





Indigenous water values, rights, interests and development goals in the Victoria catchment

A technical report from the CSIRO Victoria River Water Resource Assessment for the National Water Grid

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Aspects of the Assessment have been undertaken in conjunction with the NT Government.

The Assessment was guided by two committees:

- i. The Assessment's Governance Committee: CRC for Northern Australia/James Cook University; CSIRO; National Water Grid (Department of Climate Change, Energy, the Environment and Water); Northern Land Council; NT Department of Environment, Parks and Water Security; NT Department of Industry, Tourism and Trade; Office of Northern Australia; Queensland Department of Agriculture and Fisheries; Queensland Department of Regional Development, Manufacturing and Water
- i. The Assessment's joint Roper and Victoria River catchments Steering Committee: Amateur Fishermen's Association of the NT; Austrade; Centrefarm; CSIRO; National Water Grid (Department of Climate Change, Energy, the Environment and Water); Northern Land Council; NT Cattlemen's Association; NT Department of Environment, Parks and Water Security; NT Department of Industry, Tourism and Trade; NT Farmers; NT Seafood Council; Office of Northern Australia; Parks Australia; Regional Development Australia; Roper Gulf Regional Council Shire; Watertrust

Responsibility for the Assessment's content lies with CSIRO. The Assessment's committees did not have an opportunity to review the Assessment results or outputs prior to their release.

The Indigenous water values, rights, interests and development goals component of the Assessment relied entirely on the generosity, willingness to engage, and wisdom of a significant number of Traditional Owners from across the Victoria catchment. People gave their time and their insights to a process which they knew from the outset might investigate and report on development possibilities that they personally would not wish to see happen. As authors and on behalf of the ViWRA team, we offer our sincere and deep thanks for their willingness to accept the level of risk that this entailed. It ensured that Traditional Owners and their interests had a significant presence in the final results. For ethics and privacy reasons we do not name the 19 individuals who participated, but we do gratefully acknowledge their essential contribution.

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The assistance with the Assessment process provided by the organisations named above does not in any way imply responsibility for, or agreement with, the scope of the work and/or the findings reached.

This report was reviewed by Dr Heather Stewart and Dr Ian Watson (CSIRO)

Acknowledgement of Country

CSIRO acknowledges the Traditional Owners of the lands, seas and waters, of the area that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present.

Photos: All photos in the report are from the Victoria River catchment. Source: CSIRO

Director's foreword

Sustainable development and regional economic prosperity are priorities for the Australian and Northern Territory (NT) governments. However, more comprehensive information on land and water resources across northern Australia is required to complement local information held by Indigenous Peoples and other landholders.

Knowledge of the scale, nature, location and distribution of likely environmental, social, cultural and economic opportunities and the risks of any proposed developments is critical to sustainable development. Especially where resource use is contested, this knowledge informs the consultation and planning that underpin the resource security required to unlock investment, while at the same time protecting the environment and cultural values.

In 2021, the Australian Government commissioned CSIRO to complete the Victoria River Water Resource Assessment. In response, CSIRO accessed expertise and collaborations from across Australia to generate data and provide insight to support consideration of the use of land and water resources in the Victoria catchment. The Assessment focuses mainly on the potential for agricultural development, and the opportunities and constraints that development could experience. It also considers climate change impacts and a range of future development pathways without being prescriptive of what they might be. The detailed information provided on land and water resources, their potential uses and the consequences of those uses are carefully designed to be relevant to a wide range of regional-scale planning considerations by Indigenous Peoples, landholders, citizens, investors, local government, and the Australian and NT governments. By fostering shared understanding of the opportunities and the risks among this wide array of stakeholders and decision makers, better informed conversations about future options will be possible.

Importantly, the Assessment does not recommend one development over another, nor assume any particular development pathway, nor even assume that water resource development will occur. It provides a range of possibilities and the information required to interpret them (including risks that may attend any opportunities), consistent with regional values and aspirations.

All data and reports produced by the Assessment will be publicly available.

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Note: Assessment team as at September, 2024. All contributors are affiliated with CSIRO unless indicated otherwise. Activity Leaders are underlined. For the Indigenous water values, rights, interests and development goals activity, Marcus Barber was Activity Leader for the project duration except August 2022 – July 2023 when Kirsty Wissing (a CSIRO employee at the time) undertook this role.

¹James Cook University; ²DBP Consulting; ³Badu Advisory Pty Ltd; ⁴Independent contractor; ⁵ Centre for Tropical Water and Aquatic Ecosystem Research. James Cook University; ⁶CloudGMS; ⁷NT Department of Environment, Parks and Water Security; ⁸Rider Levett Bucknall; ⁹Baynes Geologic

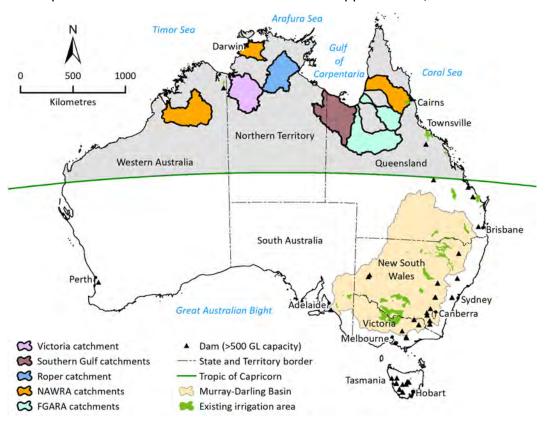
Shortened forms

SHORT FORM	FULL FORM
AAPA	Aboriginal Areas Protection Authority
ABS	Australian Bureau of Statistics
ALEDA	Aboriginal Land Economic Development Agency
ALRA	Aboriginal Land Rights (Northern Territory) Act 1976 (Cth)
ATSIC	Aboriginal and Torres Strait Islander Commission
CLA	Community Land Area
CLC	Central Land Council
CSIRO	Commonwealth Scientific and Industrial Organisation
CSSHREC	CSIRO Social Science Human Research Ethics Committee
Cth	Commonwealth
DPIE	Department of Primary Industries and Energy
ICNRM	Indigenous cultural and natural resource management
IEO	Index of Education and Occupation
IER	Index of Economic Resources
ILC	Indigenous Land Corporation
ILSC	Indigenous Land and Sea Corporation
ILS	Indigenous Landholder Service
ILSC	Indigenous Land and Sea Corporation
ILUA	Indigenous Land Use Agreement
IPA	Indigenous Protected Area
IRSAD	Index of Relative Socio-Economic Advantage and Disadvantage
IRSD	Index of Relative Socio-Economic Disadvantage
NAILSMA	Northern Indigenous Land and Sea Management Alliance
NGO	Non-Government Organisation
NLC	Northern Land Council
NRM	Natural Resource Management
NT	Northern Territory
NWI	National Water Initiative
PBC	Prescribed Body Corporate
RNTBC	Registered Native Title Body Corporate
SAWR	Strategic Aboriginal Water Reserve
SEIFA	Socio-Economic Indexes for Areas
TNRM	Territory Natural Resource Management
то	Traditional Owner
TRaCK	Tropical Rivers and Coastal Knowledge
UNESCO	United Nations Educational, Scientific and Cultural Organization
VRD	Victoria River District
1/0004	Victoria River District Conservation Association
VRDCA	

Preface

Sustainable development and regional economic prosperity are priorities for the Australian and NT governments and science can play its role. Acknowledging the need for continued research, the NT Government (2023) announced a Territory Water Plan priority action to accelerate the existing water science program 'to support best practice water resource management and sustainable development.'

Governments are actively seeking to diversify regional economies, considering a range of factors. For very remote areas like the Victoria catchment (Preface Figure 1-1), the land, water and other environmental resources or assets will be key in determining how sustainable regional development might occur. Primary questions in any consideration of sustainable regional development relate to the nature and the scale of opportunities, and their risks.



Preface Figure 1-1 Map of Australia showing Assessment area (Victoria catchment and other recent CSIRO Assessments

FGARA = Flinders and Gilbert Agricultural Resource Assessment; NAWRA = Northern Australia Water Resource Assessment.

How people perceive those risks is critical, especially in the context of areas such as the Victoria catchment, where approximately 75% of the population is Indigenous (compared to 3.2% for Australia as a whole) and where many Indigenous Peoples still live on the same lands they have inhabited for tens of thousands of years. About 31% of the Victoria catchment is owned by Indigenous Peoples as inalienable freehold.

Access to reliable information about resources enables informed discussion and good decision making. Such information includes the amount and type of a resource or asset, where it is found (including in relation to complementary resources), what commercial uses it might have, how the resource changes within a year and across years, the underlying socio-economic context and the possible impacts of development.

Most of northern Australia's land and water resources have not been mapped in sufficient detail to provide the level of information required for reliable resource allocation, to mitigate investment or environmental risks, or to build policy settings that can support good judgments. The Victoria River Water Resource Assessment aims to partly address this gap by providing data to better inform decisions on private investment and government expenditure, to account for intersections between existing and potential resource users, and to ensure that net development benefits are maximised.

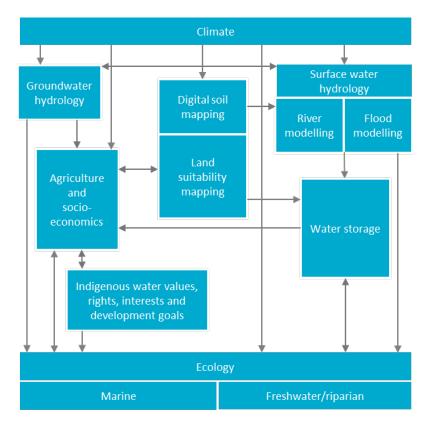
The Assessment differs somewhat from many resource assessments in that it considers a wide range of resources or assets, rather than being a single mapping exercise of, say, soils. It provides a lot of contextual information about the socio-economic profile of the catchment, and the economic possibilities and environmental impacts of development. Further, it considers many of the different resource and asset types in an integrated way, rather than separately. The Assessment has agricultural developments as its primary focus, but it also considers opportunities for and intersections between other types of water-dependent development.

The Assessment was designed to inform consideration of development, not to enable any particular development to occur. The outcome of no change in land use or water resource development is also valid. As such, the Assessment informs – but does not seek to replace – existing planning, regulatory or approval processes. Importantly, the Assessment does not assume a given policy or regulatory environment. Policy and regulations can change, so this flexibility enables the results to be applied to the widest range of uses for the longest possible time frame.

It was not the intention of – and nor was it possible for – the Assessment to generate new information on all topics related to water and irrigation development in northern Australia. Topics not directly examined in the Assessment are discussed with reference to and in the context of the existing literature.

CSIRO has strong organisational commitments to reconciliation with Australia's Indigenous Peoples and to conducting ethical research with the free, prior and informed consent of human participants. The Assessment consulted with Indigenous representative organisations and Traditional Owner groups from the catchment to aid their understanding and potential engagement with its fieldwork requirements. The Assessment conducted significant fieldwork in the catchment, including with Traditional Owners through the activity focused on Indigenous values, rights, interests and development goals. CSIRO created new scientific knowledge about the catchment through direct fieldwork, by synthesising new material from existing information, and by remotely sensed data and numerical modelling.

Functionally, the Assessment adopted an activities-based approach (reflected in the content and structure of the outputs and products), comprising activity groups, each contributing its part to create a cohesive picture of regional development opportunities, costs and benefits, but also risks. Preface Figure 1-2 illustrates the high-level links between the activities and the general flow of information in the Assessment.



Preface Figure 1-2 Schematic of the high-level linkages between the eight activity groups and the general flow of information in the Assessment

Assessment reporting structure

Development opportunities and their impacts are frequently highly interdependent and, consequently, so is the research undertaken through this Assessment. While each report may be read as a stand-alone document, the suite of reports for each Assessment most reliably informs discussion and decisions concerning regional development when read as a whole.

The Assessment has produced a series of cascading reports and information products:

- Technical reports present scientific work with sufficient detail for technical and scientific experts to reproduce the work. Each of the activities (Preface Figure 1-2) has one or more corresponding technical reports.
- A catchment report, which synthesises key material from the technical reports, providing well-informed (but not necessarily scientifically trained) users with the information required to inform decisions about the opportunities, costs and benefits, but also risks associated with irrigated agriculture and other development options.
- A summary report provides a shorter summary and narrative for a general public audience in plain English.
- A summary fact sheet provides key findings for a general public audience in the shortest possible format.

The Assessment has also developed online information products to enable users to better access information that is not readily available in print format. All of these reports, information tools and data products are available online at https://www.csiro.au/victoriariver. The webpages give users access to a communications suite including fact sheets, multimedia content, FAQs, reports and links to related sites, particularly about other research in northern Australia.

Executive summary

Indigenous Peoples¹ want to participate in sustainable economic activity in northern Australia (NAILSMA, 2013a, 2013b; NAIRG, 2023). They wish to be engaged early and continuously in the development of options for future activity, rather than be consulted about already formed proposals. This Assessment examined the feasibility, economic viability, and sustainability of water and agricultural development in the catchment of the Victoria River. There were seven main activities within the Assessment, and this report provides the outcomes of the activity that investigated: Indigenous water values, rights and interests; Indigenous perspectives on natural resource development generally; and Indigenous development opportunities and goals.

The work provides a regionally specific assessment designed to help non-Indigenous decision makers understand general Indigenous valuations of water, wider connections to Country,² and the rights and interests attached to those. It highlights issues likely to be raised in future discussions with Traditional Owners – people from recognised cultural and language groups within the Victoria catchment boundaries – about cultural and natural resource management, development proposals, community planning, and Indigenous business objectives. In doing so, it provides information and foundations for further community and government planning and decision making. The report also helps Indigenous decision makers (local, regional and national) understand the specific residential, ownership, natural and cultural resource management, and development issues relevant to Traditional Owners from the Victoria catchment.

The Assessment focused on data gathering through consultations with Traditional Owners, specifically through one-on-one and small group interviews with senior members of regional language groups. It did not attempt to conduct community-based planning or to identify formal group positions on any of the matters raised. However, it does provide firm foundations for such processes to occur in the future, should definitive development proposals eventuate. The work also contributes significant additional material about Traditional Owner perspectives on agricultural development within the Victoria catchment. This is a scoping analysis, but correlation with past studies suggests that the general issues, principles and responses outlined within constitute a reliable initial guide. Summaries of the material in this report are also included in the Victoria catchment report for the entire Assessment.

The research approach for the activity was adopted partly due to the large geographic scale and scope and the short time frame of the Assessment. The Traditional Owner population is dispersed

¹ Favoured terms used to describe Australia's Indigenous Peoples vary across Australia and continue to change with time. The language of the Assessment contract and scope documents uses the term 'Indigenous', and this is also a very commonly used term in the international literature. In significant areas of the NT and in key NT legislation, the term 'Aboriginal' is preferred. Other regularly used options include 'Aboriginal and Torres Strait Islander', 'First Nations', 'First Peoples' and 'Indigenous Peoples'. All of these options highlight particular features or strengths of Australia's Indigenous Peoples. This report uses 'Indigenous' and 'Indigenous Peoples' when making general references, and 'Traditional Owners' when referring to those with widely recognised cultural connections and territorial rights to areas within the Victoria catchment.

² Country with a capital 'C' is a favoured term used by Indigenous Peoples in Australia to refer to the lands they have ancestral and kinship ties to and through those connections are Traditional Owners for. Whenever it is capitalised in this way in Assessment reporting, it refers to this set of connections.

across the Assessment area and there are significant variations in residential density and in the existence, location and stability of local Traditional Owner corporations.

The report contains seven main sections and four appendices. To frame the research, Section 1 describes some key concepts and principles as they relate to Australia's Indigenous Peoples. These include Indigenous Peoples' perspectives on engagement, 'culture', 'Country', 'values, rights and interests' and understandings of 'development'. Particularly important to note is the way that 'values, rights and interests' encompasses both formally recognised rights and a broader range of attributes important to Indigenous Peoples.

Section 2 contains key geographic information about the Victoria catchment, as well as the methods for the Indigenous activity. The key language groups in the catchment are the Gurindji and Ngarinyman language groups in the southern and central parts of the catchment, the Ngaliwurru and Nungali language groups in the Timber Creek area, and Gajerrong language groups in the far west. These language groups have lived in the area for many thousands of years, developing strong connections to important places, and significant knowledge of the wider landscape. The violence and dispossession that occurred during European colonisation had deep and ongoing effects on both individual Indigenous Peoples and the cultures and societies they were part of. Indigenous Peoples do not fully control and are unable to live permanently on many areas within the Victoria catchment because of this history.

Rights and interests in Country that are recognised remain an important focus for discussions about water and about sustainable development in the Victoria catchment. Section 2 highlights that Traditional Owners have land holdings and rights in Country across a very large area of the catchment through the Commonwealth's *Aboriginal Land Rights (Northern Territory) Act 1976* (ALRA) and determinations under the Commonwealth's *Native Title Act 1993*. These landholdings and rights in Country are complemented by protections under the *Northern Territory Aboriginal Sacred Sites Act 1989*. However, the rights and interests these arrangements confer are very different in different parts of the catchment. This is crucial to how Traditional Owners are positioned with respect to future development.

