down, centrally driven initiatives..." (Indigenous Livelihoods 2012). Meanwhile, a stakeholder op-ed titled "Crying For Our Country" further critiques the program for its inability to connect national, regional, and local bodies: "rather than narrowing this gap... Caring for our Country has failed to provide a strategy or measures for re-connecting, integrating, and re-invigorating the activities of local groups within the regional model" (Robins 2011). And finally, an anonymous Indigenous stakeholder claim: "Approaches that leave all of the important decisions to government are fundamentally at odds with decades of national and international research showing that effective governance systems should provide local control over those issues that require local knowledge and authority for resolution" (Indigenous Livelihoods 2012). Such complaints indicate the necessity of integration at all geographical and administrative scales in achieving successful intercultural NRM outcomes and call for a regional rather than national model that can better provide

support to local community NRM (2011). Robins further criticizes the oversimplification of complex goals and values into a neat framework that cannot adequately translate into on-the-ground participation, a testament to the rigidity of guiding program documents as a barrier to participation (2011).

An example of the challenges rising through Caring for our Country's new model is seen in its program language and rhetoric, which posed a barrier to participation for some stakeholders: "The application process under Caring for our County is challenging for Indigenous groups and could benefit from having a revised format which is clearer, and contains less Government speak. The monitoring and evaluation process, and the administrative process for small grants is also off-putting and could do with revision" (Landcare Network Submisison n.d.). Aside from language used in the application, the application process is based on the national funding and implementation model that is not easily translatable to local scales and priorities, exacerbating the challenges to Indigenous participation.

In a 2012 report on its review, the Caring for our Country Review Team addressed issues surrounding scales of governance, concluding that the initiative is appropriate for the national scale: "national-scale NRM issues require a national perspective and commitment to address them effectively... Environmental and natural resource management issues often require national leadership due to the mix of public and private benefits, non-linear relationships between cause and effect, the considerations of future generations and delays between action and environmental impact. These factors mean that it is unlikely that markets alone will provide a comprehensive solution" (2012). The program's justifications in its self-review might mean that while Indigenous participation is still significant under sub-programs such as Working on County and Indigenous Protected Areas, and the program's report on Indigenous Land Management actively seeks Indigenous participation through Indigenous governance, rigidity in national planning as well as disconnect between the Hill Report and direct, explicitly prioritized Indigenous participation in the program logic, particularly for open call funding where Indigenous participants are not directly targeted, appears to pose a barrier to Indigenous participation in both goal setting and implementation.

Resource Transfer

The Indigenous Land Management Report of Caring for our Country presents projects that are directly linked to cross-cultural resource transfer. One such project is Gundjitmara Lake Condah Sustainable Development project of Victoria, which prioritized collaborative partnership with focus on universal capacity building for NRM groups, organizations, and businesses to achieve a vision of "restoration, reconciliation, and healing to facilitate flowering of the social and technical ingenuity that are required to make the successful transition to sustainable development" (Hill et al 2013). After receiving Native Title in 2008, Gundjitmara collaborated with white natural resource managers to catalogue the biodiversity present in their sacred Budj Bim reserve system, contextualizing Indigenous terminologies with ecological science to better manage the wetland according to traditional practice—flooding rather than drainage (Hill et al 2013). The vision of the program acknowledges the need for healing as well as the diverse holistic impacts of knowledge transfer in constituting sustainable outcomes. As this successful outcome of cross-cultural resource transfer was operationalized from the regional organizational scale, cross-cultural participation challenges rising through the Caring for our Country governance model were not universal. However, the transfer strategizing operationalized still appears to fit within a toolkit management model rather than a deeply-rooted ethical or ontological expansion.

The Indigenous Land Management Report also presents a project directly linked to teaching, wherein Luritja residents of the remote Haasts Bluff in the Northern Territory provide skilled educators that can enhance two-way environmental learning in primary schools, which before only included English and the standard national curricula requirements (Hill et al 2013). With this new priority, knowledge experts in NRM work together with the classroom teacher as well as an Aboriginal teacher on culturally derived practice to educate school children about Indigenous knowledges and natural resource management. For example, the senior NRM expert and Aboriginal teacher aide collected plant specimen and discussed names and uses with the children, who subsequently pressed the specimen and recorded the species in Luritia (Hill et al 2013). Targeting youth for education about Indigenous knowledges, notably at the discretion and performance of Aboriginal teacher aides, opens space for the development of a new ethical presence from early on while youth are still developing their personal ecological epistemologies, as well as provides economic resource gains to Indigenous participants. Doing so in collaboration with NRM experts creates a two-way epistemological expansion; Indigenous cosmologies are embedded into western frameworks for understanding and learning (e.g. primary school), while western structures and science (e.g. expert education and learning) are simultaneously incorporated into on-ground Indigenous cosmology during school field trips.

Community Impact

During the program review process, Indigenous stakeholders desired that Caring for our Country align more directly with Closing the Gap and Reconciliation Action Plans and called for clearer articulation of Caring for our Country contributions to Closing the Gap, expressing the belief that it is part of the Caring for our Country's interest to aim to increase the wider benefits of indigenous land management to Indigenous health, society, and economies (2012). According to the Caring for our Country review team, this request spurred "a holistic approach for supporting Indigenous engagement through partnerships with health, education, and employment outcomes" (2012). The Indigenous stakeholder call to action alludes to Indigenous conception of a holistic sustainability with inclusion of health outcomes as an integrated part of the sustainability agenda, which expands beyond the Caring for our Country definition, which references to the traditional three-tiered notion of sustainability. This divergence further underscores a greater need to address and incorporate Closing the Gap priorities. While Caring for our Country acknowledged this feedback and it inspired initiative to collaborate with diverse community partners for holistic sustainable development (although unclear whether this means expanding existing initiative within Working on Country or introducing relevant community impact initiatives in other sub-programs), outcomes of are not available in the collected data.

Conclusion

The Caring for our Country review team ultimately concluded that "the initiative is effective as Caring for our Country is making real progress towards an environment

that is healthier, better protected, well managed, resilient, and provides essential ecosystem services in a changing climate [and] has exceeded the five-year outcomes in nearly all national priority areas" (2012). While this conclusion continues to focus primarily on just environmental impact, including reference of terms that the program defines by western science, the program's report on Indigenous Land Management underscores programmatic acknowledgement of the importance of intercultural NRM, the relevance of intercultural NRM in contributing to diverse outcomes that embody holistic sustainability, and of best practices that appear to align with the criteria I have opted to use. Case studies provided in the program's report, meant to exemplify the exercise of best practice and accompanying holistically sustainable results, oftentimes fall under subprograms that already prioritize holistic community impact and Indigenous selfdetermination in planning and also constitute a biased selection sample. Also, a full comparison cannot be made because case studies from external, non-government sources (unlike those in the Indigenous Land Management report) were not available in the collected data. Still, project examples show genuine movement towards cross-cultural NRM and holistic sustainability across diverse areas of Australia.

The Caring for our Country structure created discrepancies between national/regional/local scales of governance that could have created barriers to local Indigenous participation and engagement in the best practices outlined in the Indigenous Land Management report. National source funding, particularly for Indigenous stakeholders who applied for project funding ad hoc rather than through a sub-program targeted at Indigenous participation, seems to have created challenges with regards to project priority alignment, project methods, and participation at different scales of governance, in turn creating potential challenges for Indigenous on-ground planning from the start (rather than after project funding has been granted in conversation with national priorities). Nonetheless, Caring for our Country, particularly its priority for community engagement as it intersects with the Indigenous Land Management report, represents a start in working towards meaningful intercultural NRM and holistic sustainability at the national scale.

National Landcare Program Phase One (2014-2018)

Overview

The Australian Department of Environment and Energy funds a variety of Programs, including the National Landcare Program, the Emissions Reduction Fund, Australian Heritage Grants and Protecting National History, and the Sustainable Regional Development Program ("Grants and Funding" 2019). The National Landcare Program, as the current over-arching programmatic body on landcare and natural resource management in Australia, has a planned commitment to Indigenous participation and subprograms dedicated to Indigenous knowledge and engagement.

As of 2014, the National Landcare Program consisted of four main appropriations agreed upon in 2012-2013 under Caring for our Country: the National Heritage Trust (ongoing as first absorbed by Caring for our Country), the Environmental Stewardship Program, the Natural Resources Management Account, and the Pest and Disease Preparedness and Response programs. Programs such as the regional NRM organizations (now administered through a Regional Stream), 20 Million Trees, a range of local programs, small grants, Indigenous Protected Areas, World Heritage Grants, the Reef Program, and Working on Country all fall under the National Heritage Trust as continuing existing contracts entered into under Caring for our Country and are delivered jointly through the Department of Environment and Energy and the Department of Agriculture and Water Resources (Terms of Reference National Landcare Program Review 2014).

Phase One of the National Landcare Program, through which the Australian Government invested \$1 billion towards sustainable natural resource management, occurred from 2014-2015 and from 2017-2018. Funding supported the Landcare Networks and each of Australia's 56 regional natural resource management organizations. Phase One consisted of both the Regional Stream and the National Stream. Through the Regional funding Stream, money is invested into the 56 NRM organizations to aid in delivering local and regional projects further downstream. 20% of National Landcare Program funding helps local management organizations within the 56 NRM regions, local landcare groups, and local stakeholders to undertake landcare projects that promote sustainable practices. The National funding Stream, meanwhile, includes election commitments and sustainable conservation projects occurring at the national scale, including the Threatened Species Recovery Fund, the 20 Million Trees Program, Sustainable Agriculture Small Grants, local programs that fall directly under the National Landcare Program, and continuing state commitments including World Heritage and Indigenous Protected Areas ("National Landcare Program Phase One" 2019). Government resources reference in analysis of Phase One and Phase Two of the National Landcare Program can be viewed in the Appendices.⁷

Goals

⁷ See Appendix C for government resources utilized with regards to the National Landcare Program (Phase 1 and 2)

Initial consultation for Phase One strategizing yielded possible reformed agenda items

for the new Regional Stream and accompanying 56 Regional NRM organizations, all

quoted from a 2014 National Landcare Program Phase One Consultation Paper:

- "Simplified guidelines, application processes, and reporting requirements that are tailored to the scale and complexity of investment
- A focus on decision making at the regional and local levels. Key to this will be regional NRM governance arrangements that support and encourage strong community engagement and participation in regional natural resource management planning and implementation
- Multi-year funding agreements will continue to underpin regionally-based delivery and will be structured to support regional priority setting and flexibility in response to changing circumstances of the region
- Establishing and strengthening new collaborations between regional natural resource management organizations and landcare organizations
- Developing guidance and best practice materials for use by local landcare-type groups in building their capacity, including governance, to enhance their important local role
- Supporting communication of local landcare priorities, including to potential project partners and to regional natural resource management organizations" (Consultation Paper 2014)

In response to feedback and consultation, the planning committee additionally

elected to prioritize community engagement at all stages of planning: "genuine community engagement, at all stages of regional NRM planning and delivery, will be a fundamental element of investment activity under the National Landcare Program. It is expected that regional NRM organizations will appropriately involve the broader natural resource management community, including Landcare and farmer groups, Indigenous people, and individual landholders in delivery of the regional stream of the Program" (Consultation Paper 2014), with specific emphasis on increasing participation in "NRM planning and prioritization, local NRM priorities' role in delivering national outcomes, NRM governance and decision-making, and on-ground NRM through small and medium scale projects" (Consultation Paper 2014). These aspirations appear to embody a clear goal of communal based planning starting at project conception, including for Indigenous folks. Most notably, however, the introduction of a Regional Stream that prioritizes local decision-making and priorities directly addresses the most prominent challenges to successful cross-cultural management from the predecessor program, Caring for our Country, namely the national-scale focus as it created barriers for community engagement. Progress towards these goals is actively operationalized in the regional stream. These goals, while they do not compose the formal program priorities or directly seek Indigenous priority-setting, require cross-cultural collaboration and provide channels for locally based, Indigenous decision-making in NRM.

Two years later, in 2016, the Australian Government's National Landcare Program conducted a review on its first phase to examine the appropriateness and effectiveness of the Program. The Government subsequently produced a report on the review and held community consultations on the review so as to identify areas for improvement and innovate guiding structures of the program in the development of its second phase, which started in 2018. For the review, the Department of Environment and Energy conducted a survey of NRM stakeholders regarding program goals, delivery, and outcomes. The survey received 916 responses from five main stakeholder groups: "NRM regional organizations, direct National Landcare Program grant recipients, industry groups, state or local government, and Indigenous groups" (National Landcare Program Stakeholder Survey 2016). Primary themes of interest for the survey did not include Indigenous participation, but it was noted as an additional point of discussion, which shows the need for greater integration of Indigenous participation into 1. Program goals 2. Program planning and 3. Program assessment. Although the Program seeks to "support local and long-term environmental, sustainable agriculture, and Indigenous outcomes" Indigenous outcomes are not evaluated at length in the assessment process (National

Landcare Program Stakeholder Survey 2016). While program-wide goals for Indigenous participation exist, they are not explicitly integrated into program assessment, MERI, or even new benefits from the regional stream.

In the Report on the Review of the National Landcare Program, the review team acknowledges the need for greater recognition as underscored in the survey: "the stakeholder survey revealed a low level of alignment between community and national priorities in relation to Indigenous engagement. Enhancing the links between Indigenous Protected Areas and Indigenous Ranger programs, and using their success to inform appropriate Indigenous participation in other programs, could achieve more meaningful Indigenous and environmental outcomes across the National Landcare Program" (Report on the Review 2017). Presently, Indigenous Protected Areas and Working on Country are not included in the National Landcare Program MERI framework, and instead report independently on their specific MERI plans every six to twelve months (Report on the Review 2017). Expansion of methodologies and priorities in operation through Indigenous Protected Areas and Working on Country, each of which seeks to satisfy holistically sustainable benefits to Indigenous communities, including land rights, would operationalize notions and methodologies for holistic cross-cultural sustainability at the broader programmatic scale.

Finally, the survey itself included ambiguous language. For example, 69% of respondents felt that their NRM priorities related to the priority of building Indigenous knowledge and participation, but nowhere in the MERI Framework, Program Logic, or survey are knowledge and participation explained, creating ambiguity as to whether or not knowledge is here meant as Knowledge (i.e. Traditional Ecological Knowledge or Indigenous Ecological Knowledge as defined in the Caring for our Country glossary) or knowledge (i.e. Indigenous stakeholders building western ecological NRM knowledge through participation). This is a recurring problem in guiding program documents, where Indigenous knowledge and participation might be referenced as a goal without context and recalls stakeholder feedback from Caring for our Country that better guidelines regarding goals of Indigenous participation and knowledges are needed to educate all stakeholders on appropriate methodologies and expectations for meeting cross-cultural program goals.

Methods

Regional Stream funding as a method for implementation generally increased the quality of locally appropriate methodological planning on the ground. In continuation of criticisms raised surrounding Caring for our Country, certain stakeholders claimed that funding requirements under Phase One of the National Landcare Program continued to reduce ability to design NRM that would meet local needs and on-ground planning in that specific delivery methods were still not flexible enough to identify methods designed to local needs, ultimately reducing success toward desired outcomes (NRM Roundtable Synthesis 2016). Still, introduction of the Regional Stream and its 56 regional NRM organizations alleviated challenges that came with Caring for our Country's top-down approach and centralization at the national scale of governance. Through this Stream, roundtable stakeholders felt that "regional planning processes enable state/national priorities and local needs to be reconciled, synergies identified, and translation of these into regionally relevant priorities that can direct NRM funding and activity" (NRM Roundtable Synthesis 2016). Additionally, based on 2014 Consultation for Phase One,

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the National Landcare Advisory Committee was established to specifically ensure local and regional voice in the methodological design and delivery of the Program, which further seems to step in the right direction for improvement (Consultation Paper 2014).

As was also the case in government reports on Caring for our Country, project case studies representing methodological achievements are oftentimes vague and do not include specific details on methodologies performed or cross-cultural knowledges shared, typically referencing the Indigenous community in question and the general goals and outcomes of the project, without discussion of exactly how the goals were implemented. However, where methodologies are discussed in case studies, Phase One of the National Landcare Program appears to emphasize education, such as with the Wumbudin koulyee-rah (Strong and Proud) project under the Regional Stream. Through this project, prospective employers engage an Aboriginal employment tool and provide a job skills program to at risk Aboriginal youth through which they can indulge opportunities to reconnect with culture and country as well as western scientific methods (Report on the Review 2017). Indigenous education, a prominent method in fostering Indigenous participation, can provide opportunities to learn about different forms of knowledge and practice. However, it can also become a colonizing force if focused solely on western toolkits and knowledges for management. The Wumbudin koul-yee-rah project, with its educational focus on reconnecting with culture and country for NRM, recognizes holistic community impact opportunities coming from NRM as well as historical awareness of cultural loss. However, information on the project's guiding methodologies for teaching is not available in the collected data.

Participation

Initial consultation feedback included the theme of collaboration across different stakeholder groups: "Stakeholders have different capacity issues, interests, skills and experience... Improvements are needed in the way that NRM stakeholders communicate and work together at local and regional scale... Greater Indigenous engagement in NRM planning and delivery is important for the NRM community but it needs to go beyond 'consultation' to be meaningful. Mechanisms may include Indigenous advisory groups and Indigenous membership on NRM boards" (Consultation Summary 2014). In response to this feedback, Phase One design posits that:

Regional NRM organizations have a central role in supporting Indigenous people and organizations to participate in the delivery of NRM and contribute to wider economic and social benefits. They can achieve progress in this area through activities such as planning support, utilizing and respecting Indigenous ecological knowledge, capacity building, and the delivery of on-ground activities including employment and contracting opportunities... Regional NRM organisations are expected to involve Indigenous people in both the planning and delivery of all National Landcare Programme investment. This will ensure that Indigenous engagement and participation features strongly as an investment, project and employment outcome for the National Landcare Programme. Regional NRM organisations should investigate and identify opportunities in conjunction with Indigenous communities and either include these as a part of their projects or provide a satisfactory reason for not doing so (Consultation Summary 2014).

This program design, wherein regional NRM organizations are not only funded under a regional stream but also have direct responsibilities to support Indigenous participation, seems to take a first step in increasing Indigenous participation. Emphases on the necessities to respect Indigenous knowledges and involve Indigenous people in the planning as well as delivery of program projects satisfy criteria for respectful two-way participation and early onset participation. Likewise, allowance for satisfactory justifications for not engaging with an Indigenous community enables non-Indigenous stakeholders to respect a community's wishes if they do not wish to collaborate, after
which forceful collaboration could function as a colonizing force. However, there are no examples in the collected data on actual attempts or outcomes from this specific design update.

According to the 2016 survey two years later, while respondents ranged from direct National Landcare Program grant recipients to industry groups to state and local governments and 69% identified as NRM local groups, only 4% of respondents were from an Indigenous organization (National Landcare Program Stakeholder Survey 2016), indicating lack of indigenous participation in the consultation and review process. 4% is a sizable sample considering that the nation's Indigenous population constitutes 2.8% of the total population (Australian Bureau of Statistics 2019). However, the fact that program goals of Indigenous participation are integrated into aspects of planning and desired outcomes seems to suggest that there should still be a higher percentage of Indigenous survey and program participation, especially considering the high percentage of Indigenous people in some of the remote local areas involved. The survey was distributed online via generic link, which poses accessibility requirements not easily met in remote Indigenous stakeholder communities. However, further data indicates lack of adequate participation from the start: the two National Landcare Program priorities that survey participants identified with least were to build Indigenous knowledge and participation and to promote or conserve Matters of National Environmental Significance, including World Heritage Areas and national heritage (National Landcare Program Stakeholder Survey 2016), both of which are the two program priorities associated with Indigenous governance and cultural protection. While stakeholder feedback consistent across programs advocates for increased local community

participation and engagement in general and from project onset, the survey results indicate that this aspiration is generally not conflated with Indigenous participation and engagement. This discrepancy suggests that there might be unequal concern for Indigenous presence, participation, and investment across stakeholder groups.

The survey additionally reflects that Indigenous engagement in setting priorities is the least offered community opportunity, posing an additional barrier (although not specifically to Indigenous folks) to participation from project onset. According to results, 69% of project coordinating respondents provided opportunities for community participation in the deliverance of their projects, 39% provided community participation opportunities in the planning of their projects, and 33% provided community participation opportunities for priority setting of their projects. Additionally, while 72% of Indigenous respondents were likely to be involved in planning, 83% were likely to be involved in delivery (National Landcare Program Stakeholder Survey 2016), under which the question of what constitutes best land management is already decided. One survey respondent alluded to a disconnect at geographical scales and a need for local engagement: "Local engagement is vital--never centralise control when so many different areas of this country require different solutions to their local environment parameters [Industry group stakeholder]" (National Landcare Program Stakeholder Survey 2016). The ongoing calls for increased local engagement, from grant recipients to industry stakeholders to local NRM groups and with regards to both Caring for our Country and the succeeding National Landcare Program, suggest a need for further diversification in planning and governance, particularly regarding enhanced community participation opportunities for priority setting, although, as previously noted, separate measures might

be necessary to address the issue of low identification of non-Indigenous stakeholders with the program priority to build Indigenous knowledge and participation.

At the close of Phase One, Program coordinators reported the following successful delivery regarding Indigenous engagement: "75 Indigenous Protected Areas covering over 65 million hectares, 45,000 Indigenous participants at project events, 2,000 Indigenous people participating in trainings, and 143 National Landcare Program projects utilizing Indigenous Ecological Knowledge to guide investment" ("What's been delivered?" Twitter 2017). These numbers indicate significant quantitative engagement, although there is no benchmark for comparative analysis with prior and subsequent programs as well as lack of case studies for use of knowledge and participation outcomes.

Resource Transfer

Beyond resource transfer through education as already discussed, available government and public sources on Phase One of the National Landcare Program do not discuss at length either strategies for resource transfer, specific examples, or outcomes, although cross-cultural planning and implementation is embedded in guiding program documents.

Community Impact

The National Landcare Advisory Committee's Report on the Review of Phase One of the National Landcare Program, while concluding that the program was successful, indicated that refinements were necessary to the online MERI tool so as to include critical outcome and impact information, such as social and economic benefits of investment, rather than just environmental benefits of investment (Report on the Review 2017). This review acknowledges the holistic community impacts possible through NRM and could represent a first step on the path to integrating these benefits at the national umbrella programmatic planning scale. Specific stakeholder comments or programmatic outcome examples regarding holistic community impacts of Phase One are not included in the collected data.

Conclusion

The introduction of the Regional funding stream provides better opportunities for local, regional, and national reconciliation in program planning and investment, including benefits to local decision makers (although not necessarily Indigenous). Implementation of program goals that prioritize Indigenous participation from the onset foster rhetoric for genuine Indigenous participation, but there is still divergence between the programmatic priority of Indigenous engagement and the priorities of non-Indigenous stakeholder groups, serving as a possible barrier to further discussion about alignment of specific NRM project goals between stakeholder groups. Likewise, where non-Indigenous stakeholder groups do not identify with programmatic priorities for Indigenous participation, cross-cultural resource transfer might lack historical acknowledgement, genuine dialogical collaboration, or ontological considerations. Analysis of relevant project case studies, if available, would further shed light on these considerations. Both methodologies and assessment frameworks already employed within the Indigenous Protected Areas Program and Working on Country are disconnected from larger programmatic planning and sub-programs, and expansion could provide opportunities for increasing Indigenous participation and education on cross-cultural engagement.

Under Phase One, Indigenous education was a primary method for fostering Indigenous participation and engaging two-way knowledge exchange, appearing in almost every available case study for participation and resource transfer. However, educational models employed typically occur within western frameworks for learning and thinking, even as they typically incorporated the nourishment of Indigenous knowledge and culture in the agenda. Nonetheless, the job skills educational model provides resource gains not only in the form of knowledge, but also with regards to economic, professional, and emotional wellbeing for communities where poverty is prevalent and opportunity scarce.

National Landcare Program Phase 2 (2018-Present)

Overview

Phase Two of the National Landcare Program includes an additional government investment of \$1 billion, funded directly from the Australian Department of the Environment and Energy and the Department of Agriculture and Water Resources over a five-year span, from July 2018 to June 2023. Similar to Phase One, the primary focus of the Phase is to protect and conserve Australia's water, soil, plants, animals, and ecosystems and to support the productive and sustainable use of these valuable resources through diverse partnerships with governments, industry, community, and individuals ("National Landcare Program Phase Two" 2019). The Regional Land Partnerships Program is a fundamental component of Phase Two of the National Landcare Program, through which the government invests \$450 million over the five years to support 195 projects that aim to contribute to four environment and two agriculture outcomes for 49 regional NRM organizations. Government resources referenced with regards to Regional Land Partnerships can be viewed in the Appendices:⁸

While specific case studies and projects under the Regional Land Partnerships Program are in early stages as of early 2019 and data is not presently available, projects under the Regional Stream of the National Landcare Program that are ongoing into 2019 are discussed in the subsequent section and contextualize the programmatic rhetoric presented below for Phase Two.

Goals

The four strategic objectives of the Regional Land Partnerships of Phase Two Program Logic are listed below:

- (1) Communities are managing landscapes to sustain long-term economic and social benefits from their environments
- (2) Farmers and fisheries are increasing their long term returns through better management of the natural resource base
- (3) Communities are involved in caring for their environment
- (4) Communities are protecting species and natural assets

Although Indigenous NRM is a significant component of virtual representation of

the Program and intercultural initiatives for resource management are stressed in Department-sponsored analyses and literature reviews ("Indigenous Participation" 2019), these initiatives are not explicitly incorporated into the language of the Program's primary four goals. Nonetheless, the focus on community engagement coordinated at the regional scale for three of the four goals represents a significant development since Caring for our Country, where the need for greater community engagement was

⁸ See Appendix D for list of government sources provided with regards to the Regional Landcare Program that were utilized in analysis

recognized as a fundamental area for improvement amongst stakeholders due to the centralized program model. Additionally, the first goal acknowledges the relationships between land and human and/or community, alluding to the notion that tending to land can tend to the human as well, which previous discussion has shown aligns with certain Indigenous management goals and opens space for the potential to break out of dominant land-ethics, although, conversely, can also perpetuate the notion of land as having only instrumental benefit.

Of the four objectives, Objective 3 is the only goal that explicitly alludes to Indigenous participation, seeking a long-term strategic outcome to "increase engagement and participation of the community, including landcare, farmers, and Indigenous people in sustainable natural resource management" (National Landcare Program Logic 2019). Objective 3 is also listed as contributing to a national obligation to "build community awareness of biodiversity values, skills, participation and knowledge, including Indigenous knowledge and participation, to promote conservation and sustainable use of biological diversity" (National Landcare Program Logic 2019). In this language, the focus is still ultimately placed on "conservation and sustainable use of biological diversity"—with Indigenous participation as a means to that end—rather than on constituting a collaborative channel through which to foster Indigenous NRM governance with holistically sustainable benefits.

Similarly, strategic outcomes for Objectives 1, 2, and 4 (with the exception of protecting natural national heritage sites and World Heritage Areas) focus explicitly on achieving the following environmental outcomes: ecosystem maintenance, protection,

and restoration, resilience and biodiversity, invasive species management, improved quality of the natural resource base, reduced greenhouse gas emissions, increased soil in carbon, reduction of habitat loss, degradation, and fragmentation, and reduction in threatened species (National Landcare Program Logic 2019). While these important environmental outcomes benefit Indigenous communities, as Objective 1 alludes to, discussion around these outcomes is still contingent upon definitions under western ecological science under which Indigenous participation and decolonizing community benefits would require at least a degree of Indigenous re-orientation.

Perhaps due to the limited reference to Indigenous participation in formal objectives and strategic outcomes, lack of communication about the specific expectations and goals surrounding Indigenous stakeholders is highlighted in the Q&A from a community information session on the Regional Land Partnerships. In the session, program representatives emphasize that project grant tenderers are "expected to have the involvement and support of their communities, and work with Indigenous, community, and landcare groups to achieve the outcomes under Regional Land Partnerships" (Community Info Session 2017). In response to a question about how service providers can demonstrate that they genuinely engaged Indigenous stakeholders, the National Landcare Advisory Committee alluded that criteria for the assessment process would be later provided and suggested evidence in the form of letters of support and partnership arrangements.

Although publicly available guiding documents under the *EPBC Act 1999* highlight best practices for engaging Indigenous people in NRM practices ("Engage

Early") as well as for landcare managers to best approach Indigenous stakeholders about negotiating partnerships ("Act First"), the Regional Land Partnership Program does not offer these documents, which comprise the national sources on facilitating collaborative projects with Indigenous stakeholders. This illustrates a structural disconnect with regards to resource planning and connectivity within the Commonwealth. While the requirement for Indigenous collaboration will probably increase Indigenous participation, criteria for goals such as discussion of knowledge-based priority divergences, epistemological openings, and equitable participation in priority setting are not actively communicated to non-Indigenous stakeholders at forums meant to provide programmatic clarity. The failure to provide federally recognized sources, such as Reconciliation Australia documents, which outline frameworks for interculturalism that align with research criteria, indicates a disconnect between goals for Indigenous participation in NRM and the larger national decolonization and reconciliation movement even as the National Landcare Program actively seeks to contribute to Closing the Gap. Discussion about best practices for reaching out and collaborating do exist within research reports commissioned under the National Landcare Program, but these reports function primarily to guide programmatic planning rather than serve as a resource to on-the-ground stakeholders seeking collaboration. Ongoing stakeholder questions about the requirement for Indigenous engagement (Community Info Session 2017) suggest that there might be a structural disconnect with regards to resource planning and connectivity across multiple national entities seeking to satisfy similar goals.