Section 3 reviews key literature, legislation and policy regarding water and Indigenous Peoples, Indigenous catchment and community planning, Indigenous Peoples and agricultural development, and the legislative and policy context for Indigenous responses to water and agricultural development. Indigenous interests in water were not recognised in law until changes in water law and policy in the early 1990s through native title and reforms to state and territory water statutes. In principle, native title to land applies similarly to water; however, common law does not recognise exclusive possession of native title rights and interests to waters. Only non-exclusive native title possession to access and use water can exist. Furthermore, the limited consultation and engagement regimes across Australia mean that Indigenous views about and knowledge of water are not able to be effectively expressed in public policy and planning.

These legal constraints are reflected in limited Indigenous roles in water planning (Jackson et al., 2023). Following a policy development process (Northern Territory Government 2017), in 2019, the Northern Territory Government introduced the Strategic Aboriginal Water Reserve (SAWR) policy under the Northern Territory *Water Act 1992*. This aimed to improve access to water allocations for Traditional Owners holding collective freehold under land rights legislation or land with an exclusive native title determination. However, significant limitations with this policy have

been identified (Jackson et al., 2023), not all Traditional Owners in the Victoria catchment have such rights, and there are no water control districts declared in the catchment to enable water plans to be developed. Consequently, the potential of the SAWR instrument remains dormant, and knowledge of formal government-led water-planning processes among Traditional Owners was found to be very low. Sections 1-3 provide background context to the specific quotes provided by Traditional Owners in Sections 4, 5 and 6.

In Section 4, participants in the Assessment provide crucial framing information about culture, Country and People. This includes comments about: the significance of ancestral and religious beliefs (often known colloquially as the Dreaming); hunting, fishing and swimming; and the importance of ownership and interconnections. Traditional Owners have obligations to past and future generations to maintain customary practices and knowledge and to care for the Country properly. They also have responsibilities to near neighbours and groups on rivers downstream. In terms of the management of Country, the role of Indigenous Knowledge in effective management and the growing significance of formal Indigenous roles in natural and cultural resource management are important issues.

Section 5 demonstrates the overall importance of water to Traditional Owners, as well as specific aspects of their responses to water development. Key water issues for Traditional Owners in the Victoria catchment include:

- ensuring there is enough water and it is of sufficient quality to maintain healthy landscapes (environmental flows) and sustain cultural resources and practices
- having access to all water sites
- maintaining adequate and good-quality supplies of water for human consumption and recreation in communities
- monitoring and reporting of water uses
- development impacts on water quality
- deriving benefits from water development and water use
- securing sufficient water reserves for current and future economic activity.

In Australia, Indigenous Peoples have historically received fewer benefits from major development projects and faced greater social, cultural, and environmental impacts. This influences their perception of development risks. The report highlights significant impacts on environmental and cultural heritage, including ongoing harm to existing sites. There's a need for better information on the heritage values of less documented traditional lands that might face future development. When considering water resource development, Traditional Owners throughout the Victoria catchment emphasised the importance of maintaining water flows in rivers and groundwater springs. However, if water development were to occur, the general trend from most favourable to least favourable forms of development is: flood harvesting into smaller offstream storages; sustainable bore and groundwater extraction; smaller instream dams in side tributaries or ancillary branches; and large instream dams in the river channels. A combination of supply options was considered advantageous, but large instream dams were consistently rejected by research participants across the catchment. This list is indicative rather than definitive, and issues such as the control Indigenous Peoples wield over development, the purposes for water use, and the benefits derived may alter individual and collective perceptions of which options are considered.

Section 6 identifies five interrelated development goals for Traditional Owners:

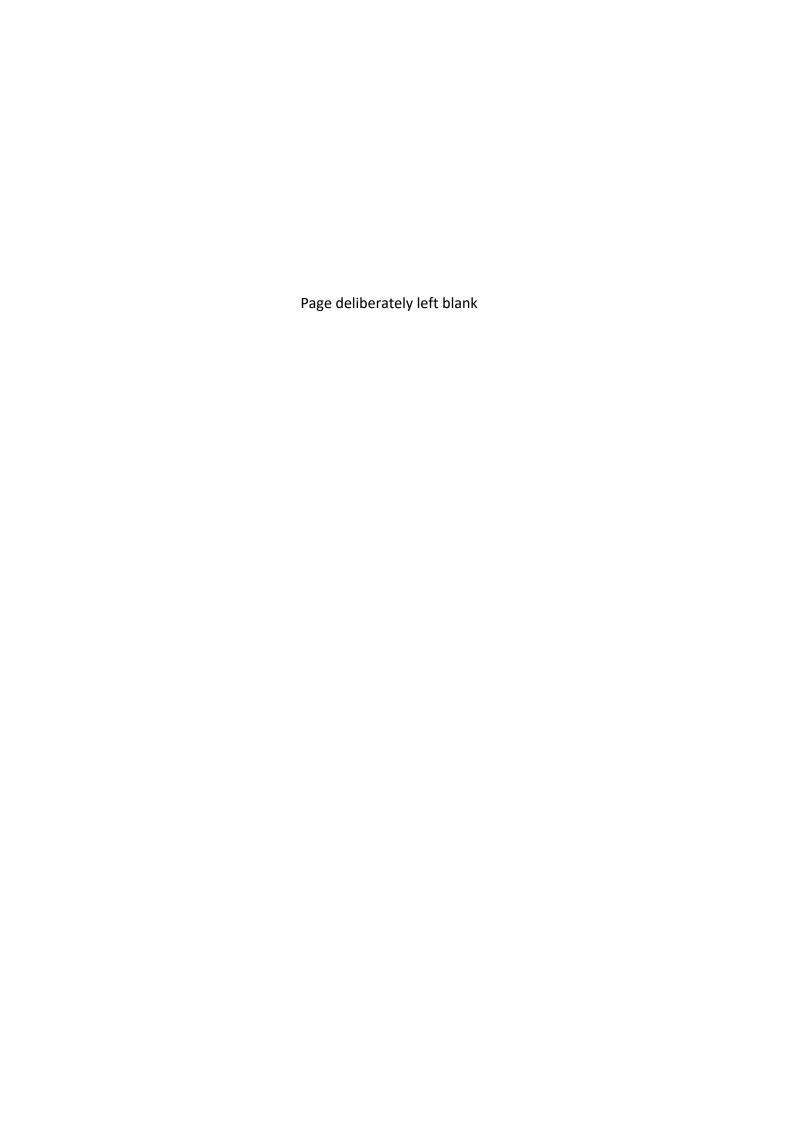
- greater recognition of Traditional Ownership of water and/or management control over water
- ensuring water supply for human consumption and recreation in communities and outstations
- improved information flow and empowerment for Indigenous decision makers
- protection and strengthening of regional and catchment governance in line with customary connections
- development of new Country-based businesses and industries.

Key issues include improving institutions for managing the Victoria catchment, aligning land ownership with water management, involving Traditional Owners in water resource and development planning, providing better water quality for communities, increasing access to information about natural resources, and supporting Traditional Owner business ideas. There are clear relationships between strengthened catchment institutions, improved recognition of Traditional Owner roles in water; community wellbeing; and development possibilities.

Effective internal Traditional Owner corporate and wider regional governance structures and processes are also important for managing external pressures for development. Participants identified this pressure in responding to the Indigenous activity of the Assessment, and also identified the Assessment itself as a manifestation of that pressure. Current circumstances highlight the need for group or community-based planning processes to help Traditional Owners prioritise desirable options for their own natural and cultural resource management and development. Such planning will also assist in further interactions and negotiations with government and developers and in strengthening catchment-wide communication and engagement.

Traditional Owners in the Victoria catchment possess leadership capabilities, valuable natural and cultural assets and represent a significant potential labour force, but collectively lack business-development skills and expertise. This in turn constrains opportunities. Partnerships can address some key gaps, but there is a need to improve the ability of business to understand and invest in Traditional Owners and their lands in the Victoria catchment. The work undertaken here has shown that Traditional Owners in the Victoria catchment strongly wish to participate in sustainable economic activity. They can also act as a substantial enabler of appropriate development but need to be engaged early and continuously in defining development pathways and options.





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Part I Main report



1 Introduction

1.1 Research context

Indigenous Peoples have consistently sought sustainable inter-generational social and economic opportunities for themselves and their communities. Mechanisms such as land rights, native title and other land restitution schemes are giving growing levels of formal recognition of their rights to the nation's natural resources, particularly in northern Australia. In the past, key Indigenous development objectives have been articulated in Indigenous-driven initiatives and documents (NAILSMA, 2012, 2013a), and Indigenous leaders have sought to have Indigenous values, rights, interests and development objectives acknowledged in past wider development initiatives and planning processes focused on northern Australia (Australian Government, 2015, 2016). As a response to these long-term trends, the Assessment includes as a key component a survey of Indigenous values, rights, interests and development objectives across the Victoria catchment.

1.2 Scope for the Victoria catchment Indigenous activity

The scope for this activity was based on previous experience from catchment-scale studies of the implications for Indigenous Peoples of water and agricultural development (Barber, 2013, 2018a; Lyons et al., 2023). The final scope for the Indigenous activity for the Victoria catchment was that it investigate and report on:

- general principles and issues for understanding Indigenous Peoples' interests in water and agricultural development
- the context for contemporary Indigenous Peoples' residence in, and connections to, the Victoria catchment
- Traditional Owners' values associated with water and riparian landscapes in the Victoria catchment
- potential cultural heritage issues associated with water and agricultural development
- Traditional Owners' needs and objectives in relation to water planning and catchment management
- Traditional Owners' needs and objectives in relation to water and agricultural development
- additional steps that may facilitate positive Traditional Owner participation in future development and lower the barriers to investor interest in such development.

The scope was used to guide the research process and the content of the current report.

At the commencement of the Assessment, the water resource development possibilities within the Victoria catchment were provisional, exploratory and geographically unspecified. All activities in the Assessment were required to be conducted simultaneously, with the results not to be released publicly until the end date of the Assessment, and the Assessment was not itself recommending particular development pathways. The Northern Land Council (NLC) and the Central Land Council (CLC) are the statutory Indigenous representative organisations for the

catchment. The Assessment was guided by CLC and NLC advice about potential participants. The method adopted by the Assessment was to engage nominated key Traditional Owners from the Victoria catchment in one-on-one and small-group interviews. Practical considerations meant that the larger residential communities of Timber Creek, Amanbidji, Yarralin, Daguragu and Kalkarindji were prioritised. This may have resulted in key data coming from areas that emerged as less favourable for development. Preliminary assessments of water storage and soil potential gave the activity some geographic focus, but these were general and provisional. As a result, it was vital to combine a 'key community' with a generalised cross-catchment approach.

The timeframe for the Assessment required a quick scoping study of Indigenous Peoples' water values, rights, and interests across the catchment. This method emphasised involving key individual research participants from pertinent groups to create a representative array of issues and viewpoints. This technique has been previously used by members of the research team (Barber, 2018a 2018b; Lyons and Barber, 2018), and the resulting data provide appropriate indicators of issues relevant to the Victoria catchment as a whole. This method also minimises the time and resource commitment needed from any individual or group participating in the project. This is a crucial consideration, when development pathway possibilities are uncertain and specific proposals within those pathways are some time away. It is also a useful approach when groups are geographically dispersed and/or when significant social fractures could lead to challenges for collective processes about potentially controversial development topics.

The 'ground-up' approach of initial individual engagement can provide foundations for future local³ within-group, inter-group, and/or catchment-based collective discussion at the end of the activity. However, it is important to note that, although the process undertaken provides foundations for wider group—based consultation and planning processes, it cannot substitute for them. The research conducted indicates that such group- and community-based planning and business-development processes will be crucial for further progress involving Indigenous Peoples and water resource or agricultural development proposals in the Victoria catchment.

The report is public and so is written in way that can address a potentially wide audience, including governments, Traditional Owners, Indigenous elders and leaders, business interests, potential developers, and the general public. Given that, the report provides a regionally specific assessment designed to help non-Indigenous decision makers understand general Indigenous valuations of water, their wider connections to Country, and their accompanying rights and interests. It highlights issues likely to be raised in future discussions with Traditional Owners about community planning, development proposals and Indigenous business aspirations. The report also helps Indigenous decision makers (local, regional and national) understand the specific residential, ownership, natural and cultural resource management, and development issues relevant to Traditional Owners from the Victoria catchment.

Australian Government attention to development in northern Australia has been welcomed by key Indigenous forums and leaders, but concerns about the pathways adopted to achieve that

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³ Local is used here and throughout to refer to individual communities, corporations, language groups, and other formations that are smaller than or at most at the scale of the Victoria catchment.

development have been expressed in the past (NAILSMA, 2012, 2013b). Indigenous Peoples have clear preferences about the processes adopted to achieve development and the types of development desired. Individual developments are judged by Indigenous Peoples on a range of criteria in addition to economic viability. These include the timing and level of consultation, roles in project leadership oversight and governance, opportunities for participation and partnership, potential social and environmental impacts, and economic development-related opportunities. Further consideration of the nature of the 'engagement' in development that can shape these outcomes is provided below.

1.3 Indigenous engagement and stakeholder consultation

Greater recognition of Indigenous Peoples and of their values, rights and interests in natural resources has led to a greater emphasis on engagement by both the public and private sectors. However, what is meant by engagement can vary considerably. Confusion about that term can significantly affect both the intended process and the likelihood of a successful outcome. There are a number of ways of conceptualising the nature of engagement processes (Hill et al., 2012), and it is important for all parties to consider what forms of engagement with Indigenous Peoples are appropriate. With respect to water and agricultural development in the Victoria catchment and elsewhere, two key issues are highlighted here: understandings of 'engagement' and of 'stakeholder consultation'.

1.3.1 Interpretations of Indigenous engagement

The list below highlights some of the different meanings people give to the term 'engagement', presented in increasing order of involvement by Indigenous Peoples:

- Consultation a frequently adopted term, often used interchangeably with 'engagement'.
 Consultation can be a formal requirement in legislation and policy, including native title. In
 Indigenous communities, consultation about the development of natural resources is expected
 to be an extended dialogue that begins very early in the process of proposal development. This
 provides time and scope for learning about and suggesting modifications to any proposal.
 However, some non-Indigenous people may see consultation as providing limited information
 for a short period about a proposal that has already been conceived and developed elsewhere
 without prior contact. The additional categories of engagement listed below rely on some level
 of consultation to be effective basic consultation is a precondition.
- Consent the power to consent implies that, following such a period of consultation, a right to refuse exists and may be exercised. In Indigenous contexts, the power to formally withhold development permission is restricted to specific tenure types, but engagement processes may nevertheless involve a combination of consultation and consent. Indigenous Peoples particularly require that consent is free, prior and informed. Obtaining such consent may require a range of additional categories of engagement beyond consultation. Some key ones are noted below.
- Participation engagement may take place through a number of forms of active participation. Participation can bring direct benefits such as knowledge enhancement, training programs, and employment initiatives, but also significant costs, as consultation processes take time, resources

and attention away from other important issues. Engagement as direct participation has been a popular model in recent natural resource development initiatives.

- Partnership the degree of acceptance and popularity of participatory engagement depends on where control rests. Partnership implies shared responsibility and authority, and for that reason is often the model of participation preferred by Indigenous Peoples. Partnership can be both a part of effective engagement about resource development and a consequence of it.
- Control the strongest form of engagement, from Indigenous Peoples' perspective, is when control over both the engagement process and the outcome rests with Indigenous Peoples themselves. Control over consultation and consent processes regarding resource development, over the operations associated with resource extraction, and over the benefits accrued from such developments, remains an important objective for Indigenous Peoples across Australia. Indigenous Peoples' control over actual resource development may be a step beyond what is commonly considered as Indigenous engagement, but at the very least it is important to consider how control over the engagement process is distributed.

It is important to be clear about what is meant by 'Indigenous engagement', when it is taken to be a necessary component of natural resource management (NRM) and natural resource development processes. The above list is not comprehensive, but it indicates how the term can be understood in different ways. Often, a number of engagement pathways exist in a given catchment or region. Without clarity about the meaning of the term, one party to any engagement may believe that the process of 'engagement' has been sufficient, while another may believe that the process has barely begun or is being undertaken on inadequate or improper foundations and cannot succeed (Hill et al., 2012). Identifying any significant difference in perspective about what constitutes appropriate engagement is an important first step in understanding what kind of agreed interaction is required.

The Assessment itself is a large, Australian Government–driven initiative grounded in historical strategic priorities developed at high levels (Australian Government, 2015, 2016). Participants were free to engage and withdraw at their discretion, but at a structural and strategic level, the Assessment is not configured as a process in which Indigenous Peoples could wield substantial amounts of control. Once the activity began, every effort was made to ensure effective consultation and free, prior and informed consent, both before and during participation. Further detail about these steps is provided in Section 2.9. Consultations with regional Traditional Owner organisations guided the engagement procedures during the Assessment, but this structural feature of the work should be acknowledged at the outset.

1.3.2 **Indigenous Peoples and stakeholder consultation**

Indigenous engagement and consultation often involves a stakeholder model. In this model, groups linked to specific industries (e.g. conservation, mining, pastoralism, irrigated agriculture, tourism) or populations (e.g. local residents, Indigenous Peoples, landowners) are equally represented in a collective process, offering everyone a 'seat at the table' (Prell et al., 2009; Reed et al., 2009). This kind of stakeholder model remains crucial to progressive planning toolkits for a wide array of applications.

The stakeholder consultation model poses ongoing issues for Indigenous Peoples. Two key challenges are highlighted, both pertinent to water and development in the Victoria catchment. The first challenge concerns how these models typically portray all stakeholders and their interests as equal. While this limits the dominance of powerful interests by giving everyone a single 'seat at the table,' it overlooks the unique pre-colonial history and subsequent colonial violence and dispossession that Indigenous Peoples have experienced. Indigenous Peoples understand their position as fundamentally different from, and prior to, all other stakeholders. From this perspective, rather than being participants, the most appropriate role is one of Traditional Owner oversight and control over a stakeholder consultation process in which government and development proponents participate as stakeholders alongside other equivalent non-Indigenous community interests. Then the final decision about how best to use stakeholder input to inform development decisions rests with Traditional Owners. Successfully undertaking stakeholder consultations requires a range of skills and capacities that may not exist in all Traditional Owner contexts, so this option may not be realisable, even if other powerful interests were to agree to it. Nevertheless the 'inverted' stakeholder model described above is useful for highlighting the conceptual, ethical, historical and political challenges posed to Indigenous Peoples by the conventional stakeholder models popular in contemporary natural resource planning.

This conceptual and ethical challenge brings up another issue: practical difficulties in Indigenous Peoples' participation. While many Indigenous Peoples are adept at engaging in stakeholder consultations, the time, resources, language, content, and tone of these discussions can hinder effective involvement. In addition, there are diverse political and linguistic boundaries across Indigenous Australia. These, combined with formal Indigenous restrictions on 'speaking for' Country that belongs to others, place particular pressures on Traditional Owner representatives involved in natural resource planning discussions across large areas (such as river catchments). The restrictions upon speaking for and about Country belonging to others can make it difficult for Traditional Owner representatives in such forums to contribute, when they have the time, knowledge and skills to do so. Such conventional stakeholder models, which are often taken as a progressive solution to planning and development challenges, pose particular difficulties for Traditional Owner participation. This has direct relevance to the future catchment management and regional development planning processes discussed later in this document.

1.4 Key principles and issues for interpreting the report content

1.4.1 Indigenous Peoples, water and development

Indigenous Peoples have lived in Australia for many thousands of years. Over time, they developed strong custodial connections to important places and significant knowledge of the wider landscape. The violence and dispossession that occurred during European colonisation had deep and ongoing effects on both individual Indigenous Peoples and the cultures and societies they were part of. In many cases, including within the Victoria catchment, these effects involved altered residence on, and consequently relationships with, traditional lands. Permanent water sites were important to pre-colonial Indigenous Peoples' habitation, and water sites were a major focus of conflict during the colonial period, as they were valuable to incoming colonisers as well as to Indigenous Peoples.

Indigenous Peoples across Australia assert and maintain important cultural, historical and emotional ties to their traditional lands. In many cases, these lands are also relied upon for a range of practical, material and economic support, so they have become a major focus for contemporary social and economic development ideas and objectives. Indigenous Peoples understand themselves as members of a socially and economically disadvantaged group, but also as upholding a long tradition of custodianship over their traditional lands and waters. This requires balancing short- to medium-term social and economic needs with long-term cultural, historical and religious responsibilities to their traditional lands and waters.

This report demonstrates the importance of water to Traditional Owners in the Victoria catchment. It is consistent with previous work with northern Australian Indigenous Peoples about water undertaken through a range of past research initiatives. These include the Roper River Water Resource Assessment, the Northern Australia Water Resource Assessment, the Northern Australia Land and Water Taskforce, the Tropical Rivers and Coastal Knowledge (TRaCK) consortium,⁵ and work by the North Australian Indigenous Land and Sea Management Alliance (NAILSMA). Water resources are usually extracted to foster wider economic and social development. Securing adequate water supplies, managing wastewater and/or protecting major assets from excess water are all potentially crucial aspects of this social and economic aspiration.

1.4.2 Country, culture and law for Indigenous Peoples

The terms 'Country', 'culture' and 'law' are crucial concepts for Indigenous Peoples when communicating in English about their values, rights and interests. With respect to 'Country', Indigenous identities are strongly connected to particular places and to the wider land and waterscapes that encompass them (Bradley, 2010; Langton, 2006; Morphy, 1991; Rose, 1996, 2004; Williams, 1986).

Indigenous Peoples often use the English term 'Country' to collectively describe those places and landscapes as an integrated whole, where particular named sites are key points in a wider regional matrix (Merlan, 1981; Myers, 1991; Strang, 1997). The use of the term 'Country' also implies a sense of ownership by people whose origins lie within that area, and a sense of responsibility for it. This has some similarities with the way citizens of Australia understand themselves as part of a 'Country' that they both collectively own and have obligations towards, including to protect it.

Indigenous Peoples understand themselves as connected to their Country in a range of ways (Merlan, 1982; Munn, 1973; Myers, 1991; Rose, 2000). First, places are part of the network of kinship relationships understood to exist between human beings, plants and animals and other features in the landscape (Rose, 2005). Alongside this kin relationship, people connect themselves to Country through physical presence in the landscape, through knowledge of its characteristics (including its seasonal and long-term changes), through practices and activities related to it such

⁴ https://apo.org.au/node/20473

⁵ http://www.nespnorthern.edu.au/track/

⁶ https://www.nailsma.org.au/

as hunting, singing and dancing, and through the relationships with other people that are formed through the Country they share (Bradley, 2010).

The term 'culture' has been used by many Indigenous Peoples and commentators to describe the knowledges, practices and relationships that bind Indigenous Peoples to one another and to Country (Merlan, 1981; Rose, 2000; Strang, 1997). 'Culture' is a widely used term with a range of meanings (Head et al., 2005), but the Indigenous usage emphasises jointly held knowledge and collectively undertaken activity. A second important aspect of Indigenous understanding of culture is shown by the use of the English word 'law' to describe these activities – 'culture' and 'law' are sometimes used interchangeably by Indigenous Peoples (Barber and Jackson, 2011). This demonstrates that 'culture' in the Indigenous sense has legal, political and moral force – it refers to the guiding principles and commitments that should govern peoples' lives, not to the rapidly changing 'popular' culture often suggested by wider English usage. Many Indigenous Peoples talk about the unchanging nature of this law and culture, and how this is different from non-Indigenous laws, which seem to constantly change.

Change in non-Indigenous law should be and is governed by underlying principles that are far more stable and in a similar way, 'unchanging' Indigenous law is a dynamic tradition that has, sometimes by force, had to adapt to new circumstances to sustain its existence. That adaptation process has been more or less successful, depending on the circumstances, but it has always relied on stable and enduring principles.

The crucial sustaining role of culture and Country, and of the laws and practices that are associated with them, places a heavy obligation on current custodians to protect and pass on as much as they can to subsequent generations. In relation to Country (both land and waters), Indigenous Peoples regard themselves simultaneously as owners, guardians, custodians, advocates, beneficiaries, relatives and dependants. When the terms 'Country', 'culture' and 'law' are used in this report, it is these broader but nevertheless specifically Indigenous meanings that are intended. Understanding these meanings is crucial to understanding Indigenous Peoples' responses to specific issues associated with traditional lands, including water and agricultural development.

1.4.3 Values, rights and interests

The report regularly uses the phrase 'values, rights and interests' in discussing Indigenous Peoples' relationships with water and with the landscape generally. This is because each of the terms in this phrase highlights a different aspect of Indigenous perspectives that those engaging with Indigenous Peoples need to consider. The working definitions below demonstrate how these terms express different aspects of Indigenous relations:

- Values refers to what people consider important, worthy and of merit and significance. Values can also refer to underlying principles or beliefs that drive estimations of importance.
- Rights can refer to what is morally or ethically correct, but in this context also refers particularly to what is legally recognised as just and valid.
- Interests refers to people having a share, involvement, concern or claim in something.

Each of these terms has strengths and weaknesses in characterising Indigenous Peoples' individual and collective stake in matters such as the development of water and land. 'Values' is in many

respects the broadest term, encompassing anything that people believe to be significant or important, as well as the underlying principles that inform that belief. 'Rights' encompasses a narrower range than values, but rights have the strongest force with respect to others (assuming the rights are recognised as such).

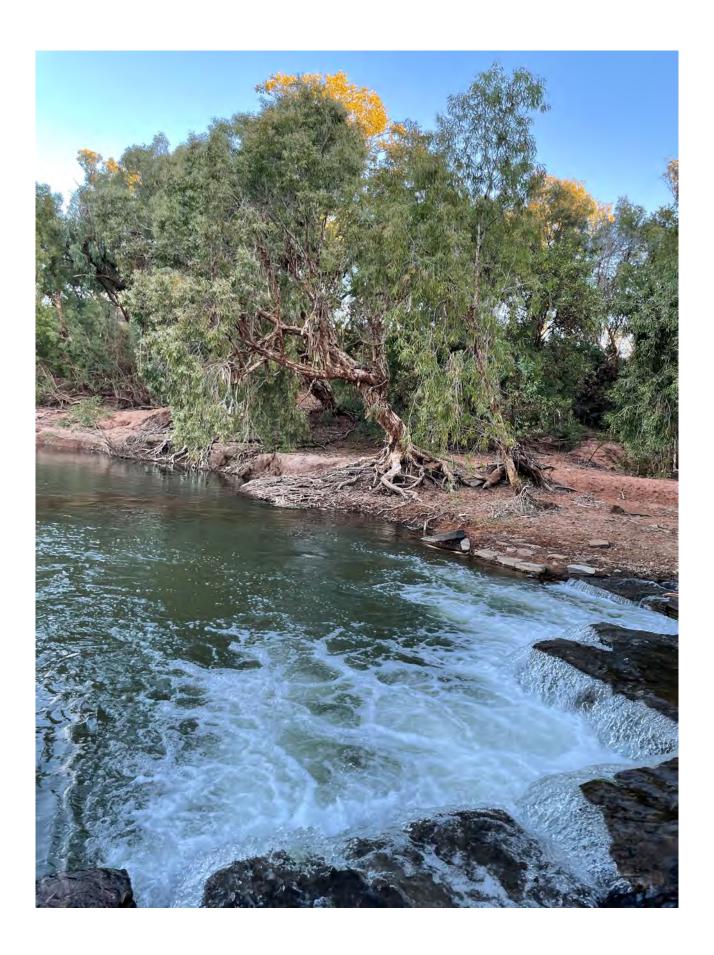
'Interests' identifies a share or stake in something, but also directly implies the involvement and interests of others in that same thing – the claim being made is not fully exclusive. Indigenous perspectives about land, water and associated resources come from a standpoint of prior ownership and sovereignty, but discussions about development may see a range of more specific values, rights and interests expressed. Decision makers and those engaging with Indigenous Peoples need to keep in mind the complementarities and distinctions between Indigenous values, rights and interests in land and water, and in the economic developments that may emerge from that resource base.

1.5 Summary: key concepts and issues

The above sections outline the scope and the research context for this activity, the scope and intent of the report, and some key principles and issues for interpreting the content that follows. The Assessment required catchment-scale research across an area that is geographically and politically complex, resulting in a process that emphasised data gathering with key individuals from relevant groups. The goal of such research is to identify issues that would inform and assist future group-based planning processes and/or scoping for developments undertaken at subcatchment scales.

Indigenous Peoples have an extended pre-colonial and colonial history of interactions with water resources, and these underpin contemporary valuations and objectives with respect to water development and water use. Indigenous concepts such as Country, culture, and law govern how people relate to one another and to their surroundings. These concepts are reference points for people in making specific responses about water and associated development. 'Values, rights and interests' is the term used in the report to express the multiple ways in which Indigenous Peoples value, share, own and are connected to water. It also expresses how some of those ways are increasingly recognised in policy and legislation. The concept of 'engagement' is discussed, both to note potential confusion between Indigenous and non-Indigenous understandings of the term and to note a sequence of potential meanings of engagement that are also applicable to wider development discussions. The limitations for Indigenous Peoples of stakeholder models are also noted, as these are a commonly favoured model of engagement.

Water-planning issues are briefly identified, as Indigenous Peoples now have specific recognition in water-planning processes, and new water-planning instruments should be a key component of any water-dependent development in the Victoria catchment. Lastly, any possible future development in the Victoria catchment will occur in the context of an increasing focus on Indigenous roles in attracting private-sector investment on Indigenous lands. The Assessment scope, regional geographic context, and the concepts, definitions, and issues identified above are important in interpreting the detailed results and analysis from the Victoria catchment presented in this report.



2 Catchment description and research methods

2.1 Introduction

The Assessment area lies in the western part of the NT adjacent to the Western Australian border and encompasses a total area of approximately 82,400 km² (Figure 2-1).

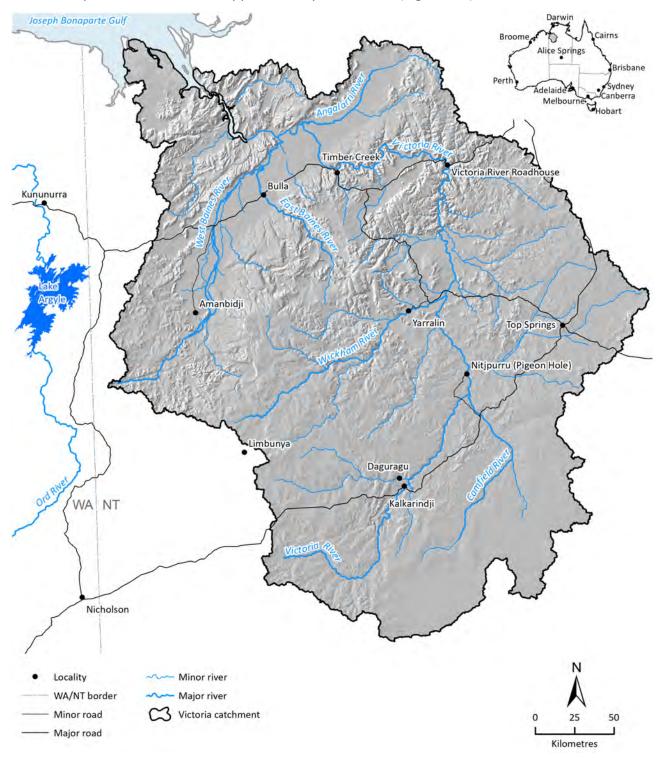


Figure 2-1 The Victoria catchment

Section 2 provides a summary of geographic and demographic information about the Victoria River catchment, focusing on Traditional Owners. The other background information provided is in part a summary of material provided by other activities of the Assessment, notably Webster et al. (2024). Section 2.9 describes the research methods, including general ethical and research requirements and how they are specifically tailored to the Victoria catchment.

2.2 History of Indigenous Peoples in the Victoria catchment

2.2.1 **Pre-colonial history**

Northern Australia contains a record of continuous Indigenous occupation and cultural adaptation that extends from at least 65,000 years ago to the present and includes some the world's earliest evidence of rock art (Clarkson et al., 2017). The northern Australian coastline is also considered to be one of the likely first points through which humans came into contact with the Australian continent. Extensive trading routes connected Indigenous Peoples in northern Australia with other Indigenous Peoples to the west, south and east, centuries before European colonisation. There is also historical evidence of trade, diplomatic and residential connections between northern Australian Indigenous Peoples and the Macassan Peoples from parts of contemporary Indonesia (Macknight, 1976; Thompson, 2005).

Pre-colonial Indigenous societies can be characterised by four primary characteristics: long residence times; detailed knowledge of ecology and landscapes to support human life; complex systems of kinship and territorial organisation; and a sophisticated set of religious beliefs, often known as Dreamings. Indigenous religious cosmologies provide a source of spiritual and emotional connection as well as guidance on identity, language, law, territorial boundaries, and economic relationships (Merlan, 1981, 1982; Rose, 2000, 2004; Strang, 1997; Williams, 1986). From Indigenous Peoples' perspective, ancestral powers are present in the landscape and waters in an ongoing way, intimately connected to people, Country and culture. Those powers must be considered in any action that takes place on Country.