Methods

Aside from information on the strategizing and implementation of Regional Land Partnerships, the website for Phase Two of the National Landcare Program includes a section called "Aboriginal and Torres Strait Islander Natural Resource Management (NRM)," which indicates a clear goal of Indigenous participation. According to the webpage:

The National Landcare Program is investing in projects that build our partnerships with Indigenous people and communities so they have the opportunity to fully participate in land and sea management, drawing on their significant and unique knowledge, skills, and responsibilities. Indigenous people have cared for and managed this continent for millennia and continue to care for their Country today. The natural resource management sector has strong Indigenous participation and has significant potential to further expand Indigenous involvement and build the capacity of emerging Indigenous natural resource managers. The National Landcare Program delivers on the Australian Governments' commitment to Closing the Gap on Indigenous Disadvantage (Closing the Gap) by providing opportunities for stronger Indigenous participation in the planning and delivery of National Landcare Program investment and outcomes. ("Aboriginal and Torres Strait Islander Natural Resource Management" 2019).

Sub-sections of the webpage for this program include "Utilising Traditional

Ecological Knowledge," "Indigenous Participation," and "Telling the Story." The first of these sub-sections provides information about how knowledge is used in the program. Rather than reference the common buzzwords of Traditional Ecological Knowledges (TEK) and Traditional Ecological Practices (TEP), the National Landcare Program mostly uses "Indigenous Ecological Knowledge" with its references to knowledge, which appears not to essentialize knowledge or indigeneity to the traditional or past and is a progression from programmatic use of Traditional Ecological Knowledge under Caring for our Country ("Utilising Knowledge" 2019). The governmental page additionally draws upon decolonizing theory with its description of "two-way transfer of knowledge" as a driving force of the program: "the transfer of knowledge needs to be two-way; it is important that Indigenous peoples have access to scientific knowledge and best practice for natural resource management while the recording and use of Indigenous ecological

knowledge needs to be in accordance with agreed protocols and with prior approval of the Indigenous custodians of the knowledge" ("Utilising Knowledge" 2019). This programmatic method for knowledge exchange acknowledges potential divergences in methods, reconciles a need for both, and sets the stage for Indigenous autonomy on if, when, and how their knowledge is used.

Stated methodologies for utilizing knowledge also include "the recording, transfer, and use of Indigenous Ecological Knowledge to ensure that knowledge is not lost with the passing of Elders and knowledge holders, and it can be used properly to provide opportunities for Indigenous people to be fully involved in the protection, rehabilitation, and/or restoration of environmental assets, threatened species, ecological communities, and migratory species" ("Utilising Knowledge" 2019). This rhetoric represents a dually recognized benefit to Indigenous NRM, including Indigenous autonomy in involvement as well as ecological benefits. Additionally, the recording and transfer of knowledge relies upon relationships of trust and respect and requires presence from both Indigenous and non-Indigenous stakeholders. However, a formal statement at this highly immediate level of programmatic media representation that knowledge must be used at Indigenous discretion and on Indigenous terms for appropriations to be beneficent would enhance cross-cultural messaging. Testimonials supporting this rhetoric from the time of programmatic transition to Phase Two are discussed in the subsequent section.

Participation

In, "Increasing Participation," the National Landcare Program discusses its participation in activities that expand its partnerships with Indigenous people and communities. Partnerships are meant to create opportunities for the full participation of Indigenous people in land and sea management in line with their ecological knowledges and cultural responsibilities, which differ across regional natural resource management entities ("Increasing Participation" 2019). Emphasis is placed on the creation of employment opportunities for Indigenous people, in addition to inclusion of Indigenous voices in governmental decision-making processes. Projects include on-ground NRM (fire, rehabilitation, pest management), recording and reinvigoration of Indigenous ecological knowledge for biodiversity conservation and sustainable use of natural resources, articulation of Indigenous cultural land and sea responsibilities in regional governmental NRM plans, and development of regional NRM Indigenous participation strategies, which structure regional goals for participation and are outlined in the subseuqnt section ("Increasing Participation" 2019).

According to the webpage, however, "the opportunities for Indigenous participation in the delivery of NRM activities is only limited by the capacity and experience of an Indigenous community to be involved and identifying the most suitable and practicable level of involvement" ("Increasing Participation" 2019), logic which appears to place the final power in the Australian state rather than into Indigenous hands; whether or not Indigenous participation is extensive is seen as dependent on capacity for engagement, which in turn is determined by the state. While a degree of fiscal accountability is required, educational programming has shown that there is opportunity through NRM programming to cultivate and train necessary fiscal responsibility and accompanying opportunities for Indigenous wellbeing, governance, and participation. "Experience" sufficient for Indigenous participation in NRM suggests that there is a degree of experience that is insufficient for participation, which continues to validate western NRM practices and ecological science over Indigenous knowledges, or at least accepts incidences of communal loss of knowledge and disadvantage in experience as a result of colonial histories, even while simultaneously recognizing the values of these knowledges.

Finally, the implication that there would be levels of involvement that are not suitable or practicable not only prioritizes government voice and judgment, but also limits Indigenous agency for involvement. Even if the state attempts to provide ample opportunity for participation, the premise of this necessity remains the deciding figure. Therefore, it seems that Indigenous knowledge is still situated into the western system rather than vice versa. Legitimate Indigenous governance and self-determination is stifled through logic that assumes limited experience and limited capacity for Indigenous involvement in natural resource management cannot always be alleviated. While there are no available examples that specifically allude to this situation, there are ample examples where Indigenous experience and capacity for involvement is actively built through education, collaboration, and empowerment, discussed in the subsequent section.

In a final National Landcare Program Phase Two website sub-section, brief "Case Studies" are provided for each of the 56 NRM organizations, meant to contextualize the list of activities underway with regards to Indigenous NRM and participation. In the Rangelands, for example, two of these "Case Studies" are titled as follows: "Crocs surveyed prior to cane toad arrival," and "Collective effort initiates Indigenous land management in WA's Midwest" ("Rangelands" 2019). It is with these hundreds of case studies and their articled descriptions that, for every NRM region, stories are told, most in operation prior to and through the period of transition into Phase Two. However, not all Regional NRM organizations provide case studies, even as Indigenous engagement is a requirement unless sufficient justifications are provided. One NRM regional organization, Kangaroo Island of South Australia, has no collaboration or utilization of Indigenous ecological knowledges listed on its page. Instead, there is a link to the organization's website and a sole paragraph:

Kangaroo Island has a long history of Aboriginal occupation, dating back at least 16,000 years. However, it is estimated that permanent occupation has not occurred for around 2,000 years. Given this history, the Kangaroo Island Natural Resource Management Board do not include any Indigenous NRM activities as a part of their National Landcare Programme Regional stream funding ("Kangaroo Island" 2019).

Even though Indigenous occupation of the island ceased before colonization, this sanitized reference to history fails to acknowledge the Indigenous demographic that lives there in 2019 and the potential for cross-cultural land management collaboration. While knowledges might not be traditional or local to enhance ecological outcomes, the holistic benefits for Indigenous people that come from working on and caring for country do not seem prioritized.

The National Landcare Advisory Committee, the guiding body of National Landcare Program planning and decision-making along with the Minister of the Environment and the Minister of Agriculture, is transparent about its decision-making processes. Summaries of National Landcare Advisory Committee meetings are publicly available, and in 2016 based on the Review of the first phase of the National Landcare Program, "the Committee noted the need to strengthen early Indigenous engagement in Landcare and opportunities for the Committee to collaborate with the Indigenous Advisory Committee on areas of mutual interest" (National Landcare Advisory Committee Communique 2016), with "early" referencing age and youth training. This note is embedded within discussion about their larger emerging priority of engaging young people and the necessity for a new generation of involvement. If the program's structural assumptions of western notions of sustainable NRM and ecological conservation have created challenges in Indigenous participation, targeting young Indigenous people could prove successful in yielding desired outcomes as place-based cultural ideologies continue to develop in Indigenous youth. Still, if the program maintains a degree of epistemological rigidity in the priorities and funding decisions it translates across geographical scales, targeting Indigenous youth could simultaneously become a colonizing force. Regardless, the language used is ambiguous, and if 'early' is interpreted out-of-context to imply Indigenous landcare engagement in all steps of decision-making starting with setting objectives (which can itself underscore the epistemological balancing act), Indigenous participation might similarly increase.

Resource Transfer

Phase Two actively emphasizes equitable two-way knowledge transfer as a methodology for Indigenous engagement and accompanying diverse resource gains. Case studies operationalizing this methodology through Phase Two are discussed in the subsequent section.

Community Impact

Programmatic rhetoric for "Utilizing Knowledge" attests that "active involvement of Elders is vital to ensure the knowledge is passed on to a younger generation of Indigenous people. There are also the opportunities for employment and partnerships through the two-way transfer of knowledge, improved opportunities for Indigenous peoples, and improved outcomes for biodiversity" (2019). This representation establishes recognition of the holistically sustainable benefits of cross-cultural NRM as well as recognition of histories that have led to intergenerational loss of knowledge. Professional benefits and accompanying social and emotional benefits rising out of utilizing knowledge—notably with active Indigenous involvement—are evident in regional crosscultural case studies discussed in the section below.

Conclusion

Objectives for Regional Land Partnerships, while emphasizing community engagement, almost universally translate to stated strategic outcomes that are grounded in ecological science and environmental benefits. While these important environmental outcomes benefit Indigenous communities, as Objective 1 alludes to, discussion around these outcomes is still contingent upon definitions under western ecological science under which Indigenous participation and decolonizing community benefits would require at least a degree of Indigenous re-orientation. This is not necessarily negative, particularly with consideration that the program engages in methodologies for two-way knowledge recovery, exchange, and use. If Indigenous re-orientation does occur alongside western re-orientation, two-way knowledge exchange generates productive and practical forms of management where Indigenous participants and connect with culture and exercise governance as well as thrive within western structures. Education in western science, which is a prominent component of Indigenous participation as evidenced in Phase Two virtual case studies ("Telling the Story" 2019), is a necessary component for cross-cultural collaboration in NRM for the practical and economic benefits it yields, even as it may also reveal divergences and challenges with project goals, methods, or possibilities for Indigenous participation.

Regional Natural Resource Management Organizations under the National Landcare Program

Overview

Fifty-six regional NRM organizations operate under the National Landcare Program, functioning to facilitate communication and connectivity in NRM across the local, regional, and national scales and ensure regional priorities are recognized and met (Consultation Summary 2014). As my previous discussions surround programmatic planning and feedback at the national scale, I have decided to discuss regional NRM organizations under which specific local projects are organized and implemented and spatial comparisons in planning can be drawn. I do not discuss all 56, but rather select salient examples provided under regional NRM organization webpages on the Phase Two website. In my exploration of these webpages, I found that most regional NRM organizations contain their own guiding documents, research reports, evaluation frameworks, priorities, and websites in conversation with the branching priorities and requirements set under the National Landcare Program as well as local needs. Analysis of regional NRM organizations also creates the opportunity to directly examine specific NRM projects. Aside from representation on the National Landcare Program website, resources from regional NRM organizations referenced for analysis can be viewed in the appendices.⁹

Goals

In its guiding document on Indigenous participation, the National Landcare Program attributes responsibility to regional NRM organizations for delivery of Indigenous participation as a component of the larger community engagement priority in

⁹ See appendix E for list of government resources from regional NRM organizations referenced in analysis

national programmatic planning and governmental requirements to contribute to Closing the Gap. According to the document, "Regional NRM organizations have a central role in supporting Indigenous people and organizations to participate in the delivery of NRM and contribute to wider economic and social benefits... Regional NRM organizations are expected to involve Indigenous people in both the planning and delivery of all National Landcare Program investment. This will ensure that Indigenous engagement and participation features strongly as an investment, project, and employment outcome for the National Landcare Program" (Indigenous participation in planning and delivery n.d.).

One goal falling underneath this obligation is that regional NRM organizations support Indigenous delivery of the National Landcare Program's ecological strategic outcomes in their projects and MERI plans (Indigenous participation in planning and delivery n.d.). However, even though emphasis on Indigenous participation to strategic outcomes grounded in western notions of ecological benefit are stressed, Indigenous participation is presented as a fundamental goal for all regional NRM organizations, which is the first significant step in structurally prioritizing Indigenous engagement at a programmatic level outside of the specifically Indigenous-targeted Indigenous Protected Areas and Working on Country programs.

Additional focus is placed on the development of strong working relationships between local Indigenous organizations and NRM representatives, including planning and decision making of projects, training, and employment. According to planning and delivery guidelines under the National Landcare Program, regional NRM organizations should engage in "planning support, utilizing and respecting Indigenous ecological knowledge, capacity building, and the delivery of on-ground activities including employment and contracting opportunities" to meet goals for Indigenous engagement (Indigenous participation in planning and delivery n.d.). This guiding document from the umbrella program stresses respectful relationships as well as holistic benefits such as employment, even when seeking western management outcomes, and so is vital in influencing best practice on the ground. Additionally, active initiative to respect and use of Indigenous knowledge rather than simply seeking Indigenous participation, as was more the case under Caring for our Country, acknowledges potential value in nonwestern management goals that might still align with ecological strategic outcomes.

Methods

At the national planning scale, the following methodological guidelines exist for

Indigenous participation in regional NRM:

- "Clearly identify and acknowledge the various Indigenous tribal and/or language groups, their interests, responsibilities and relationships to land and water and consider roles, responsibilities and capacity to achieve the outcomes and targets of the plan;
- Incorporate Indigenous ecological knowledge, where appropriate, in accordance with agreed protocols and with prior approval of the Indigenous custodians of the knowledge;
- Clearly articulate Indigenous land and sea management aspirations and opportunities and identify strategies to prioritize and implement them; and
- Clearly identify the economic and social opportunities and benefits to be gained from Indigenous land and sea management aspirations and opportunities" (Indigenous participation in planning and delivery n.d.).

Not unlike the methodologies for intercultural NRM discussed above, these steps

collectively represent an action plan for cross-cultural participation that respects

Indigenous knowledge and decisions about knowledge, enables Indigenous stakeholders

to participate from program onset, and recognizes the holistic outcomes of NRM.

Guidelines at the regional scale are more nuanced, oftentimes including detailed roadmaps for best behavior and practices regarding collaboration with Indigenous groups on NRM. Pictured below is a one such resource, the Aboriginal Participation Guideline for Victorian Catchment Management Authorities. The web-chart depicts the key principles and activities that set the groundwork for collaboration and inclusion of Indigenous communities in governmental NRM projects and programs:



Figure 1. Aboriginal Participation Guideline for Victoria Catchment Management Authorities. Australian Government National Landcare Program and Victorian Department of Environment, Land, Water, and Planning. 2016.