Resource-rich riverine habitats were central to Indigenous Peoples' economies based on seasonally organised hunting, gathering and fishing, and rivers were also major corridors for social interaction, containing many sites of cultural importance (Barber and Jackson, 2014; McIntyre-Tamwoy et al., 2013). Like elsewhere in Australia, the Victoria catchment contains archaeological evidence of Indigenous Peoples' habitation stretching back many thousands of years, but gaps remain in the published archaeological record.

2.2.2 Colonisation

European colonisation resulted in significant levels of violence towards Indigenous Peoples, with consequent negative effects on the structure and function of existing Indigenous societies across the continent. Overt violence, armed defensiveness, and avoidance were all evident in colonial relationships as hostilities occurred as a result of competition for land and water resources, and also of colonial attitudes and cultural misunderstandings. Following a number of visits by explorers earlier in the 1800s, pastoralism commenced seriously in the Victoria catchment the 1880s, with the large and high-profile Victoria River Downs Station and the nearby Wave Hill Station both

being established in 1883 (Lewis, 2012). Pastoral occupation was a focus for conflict, as pastoral homesteads and outstations were sited close to permanent water and on the fertile plains and river valleys used by Indigenous Peoples for food and other resources (Lewis 2012; McGrath, 1987). Figure 2-2 shows some key colonial massacre sites in the Victoria catchment.

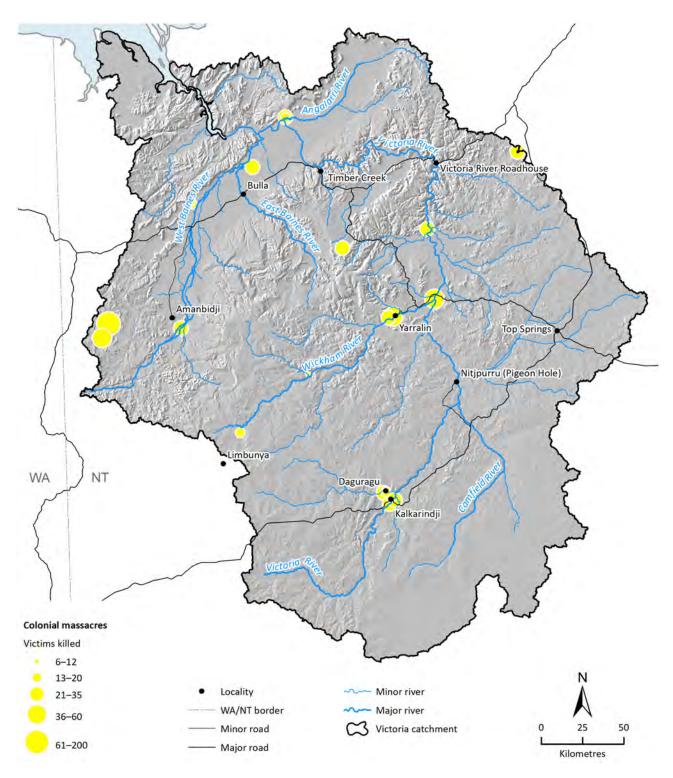


Figure 2-2 Colonial frontier massacres in the Victoria catchment

Source: Ryan et al. (2018), also see https://c21ch.newcastle.edu.au/colonialmassacres/ (accessed 15 March 2023).

Indigenous Peoples' attacks on colonial pastoral operations were made both in retaliation for past attacks by colonists and as a response to shortages of food and other resources. In response, pastoralists responded with punitive expeditions, gaining greater influence as the Indigenous guerrilla war tactics became less effective with the expansion of pastoralism into new areas (Lewis 2012). Violent encounters and massacres in the early colonial period in the Victoria catchment are receiving more attention (Lewis, 2012; Rose, 2000; Ryan et al., 2018), and there is both historical documentation and oral histories of mass killings (Figure 2-2). The police station at Timber Creek was established in 1898 as one response to the serious situation. However, some police employees were involved in the violence, and there were further massacres in the twentieth century (Lewis, 2012).

To ensure their safety, Indigenous Peoples were obliged to move to cattle stations and Christian mission settlements. Mission settlements were directly implicated in policies such as forced removals (known as the Stolen Generations) that damaged cultural and kinship connections. The stations became places for enforced dependence and colonial influence, both to control people and protect cattle (Hokari, 2011; Rose, 2000). Poor conditions on pastoral stations were ubiquitous, and at Wave Hill Station the combination of pastoral exploitation and a desire to control their own lands led to the Gurindji stockmen going on strike and walking off the station in 1966 (Hardy, 1968; Ward, 2016). The strike lasted 7 years and was a crucial part of the wider momentum for Indigenous rights and recognitions in the 1960s and early 1970s that led to land rights under the ALRA. The formation or major expansion of the townships of Kalkarindji, Daguragu and Yarralin all date from this significant period of social change (Rose, 2000; Ward, 2016).

2.3 Contemporary Indigenous residence, ownership and management

Despite the pressures entailed by colonisation, Country remained crucial to Indigenous Peoples' lives, sustaining a distinct individual and group identity as well as connections to past ancestors and future descendants. People are connected to places through a combination of genealogical, cultural, historical and residential ties. Only some of these connections are formally recognised by the Australian state.

2.3.1 Indigenous population and residence

Indigenous Peoples comprise 74.68% of the total estimated Victoria catchment population of approximately 1600 people. This includes Indigenous Peoples who are Traditional Owners – members of the recognised local ownership groups identified above in Section 2.3, as well as residents who identify as Indigenous but have their origins elsewhere. For many Traditional Owners, primary residential locations may be outside the traditional lands to which they have formal ties. These patterns of residence and dispersal reflect a combination of historical involuntary relocation, voluntary movement to seek jobs and other opportunities, and kinship and family links.

Key Indigenous communities in the Victoria catchment include Daguragu, Nitjpurru (Pigeon Hole), Yarralin, Bulla and Amanbidji. A substantial number of Traditional Owners also live at the towns of Kalkarindji and Timber Creek. These communities face a range of social and demographic

challenges, including significant unemployment, poor health and housing, water insecurity, and structural impediments to economic participation, including remoteness and social and family units under high levels of stress. These result in strong aspirations for economic and social conditions that would enable more people, particularly young people, to be employed, and for capacity to engage in formal planning processes on traditional lands.

Indigenous ownership and representation 2.3.2

Indigenous Peoples' ownership of the Victoria catchment is complex and diverse, encompassing large language groups divisible into related groups and subgroups within these regional descriptors. Ownership patterns tend to follow natural landscape features such as rivers and hills, as well as formal boundaries between ownership groups, where these been negotiated. However, in other places the edges of group territories are less distinct and/or there may be shared territory or overlapping claims. Key language group names used publicly include the Gurindji and Ngarinyman in the southern and central parts of the catchment, Ngaliwurru and Nungali in the Timber Creek area, and Miriuwung and Gajerrong in the west.

Information regarding the identification of potential owners and interest holders is provided by the formal regional Traditional Owner representative organisations in the Victoria catchment: the NLC and the CLC. The boundary between the respective jurisdictions of these two statutory authorities runs through the Victoria catchment (Figure 2-3), and they remain key initial points of contact for outside interests with respect to permits, access, and participation, partnership and ownership in development in the Victoria catchment. Local Traditional Owners in the area are also represented through a range of local-scale corporations and entities, many of which exist as a legislative requirement following recognition of Traditional Ownership, discussed in more detail below. With respect to development, the Northern Territory Aboriginal Areas Protection Authority (AAPA) was established to implement the Northern Territory Aboriginal Sacred Sites Act 1989 (NT). AAPA is an independent statutory authority that has responsibilities for recording, registering, and managing Indigenous sacred sites, and with ensuring that the appropriate people are consulted during these processes.

2.3.3 Indigenous ownership of land

In the NT jurisdiction, the ALRA provides a standardised form of inalienable collective freehold ownership across significant parts of the NT. The Act grants a standard set of strong rights that are held and managed by Aboriginal Land Trusts that represent the Traditional Owners, and 30.5% of the land tenure underlying the Victoria catchment is held under the land rights regime (Figure 2-3). However, just over half of this overall holding comprises the Judbarra National Park, which is overlain by a 99-year lease with the Northern Territory Government. The lease provides for joint management by Traditional Owners and the government and creates a very different public access regime than the stringent access permit system that operates on ALRA areas without such lease arrangements. On standard ALRA land, Traditional Owners have direct control, unimpeded access, the ability to exclude others, and consequent amenity and privacy. Conversely, Judbarra National Park is co-managed for ecological values and tourism, emphasising public access through a permit system regulated by the government, not directly by Traditional Owners and their representatives.

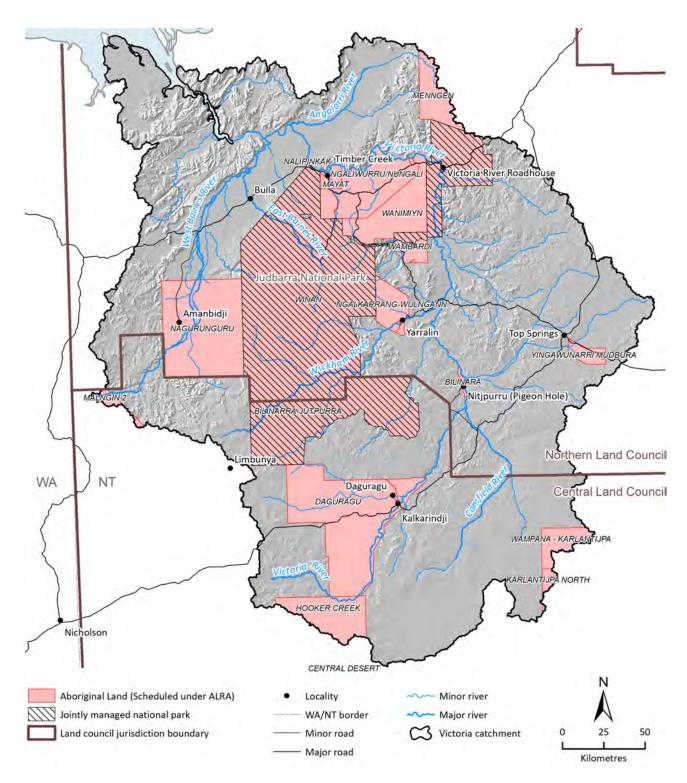


Figure 2-3 Indigenous freehold (Aboriginal Land) in the Victoria catchment as at November 2023 ALRA = Aboriginal Land Rights (Northern Territory) Act 1976 (Cth).

Data source: Digital Cadastral Database of the Northern Territory, Department of Infrastructure, Planning and Logistics, Northern Territory Government

2.3.4 Indigenous interests in land

Across the whole of Australia, the primary form of recognition of Indigenous Peoples' rights and interests is the Commonwealth's *Native Title Act 1993*. In the NT, the native title system has primarily been used to secure rights for Traditional Owners in circumstances where the ALRA was not able to be applied. This is because native title does not provide a strong standard set of rights,

but rather each native title determination outlines the specific rights that were able to be proven in court in that particular case. A determination may recognise only very limited rights, such as access for specific cultural purposes under certain conditions, or it may encompass strong rights, such as exclusive possession. This variability means that considerable caution should be used in interpreting a map showing substantial areas of determined native title, such as Figure 2-4. The majority of these areas may have constrained and specific rights to access and consultation, very different from the inalienable freehold ownership granted under the ALRA regime.

This pattern is demonstrated in the Victoria catchment. Approximately 34% of it is covered by native title determinations in which native title exists in all or part of the determination area and a further 1.6% is under current claim. But the determination areas are aligned with and named after existing pastoral lease boundaries, and the determinations themselves provide limited access rights onto those leases, which are held by others. In addition, native title holders in the NLC jurisdiction are not represented by locally based Registered Native Title Bodies Corporate (RNTBCs) often known as Prescribed Bodies Corporate (PBCs). Rather, they are all represented by a small and operationally limited shell entity based at the NLC Darwin office known as the Top End (Default PBC/CLA)⁷ Aboriginal Corporation RNTBC (Figure 2-4). As a result, native title holders in much of the Victoria catchment do not have locally distinctive representative or operational capacity in the way that the land trusts in the ALRA system do.



⁷ This is the proper full name for the PBC. CLA stands for Community Land Area (CLA).

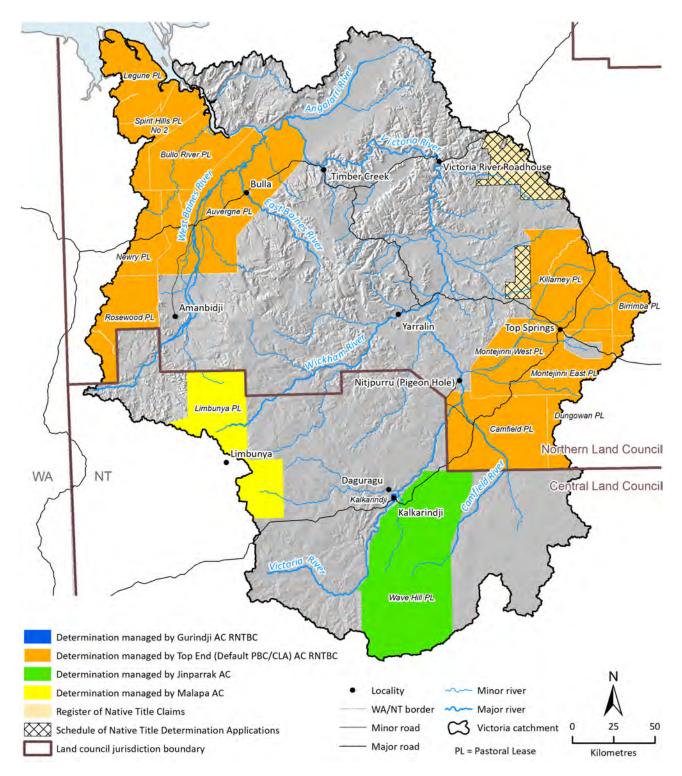


Figure 2-4 Native title claims and determinations in the Victoria catchment as at November 2023

Most native title determinations in the Victoria catchment align with pastoral boundaries and are correspondingly named after the pastoral lease. Kalkarindji is the Gurindji AC RNTBC Determination area and is confined to the town area of Kalkarindji. It is not visible on a catchment scale map. AC stands for Aboriginal Corporation.

Data source: National Native Title Tribunal

2.3.5 **Indigenous Land Use Agreements**

The Native Title Act 1993 also allows for voluntary registered agreements between native title claimants or holders and other interested parties for the use and management of land and resources. These are known as Indigenous Land Use Agreements (ILUAs). They do not reflect Indigenous tenure but do show an Indigenous interest in land where tenure is held by others. The Australian Government also oversees Indigenous Protected Areas (IPAs) which are areas that Traditional Owners have agreed to manage for biodiversity conservation. IPAs form a substantial part of the National Reserve System.

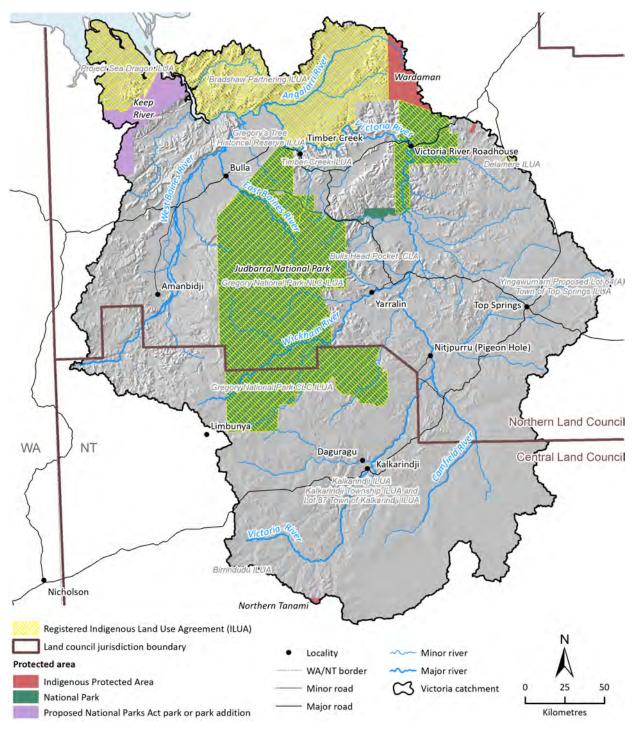


Figure 2-5 Indigenous Land Use Agreements and Indigenous Protected Areas in the Victoria catchment as at **November 2023**

Data source: National Native Title Tribunal

The specific implementation of the ALRA and native title regimes, respectively, in the Victoria catchment means that Traditional Owners in the area experience five primary states of tenure over large areas of the wider landscape beyond towns and communities. These appear below, ordered in terms of the greatest amount of legal recognition and ownership control to the least:

- 1. Indigenous collective freehold, primarily through the ALRA or other freehold mechanisms
- 2. Indigenous collective freehold overlain by a 99-year lease to government for a national park
- 3. limited, native title-based access rights for specific purposes to pastoral leases held by non-Indigenous people and corporations (often large pastoral and agricultural companies)
- 4. Crown lease for defence training purposes, with an ILUA over it
- 5. pastoral leases and other holdings held by non-Indigenous people without current native title determinations or other forms of Indigenous recognition (notably, Victoria River Downs, Humbert River, Delamere, Riveren, and Waterloo Stations).

This pattern of tenure means that the location of any proposed development is highly consequential in determining whether Traditional Owners can exercise a substantial degree of control over that development. They may have substantial control through the ALRA system, have only limited rights to consultation under native title, or have no recognised substantial Indigenousspecific tenure and property rights to bring to bear.

2.3.6 Indigenous interests in water planning

The Northern Territory Water Act 1992 regulates and manages water resources by designating a Water Control District and then developing and implementing water allocation plans that cover specific regions within those designated water control districts (see

https://depws.nt.gov.au/water/water-management/water-allocation-plans). The water-planning process is implemented where there are competing demands for water that risk compromising the sustainability of the water resource, thereby having an impact on significant environmental or cultural values, or where significant interconnection between water sources requires a systemsmanagement approach. Stakeholder consultation is focused on the plan level rather than the district level, and the plans are developed through a combination of scientific assessment and stakeholder consultation processes.

The creation of a SAWR in a water plan allows for a reserved percentage of water from the designated consumptive pool within a water allocation plan area that is exclusively accessible to eligible Indigenous Peoples to use or trade. Section 4(1) of the Water Act 1992 defines a SAWR as 'water allocated in a water allocation plan for Aboriginal economic development in respect of eligible land'. A key constraint on the SAWR as formulated is that it is calculated according to the proportion of land held either as scheduled under the ALRA or as exclusive possession native title determinations. At its maximum, the SAWR can be no more than 30% in an area with more than 30% of eligible Aboriginal land (Godden et al., 2020). Groups without such holdings will be unable to access a SAWR and will, therefore, be subject to the conditions for general water licensing and planning. Beneficial uses are described as agriculture, industry, aquaculture and cultural use (where the cultural use is considered consumptive). The potential of water planning and of the SAWR pathway to address Indigenous Peoples' interests in water is limited (Jackson et al., 2023;

Nikolakis W and Grafton R, 2022; O'Donnell et al., 2022). Currently in the Victoria catchment almost all water use occurs outside water control districts or water allocation plan areas, making the SAWR instrument inapplicable.

2.3.7 **Indigenous roles in NRM**

The designated catchment and NRM entity for the Victoria catchment is the Territory Natural Resource Management (TNRM) (https://www.territorynrm.org.au). This is an independent notfor-profit organisation that seeks the sustainable management of natural resources and catchments. Guided by the regional plans covering different areas of the NT, the TNRM funds and supports a range of activities. The Gulf Savanna Region plan (TNRM 2021–2025) is the plan that covers the Victoria catchment. There is Indigenous representation on the board of the TNRM, but the board members are not Traditional Owners from the Victoria catchment. The Victoria River District Conservation Association (VRDCA) (https://landcarent.org.au/groups/victoria-river-districtconservation-association) is a pastoral-based land management group affiliated with Landcare NT. In the Victoria catchment, Traditional Owner awareness of TNRM and VRDCA activities was found to be low.

Indigenous rangers are active in the Victoria catchment. Overseen by the Judbarra National Park joint management arrangements, Indigenous rangers are employed by the Parks and Wildlife Commission of the Northern Territory to assist with park management. South of the national park, there is one dedicated Indigenous cultural and natural resource management (ICNRM) program. The Murnkurrumurnkurru (Gurindji) Rangers is facilitated by the CLC and has an Indigenous ranger team that operates on Gurindji territory.

2.4 Wider catchment governance and demographics

The Victoria catchment lies entirely within the NT and comprises around half of the Victoria Daly Regional Council Local Government Area. The northern part of the catchment includes part of the NT electoral division of Daly, and the southern part of the catchment includes part of the NT electoral division of Gwoja. At the federal level, the catchment forms a part of the Division of Lingiari (which encompasses most of the NT, excluding the Division of Solomon, which covers an area near Darwin).

The population data provided below is summarised from the Technical Report from the agriculture and socio-economics activity of the Assessment (Webster et al., 2024). Further detail can be found in that document. The population density of the Victoria catchment is extremely low, at one person per 51.4 km². This is approximately one-eighth of the population density of the NT and 1/165th of the population density of Australia as a whole. The catchment contains no significant urban areas (i.e. areas with a population of >10,000 people), but there are several small towns and communities, including Timber Creek (the furthest north in the catchment), Yarralin, Daguragu and Kalkarindji (the furthest south). The largest of these settlements is Kalkarindji (population 383, as at the 2021 Census), which also services and supports the nearby population at Daguragu. Katherine (population 6303 in 2016) is the closest NT urban service centre and is located northeast of the catchment, approximately 290 km from Timber Creek. Kununurra (population 4500) in WA (Figure 2-1) is closer to significant parts of the catchment than Katherine. The nearest major

city and population centre is the NT capital of Darwin (the population of the Greater Darwin area was 136,828 in 2016), approximately 600 km from Timber Creek.

The demographic profile of the catchment, based on data from the 2021, 2016, 2011 and 2006 censuses, is shown in Table 2-1.8 The catchment population is predominantly younger (median age 25 in 2021) than is typical in the NT (mean age 33) and Australia as a whole (mean age 38). However, the trend from 2011 to 2016 and to 2021 suggests that the median age is increasing a little. The population in the catchment contains a much larger proportion of Indigenous Peoples (close to 75%) than that of the NT (26.3%) and the country overall (3.2%). The median household incomes in the catchment were considerably below the mean for the NT and the country as a whole in 2021. Furthermore, the proportion of households on low incomes (less than \$650/week) was far higher, and the proportion on high incomes (more than \$3000/week) was far lower, than the proportion for the NT and the country as a whole (Table 2-1). Census data from remote Indigenous communities like those of the Victoria catchment can be less reliable than that collected in other circumstances, but it does show key demographic features and how they compare with the wider population.

Table 2-1 Major demographic indicators for the Victoria catchment

INDICATOR	UNIT	VICTORIA RIVER SA2 REGION	VICTORIA CATCHMENT†	NORTHERN TERRITORY	AUSTRALIA
Total population 2021	People	2609	1600	232,605	25,422,788
Total population 2016	People	2489	1527	228,833	23,401,891
Total population 2011	People	2516	1544	211,946	21,507,720
Total population 2006	People	2762	1693	192,899	19,855,287
% change in population, from 2016 to 2021	%	4.82	4.80	1.65	8.64
% change in population, from 2011 to 2021	%	3.70	3.62	9.75	18.20
% change in population, from 2006 to 2021	%	-5.54	-5.49	20.58	28.04
Indigenous population 2021, as % of total	%	74.59	74.68	26.27	3.20
Indigenous population 2016, as % of total	%	73.40	73.53	25.45	2.77
Indigenous population 2011, as % of total	%	75.99	76.06	26.79	2.55
Indigenous population 2006, as % of total	%	76.36	76.46	27.82	2.29
Male population 2021, as % of total	%	50.36	50.35	50.53	49.35
Male population 2016, as % of total	%	50.70	50.68	51.81	49.34
Male population 2011, as % of total	%	49.28	49.29	51.67	49.44
Male population 2006, as % of total	%	50.58	50.57	51.52	49.35
Population density per 1000 ha 2021	People	0.2	0.2	1.7	33.1

⁸ The Australian Bureau of Statistics (ABS) reports statistics by defined statistical geographic regions that are classified into a nested hierarchy of statistical areas. The Victoria River ABS Statistical Area Level 2 (SA2) region (702051068) broadly encompasses the Victoria catchment, extending beyond the catchment boundary in most directions. Small portions of the catchment reach into two other SA2 regions: Tanami (702011053) and Barkly (702021055). Thus, data are shown for: (i) Victoria River SA2 region – as the single region which most closely approximates the catchment boundary and (ii) Victoria catchment - estimated data based on combining appropriate portions of three ABS regions to best match the actual spatial coverage of the catchment (60.7% of Victoria River SA2 region plus small portions (less than 1%) of Tanami and Barkly SA2 regions.

INDICATOR	UNIT	VICTORIA RIVER SA2 REGION	VICTORIA CATCHMENT†	NORTHERN TERRITORY	AUSTRALIA
Median age 2021	Years	25	25	33	38
Change in median age, from 2016 to 2021	Years	No change	No change	1	No change
Change in median age, from 2011 to 2021	Years	1	1	2	1
Median weekly household income 2021	\$	\$1095	\$1097	\$2061	\$1746
Change in median weekly household income, from 2016 to 2021	%	0.18	0.34	3.93	21.42
% of households with weekly household income less than \$650/week	%	27.20	27.12	12.40	16.50
% of households with weekly household income more than \$3000/week	%	8.70	8.67	28.80	24.30
Mean number of people per household in 2021	People	4.1	4.1	2.8	2.5
Change in mean number of people per household, from 2016 to 2021	People	0.3	0.3	-0.1	-0.1

^{*}Weighted averages of scores for SA2 regions falling wholly or partially within the catchment boundary. Source: ABS (2006), ABS (2011), ABS (2016) and ABS (2021) census data

The Victoria catchment falls within the first decile for each of the Socio-Economic Indexes for Areas (SEIFA) metrics (Table 2-2), indicating that the catchment scores below 90% of the rest of the country on each measure. All three SA2 regions that fall within the catchment boundary (Victoria River, Tanami and Barkly) individually rank within the first decile for all four measures.

Table 2-2 Socio-Economic Indexes for Areas (SEIFA) scores of relative socio-economic advantage for the Victoria catchment

Scores are relativised to a national mean of 1000, with higher scores indicating greater advantage.

INDICATOR	VICTORIA RIVER SA2 REGION		VICTORIA CATCHMENT†		NORTHERN TERRITORY	
	SEIFA score‡	(Decile)	SEIFA score‡	(Decile)	SEIFA score‡	(Mean decile)
§ Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD)	501	(1)	501	(1)	904	(5)
* Index of Relative Socio-Economic Disadvantage (IRSD)	678	(1)	678	(1)	945	(5)
Index of Economic Resources (IER)	557	(1)	557	(1)	887	(4)
Index of Education and Occupation (IEO)	819	(1)	819	(1)	976	(5)

[†]Weighted averages of scores for SA2 regions falling wholly or partially within the catchment boundary.

Source: ABS (2023)

2.5 Land use

The Victoria catchment covers an area of approximately 82,400 km²: 62% of this is Crown land leased for pastoralism, and a further 35% comprises conservation and natural environments land (Figure 2-6). The Bradshaw Field Training Area is 7% of this conservation and natural environments land, but is a defence force facility owned by the Australian Government with a southern boundary following the Victoria River. A further 2.1% of the catchment is classified as water and wetlands, most of which is coastal and tidal waters, including reaches in the Angalarri River.

[§]Based on both the incidence of advantage and disadvantage.

 $^{^{*}}$ Based purely on indicators of disadvantage.

Intensive agriculture and cropping make up a very small portion of the catchment: dryland and irrigated agriculture and intensive animal production together comprise just 0.02% of the land area. The other intensive localised land uses are transport, communications, services, utilities and urban infrastructure (0.22%).

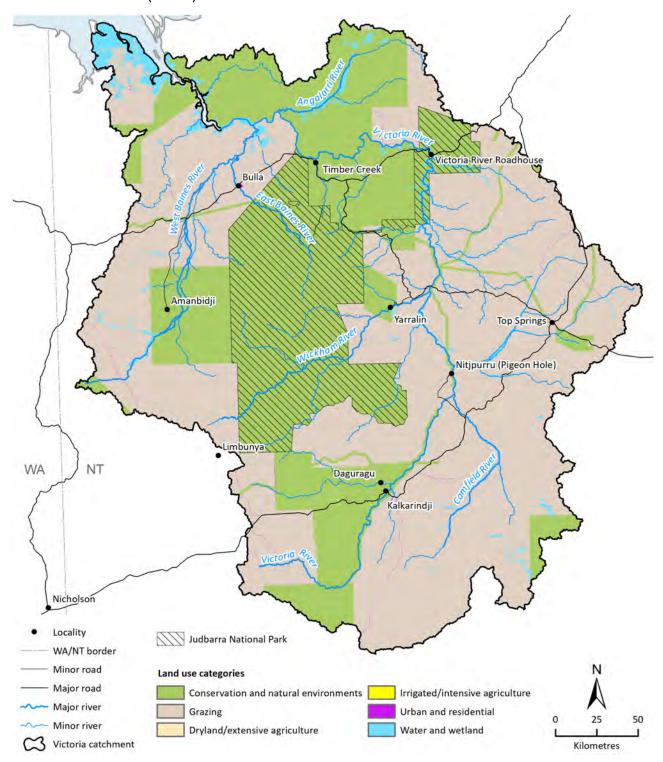


Figure 2-6 Land use classification for the Victoria catchment

Source: Northern Territory Land Use Mapping Project 2016–2022, Department of Environment, Parks and Water Security, Northern Territory $\textbf{Government}, \texttt{https://www.ntlis.nt.gov.au/metadata/export_data?type=html\&metadata_id=ECEEDF0AD4826221E0532144CD9BC059}$

2.6 Water

Most communities in the Victoria catchment source their water from groundwater for the purposes of stock, domestic and community water supplies. The water quality of the drinking water is a significant issue for some communities. The annual volume of groundwater extracted for community water supplies is only small (<0.2 GL/year), so a groundwater licence is not required (Figure 2-7). A groundwater licence is also not needed for watering stock. Surface water is also used in some applications – water is occasionally pumped from dams or streams for use in agriculture on a small scale. There are no major water transmission pipelines in the catchment and only a couple of small dams.

Almost all water use in the catchment occurs outside water control districts or water allocation plan areas. The Victoria catchment mostly occurs to the west of the Daly Roper Beetaloo Water Control District, though a small portion of the district occupies the eastern margin of the catchment to the north and south of Top Springs (Figure 2-7). The only water allocation plan currently applicable to the Victoria catchment is the Georgina Wiso Water Allocation Plan, which coincides with a small portion of the eastern margin of the catchment to the west of Top Springs (Figure 2-7). Licensed surface water entitlements are sparse across the Victoria catchment. Four surface water licences have been granted for a combination of use for agriculture and aquaculture, all occurring in the northern parts of the catchment (Figure 2-7). There are currently no licensed groundwater entitlements in the Victoria catchment. The Montejinni Limestone hosts the largest and most productive regional-scale groundwater system in the catchment.



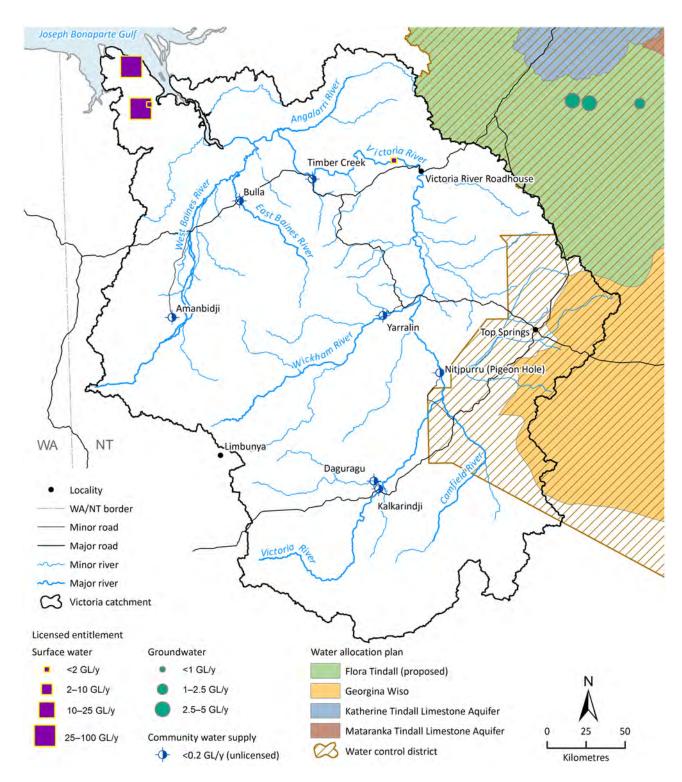


Figure 2-7 Location, type and volume of annual licensed surface water and groundwater entitlements

Data source: Water allocation plan areas and the Daly Roper Beetaloo Water Control District sourced from the Department of Environment, Parks and Water Security (2024)

2.7 Economic activity

The Victoria catchment provides a significant proportion of the revenue for livestock for the NT (\$110.2 million of \$605.1 million overall for the NT in 2020–21) but has no cropping of economic significance (Webster et al., 2024). The constraints of variable climate and low fertility soils have shaped the types of beef production systems currently in the Victoria catchment, which target live exports to South-East Asia through Darwin Port. A study in 2014 (Cowley 2014) described how the Victoria River District (VRD) is characterised by large property sizes, with the majority of those surveyed being between 2000 and 4000 km². A large percentage of properties (56%) are company owned, as distinct from having an Owner-Manager (Figure 2-8). More detail on economic activity can be found in Webster et al. (2024).