The principles and activities presented in this visual appear to align with

components of decolonizing practice as they fight against essentialization,

commodification, selective leeching, and further marginalization of Indigenous voices. However, some are at risk of essentialization; for example, "the health and wellbeing of country and people are all one" is not universal amongst each Indigenous Australian community, even within the regional operation zone, and may also have been philosophically lost through time. Still, the idea is fundamental to holistically sustainable ontologies and is a driving force for Indigenous participation in NRM, even as contextualized in this paper. While acknowledgement of such nuances is necessary, the methodologies propose align with almost all research criteria for cross-cultural implementation, including a degree of historical awareness, engaging in respect and trust, prioritizing Indigenous obligations to country, embracing new Indigenous rather than situating them into non-Indigenous ontologies, and equitable opportunity for Indigenous engagement.

The web-chart format of these guidelines, however, is limiting in its scope. Although it provides an organized overview of best practices, it is through a western form of transmitting information and does not allow for diverse presentation of knowledge and ideas, which is a recurring problem across government reporting and planning at all scales of governance reflected in the collected data documents. Similarly, the web-chart format limits the expansion of ideas, which must be restricted to single statements. Here, western forms of education are used with beneficent intentions, but potentially at the detriment of the development of ideas and knowledge that they are meant to facilitate. Complex worldviews and land ethics of Indigenous Australian countries can become stifled in an aesthetic web-chart and while histories are acknowledged with regards to their effects on Indigenous people, effects of these histories on Australian governance are neglected. This framework takes a unique step in directly acknowledging that history can have a negative effect on capacities to participate, which is more than can be said is part of most other methods, but full historical awareness and reflection is not engaged in preparation for cross-cultural dialogue—only insofar as it negatively effects collaboration at the onset. Strategic presentation of information in the web-chart implies progress and positivity, failing to acknowledge the problems that lead to the necessity of designating best practices in the first place.

While this framework is not built explicitly into the programming of the National Landcare Program, it is representative of region-specific methodological frameworks offered through regional NRM organizations in collaboration with Indigenous landcare groups. Although planning under Caring for our Country and the National Landcare Program reference intercultural collaboration as a priority moving towards Closing the Gap, detailed proposed frameworks such as this are typically found either on a regional NRM website or coming from the Department of the Environment and Energy, again underscoring a lack of programmatic support from the umbrella entity even as it continues to set the requirements-at times rigid-for collaboration and other NRM priorities. Additionally, lack of acknowledgement of problems that necessitate the need for this discourse stunts effectiveness of best practices, as failure to acknowledge and learn from the past perpetuates it, which is also a recurring theme in national programming. The contrast in detail between this framework and those proposed under national programs highlights a potential disconnect in intercultural planning between NRM at numerous levels. While a degree of difference is necessary due to regional specificities, and the existence of regional NRM organizations aids in translating between local and national needs, greater connectivity about these disconnects in the guiding documents would benefit communicative clarity across scales of governance.

Reconciliation Australia provides general frameworks for two-way governance and intercultural mixing of Indigenous and non-indigenous cultures, laws, and rules that are structured similarly to regional participation methods and translatable across place, yet the branching National Landcare Program does not utilize such sources in its messaging for methodologies to satisfy requirements.

Participation

Guidelines under the National Landcare Program for regional NRM organizations acknowledge that Indigenous participation in NRM is not always a decolonizing practice. According to the guidelines, "if an Indigenous organization does not want to be involved in any activity being undertaken by a regional NRM organization, we will respect this decision and not require Indigenous participation to be included. Where this is the case, it is expected that the regional NRM organization can provide evidence from the relevant Indigenous people and/or organizations that they have been consulted and do not wish to participate" (Indigenous participation in planning and delivery n.d.). The guideline posits that Indigenous organizations might have had negative interactions with non-indigenous groups or NRM staff in the past, or might not have the capacity for involvement, and that these factors can also lead to unwillingness to engage. Where this is the case, the guidelines recommend forming an Indigenous participation and priority strategy in collaboration with the Indigenous organization (if this degree of communication can be achieved) (Indigenous participation in planning and delivery n.d.). According to the guidelines, the final acceptable justification for lack of engagement concerns specialized projects based on a specific site where there is no opportunity for Indigenous involvement (Indigenous participation in planning and delivery n.d.). While the extent of

Indigenous participation in such situations is none or next to none, and therefore so is progress towards holistic sustainability through NRM, forcing Indigenous engagement is no better than Indigenous engagement initiatives that are partial or non-reflective. Respect and space for Indigenous autonomy to engage or not engage, while a barrier to progress, is important. However, rather than completely give up, historical consideration, awareness, and dialogue could begin to open possibilities for cross-cultural collaboration.

According to the National Landcare Program's report on Indigenous participation, "including Indigenous people in regional and project planning is an essential foundational activity to ensure that Indigenous knowledge and aspirations are incorporated into the delivery of an investment from the beginning. Some examples may include activities such as: discussing a proposal with the relevant organization's representatives; including Indigenous representatives on a working group or on the organizations board; or developing a project that has been identified as a priority through the inclusion of land and sea management in a regional NRM plan" (Indigenous participation in planning and delivery n.d.).

In addition to on-ground management plans and NRM activities, listed methodologies for including Indigenous participation in regional investment include, for example:

Clear articulation of Indigenous land and sea aspirations in regional NRM plans, the development and implementation of regional NRM Indigenous participation strategies, appropriate referencing and linking of regional NRM plans and activities with relevant whole-of-government Indigenous plans, the recording and continued use, support and reinvigoration of Indigenous ecological knowledge to underpin biodiversity conservation and the sustainable use of natural resources, and employment and capacity building, including access to appropriate training, education, land and sea management planning, management activities and enterprise development (Indigenous participation in planning and delivery n.d.).

A quick skim through online case studies from random regional NRM organizations (virtually represented by Phase Two of the National Landcare Program) revealed varying degrees of Indigenous participation with the nationally recommended guidelines. For example, under the Healthy Country Plan for the Kanpi/Nyapari Land Management program, Indigenous community members collaborated with natural resource managers to develop a three-year work plan outlining the priorities, outcomes, works, and projects that the Traditional Owners of the land wanted to see completed ("Kanpi-Nyapari Land Management Program" 2019), which represents Indigenous articulation of management aspirations and aligns with the scholarship claiming that Indigenous stakeholders must be involved from onset of program design rather than just at the implementation stage. The Plan additionally represents an example of a working group with Indigenous voice and representation as a guiding force for project planning.

Another collaboration between the Gunaikurnai Enterprise, the Traditional Owner organization under the Gunaikurnai Land and Waters Aboriginal Corporation and experienced NRM project managers from local and national lanfcare groups, however, only incorporates Indigenous participation at the delivery point: "The project managers provide guidance to the crews on task expectations and explain project objectives, the crew members... thus [build] their skills and capacity" ("Partnerships and participation in East Gippsland" 2019). Project objectives include tree planting, tree guarding, seed collection, weed control, fox baiting, and cultural surveys, all meant to contribute to EPBC listed ecological communities. While Indigenous participation is stressed, so too is that this participation occurs only in project delivery. Focus is on building Aboriginal engagement with NRM and education on goal setting. While the East Gippsland Catchment Management Authority mentions that Indigenous participants share their cultural knowledge, this only occurs as it is relevant for existing project expectations and objectives. Unlike the Kanpi-Nyapari Healthy Country Plan, Indigenous participation did not begin with priority setting.

A final guiding methodological recommendation for regional NRM organizations to engage with Indigenous communities was that "generally the level of Indigenous activities supported by regional NRM organizations has centered on Indigenous ecological knowledge and specific cultural heritage protection. While these are important foundational activities, they can usually be undertaken in a relative short timeframe and do not fulfill the broader aspirations and opportunities that Indigenous people have for managing their land and sea country (Indigenous participation in planning and delivery n.d.). This guideline aligns with my criterion of ontological re-centering to better visualize broader and holistically sustainable aspirations.

Ultimately, methodologies provided for regional Indigenous participation from the umbrella program fit with research criteria as they prioritize recognition of Indigenous aspirations and agenda setting and acknowledge diverse benefits to Indigenous communities. However, not all projects within the broad sample of regional NRM case studies engaged the proposed methodologies, yielding varying degrees of success with regards to holistically sustainable outcomes, particularly including the decolonizing force of Indigenous governance and autonomy in planning. Nonetheless, this difference might imply that certain regional NRM organizations are farther along than others in integrating Indigenous engagement and aligning with best practice at all levels of management.

Resource Transfer

The most common form of resource transfer across sample projects was the collection and documentation of Indigenous ecological knowledges into western forms of record keeping, and vice versa—the incorporation of western scientific knowledges into communal knowledge sharing among Indigenous groups. These projects occurred almost universally as an initial step for Indigenous participation, perhaps because they address the urgent need, in some cases, for Indigenous knowledge restoration and set the stage for knowledge learning and sharing in preparation for implementation of management plans. The national guiding document describes this practice as "the recording and continued use, support and reinvigoration of Indigenous Ecological Knowledge to underpin biodiversity conservation and the sustainable use of natural resources" (Indigenous participation in planning and delivery n.d.).

One example of this is evidenced in the Gunditj Mirring Partnership project, the collaborative compilation of an archive of Gunditj Mirring ecological knowledges under the Glenelg Hopkins regional NRM organization. The project, a collaboration between the Gunditj Mirring Traditional Owners Aboriginal Corporation and the Glenelg Hopkins Catchment Management Authority, involved a broad sweep of national resources containing place-based ecological knowledge, which was reviewed, catalogued, and stored ("Gunditj Mirring Partnership Project" 2019). Gunditj Mirring elders then used the knowledge to strengthen their capacity to identify, collect, and provide advice on land management practices to future collaborators ("Gunditj Mirring Partnership Project").

From this archive, which contained over 1000 sources supporting dynamic knowledge over 60,000 years on how to care for country, ecological knowledge and practice toolkits were developed along with field guides and even a cell phone app ("Gunditj Mirring Partnership Project" 2019). Additional benefits included the development of an Indigenous seasonal calendar, a regional NRM guide called "Engaging Indigenous Communities within our Catchment" and professional development opportunities to stakeholders ("Gunditj Mirring Partnership Project" 2019).

The resource compilation and two-way transfer had positive results amongst stakeholders. According to Eileen Alberts, a Gunditimara elder:

"A lot of the knowledges seen within the archive, we used when I was growing up, because I was raised outside of the mission and outside of the town; we lived On Country. And we used those traditional ways, particularly burning, to stain... first of all, our basket grass, which my grandmother and my aunt made and of course passed the knowledge down on to me and my daughter and my grand-daughters...and although I had that knowledge, I think it was good to see something at last that I could read that would reinforce the knowledge that I had... When we went through the Native Title process, our oral history wasn't accepted, and yet now we see our oral history being supported all together in historical written sources, which is really exciting..." ("Video Documentary" n.d.)

Certain stakeholders might argue that the archive is assimilating or imposing as it translates and forces Indigenous knowledge into a western structural framework for what constitutes knowledge and history. However, adequate intercultural resource transfer is dependent on exactly these types of structural translations, which enhance capacity for Indigenous communities to learn, engage with and apply their knowledge while simultaneously enhancing and validating Indigenous knowledges themselves. The resource of documentation and the resource of traditional knowledge are shared through a dually beneficent method. Indigenous oral histories have been historically invalidated and disregarded as factually questionable and incorrect due to supposed questionable qualities of orality, so to inventory the knowledge in the structure that western academia, law, and government validates can be seen as a form of validation and sovereignty. Additionally, according to Micko Bell, a Partnership Project administrative officer, "I think it's good that the Gunditj Mirring people can get access to their historical knowledge. It's not just there for anyone to look at. You have to get permission for it from the full group. Only Gunditj Mirring people can look at it when they want to, so it's good for them, if they want to learn more about their history" ("Video Documentary" n.d.). A key success factor for the resource transfer was that elders maintain primary agency, and someone who is not Gunditj Mirring would need to get permission from the elders to access the literature review ("Video Documentary" n.d.). The compilation therefore remains the knowledge of the elders, and the ultimate power of knowledge production also rests with the elders.

Dean Robertson, a Glenelg Hopkins CMA Biodiversity Planning Coordinator, also reflected on the project:

My perception of Australia before European settlement was of a wilderness inhabited by nomads. To learn that this landscape in southwestern Victoria—the Indigenous people having a semi-permanent lifestyle, and intensively managing the landscape, has been absolutely fascinating... The most surprising thing for me, out of this whole project, has been the depth and breadth of the knowledge that was held by the Gunditjmara people, and that the landscape was so intensively managed... that there was infrastructure like the channels and the fish traps. Speaking from a natural resource manager point of view, I hope that non-Indigenous Australians can also learn from this history and come to a deeper understanding of Australia's cultural and natural history ("Video Documentary" n.d.)

Robertson's reflection implies that through cross-cultural collaboration,

Robertson underwent a realization about Indigenous knowledge that changed his

previously established perception of Australia's history, which in turn opens up space for

the possibility of becoming even more deeply rooted in a new knowledge frontier, meeting the established criterion for resource transfer. Robertson's reflection on the project might signify the beginning of the type of two-way ontological expansion through two-way knowledge exchange that Birch discusses, wherein western notions are embedded within the broader and longer standing Indigenous systems within intercultural initiatives, rather than the other way around. However, it is also worth noting that the available data and testimonial on the project might be biased, as video testimonials come from Traditional Owners Aboriginal Corporation Website and were selected for representation.

Another common context for resource transfer was the use of traditional fire management practices to reduce the intensity of fires and conserve biodiversity. One salient example of resource transfer in a regional NRM project was with the development of traditional fire management in Cape York, which rose out of a Traditional Knowledge Recording project undertaken with two elders who were the last remaining speakers of the local language. According to the account:

For the first time in decades, traditional fire management is now being undertaken in Lakefield National Park. The Traditional Knowledge Recording Project has provided a catalyst for the Kuku Thaypan Elders to re-introduce therapeutic burning regimes to their country whilst documenting the traditional knowledge that underpins fire practices. Peta Standley, a James Cook University doctoral student has worked with the Elders to measure any vegetation and fauna changes as a result of the burns. Remote sensing imagery, field-work, and informal interviews are the basis of data gathering before, during, and after the fires. In this way, western science and traditional knowledge are combined under the direction of traditional Elders. Historical and contemporary knowledge about fire and vegetation is also gathered to support findings. The project aims to show how traditional burning practices can help in reversing weed infestation and biodiversity decline in this tropical savanna area of Cape York Peninsula. 'At the time European people arrived in Cape York, species of flora and fauna relied upon an established Indigenous fire regime,' says Peta Standley. 'This means that species such as the Golden Shouldered Parrot continue to need similar regimes to cater for all of their survival needs. The species loss we are now seeing in Cape York is linked to changed fire regimes and land use patterns ("Indigenous knowledge helps manage our land" 2019).

This project similarly represents two-way knowledge transfer between both Indigenous and non-Indigenous stakeholders and incorporates western scientific planning into Indigenous knowledges and cosmologies rather than the other way around, with Elders spearheading the management practices and western data systems supplementing them. There is also the benefit of mutual resource gains, with employment for Indigenous elders and availability of valuable knowledge for non-Indigenous natural resource managers, cultivating a two-way epistemological expansion. Additionally, the stated rationale behind biodiversity loss in this excerpt is an acknowledgement of Indigenous occupation and land management pre-colonization, actively uprooting the notion of *terra nullius*.