Often, these company-owned, or 'corporate', properties are run within a system of other properties that allow transfer of cattle between properties and sharing of staff and resources (Cowley, 2014). Corporate properties are typically the larger properties in the VRD, containing the most cattle. Therefore, the overall proportion of production from the corporate properties is much larger than 56%. The Victoria River Research Station, also known as Kidman Springs Research Station, commenced operations in 1960 and is the NT's principal pastoral research station, carrying out research on cattle productivity and sustainability of the pastoral landscape.



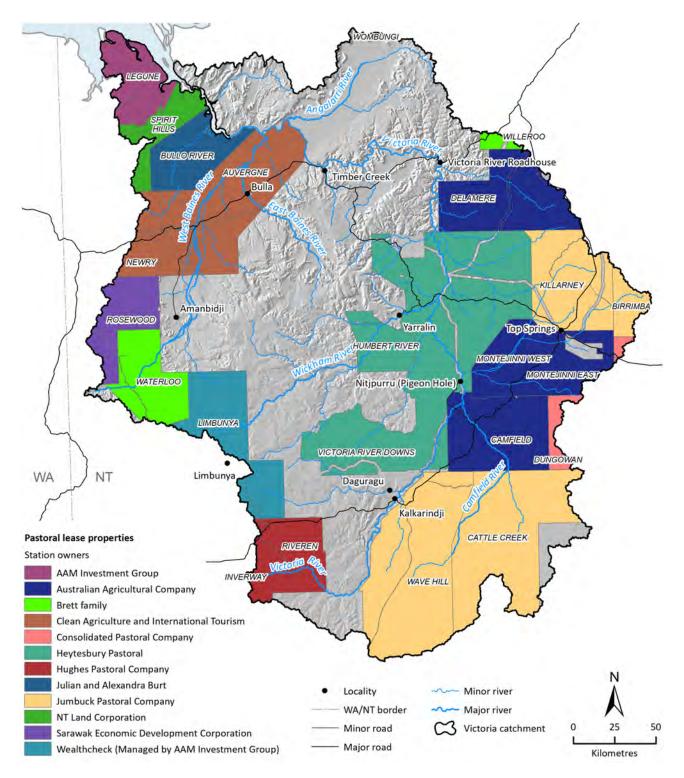


Figure 2-8 Pastoral lease boundaries and leaseholders in the Victoria catchment as at March 2024

Pastoral lease boundaries data source: Digital Cadastral Database of the Northern Territory, Department of Infrastructure, Planning and Logistics, Northern Territory Government

Pastoral lease ownership data source: indicative data only, compiled from corporate websites from the respective pastoral lessees, cross-referenced with online media sources of pastoral property sales.

2.7.1 **Aquaculture**

There is currently no active aquaculture in the Victoria catchment. An application for prawn aquaculture farming by Project Sea Dragon Pty Ltd was lodged with the Northern Territory Government in 2015 (Cobcroft et al., 2020). Significant milestones were completed in 2020, progressing the approval process and initial construction contracts were awarded. The project is currently awaiting secure funding. A comprehensive situational analysis of the aquaculture industry in northern Australia (Cobcroft et al., 2020) identified key challenges, opportunities and emerging sectors. Offshore, the Victoria River drains into one of the most valuable fisheries in the country, the Northern Prawn Fishery

2.7.2 **Tourism**

The Victoria catchment has a relatively low volume of tourist visitation, due largely to its remoteness, sparse population and lack of tourism development (Tourism NT, 2023). Most tourism visits are from self-drive tourists along the Victoria Highway (part of National Highway 1), which traverses the northern part of the catchment. Timber Creek is the gateway to Judbarra National Park, the second-largest national park in the NT (Tourism NT, 2024a). Fishing in the Victoria River and its major tributaries is an important attraction. Fossicking is promoted as a popular activity near Kalkarindji, a locality known for an abundance of geodes on the ground (NT Government, 2016).

A pre-COVID-19 profile for the Victoria Daly region Local Government Area indicates that 20 tourism businesses were operating in this region at the time of their 2019 survey (Tourism Research Australia, 2019). Of these 20 businesses, 12 were 'non-employing', 4 had fewer than 5 employees, and 3 had more than 20 employees (Tourism Research Australia, 2019). Tourism has the potential to enable economic development within Indigenous communities, because Indigenous tourism enterprises, most likely microbusinesses, often have some competitive advantages (Fuller et al., 2005). Successful tourism developments in regional and very remote areas such as the Victoria catchment are highly likely to depend on establishing private and public sector partnerships, ensuring effective engagement and careful planning with Traditional Owners and regional stakeholders, and building interregional network connectivity and support (Greiner, 2010; Lundberg and Fredman, 2012).

As for much of northern Australia, high summer temperatures and humidity, and wet-season rains, mean that most tourists visit during the drier, cooler months between May and October (Tourism NT, 2024b). Given the important effect of climate on tourism seasonality, demand and travel patterns in northern Australia (Hadwen et al., 2011; Kulendran and Dwyer, 2010), the increased temperatures and occurrence of extreme weather-related events (e.g. droughts, floods, severe fires and cyclones) associated with climate change are likely to be significant threats to the industry in the future. These will likely negatively affect not just tourist numbers, but the length and quality of the tourist season, tourism infrastructure (including roads), and the appeal of the landscape and its changing biodiversity (Amelung and Nicholls, 2014; Prideaux, 2013).



2.7.3 Mining

Mining includes extraction of minerals (including coal), petroleum and gas, and quarrying. No mine or petroleum projects are currently operating in the Victoria catchment. Nonetheless, approximately 61% of the Victoria catchment is covered by either mineral or petroleum exploration licences (Figure 2-9), with areas without exploration licences predominantly being inside Judbarra National Park and the Bradshaw Field Training Area (Figure 2-9). Minerals identified as occurring within the Victoria catchment are lead and copper (in the centre of the catchment), manganese (in the east) and zinc (in the far north-west).

Water is central to minerals and petroleum industries. Mining uses water in a variety of ways, including during the transport of materials, chemical or physical processing, cooling, disposing of and storing waste materials, washing, and dust suppression. Water consumption at mining operations is highly variable due to variation in mining methods, ore types, ore grades, and processing treatments, and differences in definitions of water usage. The mineral resources found in the Victoria catchment are not those that have higher water demands for mining. Mining enterprises usually develop their own water supplies, and these are often regulated separately to the water entitlement system (Prosser et al., 2011).

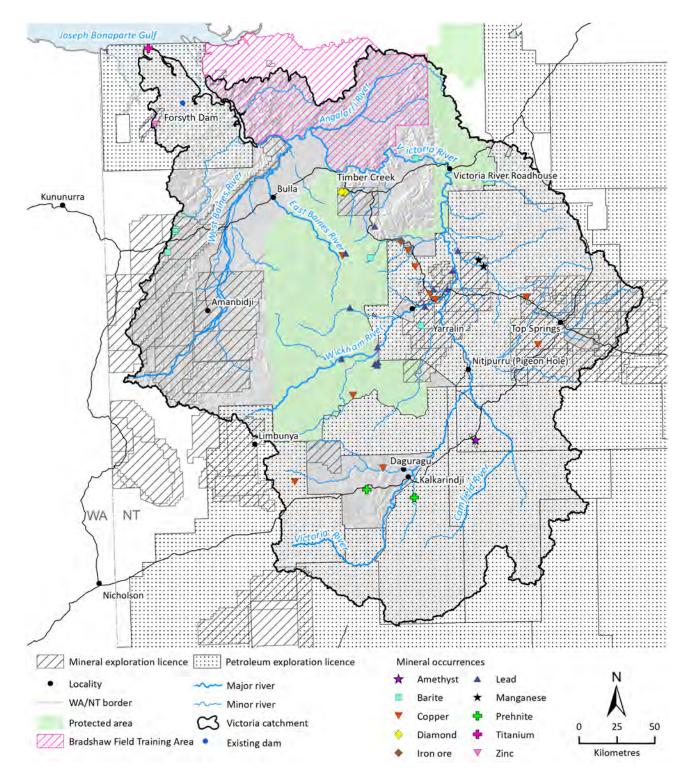


Figure 2-9 Main commodity mineral occurrences and exploration tenements in the Victoria catchment

Source: Mineral Occurrence Database (MODAT), Northern Territory Geological Survey Database (MODAT, 2024)

2.8 Current infrastructure

2.8.1 **Transport**

Transport connectivity is of crucial importance in a very remote area like the Victoria catchment. It is serviced by two significant roads: the Victoria and Buntine highways (Figure 2-10). The Victoria Highway is sealed and well trafficked by both tourist and commercial vehicles. Flooding causes road closures during the wet season. The Buntine Highway leaves the Victoria Highway just outside the north-east of the catchment and travels through Top Springs and Kalkarindji (sealed) before crossing into WA (unsealed), where it intersects with Duncan Road, which continues to Halls Creek. The Buntine Highway carries more commercial traffic than the Victoria Highway, servicing the cattle industry and the towns and Indigenous communities along the route. The Buchanan Highway provides access to what was once Australia's largest cattle station, Victoria River Downs Station, and other stations in the central and east of the catchment, as well as the community of Yarralin. It is also a popular tourist route through the scenic Jasper Gorge. Apart from these highways, the Victoria catchment is serviced by a sparse network of mainly unsealed roads, all subject to flooding and wet seasonal closures. Fuel and groceries can be purchased from smaller stores at locations such as Timber Creek, Kalkarindji and Yarralin. The Victoria River Roadhouse and Top Springs Roadhouse also supply fuel.



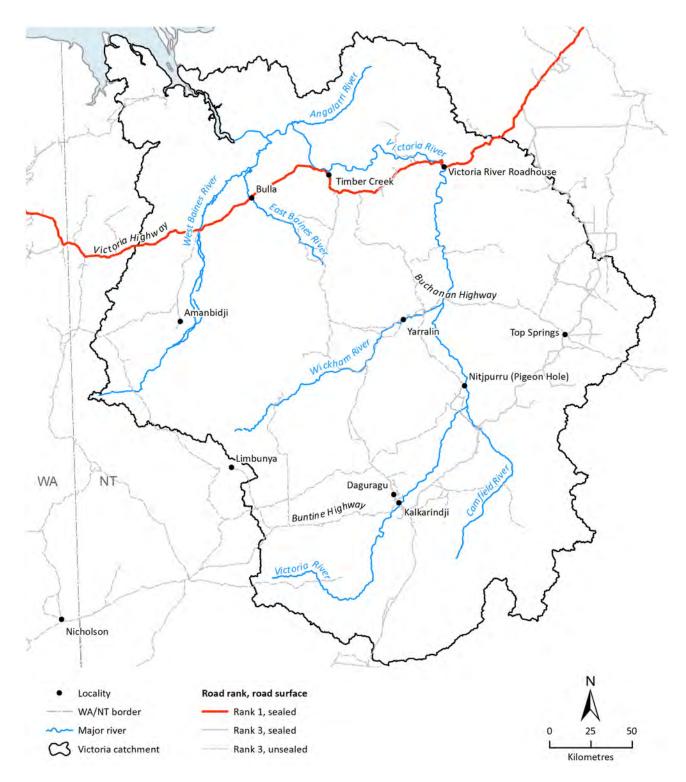


Figure 2-10 Road rankings and conditions for the Victoria catchment

Rank 1 = well-maintained highways or other major roads, usually sealed; Rank 2 = secondary 'state' roads; Rank 3 = minor routes, usually unsealed local roads. The 'Rank 1' road is the Victoria Highway, which runs from Katherine (in the east) to Kununurra (in WA).

Data source: CSIRO

2.8.2 **Community services**

For electricity, the two largest communities of Kalkarindji and Timber Creek rely on hybrid systems powered by diesel generators supplemented with solar. Distribution lines link nearby smaller settlements to these off-grid sources of electricity. There are six government schools servicing the catchment communities, but no hospitals. There are three health centres (Kalkarindji, Timber Creek and Yarralin) and health clinics in four communities (Amanbidji, Bulla, Lingara and Nitjpurru (Pigeon Hole). There are police stations at Timber Creek, Yarralin, and Kalkarindji. Local government is provided by the Victoria Daly Regional Council.

2.9 Assessment research methods

The above description of the Victoria catchment, combined with the scope, provides the context for the approach taken in this activity. The following section outlines the research methods for the Victoria catchment, considering research ethics, the literature, and fieldwork in turn. As noted in the Introduction, the Assessment itself is an Australian Government-driven initiative grounded in strategic priorities developed at high levels, and as such was not configured as a process in which Indigenous Peoples could wield substantial amounts of control. However, processes of consultation and of free, prior and informed consent supported engagement with individuals from a range of groups. The goals of the activity were met in a manner that tried to protect Indigenous Peoples' interests as much as practicable.

2.9.1 **Ethical and research permission**

Prior to the commencement of field research, the research aims, scope and proposed methods were reviewed for approval by the CSIRO Social Science Human Research Ethics Committee (CSSHREC approval number 011/22). The committee is made up of Indigenous and non-Indigenous people and of researchers and community members. Key to the CSSHREC review and approval process were the information sheet and the free, prior and informed consent form (see Appendix A and Appendix B). Key aspects of the participant consent process were outlined to CSSHREC, including the following:

- participation in the activity was entirely voluntary, with participants free to withdraw from the process at any time up until publication
- participation would be on an individual basis, with comments appearing in the public report deattributed to the group level to provide a combination of anonymity and geographic and cultural specificity
- participation would be focused on senior people with experience of communicating beyond the group
- no information of a personally or culturally restricted nature would be sought or recorded
- individual participants would make the final decisions about the content they provided and how they were to be identified
- participants would retain all intellectual property in any material they provided
- individual participants would not be paid to participate.

In order to achieve free, prior and informed consent, potential participants were provided with clear explanations of the research process and outcomes through a combination of telephone, face-to-face and written contact before they made any decision to participate. Wherever practicable, research participants were afforded an extended period (of 1 month or more) after first contact by research staff to allow time for further consideration and consultation before making a decision to participate. After this process had taken place, verbal consent was to be sought and then confirmed through the participant signing the consent form. CSSHREC approval for the research was provided on this basis, and these conditions were met in subsequent research. Following the interview, participants' comments emerging from the analysis as potentially significant were extracted and were then confirmed with participants as accurate and correct or requiring withdrawal or amendment. This confirmation occurred either face to face or in writing. Once the final comments were confirmed as suitable for publication, participants signed a second consent form that superseded the first signed before the interview. Only confirmed comments from participants who had signed the second consent form were used in the analysis as validated data. The final list of participants was 19 people.

The interviews were conducted in English. This reflects the focus of the Assessment on communication with the wider public and, therefore, on participants who have played that role in the past and would be expected to do so in the future. As expected, English was not necessarily the first or primary language of a number of the participants identified. The interview questions were designed to be understood by those with limited English. The research team ensured during due diligence prior to interview that all of those interviewed had sufficient English to understand the questions and to provide basic conversational answers. The quotes from participants are edited for punctuation, but otherwise reflect their capacities and constraints in English. Demonstrating these capacities and constraints form an important part of the research dataset. The language of this technical report aligns with the language level of other reports in the overall Assessment, and it is understood that not all participants will be able to read it easily. Communication of the research findings to participants relies on a range of mediums, including shorter communication products, group presentations, and face-to-face discussions.

The overall Assessment included an oversight and steering committee involving stakeholder representatives from government, development agencies, agricultural interests and community interests. The Indigenous activity undertook research under research permits issued by the respective land councils. The permit application included specific information about: how localscale Traditional Owner participation would be invited; how the risks and benefits of participation would be managed; the process and the timing of engagement for data gathering; how data would be checked and confirmed; the Indigenous activity fact sheet, consent form, and interview guides. The research team provided further briefings and presentations to internal representative councils and committees as directed by the NLC and CLC. As far as practicable, participants and land councils were given the chance to review and comment on the draft report prior to finalisation and publication. COVID-19 travel restrictions were complied with throughout the work.

Previous experience by the research team highlighted the research value of qualitative data from small-scale face-to-face interviews, and there was solid guidance from the land councils and initial local contacts that local-level consultation would be a priority. Yet the geographic scale and rapid timing of the Assessment required that any such data would necessarily be a subsample of the overall Traditional Owner population of the Victoria catchment. It was also desirable to retain a

degree of consistency of approach with previous assessments. The research attempted to balance these requirements with established community consultation protocols and associated group governance. The Assessment also provided learning opportunities for individual group members regarding the issues raised in the research.

2.9.2 Fieldwork data gathering

Participants were informed at the outset that the results of the Assessment were to be made public, and that information subject to cultural or other restrictions would not be sought or recorded. The semi-structured discussions and interviews were guided by a series of questions based on understanding derived from issues and topics identified in other water studies undertaken by the research team and/or evident in the research and policy literature. Historical and ethnographic literature in regional and national databases was also investigated and key information incorporated into the analysis. The questions used common everyday language and were designed to act as open-ended prompts for further discussion, rather than generate simple 'yes' or 'no' responses. This reflects the scope of the Indigenous activity of the Assessment to identify a representative range of water and development issues arising for Traditional Owner decision makers in the Victoria catchment, rather than to attempt to survey attitudes across the Indigenous population of the entire Victoria catchment. The questions were:

- What places or areas of the catchment/s are most significant for you? (Additional: Why? What makes them significant?)
- How do you stay in touch with those places/areas?
- Who manages and looks after them?
- Why is water important?
- How have people used groundwater and river water on your Country in the recent past?
- What are the most important ways to use groundwater and river water in this catchment in the future?
- What are the best ways to get and store that water?
- What is good and bad about current decision making about using water?
- Who should be involved in making future decisions about water use?
- What needs to change to get that involvement?
- What plans do you (and/or your group or organisation) have for business development that will need water?
- What else is needed to make those business-development plans happen?

In the interviews, the research team would occasionally prompt further discussion of the issues by referring to general categories of response and local examples. Formal data gathering and data revision with local participants was undertaken during 2023 and 2024, with all participants being given the opportunity to interact with the research team at least three times during that period, and usually four or more times. Traditional Owners and residents of Nitjpurru (Pigeon Hole) elected not to participate, as they experienced severe flood impacts during this period.

The final number of individuals interviewed from any group depended on the group size and individual availability for interview, but a sufficient number of people (19) participated from across the Victoria catchment communities to enable a representative spectrum of views from across the catchment.

2.9.3 Data analysis and revision

The data from the literature and interviews were iteratively analysed using NVivo qualitative analytical software. The initial themes and categories for analysis were derived from previous assessments of a similar nature (Barber, 2013, 2018a) and were then adapted and modified to suit the circumstances. Key information and research participant comments from the interviews were identified, extracted and then formally checked with the respective research participants to ensure that they were an accurate reflection of their views and that they could be used in further analysis and public presentation. The resulting information and analysis were combined into a draft research report that provided a basis for review by research participants, Indigenous stakeholders, peer scientists, and the Australian Government client prior to finalisation.



3 Literature, legislation and policy

3.1 Introduction

Chapter 3 reviews the relevant literature in four key areas:

- water and Indigenous Peoples including links with international initiatives
- Indigenous community-based planning
- Indigenous Peoples and agricultural development
- legislative and policy context for Indigenous Peoples' responses to water and agricultural development.

This literature review establishes the broader academic and institutional context of Indigenous water rights, values and development interests, and directly and indirectly informs the analysis of the data derived from the Indigenous activity component of the Assessment in the following chapters.

3.2 Water and Indigenous Peoples

The recent and sustained focus on the relationship between water and Indigenous Peoples in Australia has emerged alongside (and has engaged in mutually beneficial ways with) an international focus on water and Indigenous Peoples. Indigenous Peoples have long advocated for the importance of their perspectives, and this advocacy has been able to attract greater international attention over the past 25 years. In 2000, the United Nations Educational, Scientific and Cultural Organization (UNESCO) organised an inaugural session on 'Water and Indigenous People' at the Second World Water Forum. A subsequent session at the 2003 Third World Water Forum in Kyoto, Japan, culminated in the Indigenous Peoples' Kyoto Water Declaration (World Water Council, 2003). Indigenous Peoples from a range of countries around the world have retained a profile at subsequent events, and a statement generated in Australia was presented to the 2009 Water Forum in Istanbul (NAILSMA and UNU-IAS TKI, 2008). Further statements have been generated specifically for the Australian context (Kimberley Land Council, 2018; NAILSMA, 2008). These have been crucial documents for refining Indigenous Peoples' thinking about water issues and for briefing wider non-Indigenous communities about Indigenous perspectives and priorities. In 2023, the Indigenous Peoples pre-summit UN Water Conference meeting resulted in the New York Indigenous Peoples' Declaration (United Nations, 2023).

Reflecting both Indigenous advocacy and interest from government policymakers, the amount of research and literature describing how Indigenous Peoples relate to water is growing. The published research shows how Indigenous Australian societies give meaning to water and examines the place of water in their formalised systems of knowledge and social institutions (Babidge et al., 2023; Barber, 2005, 2018b; Barber and Jackson, 2014; Jackson, 2004, 2006). There is a northern focus to this literature, encompassing tropical savanna, the wet tropics, and the Torres Strait (Barber and Jackson, 2011, 2012; Laborde and Jackson, 2022; Lyons et al., 2023;

Maclean and The Bana Yarralji Bubu Inc., 2015; Pelizzon et al., 2021; Poelina et al., 2019, 2023; Strang 1997; Toussaint et al., 2005; Wissing and Webb, 2023; Yu, 1999). Further work has also been conducted in the Murray-Darling Basin (Maclean et al., 2012; Moggridge and Thompson, 2021; Weir, 2009).

This literature demonstrates how water is an important feature of the Indigenous cultural landscape, with symbolic dimensions that attach individuals and groups to water bodies. Indigenous Peoples and groups conceptualise water sources and rivers, as with the land, as having been derived from the actions of mythic beings during the Dreaming, when the world attained its present shape and the sociocultural institutions governing water use were formed (Barber, 2005; Barber and Jackson, 2011;). Stories relating to water are represented in myth, painting, film and dance, as well as in the local customary practices, beliefs and ideas associated with water (Morphy, 1991; Strang, 1997; Toussaint et al., 2005). In the Fitzroy River in WA, the ever-present mythic beings in the form of rainbow serpents or snakes (variously referred to as kaput, unggud, yungurrungu) represent a common theme modified by local interpretation and practice (Toussaint et al., 2005).

Many studies also reveal the material and economic use of water according to Indigenous custom. Water is of economic significance to Indigenous Peoples. It provides the foundations for the Indigenous harvest and distribution of wildlife in general and of aquatic life in particular (Finn and Jackson, 2011). Indigenous Peoples sometimes changed the local land- and waterscapes to improve their harvest, as river flows were manipulated with the construction of fish traps, weirs and small dams in numerous Australian river systems (Barber and Jackson, 2012; Tan, 1997). Some research about Indigenous Peoples and water has pointed to the connections between Indigenous landscape constructions and valuations and those held by non-Indigenous groups and individuals (Barber, 2005; Goodall, 2002; Strang, 1997, 2009). Such studies highlight the importance of understanding how cultural meanings and environmental perspectives form. The research demonstrates how human-water interdependence is common to all peoples, and this can provide some important insights into collaborative approaches to the management of water and waterdependent development (Douglas et al., 2019; Jackson et al., 2012).

Indigenous Peoples' understandings of the significance of water incorporate its value (i) as a resource in its own right, and (ii) in the resources for physical sustenance it provides. These are the values that are most familiar to non-Indigenous people. But the significance of water for Indigenous Peoples also encompasses mythology, identity and social connection, and the interrelationships between these different valuations. All these values are evident in the findings from the activity presented in Sections 4 to 6.

3.3 Indigenous catchment, community and business planning

The information provided by the Indigenous activity of the Assessment will enable future development-focused planning and a greater degree of focus on the likely development options. While such processes will require additional investment, community-based planning processes have been variously supported by Non-Government Organisations (NGOs), land councils, Indigenous development agencies, state and territory representatives, and researchers. There is now considerable expertise in conducting community-based development planning in Australian Indigenous contexts and an associated history of successful outcomes (Agius et al., 2007; Dale,

1992; Davies et al., 2013; Davies and Young, 1996; Hemming et al., 2017; Howitt, 2010; Smyth, 2008). Planning is increasingly encompassing multiple-tenure regimes and/or business-development opportunities and can encompass a wide array of social and economic aspirations in addition to seeking protections for natural and cultural resource assets (Altman and Kerins, 2012; Hemming et al., 2017; Jackson et al., 2015; NAILSMA, 2013b). Indigenous development objectives and Indigenous development partnerships are best progressed through locally specific, group and community-based planning and prioritisation processes that are nested in a system of regional coordination (Costanza-Van Den Belt et al., 2022; Dale, 1992; Lyons and Barber, 2018). Such planning and coordination can greatly increase the success of business development and of the resulting opportunities for Indigenous employment, retention and resettlement (Barber, 2018c; Dale et al., 2014). Sustainable futures require government and developer attention to Indigenous rights, the development of good relationships with Indigenous Peoples, and support for good governance that enables both autonomy and responsibility within communities (Barber, 2018c; Costanza-Van Den Belt et al., 2022; Howitt, 2010).

3.4 Indigenous Peoples and agricultural development

The agricultural development context of the Assessment makes it necessary to identify literature and policy activity about the topic as it relates to Indigenous Peoples. Indigenous Peoples have an extended prehistory of landscape manipulation using fire that has been termed 'firestick farming' (Bliege Bird et al., 2008), and there is also evidence in the Victoria catchment for the manipulation and use of water at a landscape scale (Barber and Jackson, 2012). During the colonial era, many Indigenous Peoples were displaced by agricultural and pastoral activity, particularly in the fertile and valuable lands of southern and eastern Australia. However, in northern Australia, Indigenous Peoples formed an important labour force for colonial pastoralism (McGrath, 1987; Merlan, 1978), and they remain involved in the industry to this day.

In contrast to the large impact of pastoralism, the small amount of intense agriculture in northern and central Australia, where Indigenous land ownership is concentrated, has meant that Indigenous involvement in that sector has been limited. The growing amount of rural land passing back to some form of Indigenous control (Hill et al., 2013), combined with improved technology, may alter this situation. The chances of Indigenous participation in agricultural development in the future appear to be increasing. One early analysis of the prospects for agricultural development on Indigenous lands identified a range of necessary requirements for further progress (Alexandra and Stanley, 2007). These included sustained funding, capacity building and mentoring, robust community and commercial structures, sound business and commercial models, and governance improvements.

The limited involvement of Indigenous Peoples in agriculture also means that there are no case studies of development in the literature and little documented policy to guide development. Nevertheless, some key features of the current landscape can be noted here: the policy landscape, agricultural initiatives by the Indigenous Land Corporation (now known as the Indigenous Land and Sea Corporation (ILSC), the horticultural 'broker' role played by Centrefarm in central Australia, and the comprehensive Indigenous agreement associated with the Ord River Irrigation Area.

Policy settings relating to Indigenous Peoples and agricultural development appear to be sparse and intermittent. In the 1990s, the National Aboriginal and Torres Strait Islander Rural Industry

Strategy (ATSIC and DPIE, 1997) aimed to support Indigenous landholders in developing rural industries. However, minimal implementation and auditing appears to have occurred after the development of the policy. As a result, it has not been extensively used, although it may have had some indirect influence on local and regional project planning (Alexandra and Stanley, 2007). There have also been Commonwealth policy initiatives in relation to forestry and aquaculture aligned with broader economic, business and employment development initiatives associated with the commitment of the Council of Australian Governments to Closing the Gap. However, the general level of policy activity specific to Indigenous agricultural development appears to be low (or alternatively not well documented).

The low level of wider policy activity contrasts with the activities of the ILSC. The ILSC is an Australian Government statutory corporation that assists Indigenous Peoples in acquiring and managing land (ILC, 2013). It has strongly prioritised the development of Indigenous agricultural business in recent years and directly oversees a range of land-based Indigenous enterprises. Historically, ILSC strategy has aimed to bring Indigenous land into economic production to create employment and development benefits, and to regionally integrate these businesses, wherever possible, to increase productivity and profitability (ILC, 2011). The ILSC produces state-based strategies and collaborates with state jurisdictions. For example, the Indigenous Landholder Service (ILS), a joint venture between the ILSC and the Western Australian Department of Agriculture and Food (now the Department of Primary Industries and Regional Development), worked for close to two decades to support Indigenous pastoral and agricultural producers. The program engaged with around 5000 people on 70 Indigenous-held properties to build capacity and economic benefits through technical support, governance development and businessmanagement mentoring. In June 2016, the ILS was transformed into the Aboriginal Business Development project. The ILSC plays an important ongoing role in the transfer of legal tenure to Indigenous control in circumstances where legal pathways recognising Traditional Ownership are not possible, and in assisting Indigenous owners generally to maximise economic returns from their lands. It may also play a role in broader discussions of future agricultural development in the Victoria catchment.

Centrefarm is an Indigenous-owned company that specialises in brokering the economic development of Indigenous lands in central Australia, specifically with respect to horticulture (Davies et al., 2010). It emerged from an Aboriginal Horticulture Strategy developed by the CLC and the ILSC in 1999. This strategy identified strong Indigenous landowner interest, suitable crops, potential funding sources, and joint venture and long-term lease arrangements. Centrefarm acts as a horticultural broker to reduce transaction costs for investors. It facilitates agreements with Indigenous owners, secures planning approvals, organises water licences, and attracts commercial growers, but its services have expanded to include all aspects of remote Indigenous economic development (see http://www.centrefarm.com). However, the logistics of remote areas and skills shortages in local labour have limited the attractiveness to investors of Centrefarm activity, and Indigenous employment aspirations have not been fully realised (Maru and Davies, 2011). The model used by the ILSC requires a greater investment by local Indigenous groups in any enterprise. In the northern section of the NT, Centrefarm trades as TopEnd Farm, and has had significant involvement in the Aboriginal Land Economic Development Agency (ALEDA), a joint initiative from the respective land councils. Three pilot phase projects are being advanced through the Joint Land Council Economic Development Strategy.

The highest-profile agreement relating to Indigenous involvement in and benefits from a specific agricultural initiative is that for the Ord River Irrigation Area in the Kimberley, WA (Jackson and Tan, 2013). The original Ord River Irrigation Scheme was initially developed without considering Indigenous rights, needs and interests; it involved flooding key sites and dispossessing Indigenous Peoples of their lands. An ILUA that attempted to resolve issues created by the scheme was negotiated between the state of WA and the Miriuwung Gajerrong People. It aimed to recognise Indigenous claims to land, mitigate the impacts of existing developments, and adopt a partnership approach for future stages of the Ord development (Jackson and Barber, 2013).

The overall agreement involved compensation for compulsory land acquisition and reparations for past impacts, but also establishment of a new Indigenous corporation to manage the benefits received under the agreement, operate an economic development unit, and hold and acquire land (farm lots, commercial/industrial land and residential land) (Jackson and Barber, 2013). The agreement required any developer of Ord Stage 2 to negotiate a benefits package with the Indigenous corporation. Notably, the Ord Final Agreement did not include rights to water for commercial purposes for Traditional Owners, and it has been the subject of criticism by prominent Indigenous leaders associated with the development (Anderson, 2013). Nevertheless, a further doubling in size of the Ord River Irrigation Area (Stage 3) is in development.

3.5 Legislative and policy context for Indigenous responses to water and agricultural development

There is an extensive legislative, regulatory and policy context that relates to Indigenous values, rights and interests in water and irrigation development. This context also shapes Indigenous development objectives, enabling some possibilities and constraining others. A previously published technical report (Macintosh et al., 2018) provides a detailed description of the legislative, regulatory and policy context specific to Indigenous issues and of the general legal and regulatory environment that governed water-related development in northern Australia at that time. The following short summary, drawn from a report by Barber (2018a), provides some basic contextual information to enable understanding of the field data provided by Indigenous research participants that appears in subsequent chapters of this report.

In terms of making laws, the Australian Constitution provides for government powers and responsibilities to be shared between federal, state and territory governments. This includes powers to make laws with respect to Indigenous Peoples and their interests, and in each jurisdiction, governments have elected to do this. In Australia, international law does not directly affect legal relations between domestic actors unless it becomes incorporated into domestic law by an Act of Parliament. The following sections briefly summarise Indigenous interests in land and water as they are represented in domestic law and as they have emerged in the field data from Indigenous participants in this activity.

3.5.1 Indigenous interests in land

A legal challenge by Indigenous Peoples to secure rights in land in 1971 (Milirrpum vs Nabalco Pty Ltd) was unsuccessful, but it led to the Australian Parliament creating the ALRA. The development of the ALRA was influential in subsequent debates and initiatives regarding Indigenous land

interests - Indigenous Peoples elsewhere in Australia remain aware of the extent and power of the NT example. The Act provides a system for granting substantial rights (fee simple estates) over areas of land in the NT to trusts representing Traditional Owners. The trusts have considerable control, similar to freehold title held by property owners elsewhere in Australia, but in this instance the property is collectively held and unable to be sold. Other state jurisdictions also produced Acts providing for Indigenous collective ownership over small areas, often the sites of former Christian missions and designated Aboriginal reserves.