Community Impact

In addition to community benefits from knowledge revival, Lenny Cooper, an Indigenous community coordinator of the Glenelg Hopkins CMA, spoke to the impact of the Gundtij Mirring Partnership Project, namely the knowledge archive, on the local Elders:

We got to reading through it, and Fred summed up verbally, you know, his experience with it. And as we're looking through it all, I look across at Uncle Kenny, and he was just full of emotion. A lot of the elders and a lot of the Gunditj Mirring community members have been fighting for years with their historical beliefs and what they're trying to do On Country. This was pretty important to Uncle Kenny, to see how emotional he got... we've seen it as a huge positive that we could have that effect on a community member, especially an elder, that's done so much and fought so much for their culture, for the next generation, for their land... so it's a real important resource for the Gunditj Mirring to connect with their history" ("Video Documentary n.d.)

Conclusion

Guiding documents under regional NRM organizations, outlining goals and methodologies for Indigenous participation, are generally more detailed than analogous guiding documents falling under national programs, which makes regional NRM organizations valuable for recognizing and meeting local management goals, as well as for communicating across scales. Specific management projects are funded under regional NRM organizations rather than under umbrella programs, so it is mostly through regional NRMs that criteria can be considered with regards to actual on-ground projects rather than general programmatic rhetoric and language. However, because local projects are smaller in scale, available outcomes and reflections on projects oftentimes come from the same source, and there was less opportunity to triangulate perspectives and glean any shortcomings. Nonetheless, perhaps because they are more locally based, guidelines and projects under regional NRM organizations generally appeared to be in greater conversation with both history and local priories, yielding place-based benefits, although not without exception. Most projects also directly included collaborative and equitable goal setting, implementation, and resource transfer, satisfying methodological criteria.

Working On Country (2007-Present)

Overview

The Working on Country Program is an Indigenous environmental Program that recognizes the shared responsibility of sustainable employment for Indigenous people through which Indigenous rangers can actively manage the land that they own, which as 0f 2013 constituted 20% of the Australian continent (Working on Country Fact Sheet 2013). The Program began in 2007 as a "cross-cultural model" for Indigenous land management and, including the Indigenous Ranger Program, was a formal component of the Caring for our Country Program, subsequently of the National Landcare Program (Working on Country Fact Sheet 2013). Government resources referenced in analysis of Working on Country are listed in the Appendices.¹¹

Goals

Working on Country recognizes Indigenous people's strong relationship and obligations to country and employs over 680 Indigenous rangers across 90 ranger groups nationally with full-time, long-term jobs that seek to achieve "environmental, cultural, social, education, health, employment, and economic development outcomes" (Working on Country Fact Sheet 2013). In doing so, Working on Country aims to be an active and intercultural part of the Australian government's commitment to Closing the Gap, providing employment and land management autonomy within western policy structures to remote Indigenous peoples (Working on Country Fact Sheet 2013). Under this model, Indigenous community benefit is the primary programmatic goal, making it unique among selected program case studies.

According to a non-Indigenous organizational stakeholder, "the program's governance arrangements, in particular those managed in partnership with the Indigenous Protected Areas program, ensure that projects align with aspirations of traditional owners to manage their lands sustainably and in accordance with their cultural priorities. Project leadership and management occur at a local level, and communities feel a sense of project ownership. Traditional owners are consulted with, represented on Steering

¹¹ See Appendix F for list of government resources referenced in analysis of Working on Country

Committees such as those established under the Indigenous Protected Areas program, have a role in designing and implementing projects, and are involved in guiding and prioritizing the ranger activities" (National Landcare Program 2016). This program structure satisfies the criteria for setting project goals: local agenda setting, acknowledging potential divergences between scientific and cultural priorities, Indigenous consultation in setting goals, and dialogical collaboration in project planning.

Stakeholders expressed concern about the ongoing funding for Working for Country underneath national umbrella programs—first Caring for our Country, and then the National Landcare Program, questioning whether Working on Country was a priority sub-program at the national scale. According to an organizational stakeholder from the Torres Strait, "rather than a short-term project focus, it needs to become something that is embedded in government policy framework as a permanent fixture. Expectations that those ranger groups will be ready for autonomy are unrealistic. It is a long-term process. The ranger programs are central to the delivery of environmental management. If the funding is discontinued it will have very significant negative flow on effects" (Ryan et al 2012). Anxiety over ongoing program funding and challenges to essential administrative support underscore possible disconnect between program priorities at different scales of governance—as Working on Country prioritizes Closing the Gap first and foremost while other programs prioritize ecological benefits first and foremost. Anxieties also indicate the vital services provided through Working on Country for Indigenous participates, suggesting local alignment of goals are actually satisfied.

However, interviews from a consultant revealed that despite programmatic focus on Closing the Gap through locally-based sustainable ecological management, some

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participants "would like to see a greater emphasis on cultural heritage outcomes, which they feel are currently overshadowed by the strong focus on biodiversity outcomes (Smyth 2011). Also, while Indigenous interviewees generally sought program investment in the environmental and community development views and goals of Indigenous rangers, "other [non-Indigenous] interviewees [saw] the need for an enhanced strategic approach to the biodiversity work undertaken by rangers, including better access to advice and assistance from ecologists" (Smyth 2011). The consultant concludes:

To maximize future benefits of Working on Country there is a need to review how investments in Indigenous environmental management at all levels of government, and from non-government sources, can be better coordinated and by whom (e.g. by governments or by Traditional Owners themselves). The challenge here is to ensure that investments by the Australian Government and investments by State and Territory governments are complementary in assisting Traditional Owners to achieve their visions of managing country (Smyth 2011).

Results from consultant interviews underscore a divergence in goals, at least in some ranger areas, which is reflected in the intense ecological skills training provided to rangers from non-Indigenous collaborators in contrast to ranger focus on sharing local knowledge.

Methods

According to the fact sheet, Indigenous ranger teams manage over 1.5 million square kilometers of country "using western science and training and Indigenous ecological knowledge" (2013). Indeed, project stakeholders identified Working on Country's two-way learning model as a key program success factor: "Working on Country values and uses both western and traditional knowledge, providing unique crosscultural sharing and learning opportunities" (2013). The structure of Working on Country is inherently intercultural: Working on Country is focused solely on Indigenous land management (rather than Indigenous participation as one of many priorities for land management), which includes Indigenous autonomy in setting priorities, planning, and self-determination.

Working on Country simultaneously provides training and collaboration in western science that proves useful for Indigenous stakeholders and increases social, cultural, and economic opportunities for Indigenous participants to thrive within both Indigenous and western societal frameworks for societal wellbeing (2012). Rangers are provided with trainings using an Indigenous Ranger Skills Guide, which extensively covers western ecological management skills and practice and supplements use of traditional knowledges (Indigenous Rangers Skills Guide 2009). A non-Indigenous organizational stakeholder describes that Working on Country uses a "two-toolbox" methodological approach for management:

Working on Country uses a model drawing on both western science as well as Indigenous cultural knowledge in caring for country. While Working on Country projects enable traditional practices to occur and Indigenous input and decision-making into how country is managed, projects are also supported by scientific organisations, research centres, universities and farming groups who lend their expertise, skills and knowledge to the application of ranger activities (e.g. teaching of fauna surveying, monitoring activities, scientific names of flora). This 'two tool boxes' approach gives the rangers a different perspective on land and sea management, providing them with the tools needed to successfully manage country (National Landcare Program 2016)

The "two tool-box" approach to interculturalism acknowledges that methods diverge across stakeholders and seems to actively seek to equitably engage and synthesize both sets of knowledge. However, while the "tool-box" conceptualization satisfies criteria for equitable engagement in methods, it can also be limiting, insofar as
knowledge is considered not "a toolkit for management, but an ethic for living" (Muir 2010), and might encourage an ontological reconciliation rather than a fundamental ontological expansion.

Indigenous rangers have reflected on operationalization of this intercultural approach to management, with a Dhimurru ranger providing the following example: "We have a two-way approach with non-Indigenous and Yolngu working together...Working with scientists regarding issues and how we manage the country. Flora and fauna surveys, we did one last year where we used our senior rangers to identify different tracks and what they belong to, putting down Yolngu names for plants and animals. Using western scientific knowledge about the plants. Traditional knowledge used also—if we want to find something Yolngu will know where to find it, the season" (Ryan et al 2012). The ranger's description of collaboration indicates mutual trust and respect between both the Indigenous rangers and the scientists, as each group shares with the other and both sets of information have presence in the implementation process.

Meanwhile, according to a non-Indigenous organizational stakeholder, "elders lead cultural activities and workshops with the rangers. For example, a community elder spends one day each month teaching the Ngarrindjeri rangers wood carving. Working on Country and related Indigenous NRM initiatives have facilitated new ways of capturing and recording traditional knowledge to assist with the inter-generational transfer, such as film recording of elders. Traditional owners and elders sometimes accompany the rangers on camps or country visits" (Ryan et al 2012). This description similarly attests to the two tool-box methodology for resource transfer. While rangers learn ecological management science and skills from the Ranger Skills Guide, they also learn traditional practices from local elders, further reflecting mutual respect of knowledge and putting knowledge in dialogue.

While broad programmatic methodologies for interculturalism satisfy almost all criteria, interviewed stakeholders did discuss challenges with regards to local administration of Working on Country, specifically inadequate administrative report and variable factors that influence delivery, such as "remoteness, operational scale, ratio of coordinators to rangers, partner agency support, access logistics, and climatic conditions" (Smyth 2011). Coordinators described their role as exhausting without support or mentoring from colleagues, especially where only one coordinator was responsible for all operational, strategic, and financial planning and management activities (Smyth 2011), which could block successful program and project subsequent implementation steps.

Participation

"Aboriginal input and Aboriginal say—we need our voices heard—very important to promote what rangers are doing and what Aboriginal people want" (Ryan et al 2012). This Bardi Jawi ranger's claim testifies to Indigenous participatory aspirations. In general, testimony seems to reflect genuine Indigenous participation in decisionmaking and management processes, and there was a trend that participatory action created a sense of communal pride, responsibility, and reconnection for rangers. According to a Mapool Land and Sea Center ranger, "They [the traditional owners] know they are really being listened to. I wanted to see and work on my country, being a traditional owner I wanted to be a leader for it, for my tribe. To say if I can do it, you can too" (Ryan et al 2012). According to another ranger from the Djelk Land Management

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Extension Project, "[Working on Country] made a good man of me, I respect people, the people I approach around Djelk, strengthening relationships, talking with visitors, public presentations with other rangers about our work here and how we do it, I have more confidence and am being bold, like a role model to the other [younger] rangers" (Ryan et al 2012). For these rangers, participation extended beyond just NRM and created a sense of communal leadership, implying self-determination in the management process.

A Raukkan Natural Resource Management ranger and elder, meanwhile, described that "the biggest difference from when I was a park ranger is... now I am working on country and seeing the benefits. 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 eighteen 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" (Ryan et al 2012). This ranger's participation in the program enabled him to reconnect to country and in turn, to his or her Indigneous identity, noting that putting back into country and the community is "what makes us who we are." The ranger's reflection indicates a high degree of active participation in both land management as well as self-determination associated communal, social, and/or spiritual benefits working from the "grass roots."

There was also a theme of intergenerational participation reflected in Working on Country, with participating elders transferring their knowledge to young community members. A Gumurr Mathakal organizational stakeholder says that "the older and younger crew working together, that is the whole point of it. Some of the older ones can't go out as much so the younger ones help out, they get the food and in return the older rangers teach the young, transfer their knowledge" (Ryan et al 2012). This stakeholder's description means that at least in some cases, participation extends beyond the rangers to include other community members, such as youth, in connecting to and working on country, with another stakeholder noting "Some of that [Indigenous] knowledge is being transferred to younger members, the older ones really like the fact that this program is valuing and respecting that knowledge..." (Ryan et al 2012). Both reflections indicate genuine Indigenous participation across multiple sectors of society, in part enabled through programmatic respect for knowledge and its preservation.

Working on Country program guidelines did address one barrier to full Indigenous participation, which was where communities that experienced a particularly significant impact of white settlement, including disruption of culture and displacement from traditional lands, were less equipped and willing to become involved in collaborative facilitation of cultural activities (Evaluation Report 2010). This is not unlike the common barriers to land rights such as Native Title. However, initial participation seeks to increase capacity for active and informed participation, including through improved literacy skills, that better enables Indigenous communities to work with government agencies, employers, and even Native Title Claims (Ryan et al 2012).

Resource Transfer

The "two-tool box" methodology for management employed under Working on Country yielded a high degree of two-way resource transfer. Indigenous natural resource manager and scholar Wayne Barbour posits that "non-Indigenous ecologists and land managers working in cross-cultural situations need to be flexible and should question the validity and appropriateness of some of their own assumptions within this context, just as Indigenous partners will likely be challenged to question and perhaps modify some of their assumptions" (2012). Both Indigenous and non-indigenous observations reflect this challenging of assumptions and begin to satisfy the criterium of a two-way ontological expansion through knowledge exchange:

According to a Gumurr Marthakal organizational stakeholder, "rangers have undertaken Certificates I and II in Conservation and Land Management, fisheries compliance, OH&S, coxswain, quad bikes, poisons, firearms, animal trapping, and plant identification training. They learn to do their job and they look at the world differently" (Ryan et al 2012). Indigenous rangers have reflected positively on management skills trainings, with a Gummur Marthakal ranger claiming that "whitefella trainings gives rangers a different perspective" (Ryan et al 2012). A Mid North Coast Aboriginal Rangers ranger similarly reflects that "all the training is a benefit to us. It broadens our knowledge and technical skills. It teaches us how to go about our jobs in a safe and orderly manner" (Ryan et al 2012). Meanwhile, the non-Indigenous Djelk Land Management Extension Project Coordinator suggests that there are benefits in non-Indigenous staff with a background in western land management science developing skills in cultural NRM, claiming that the program made a difference in his life: "I see things differently. Rather than just looking at it from a land management science point of view" (Ryan et al 2012). While knowledge resource transfer still generally came in the form of a toolkit, specifically with regards to the ranger skills trainings and guide, these reflections suggest the possible beginning of ontological expansions and respectful ethical presences that extend beyond two tool-kit management.

Under Working on County, resource transfer occurred not only between Indigenous and non-Indigenous groups, but also between Indigenous elders and youth. A Kalan Ranger Project ranger describes how "a big part of that language stuff has died. Earlier this year, we got flora and fauna, got it all on big database, we have the scientific names and the language name and the pictures of each—we take pictures and can show the elders, they tell us what it is. It's helping to document all that traditional knowledge" (Ryan et al 2012). Under the Kalan Ranger Project, rangers actively participate in teaching language to children, ranging from body parts to traditional flora and fauna names to nursey rhymes, and a female Kalan Ranger Project ranger reflects that due to bringing Indigenous language learning into the school, "our boys are now talking language; they know the names for birds and animals" (Ryan et al 2012). Rangers from other ranger areas describe similar effects, such as taking their children into the bush and teaching traditional Aboriginal knowledge that they had learned through the rangers program Ryan et al 2012). The intergenerational resource transfer as described can contribute to communal connectivity, spiritual growth, and cultural preservation both ways, which are in themselves alternative forms of resource transfer. Indigenous youth may be equipped from a young age with experience in reconciling ontologies and selfsituation within knowledge frontiers.

Finally, in terms of practical resource transfer, rangers reported that they had increased access to communications technology as well as increased knowledge of their legal rights, responsibilities, and opportunities in accessing and managing land, noting that through collaborative resources they have come to better understand their rights and consequently, how to pursue greater access and sovereignty to country (Ryan et al 2012). Additionally, some rangers note that they through collaboration with research centers, Universities, and other government agencies, they were able to access new resources and information and share it with the rest of their community (Ryan et al 2012), indicating that practical resource transfer extended into the broader Indigenous communities as a result of the program (and not just direct program participants), and also testifying to Indigenous participation as extending beyond just management and into communal roles.

Community Impact

Working on Country, which along with Indigenous Protected Areas is the only sub-program of the National Landcare Program directly prioritizing Indigenous knowledge, participation, and wellbeing, also includes the most holistic conception of sustainability. An assessment on the Social Outcomes of Working on Country from Urbis consultants (Ryan et al 2012) illuminates a systemic understanding of benefits to Indigenous involvement in natural resource management that stretches beyond the positive environmental outcomes associated with Indigenous ecological knowledge. Charted outcomes from the Urbis consultants range from better fitness to psychological health for rangers, to increasing education and connection to culture, better housing, and better family functioning for families, to Indigenous self-determination, reduced conflict, and improved relationships for communities (Ryan et al 2012). Urbis's division of the traditional three tiers of environmental, social, and economic sustainability into additional criteria for wellbeing, including health/wellbeing, cultural, financial, and educational, and exercised at numerous scales, from benefits to the individual ranger, to his or her family, and to the surrounding community, suggests that Working on Country strategically operates within a larger relational and interconnected system of health, economy, environment, culture, community, and so on, a strong indicator for successful

intercultural engagement and holistic sustainability.

The policy context of Working on Country, meanwhile, also provided from Urbis consultants (Ryan et al 2012), demonstrates Working on Country relationships to other NRM projects and environmental Indigenous policy agendas, conceptualizing Working on Country's emphasis on the holistic benefits of Indigenous natural resource management and indicating how small-scale locally or regionally grounded projects can provide intimate communal benefits as opposed to projects happening under national programming. The policy context of Working on Country provided in the Urbis report, wherein Closing the Gap directly supports Working on Country and the associated Indigenous Protected Areas program but not necessarily Caring for our Country and associated government environmental policy further up the policy ladder, also indicates the disconnect between Closing the Gap and Caring for our Country, which has proved a roadblock for program success further up the ladder.

Anonymous quotes from Indigenous and non-Indigenous stakeholders involved in Working on Country provide examples of various community outcomes relating to the different realms of wellbeing that Urbis consultants introduce and are here discussed to underscore holistically sustainable structures and outcomes associated with Working on Country.

At a near universal level, Indigenous stakeholders fiscally benefitted from fulltime employment through Working on Country. Rangers expressed a higher degree of fiscal comfort, some relaying that for the first time they were able to get off of welfare, have an ATM card, or were able to afford a car (Ryan et al 2012). According to a Riverland Rangers ranger, "it makes me look rich. I bought a leather lounge I never, ever thought I would buy. And an iPhone and plasma screen TV I never, ever thought I would have" (Ryan et al 2012). Beyond purely economic benefits, ranger employment also served to break down community stereotypes about Indigenous people and work, serving as a reinvigorating force for wellbeing. One organizational stakeholder claims that "the program has been very successful in addressing issues of work attendance and attitudes to work. It's helped to break down barriers of stereotypes and employers say that young people are more switched on" (Ryan et al 2012). Similarly, other stakeholders attest to ranger employment actually increasing community school attendance due to children seeing their parents committed to a job that translates into going to school in the morning (Ryan et al 2012).

Notably, numerous rangers indicated that the job was most attractive due to cultural and spiritual benefits, with financial benefits secondary. One Indigenous stakeholder observed that "the ranger program gives hope to kids looking to the future. In remote areas it's very difficult to think of the future. We are family orientated, leaving our country [for work] is very difficult. For white fella kids the world is their oyster but there's not much hope here" (Ryan et al 2012). This reflection underscores how the program does not just provide any employment; the employment is meaningful to Indigenous cultures, priorities, and spiritualities that create value in employment opportunities specifically to work on country.

Even as employment provides a channel for reinvigoration of Indigenous culture and spirituality, other stakeholders mention that it provides a channel for proper functioning within western society. Riverland Rangers non-Indigenous organizational stakeholder says it also provides a channel for success within western cultural frameworks:

The work stabilizes people. They see that if you don't come to work you are letting the team down. The rangers are learning that they owe the project their time-they're working on company time. It's a big step, we are trying to transition them into responsible employment behavior. We want them not to have a taste of mainstream; we want them to be mainstream (Ryan et al 2012).

The notion of transitioning Indigenous participants to "be mainstream" alludes to an ontological opening, although not necessarily desirable. The language of "mainstream" can be othering to what one would consider not "mainstream," and emphasis on assimilation, while in this context contributing to closing the financial gap of Indigenous disadvantage, could become harmful to other program and Closing the Gap priorities that involve Indigenous cultural sovereignty. An Indigenous Health Project worker of Raukkan Natural Resource Management contextualizes that closing the gap isn't just about closing the gap in statistics of disadvantage, but is part of a larger decolonization strategy: "Taking away country and language created the gap. Working on Country increases people's sense of who they are, regaining what was once taken away, that is a really critical Closing the Gap strategy" (Ryan et al 2012). However, there is value in being able to maintain a foot in both worlds, which the cross-cultural approach to Working on Country seeks to ensure. Indigenous rangers have reported feeling pride about skills gained: "Most Aboriginal people are shy, can't get up in a classroom and talk... the first time I did I had tears coming out of my eyes, the emotion and feeling was there" (Mapoon Land and Sea Center Ranger Ryan et al 2012), and "Interacting with people—with the training organization, with government departments, you have to

communicate in a proper manner. Rangers are generally shy to talk to white fellas, but now we have certificates and rangers feel very confident, very proud of where it can take us. (Bardi Jawi Rangers Ranger Ryan et al 2012), indicating positive impact of western employment on both community progress and personal confidence.

Another organizational stakeholder from Raukkan Natural Resource Management expressed that:

Previously people are just surviving–worrying about rent and housing. Employment gives people the opportunity to improve their lives. When dominant culture came in, it swallowed up culture really quickly. It suppressed cultural activity because people were worried about how to survive in a changing world. Employment can re-invigorate culture from a different perspective, because it gives people the freedom to do those things (Ryan et al 2012).

This quote underscores how employment within the "dominant culture" enables Indigenous participants to learn how to thrive within the dominant culture while simultaneously creating space for Indigenous cultural activity. Indigenous rangers generally reflect that in addition to learning valuable employment skills, Working on Country instilled "a renewed sense of Aboriginality and strengthened cultural identification amongst rangers and other community members. Indigenous people are enjoying rediscovering their cultural heritage" (Ryan et al 2012). Nonetheless, while holistic community benefits through employment are evident, the employment framework still places Indigenous cultural activity and knowledges within the larger over-arching western frameworks rather than conceptualizing the knowledge and culture sets from the other way around.

Community impact of Working on Country also manifested through gendered

outcomes and developments, specifically within Australian Indigenous cultures, which are typically patriarchal. An organizational stakeholder recollected "seeing the women getting more confident in their ability to do the tasks and get out on country ... This program is really helping to push women looking after country side by side with men doing this. Women are starting to feel they have a right and a role that is equal to the men's role. Then that confidence bleeds out into the rest of their lives. I've seen the women go from being so fearful of some situations, driving a vehicle, camping out, it's really crucial to get some balance back, not just see it as men's business" (Ryan et al 2012). Indeed, young women rangers reported undertaking tasks not conventionally done by women (Ryan et al 2012), indicating that an additional community impact from Working on Country was breaking down certain gender barriers for young women participants.

Ranger testimonies also reflect psychological impacts of Working on Country. According to a land management worker of the Warddeken Indigenous Protected Area, "People are able to sustain on country. If people look after country, country looks after people—it's a circular thing" (Ryan et al 2012). The commentator's claim reflects the notion that ecological health and human health are intertwined. Another stakeholder reflects upon the relationship between recovery of culture and improvement of mental health: "the denial of Aboriginal culture for so long, previously there was no opportunity to re-access that culture, people are starting to feel good about it again" (Ryan et al 2012), noting specifically connecting or reconnecting with land and water. An Indigenous Health Project Worker or Raukkan Natural Resource Management suggests that working on country instills eudaimonic purpose as well: "Being on country locates people within themselves; there is a sense of being real, of being whole" (Ryan et al 2012). The notion of becoming real and whole upon (re)connecting with culture introduces the idea that intercultural ontological expansion can also occur within Indigenous communities as connection to country is discovered, learned, and/or restored, rather than only between cultures across the binary.

Smyth's stakeholder interviews suggest that beyond the personal purpose and wellbeing that can rise out of caring for country, there were also positive impacts on community psyche. According to Smyth, rangers were held in high regard amongst their communities; "one very moving expression of the esteem in which Rangers are held occurred recently when the family of a ranger who passed away requested that he be buried in his ranger uniform" (Smyth 2011). Additionally, individual rangers took initiative to organize and support local community events, coming to see themselves with pride as role models for younger community members, who in turn felt proud of community rangers and their jobs (Smyth 2011). These examples all indicate connection to country and opportunity to contribute to community had positive influence on wellbeing, highlighting the value of environmental health on individual and communal human health.

Finally, projects implemented under Working on Country (along with Indigenous Protected Areas), seem to have reduced negative social and economic impacts of incarceration through creation of employment streams (Report on the Review 2017). For example, one project in central Western Australia, The Kanyirninpa Jukurrpa project, provides employment as a ranger on an Indigenous Protected Area as an alternative to serving jail time for minor offences. The former Magistrate for the region noted that "the programs run by Kanyirninpa Jukurrpa rangers in the various Martu communities have the potential to break cycles of bad health, regular interaction with the justice system leading to incarceration, dysfunction, and trauma. These programs can aid in reconciliation and healing within the communities as participants come together to learn about and look after country and develop a deeper understanding about themselves and the possibilities for their future" (Deen Potter quoted in Report on the Review 2017). This project yielded \$3.7 million in savings to the justice system as 70 Indigenous stakeholders had their sentences suspended or reduced (Report on the Review 2017). Projects such as this, as well as the other community impacts discussed, suggest that Working on Country has a systematically sustainable impact on the local community stretching well beyond just conservation benefits, probably in conversation with its programmatic recognition of diverse sustainability benefits and direct connections to Closing the Gap in policy context.

Conclusion

In associating sustainable environmental outcomes of NRM projects with cultural, social, education, employment, and economic development outcomes, Working on Country capitalizes on the systemic nature of sustainability and does so with a priority that is directly decolonizing in its provision of space for Indigenous involvement at all levels of project planning (Ryan et al 2012). Other than the tool-kit model of management and knowledge sharing, which has yet to develop into the more deeply ingrained transfer of living ethics, the program meets criteria. However, one limitation in Working on Country analysis was availability of data. All assessment is given based on only what was publicly available, and largely using quotes provided in the report on Social Outcomes of Working on Country, which could have biased representations.

Nonetheless, the intercultural initiative appears to work across all examined sources for a variety of reasons: 1) A holistic conception of sustainable outcomes guide programmatic planning; 2) Working on Country is mutually beneficial as it simultaneously supports Indigenous priorities to care for country and helps meet governmental conservation obligations; 3) Indigenous priority-setting is recognized from the "grass roots" stage and capacity planning occurs at the local community level based on design, development, and leadership of projects to meet community interests; 4) Meaningful employment that shrinks industry skills gaps and also recognizes traditional activities and aspirations as valid forms of employment, requiring a mutual ethics of respect and trust in collaboration, probably facilitated through Indigenous driven planning through the Indigenous Protected Areas; 5) Strong Indigenous motivation for involvement, in part attributable to diverse spiritual and cultural community benefits, and 6) the program ontologically acknowledges history and underlying power imbalances.

Chapter 5: Closing Thoughts

"Rock stays Earth stays I die and put my bones in cave or earth. Soon my bones become earth... All the same. My spirit has gone back to my country... My mother"

—Bill Neidjie, 1986

It was sacred women's space. In the dirt alongside the creek, three tracks. We still thought it was strange to see our bare footprints intermingled with those of the animals. Lapping water left worlds of fractals in the sand water bugs digging spring holes, eggs splayed in waves along the soil. As summer marched, we learned. Sometimes, on a sticky hot day, the wallabies ventured towards the water, and on mornings when the water was low, the stork would sit in its shallow pools. Venture further into the creek, tadpoles scatter. When the turtles were out basking, we quickly learned to steer clear: crocs. And all the while, our footprints intermingled, asserting our natural place within the ecosystem.

At the end of his life, Neidjie was the final custodian of his Country in the northern Kakadu rainforest ("Back to my Country Online Exhibition"). Knowledge of intergenerational secrets passed down to Gagudju initiates, taboo to reveal to noninitiates, had potential to become entirely lost, as if with the tide of history. So that his culture would live on, Neidjie shared cultural secrets before his death in 2002, letting them join the embodied archive of knowledge held within his land. As a senior elder of the World Heritage-listed Kakadu National Park, Neidjie was a pioneer in intercultural landcare, opening up the Kakadu land to others and establishing it as a protected National Park under the NRS ("Back to my Country Online Exhibition"). Neidjie jointly managed the park and its conservation, engaging his ecological knowledges and cultural histories in collaboration with governing entities of the National Park ("Back to my Country Online Exhibition"). With autonomy to drive planning, Neidjie shared his love for country and his respect for heritage with both national and international tourists to the rainforest.

Through Neidjie's governance and dedication, the Kakadu National Park tells an alternative narrative about Australia. Kakadu National Park, perhaps the biggest thing of all, embodies a respectfully shared narrative where land is full of life and history, its spiritual relevance is embedded in its core, and cultural knowledge is archived in its soil. Indigenous presence, even though linguistically and semi-physically erased, remains strong in the land. Neidjie's personal story attests to the reality of Australia's violent colonial history while simultaneously offering—with open arms—a very different yet very real Indigenous history of the land, a history embedded in political ecology and an alternative land-ethic to explore. This was how I was able to experience the land permissively on country, place-based, opening up to its knowledge, sharing in its pain, laughing with its joy, learning my place within its system of relationships.

Bill Neidjie's poems reflect more than just his experiences with "whitefellas," or his sadness at the slow erasure of his community's cultural and linguistic history. His words are embedded within an ontological knowing that is connected to the land, a relational land-ethic at ideological odds with western notions of land ownership, resource exploitation, instrumental land benefits, and even ecological conservation. In this research, I grappled with the ontological, epistemological, and historical challenges that come with intercultural attempts to reconcile sets of ecological knowledges and environmental paradigms in working towards sustainability, and attempt to explain points of programmatic success and failure in intercultural land management and holistic sustainability. Rooted in uncomfortable, violent, and amnesiac histories, contrasting ecological paradigms are emblematic of the systemic effects of colonial conquest and accompanying paradigms.

Australia today is subject to racial tensions, violence, stark structural inequalities, environmental degradation, and loss of biodiversity (Birch 2016). It is fitting, considering some of the deeply rooted relationships between Australian Indigenous people and nature, that colonial traumas continue to affect both Australia's Indigenous people and its land. Decolonization discourse is therefore an important tool for healing not just people and traumatic relationships, but also of nature. However, this requires a dramatic restructuring of contemporary dominant Australian frameworks and paradigms. Government initiatives, while structurally conscientious of collaboration, respect, and the need for permission, still incorporate Indigenous ecological knowledges and responsibilities into Western structural frameworks for productivity and progress. To structurally decolonize and allow for Indigenous co-governance would involve a stretch of the imagination—a stretch that situates the West within Aboriginal knowledge systems rather than vice versa (Muir et al 2010).

Australian decolonization scholars advocate a significant re-orientation in thinking about both land and Australia. According to Muir, "a serious commitment to engaging with TEK requires more than a change in management styles—it requires a change in world views and ethics for living" (Muir 2010). To simply use Indigenous ecological knowledge does not necessarily translate into respect for that knowledge, as without proper communication and collaboration, the knowledge may be appropriated, commodified, abused, stolen, or essentialized, and negative colonial forces continue unchecked (Muir 2010). Meanwhile, political scientist Fiona Nicoll recommends moving past reconciliation altogether and instead advocates for what she calls "*falling out of* perspective into an embodied awareness of being in Indigenous sovereignty" (2004), not unlike Maddison's proposals for personal unsettlement that are in line with the more drastic changes in worldview that are necessary. Otherwise, white people continue to "assume perspective on Indigenous sovereignty, so that white sovereignty remains a nonnegotiable absolute to which Indigenous people must be reconciled" (2004). As the scholarly proposals constitute a significant cultural change, decolonizing guidelines within Western frameworks of governance do not necessarily constitute the dramatic

change in ethics for living that the scholars describe, although they do yield holistic community impact.

Ultimately, intercultural NRM projects at the national level are not yet significantly meaningful for holistic sustainability that I conceptualize and introduce in this paper due to structural, linguistic, historical, and epistemological challenges. However, the National Landcare Program has taken meaningful first strides in dialogue, respect, and collaboration and National Landcare Program projects have still yielded significant success with natural resource conservation and the creation of jobs for Indigenous participants, and certain projects funded under the national stream have still proved interculturally successful. Western ideas about conservation play the dominant role in how NRM is practiced and how broader policy is set, despite any objectives, which has excluded Indigenous people. According to Barbour: "If ecologists trained in the Western discipline wish to form partnerships with Indigenous people, they should have access to a range of voices, to find out why Indigenous people want to participate in conservation, how they think about conservation and how they want to go about achieving it. Western ecologists also should recognize that the motives and contexts of Indigenous peoples are very likely to differ from their own, and that a failure to accept this is likely to have negative effects on collaborations" (2012).

Additionally, some projects are too blanketed at the national level, universally passed down despite the diversity of Indigenous experiences through space. However, where Regional Landcare Facilitators and National Landcare Program coordinators embed structure through which Indigenous groups set the objectives at the starting point,

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after which landcare coordinators or policy makers meet them halfway there and can open up to cross-cultural notions of conservation, Indigenous jobs in NRM prove valuable both in lessening the wealth gap and in providing inherently intercultural channels for Indigenous communities to fulfill roles in caring for country, beginning to cultivate a decolonizing and holistically sustainable outcome.

This research was not without limitations. All concluding thoughts are derived from the specific and incomplete set of resources that were available to me. Media sweeps for stakeholder comments and opinions did not yield as much data as I hoped, so most of my resources for analysis are from government documents and publications. It is for this reason that this research represents more of a survey of program rhetoric, research, and reports rather than specific on-ground divergences. This paper primarily functions to contextualize intercultural NRM projects within the expanded definition of holistic sustainability that I introduce and conceptualize. Further research would involve participant observation and interviews, perhaps narrowed in to focus on a specific program or program project, that yield targeted stakeholder sentiments and reflections, which can be considered with regards to criteria beyond just program rhetoric.

Examination of Australia's NRM infrastructures underscores the complicated nature of use of Indigenous ecological knowledges and practices for sustainability within the decolonization schematic, so the conclusions in this paper are not final, nor are successful intercultural NRM projects. Both are part of the ongoing journey towards reconciliation, decolonization of state, person, and land. As my professor of Aboriginal Land, Law, and Philosophy Jessi Coyle told me, a non-Indigenous person like myself can dedicate my life to understanding and addressing these issues, and still remain 'underground.' For this reason, I did not title this section "Conclusion," because there is no conclusion, and this research and thinking are ongoing. Even though there is no close (except within formal Western academic structures), I titled this section "Closing Thoughts," to finish with comments on my current thinking.

In this light, my closing thoughts warrant a return to positionality. As a nonindigenous person discussing issues related to Indigenous sovereignty and agency in a colonial state, it is important I work towards cultivating a perspective that involves *being in* Indigenous sovereignty rather than *on* Indigenous sovereignty, which would require me to recognize distinctions between subjective and objective representations of the past (Nicoll 2004). This ongoing work, embodying Western presentation of knowledge and produced in a Western academic institution in a colonial state, is no use if it only presents perspectives on cultivation of Indigenous sovereignty. Instead, may it actively work to be in Indigenous sovereignty, a feat that remains unfamiliar and contested. Through gleaming manifestations of various land-ethics and paradigms, historical openings and narrative possibilities, this paper is the hopeful beginning of ability to fall out of perspective and situate myself and my areas of interest into a new ethic for living.

Appendix A

Glossary of Terms used in Programs and in Program Analyses, pulled from Caring for our Country Report on the Review except where otherwise noted

Australian Heritage Council: The principle adviser to the Australian Government on heritage matters. The council includes nine people, including two experts on natural heritage relating to NRM, two experts on historic heritage relating to ecological relationships, and two Indigenous-identifying experts on Indigenous heritage experience, representing the interests of Indigenous people ("About the Council" 2019).

Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS): Self-defined as a governmental research organization that promotes knowledge and understanding of ATSI cultures, traditions, languages and stories, past and present, established under the AIATSIS Act of 1989 (AIATSIS 2019). The AIATSIS, whose council is entirely Indigenous, co-writes and or contributes to NLP Review Reports and other reports on Indigenous engagement.

Biodiversity: The variety of all life forms on earth including the different plants, animals, and micro-organisms and the ecosystems of which they are a part.

Caring For Our Country (CFOC): An Australian Government initiative that seeks to achieve an environment that is healthy, better protected, well-managed and resilient and that provides essential ecosystem services in a changing climate

Closing the Gap (CTG): Specific and ambitious targets to close the gap in Indigenous disadvantage, set by the Australian Government, together with the states and territories through the Council of Australian Governments (COAG). COAG has identified targets and priority areas where action is required to effect positive life improvement through outcomes that are interconnected and linked to early childhood, schooling, healthy homes, safe communities, health, economic participation, and governance and leadership.

Community Action Grants (CAGs): Small grants led by community groups and Indigenous organizations to implement local priorities to protect and conserve the environment. They are the equivalent of Community Environment Grants in the second phase of CFOC.

Connectivity: The location and spatial distribution of natural areas in the landscape to provide species and populations with access to resources (food, breeding sites, and shelter); increase habitat availability and facilitate population processes (dispersal, migration, expansion and contraction); and enable ecological processes to occur (evolution, water, fire, and nutrients). In fragmented landscapes, connectivity is most likely to occur where there are a series of close habitat areas arranged like 'stepping stones.'

Department of Agriculture and Water Resources (DAWR): Formed in September 2015, the DAWR is self-defined as the Department that develops and implements

policies and programs to ensure Australia's agricultural, fisheries, food, and forestry industries remain competitive, profitable, and sustainable, and supports the sustainable and productive management and use of rivers and water resources ("About Us" 2019). The DAWR collaboratively funds the agricultural components of the NLP.

Department of Environment and Energy (DEE): Formed in July 2016, the DEE is self-defined as the Department that implements Australian Government policy and programs to protect and conserve the environment, water, and heritage, promote climate action, and provide adequate, reliable, and affordable energy ("About Us" 2019). The DEE collaboratively funds and oversees the NLP.

Ecological Communities: Interacting organisms living together in a specific habitat.

Ecosystem: A biological community of interacting organisms and their physical environment. Ecosystems are identified at various scales.

Ecosystem services: The benefits essential to human survival and wellbeing that natural ecosystems provide through their structures and functional processes.

Environment Protection and Biodiversity Conservation Act 1999 (EPBC): The Australian Government's central piece of environmental legislation. It provides a framework to protect and manage nationally and internationally important flora, fauna, ecological communities, and heritage places.

Fragmentation: The isolation, breaking up or reduction in size of habitats or vegetation.

Governance: Governance is about how people choose to collectively organize themselves to manage their own affairs, share power and responsibilities, decide for themselves what kind of society they want for their future, and implement those decisions ... Governance gives a nation, group, community, or organization the ways and means to achieve the things that matter to them. Governance is not the same thing as 'government,' 'management,' 'corporate organizations,' 'administration,' or 'service delivery.' It's also more than just 'leadership' ("Understanding governance" Reconciliation Australia 2019).

Indigenous Advisory Committee (IAC): All-Indigenous committee established in 2000 under the EPBC Act to advise the Minister for the Environment and Energy on the operation of the EPBC Act, taking into account the significance of Indigenous peoples' knowledge of the management of land and the conservation and sustainable use of biodiversity ("Indigenous Advisory Committee" 2019). The IAC seeks to satisfy section 3.2(g) of the EPBC Act, which promotes Indigenous partnership to environmental protection and biodiversity conservation through (iii) recognizing and promoting Indigenous people's role in, and knowledge of, the conservation and ecological sustainable use of Australia's biodiversity and (iv) the involvement of the community in management planning (EPBC Act, 1999).

Indigenous Ecological Knowledge (IEK): An ancient and intricate body of knowledge of the environment that is an accumulation of observations of the natural world. It has been passed from one generation to another within a living cultural landscape of deep

spiritual significance to Indigenous people. Indigenous ecological knowledge is invaluable to better environmental management.

Indigenous estate: Land held by Indigenous interests through a variety of forms of tenure or title.

Indigenous Protected Areas (IPA): Reserves contributing to the National Reserve System that are dedicated and managed by Indigenous people.

Investment themes: The Australian Government's priorities for investment in Australia's most environmentally significant places. They are similar to the term 'national priority areas,' which were used under the first phase of CFOC.

Matters of National Environmental Significance (MNES): Nationally or internationally important flora, fauna, ecological communities and heritage places as defined under the *Environment Protection and Biodiversity Act 1999*.

Monitoring, evaluation, reporting, and improvement (MERI): A framework for monitoring and reporting progress in achieving Caring for Our Country outcomes, linking project activities with intermediate and long-term objectives. Its approach is iterative and integrative and aims to result in learning and adaptive management. [The NLP and RLP now have their own MERI frameworks].

National Heritage: Comprises exceptional natural and cultural places that contribute to Australia's national identity. National Heritage defines the critical moments in our [Australia's] development as a nation and reflects achievements, joys, and sorrows in the lives of Australians ("National Heritage" 2019). The National Heritage List includes places of outstanding heritage significance to Australia, which are protected under the EPBC Act and through agreements with state/territory governments, private owners, and Indigenous custodians ("Protecting places in the National Heritage List" 2019).

National Heritage Ministerial Board: Established under the *National Heritage Trust of Australia Act 1997* to provide formal mechanism for cooperation between the Environment and Agriculture Ministers on all matters relating to programs funded through the NHT of Australia Account. The Board supports the design and delivery of the National Landcare Program and makes decisions on related programs funded through the NHT account, including IPAs (Board and Committee NLO 2019). The board consists of the Environment Minister and the Agricultural Minister (Australian Government Directory 2019), neither of who is Indigenous.

National Heritage Trust (NHT): Established in 1997 through the Australian Government to help restore and conserve Australia's environment and natural resources at the community, regional, and national/state levels. The NHT ceased operation 2008 and functionally transitioned into CFOC (Benham 2015).

National Landcare Advisory Committee (NLAC): A non-statutory body established by the National Heritage Ministerial Board to advise the Board on the development and implementation of the National Landcare Program, including investment priorities, implementation and effectiveness, community consultation and engagement, and

achievement of outcomes (Board and Committee NLP 2019). The NLP website does not imply a priority for Indigenous participation in the NLAC, of which one out of ten committee-members is Indigenous.

National Landcare Network (NLN): A non-governmental organization self-defined as the representative body for Landcare groups across Australia with the purpose of providing a voice for Landcare at the national level. The NLN includes representatives from each State and Territory who share successes and challenges in Landcare programs ("National Landcare Network" 2019).

National Landcare Program: A national Program that was implemented in 2014 and absorbed all activities of Caring for our Country. Self-defined as a key part of the Australian Government's commitment to natural resource management, the program supports local and long-term environment, sustainable agriculture, and Indigenous outcomes (National Landcare Program Review Terms of Reference).

National priority areas (NPAs): Six areas that CFOC is focused upon to achieve its strategic goals. The six areas are: national reserve system, biodiversity and natural icons, coastal environments and critical aquatic habitats, sustainable farm practices, natural resource management in northern and remote Australia, and community skills, knowledge, and engagement.

National Reserve System (NRS): Australia's nationwide network of protected areas such as parks and reserves. The system conserves examples of Australia's unique landscapes, plants, and animals for future generations. The aim of the National Reserve System is to protect a comprehensive range of examples of ecosystems and other important environmental values within each of Australia's 85 bioregions.

Natural resource management (NRM): The sustainable management of Australia's natural resources (our land, water, marine, and biological systems) to ensure our ongoing social, economic, and environmental, wellbeing.

Program Logic: The rationale behind a program. It includes what are understood to be the cause-and-effect relationships between program activities, outputs, intermediate outcomes and longer-term desired outcomes. Program logic shows a series of expected consequences, not just a sequence of events. It thus facilitates planning, execution, and evaluation of an intervention.

Reconciliation: According to Reconciliation Australia: the concept of reconciliation has taken on a holistic approach that encompasses rights as well as symbolic and practical actions. Reconciliation raises broader questions about national identity and the place of Aboriginal and TSI histories, cultures, and rights in the nation's story. Based on a review of reconciliation in Australia and internationally, Reconciliation Australia developed a framework to represent and measure progress towards reconciliation, which includes five dimensions: race relations, equality and equity, institutional integrity, and historical acceptance, all converging on the dimension of unity ("What is Reconciliation?" 2019).

Reconciliation Australia (RA): Self-defined as a non-governmental organization that promotes and facilitates respect, trust, and positive relationships between the wider

Australian community and Aboriginal and TSI peoples. RA composes Reconciliation Strategic Action Plans (RAPs), Discussion Guides on the state of Reconciliation, Reports on the state of Reconciliation, and promotes programs including the Indigenous Governance Program (Reconciliation Australia 2019).

Regional base-level funding: Funding provided to regional natural resource management organizations to deliver integrated CFOC projects at the regional level, including providing support and access to knowledge and skills for landholders and communities.

Regional Landcare Facilitators: People who help Landcare and production groups to adopt sustainable farm and land management practices. CFOC funds one full-time staff member in each of Australia's NRM regions.

Regional Landcare Program: A program under Phase Two of the National Landcare Program, implemented in 2018 and funding 195 landcare NRM projects ("Regional Landcare Program" 2019).

Regional natural resource management (NRM) organization: NRM regions are based on catchments or bioregions. There are 56 NRM regions across Australia, also known as regional NRM bodies, NRM groups or in some cases, Catchment Management Authorities. These are the organizations that undertake to plan, coordinate, and support NRM at the regional level.

Resilience: The capacity of an ecosystem to tolerate disturbance without collapsing into a qualitative different state. Resilience is controlled by a different set of processes. A resilient ecosystem can withstand shocks and rebuild itself when necessary.

Stewardship: Conservation of the environment through sustainable practices.

Sustainability: Maintaining or improving the wellbeing of society over time, including environmental sustainability, social welfare, and economic prosperity.

Traditional ecological knowledge: A cumulative body of knowledge, know-how, practices, and representations maintained and developed by Indigenous peoples with extended histories of interaction with the natural environment. These sophisticated sets of understandings, interpretations and meanings are part and parcel of a cultural complex that encompasses language, naming, and classification systems, resource use practices, ritual, spirituality, and worldview.

World Heritage Areas: Areas listed for one or more specific outstanding universal values and representing the best examples of natural and cultural places in the world and include outstanding examples of major stages of the earth's ecological, biological, or geological processes or contain important and significant natural habitats for biodiversity conservation or are associated with unique, living cultural traditions.

Working on Country: A component of the Caring for our Country program. It supports projects that incorporate Indigenous traditional knowledge in managing and protecting

land and sea country. The initiative includes an Indigenous Ranger Program, currently employing over 680 people in managing land to protect its environmental values.

Appendix B

Caring for Our Country Government Resources Referenced for Analysis

- Caring for our Country Achievements Report 2008-2013: Biodiversity and Natural Icons (prepared by the Australian Government Department of Sustainability, Environment, Water, Population, and Communities and the Department of Agriculture, Fisheries, and Forestry 2013)
- Caring for our Country Achievements Report 2008-2013: Coastal Environments and Critical Aquatic Habitats (prepared by the Australian Government Department of Sustainability, Environment, Water, Population, and Communities and the Department of Agriculture, Fisheries, and Forestry 2013)
- Caring for our Country Achievements Report 2008-2013: Community Skills, Knowledge, and Engagement (prepared by the Australian Government Department of Sustainability, Environment, Water, Population, and Communities and the Department of Agriculture, Fisheries, and Forestry 2013)
- Caring for our Country Achievements Report 2008-2013: Introduction (prepared by the Australian Government Department of Sustainability, Environment, Water, Population, and Communities and the Department of Agriculture, Fisheries, and Forestry 2013)
- Caring for our Country Achievements Report 2008-2013: National Reserve System (prepared by the Australian Government Department of Sustainability, Environment, Water, Population, and Communities and the Department of Agriculture, Fisheries, and Forestry 2013)
- Caring for our Country Achievements Report 2008-2013: Northern and Remote Australia (prepared by the Australian Government Department of Sustainability, Environment, Water, Population, and Communities and the Department of Agriculture, Fisheries, and Forestry 2013)
- Caring for our Country Achievements Report 2008-2013: Synthesis (prepared by the Australian Government Department of Sustainability, Environment, Water, Population, and Communities and the Department of Agriculture, Fisheries, and Forestry 2013)
- Caring for our Country Achievements Report 2008-2013: The Past and the Future Appendix (prepared by the Australian Government Department of Sustainability, Environment, Water, Population, and Communities and the Department of Agriculture, Fisheries, and Forestry 2013)
- Indigenous Land Management in Australia: Extent, Scope, Diversity, Barriers, and Success Factors (prepared by Australian Landcare Council, CSIRO, Caring for our Country, and the Australian Government 2013)
- Regional Delivery-Successful Projects sorted by NRM Organization, Sustainable Agriculture Stream, and Sustainable Environment Stream (Caring for our Country n.d.)
- Report on the Review of the Caring for our Country Initiative (prepared by the Australian Government Land and Coasts and Caring for our Country Review Team 2012)
- Review of Caring for our Country: Australia's National Resource Management Investment Initiative (prepared by the National Landcare Network n.d.)

• The Review of Caring for our Country: Australia's Natural Resource Management Investment Initiative Discussion Paper (2011)

Appendix C

National Landcare Program (Phase One and Two) Government Resources Referenced for Analysis

- Aboriginal and Torres Strait Islander Natural Resource Management (prepared by the Australian Government and the National Landcare Program 2019)
- Advice on the National Landcare Program Review (prepared by the National Landcare Advisory Committee 2016)
- Community Information Sessions (PowerPoints used to educate local community members about the NLP and open space for discussion and questions. Between every capital city, over 600 people attended. Prepared by the National Landcare Program and Australian Government 2014)
- Community Information Sessions Questions and Answers (with regards to National Landcare Program Phase Two and Regional Land Partnerships 2017)
- Consultation Paper on the National Landcare Program (prepared with regards to 10 Phase Two Program consultation sessions by the Australian Government and the National Landcare Program 2014)
- Consultation on the National Landcare Program (prepared with regards to Program consultations by the Australian Government and the National Landcare Program 2017)
- Economic benefits of Landcare Summary (Department of the Environment, Commonwealth of Australia 2016)
- Evidence for the economic impacts of investment in National Landcare Programme activities (prepared for the Department of the Environment and Energy and the National Landcare Advisory Committee 2015)
- Increasing Participation (prepared by the Australian Government and the National Landcare Program 2019)
 Indigenous participation in the planning and delivery of National Landcare Programme investment (delineates, expectations, guidelines, and advice for Indigenous participation in the planning of program investment through guiding framework prepared by the Australian Government and the National Landcare
- Program n.d.)
 Information Sessions on National Landcare Program Phase Two Agenda (prepared by the Australian Government and the National Landcare Program 2017)
- Landcare's role in building adaptive capacity and resilience (prepared by the National Landcare Advisory Committee 2016)
- National Landcare Advisory Committee Communique (prepared by the National Landcare Advisory Committee 2016)
- National Landcare Program Environment Small Grants: Successful Projects (prepared by the Australian Government and the National Landcare Program n.d.)
- National Landcare Program Management Units 2018 (map of the 56 NRM regions prepared by the Australian Department of Environment and Energy)
- National Landcare Programme Monitoring and Reporting Plan (Monitoring, Evaluation, Reporting, and Improvement framework for the Phase One, to be read in conjunction with the Program Logic and Performance Indicators, based on

strategic objectives and outcomes, prepared by the Commonwealth of Australia 2014)

- National Landcare Program Phase Two Information and Consultation Sessions 2017 (prepared by the Australian Government and the National Landcare Program 2017)
- National Landcare Program, Program Logic (prepared by the Australian Government and the National Landcare Program n.d.)
- National Landcare Programme Opportunities for Community Groups (prepared by the Australian Government and the National Landcare Program 2016)
- National Landcare Program Regional Delivery Key Performance Indicators 2014-2018 (based on Strategic Objectives)
- National Landcare Program Stakeholder Survey (prepared by the Department of the Environment and Energy and the Department of Agriculture and Water Resources 2016)
- National Landcare Program 20 Million Trees Performance Indicators 2014-2020 (based on Strategic Objectives)
- National Landcare Programme-25th Anniversary Landcare Grants Key Performance Indicators 2014-2016 (based on Strategic Objectives)
- Natural Resource Management roundtable: Synthesis (prepared by Jacki Schirmer, Kate Andrews, and Stephen Dovers 2016)
- Outcomes of Community Consultation (prepared by the Australian Government and the National Landcare Program 2014)
- Report on the Review of the National Landcare Program (Commonwealth of Australia 2017)
- Public Consultation on the National Landcare Program (prepared by the Australian Government and the National Landcare Program 2014)
- Telling the Story (with regards to Indigenous Land Management, (prepared by the Australian Government and the National Landcare Program 2019)
- Terms of Reference National Landcare Program Review (prepared by the Australian Government and the National Landcare Program 2017)
- Utilizing Knowledge (with regards to Indigenous Participation, (prepared by the Australian Government and the National Landcare Program 2019)

Appendix D

Regional Landcare Partnerships under the National Landcare Program Government Resources Referenced for Analysis

- Mapping tool instructions for tenderers of Regional Land Partnership (prepared by the Australian Government and the National Landcare Program 2017)
- National Landcare Program Phase 2: Summary of Regional Land Partnerships Survey with 124 responses (prepared by the Department of the Environment and Energy 2017)
- National Landcare Program Regional Land Partnerships Consultation Paper (Commonwealth of Australia 2016)
- National Landcare Program Regional Land Partnerships MERI Framework (Monitoring, Evaluation, Reporting, and Improvement plan, developed by the Department of the Environment and Energy and the Department of Agriculture and Water Resources as a Regional Land Partnership-specific framework built upon the original Commonwealth MERI framework 2018)
- Regional Land Partnerships Assurance Framework highlighting processes and approaches to managing risks to successful program deliverance (prepared by the Australian Government and the National Landcare Program 2018)
- Regional Land Partnerships Evaluation Plan for each of the six desired outcomes (prepared by the Department of the Environment and Energy 2018)
- Regional Land Partnerships GIS Management Units App with national sustainability priorities organized by management unit (prepared by the Australian Government and the National Landcare Program 2019)
- Regional Land Partnerships Program Logic outfling program outcomes and principles (prepared by the Australian Government and the National Landcare Program 2018)
- Regional Land Partnerships Project Listing (prepared by the Australian Government and the National Landcare Program 2018)
- Response to the Regional Land Partnerships Consultation (prepared by the Australian Government and the National Landcare Program in consideration of program design and implementation 2018)

Appendix E

Regional NRM Organization Government Resources Selected to Reference for Analysis

- Aboriginal Participation Guidelines for Victorian Catchment Management Authorities (prepared by the Victoria State Government, Victorian Natural Resource Management Organizations including Catchment Management Authorities, and the Commonwealth of Australia n.d.)
- Alinytjara Wilurara Regional Natural Resource Management Plan: Ngura Atunymankuntjaku Tjukurpa Caring for country story (prepared by the Alinytjara Wilurara Natural Resources Management Board of the Government of South Australia 2011)
- Australian Government Performance Expectations for Regional NRM Organizations (prepared by the Australian Government and the National Landcare Program 2014)
- Australian Government Performance Framework for Regional NRM Organizations – 2016 Revision (prepared by the Australian Government and the National Landcare Program 2016)
- Australian Government Performance Framework for Regional NRM Organizations – 2017 Implementation Manual V1.0 (prepared by the Australian Government and the National Landcare Program 2017)
- Case studies and details on Indigenous activities and projects undertaken in each of the 56 Natural Resource Management Regions by each of the 56 Natural Resource Management Organizations (presented by the Australian Government and the National Landcare Program 2019)
- Everybody's Land: A Strategy for Aboriginal Partnerships in the SA Arid Lands Natural Resource Management Region (prepared by the South Australian Arid Lands Natural Resource Management Board under the Government of South Australia 2013)

Appendix F

Working on Country Government Resources Referenced for Analysis

- Assessment on the social outcomes of the Working on Country Program (prepared by the Urbis Social Policy team for the Australian Department of Sustainability, Environment, Water, Population, and Communities 2012)
- Case Study Working on Country: Working Remotely in the Northern Territory (prepared by the Commonwealth of Australia 2012 for the Closing the Gap initiative)
- Fact Sheet: Working on Country through Caring for our Country and Closing the Gap (Commonwealth of Australia 2013)
- Review of Working on Country and Indigenous Protected Area Programs Through Telephone Interviews (prepared by Dr. Dermot Smyth for the Commonwealth Government's program review 2011)
- Working on Country Evaluation Report (prepared by WalterTurnbull for the Department of the Environment, Water, Heritage, and the Arts 2010)
- Working on Country: Indigenous Rangers Skills Guide (Prepared by the Commonwealth of Australia's Department of the Environment, Water, Heritage, and the Arts 2009)

Appendix G

Miscellaneous Government and Affiliated Resources Referenced for Analysis

- Ask First: A guide to respecting Indigenous heritage places and values in natural resource management consultation (prepared by Indigenous Heritage Section staff of the Australian Heritage Commission 2002)
- Australian Government Natural Resource Management Monitoring, Evaluation, Reporting, and Improvement Framework (Commonwealth of Australia 2009)
- Capturing Indigneous Knowledge in Water Management Processes: Wudjuli lagoon Case Study, Ngukurr, NT (Lisa Watts through the Australian Indigenous Land and Se Management Alliance for the Northern Land Council of the Department of Sustainability, Environment, Water, Population, and Communities 2012)
- Creating [Indigenous] Archives (Australian Institute of Aboriginal and Torres Strait Islander Studies n.d.)
- Critical Success Factors for Engaging Indigenous People and Communities in Natural Resource Management and Primary Industries (South Australian Government Department of Water, Land, and Biodiversity Conservation on behalf of the Natural Resource Management Ministerial Council 2009)
- Evaluating long-term outcomes of project investments, including the Natural Heritage Trust and Caring for our Country (Department of the Environment and Energy 2017)
- Indigenous knowledge in water planning, management, and policy (Chris Roberts through the North Australian Indigenous Land and Sea Management Alliance for the Department of Sustainability, Environment, Water, Population and Communities 2012)
- Indigenous Livelihoods: Summaries and Recommendations of cultural, social, and environmental natural resource management Research Projects (prepared through the North Australian Indigenous Land and Sea Management Alliance for the Department of Sustainability, Environment, Water, Population, and Communities 2012)
- Indigenous Water Values and Water Planning in the Upper Roper River, Northern Territory (Marcus Barber and Sue Jackson for the National Water Commission and the Department of Sustainability, Environment, Water, Population, and Communities 2011)
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