Although conferring powerful rights, the ALRA and other state land rights legislation did not represent formal recognition in Australian law of traditional Indigenous ownership – of native title. That recognition came from the High Court of Australia's 1992 decision in Mabo v Queensland (No. 2). That decision and subsequent legislation — the Commonwealth's Native Title Act 1993 (Native Title Act) – created a system for recognising Indigenous native title across Australia. The native title system provides formal recognition for traditional claimants, but it does not automatically generate consistent property rights like those coming from the ALRA. Rather, it recognises a 'bundle of rights' defined by the laws and customs of the successful claimants, inasmuch as they can be demonstrated to the Court. As a result, it can enable recognition of rights that are foreign to Anglo-Australian property law. However, it requires an extensive burden of legal proof regarding the connection and continuity through time of Indigenous laws and customs. Where that proof cannot be demonstrated, such laws and customs remain unrecognised in Australian law. By its nature, the system creates significant variations across time and space (i) in the ability to recognise potential native title holders, and (ii) in the rights they can secure. This means all parties affected by determinations of native title must pay close attention to the detail of each determination.

Securing native title can be a long process, and there are a series of stages to negotiate. These include deciding on whether a claim can be launched, identifying a suitable list of claimants, registering the claim, managing potentially competing claims, securing a determination from the Court, registering that determination, and creating a PBC to manage the rights secured.

The native title system also contains provisions for managing 'acts' (defined in the Native Title Act as activities, land use changes) that wholly or partly affect the continued existence, enjoyment or exercise of native title rights and interests of native title holders. One key aspect of these provisions is a system of compensation. The type of act and when it took place is very important in determining whether compensation is possible and the size and distribution of it. The system also supports the identification and management of future acts that may affect native title. Depending on the circumstances, future acts can be rendered invalid, or trigger a requirement for compensation, if they adversely affect native title. For water and irrigation development, these acts may include special legislation to facilitate development, issuing property interests or approvals, and undertaking public works in support of development. The Native Title Act specifies processes for identifying whether such acts are valid, the procedures they require, and whether compensation is payable.

ILUAs are binding agreements between native title parties and others about the use of land and waters where native title is claimed or determined. They can be made at any time during the native title process and may encompass a wide array of issues, including: how native title coexists with other interests; development agreements; compensation for adverse effects; cultural

heritage site conservation; and benefit sharing. ILUAs can represent a significant tool for managing native title interests in proactive and productive ways.

3.5.2 Indigenous interests in water

Under Australian law, the rights to the use, flow and control of water rest with state and territory governments. State and territory water legislation specifies processes for water-planning and approval regimes, as well as for constructing water infrastructure such as dams and pipes. Indigenous Peoples' interests in water were largely ignored until the recognition of native title, as native title can apply to water as well as land. Non-exclusive rights to use and access waters have been secured through this avenue, but past native title cases have determined that exclusive possession of water will not be recognised in Australian law. Exclusive possession of land through native title can provide the practical ability to restrict access to water, but it is not exclusive possession of the water. As with land, continuity in laws and customs in relation to water must be demonstrated for rights to be recognised.

A second means for recognising Indigenous interests in water is through water laws and statutes. The NT is a signatory to the National Water Initiative (NWI) (agreed in 2004 by the Council of Australian Governments), which emphasises Indigenous access to water, Indigenous representation in water planning, and the incorporation of social, spiritual and customary objectives in water plans. The NWI also highlights the existence of native title rights to water. There are variations across the jurisdictions in the degree to which their statutes reflect the NWI. In the NT, 'cultural factors' can be considered in current water-planning frameworks, alongside water allocations for Indigenous economic development that are now possible through the SAWR that became a statute in 2019. The Australian Government has committed to renewing the NWI.

3.5.3 Government approvals

General government planning, environmental and heritage approval processes provide a means for Indigenous participation in development decisions, and for recognising and protecting Indigenous interests in development. Regulatory processes focused on the specific protection of Indigenous interests mostly relate to the protection of places and objects of Indigenous heritage significance. This encompasses legislation at both federal and state levels, and both cultural and environmental heritage legislation. Water and irrigation developments will need to comply with relevant federal, state and territory environmental and cultural heritage requirements.



4 Culture, people and Country

4.1 Introduction

Section 4 of this report uses data from the Assessment participants to highlight key principles valued by Traditional Owners of the Victoria catchment. The comments are organised into three interrelated themes that are frequently emphasised as significant by Indigenous Peoples themselves: culture, people and Country. The comments progress in sequence, providing foundations for more-specific remarks about water, environmental change, and development impacts and objectives in subsequent sections. In discussing culture, the section highlights the importance of underlying cosmology and belief (known in the Victoria catchment as the Dreaming), activities, and the knowledge that flows from those. These key components of culture influence people, shown here by comments about identity and kinship and about obligations and responsibilities. In turn, these discussions of culture and people inform understandings of Country - ownership and access, and how Country is looked after. Supported by Sections 1, 2 and 3, Section 4 provides principles and foundations for understanding Section 5, which focuses directly on water and natural resource development.

4.2 Culture

When speaking English, Indigenous Peoples often describe their 'culture' as a crucial attribute. Culture is a complex term with a range of meanings, even in technical usage in the social sciences. When talking about culture, Indigenous Peoples frequently emphasise interrelated principles, beliefs and activities – stories, laws, songs, dances, kin relationships, hunting and fishing practices, and so on. Of these, three main elements of culture will be highlighted here: religious beliefs about land- and waterscapes (usually referred to in English by Traditional Owners from the Victoria catchment as the Dreaming), activities on Country, and Indigenous Knowledge. These cultural components are crucial to sustaining their rights and responsibilities to water sources (Rose, 2002).

4.2.1 The Dreaming

Among Indigenous Peoples, the rivers and all water sources are known to have been created by ancestral beings. These can be regarded as living rainbow serpents or water snakes. Water, in Indigenous Peoples' belief systems, is living. It creates and sustains life in both the spiritual and physical sense. People and places across the landscape are related through knowledge and practices, including ceremony, stories, laws and protocols that can be enacted with and through water. Participants in the Assessment spoke of the importance of the Dreaming, of the songlines and connections along the river, and of the water that is an essential part of those connections:

For Dreaming, like Dreaming sites, fishing along that Victoria River, we fish and hunt. A lot of art on the catchment along Victoria River. We stay in touch with those places. We go back there for

hunting, fishing, turtle. We got water in those stories and songlines. Drinking and fishing have got a storyline, a songline. (Ngaliwurru Elder 1)

The Victoria River catchment area, that's significant. It's got all the artefacts, Dreaming sites, songlines. So that's why it's significant. (Ngaliwurru Elder 2)

Water has a story of its own, goes back in time. It's for each clan to say, because everybody have their different totem. I can't speak for another clan, another totem. But I can say one thing for sure, we are all Indigenous Peoples and our law comes from the water too. (Gurindji Person 2)

That's one of them old nature things, still working. Old people, nature, working, that Dreamtime thing. He don't want you to touch him or make damage to Country, otherwise water will be taken away. Old people been dying out, but there's the spirit still around. (Ngarinyman Elder 1)

There are heaps of sacred sites between the Vic River area, the Vic River roadhouse area. So you've got the women. There is a blue tongue Dreaming there. Across the hill I've been told there is a billabong there that's actually a baby Dreaming. Yeah, it's like a sacred billabong. Most of the plants and animals that live near the water are in stories and song as well. I think the main ones would be the water python, barra – there's a story about the barra – catfish, stingray and shark, which is the area that I was telling you about before that was sacred. (Ngaliwurru Person 1)

Some places are secret. We can't talk about them. The knowledge and ceremonies are private. (Ngarinyman Elder 4)

In speaking about the cultural and spiritual significance of water, some participants specifically emphasised the importance of snakes and serpents in sustaining water supplies. They also highlighted that these snakes are a basis for connections between people and Country across wide areas.

There's a few Dreaming spots around here. That most significant one – the NLC's got that – the blowhole. That's one that relates to everybody, that sea serpent, and that's related to water. If we didn't have water, it wouldn't survive. (Senior Ngarinyman Person 2)

That one thing, that main water, they are always there. We got that rainbow snake there all the time. That serpent there, he's the only one got water. When he move, it's because there's no spring water there, there be no water here. He got to take the water with him. Rainbow snake is water himself see? Right around Australia, people say the same, same story. (Ngarinyman Elder 1)

A further aspect of cultural life and cultural sites emphasised by participants was the separation between genders. This encompasses the roles and locations that are important to men and women, respectively, and the matters that must be kept segregated based on gender. This gender separation is an example of the way that Dreaming encodes wider laws, protocols, and codes of conduct.

These other people don't go on that sacred site. Sometimes the ladies go in there. It is secret for women. Other places, it's only for men. Men go on their own site. Women got their own culture and men got their own culture. (Gurindji Elder 1)

That water all got blackfella way story. And lady way story too. But you know lady, lady will tell you. I'm only talking for this the public one. Even my secret tell I can't tell you. (Ngarinyman Elder 1)

There is a sacred site along this river which is for men. We usually go down, we plan it for young boys to become men, like a meet-up place. It's near the water and usually there is water there. (Ngaliwurru Person 2)

In this area down here, some areas are sacred – men's areas. There's woman area up there. There's more gathering areas than anything else. (Senior Ngarinyman Person 3)

Sites restricted by gender rules usually comprise a relatively small part of the overall land- and waterscape. Yet they are highly significant in cultural continuity and in regulating key aspects of Indigenous Peoples' social life. They are supported by, and support, the overall significance of the Dreaming in how people understand themselves and their world. The connection between the Dreaming powers and people mean that the landscape is understood as alive, as responsive to changes in human life. This means that people must be aware of their conduct on Country and be concerned about events and activities undertaken by others that may occur there.

4.2.2 Presence on Country – hunting, fishing and swimming

Indigenous Peoples emphasise the practice of their culture as fundamental to their relationship to their ancestral lands and waters, and to their collective cultural and physical survival. Cultural practices that are communicated orally and through performance include access and restriction protocols, ceremony, dance, welcome to Country, and the protocols of harvesting and sharing of resources. Participants noted how their kinship relations connected them with certain places and totems, to associations with resources at certain times of the year, and to inter-generational knowledge sharing. Hunting and fishing are commonly cited across Australia as cultural activities that bring people together on Country, and this is also true in the Victoria catchment. A further emphasis on swimming was a notable feature of the data gathered here in comparison with previous assessments. Hunting, fishing and swimming activities are seasonal, and there are diverse places these activities can occur, including rivers, springs and billabongs. Participants talked about their favourite places that they visit and value. The significance of being physically present and of hunting, fishing and swimming to peoples' ongoing connection to Country is clearly evident:

When you go there, to fish or hunt, you get that connection to Country. I drive out there, or we go and walk down there together. Some places you can walk. Some are a bit difficult to get access to. But that is the beauty of it. We just go there to relax, get away from the hustle and bustle of life, being next to the river. I gotta visit at least once a year to those spots. I might go back there every 3 months or 6 months. (Senior Ngarinyman Person 2)

People, they need water, go out fishing, hunting. People go out there to the river, fish and stay there all day, go swimming there. Take them kids out and swim. (Ngarinyman Elder 3)

We go out there, camping and fishing and hunting, we get barramundis, catfish, sometimes we get swordfish. It depends on what the river does in the wet season. (Western Ngarinyman Person 1)

The river. That's where we go hunting and swimming and things. We have sacred sites. (Ngarinyman Elder 6)

We go fishing along there, plus along that river you've got heaps of areas that is good hunting spots – billabongs and that. We catch long-necked turtle, magpie geese, duck. (Ngarinyman Person 1)

Well, everybody go down to the river to swim and for fishing. They share water – like as drinking water, swimming, fishing, and some days they are there like camping. (Gurindji Person 3)

That river was really important, because everybody fished there, everybody hunted there, get water from there too. And swim. And it's every day. It was, everyday living, everyone depended on the river. Even now, even though we live in settlement, we live in community, everybody go fishing every day. Because the shop's not always open. People, when they run out of food, will go fishing to feed their family. (Gurindji Person 2)

Our kids go down to the river, or us mob too we go down and have a swim. I think it is really good. Water give you shade, big trees. (Ngarinyman Elder 5)

We still use water sometimes from river, like we go out hunting and fishing. (Ngarinyman Elder 4) I go camping there. Before, I used to a lot of time. We eat kangaroo, sugar bat, and turkeys. Goanna and turtle. (Ngarinyman Elder 2)

A lot of feed inside there – you got crab meat, you got mussels, you know, and there's catfish, there's barramundi, rock cod, turtles, everything. (Ngarinyman Elder 1)

I go back there for fishing, hunting and take my kids for learning and telling our children about their Country. Where their grandfathers come from and their mother's Country, their ties to the land and what Dreamtime, you know, is on that catchment area. School holidays, fishing, weekend, anytime we go there. (Ngaliwurru Elder 2)

The above comments show how being present on Country sustains cultural connections. Awareness of culture, Country, and water resources helps identify the best places to visit. However, comments from other participants highlighted constraints on visitation, including distances travelled, cultural access protocols recognising Traditional Ownership, awareness of dangers such as crocodiles, limitations due to the land being controlled by others, and the lack of vehicles needed to access remote places.

The education of young people can occur through hunting and fishing, for example the teaching of language names for fish while concurrently engaging in recreational and economic activity. Past research suggests that alterations to the flow regime of other rivers under future irrigated agricultural development scenarios could have a substantial impact on populations of aquatic species that contribute to the Indigenous customary economy (Jackson et al., 2011). Indigenous hunting and gathering is vital to cultural and economic life, and so changes to species availability, or to the underlying habitat that supports those species, are of considerable significance.

4.2.3 Indigenous Knowledge

Indigenous Knowledge is directly informed by the combination of the ancestral law encoded in the Dreaming, and the everyday engagement with the land- and waterscape represented here by hunting and fishing activity. Indigenous Knowledge and culture is vital to Indigenous land and water management systems and subsistence resource-use strategies (Barber, 2005; Woodward et al., 2012). Indigenous Knowledge arises through long occupation and observations (Beaupark et

al., 2023; McKemey et al., 2020) and is often passed inter-generationally while interacting with Country. One key aspect of knowledge emerging from the interviews is where and how to access water:

When they used to walk, they used to know where the water is. They know where to go. The main water, the river now. Because them other places, when it's dry, we have to leave and follow the water. Only some springs, but we have to find water, to camp where the water is. And they been move on from there to the next waterhole. (Ngarinyman Elder 3)

At Lingara there was no water. We had to dig the sand. The old people used to show us, dig the sand right down and the water comes up and it settle. Go clean and use that for our tea. Just to make a little hole, dig them with finger and cover it up again. (Ngarinyman Person 2)

To get fresh water, you got to take that rock out and dig, take your fresh water. In the old days, one day, they used to walk, they used to know where there's soaks. They went digging. They used to travel from my Country to come here and they [would] have no fresh water. They used to stop here, dig out that rock. And they used to crack, dig them. They get fresh water from salt water. We still know where to get water when you're hunting because you can't just go, unless you got to carry water with you in the car. (Ngarinyman Elder 1)

Our ancestor used to have water sources. You know they knew where water were. You know they never waste it. They used to save it, they used to protect them. (Ngaliwurru Elder 2)

This ancient knowledge of water has had direct implications for how Country is used and travelled over today. This is not only travel by Indigenous Peoples, but by everyone:

All these main roads run through when old people used to walk, they can just follow the old track. I couldn't believe that too myself, but my dad used to tell me. That's that story. It's still there from old people. They're all following the old track. (Ngarinyman Elder 1)

Before they used to use ground water, the Countrymen, when they used to walk. Traditional Owners used to walk from Country to Country. They knew where their soaks are, waterhole for drinking, to survive to get to another places. And now, the pastoralists use them. (Ngaliwurru Elder 2)

People know where to go. They know that water there, that's where they go to hunt every year and fish. And they could tell stories. 'You know that place, that's where all water all is. That story there.' (Ngarinyman Elder 1)

The animals that we find hunting, they'll be staying near the water so we use that as a way to hunt them. If you know there's water here, you know there's kangaroos or turkey over here. (Ngaliwurru Person 1)

Medicinal knowledge is a high-profile aspect of Indigenous Knowledge more generally. This type of knowledge was also highlighted by participants:

We've got bush medicine and bush fruit. In the wet season, we get them. (Ngarinyman Elder 6)

Plum grows along the bank. Native plums. They got to survive from water. Bush medicine like the paper bark, the eucalyptus, the river gum. (Ngaliwurru Elder 1)

Along that river is a lot of, a lot of what the name too, medicine, bush medicine. You smoke them yourself, make them down there, smoke. It's everywhere you know, make you strong. Get the

water, or burning leaf, soak them leaves in the water and smoke them and rub them round or wipe it to that young kid. That way for healthy one. (Ngarinyman Elder 1)

Most of our bush medicine as well we'll find near the water. We call it Dimalan which is our medicine that cures scabies, flu and other stuff like that. You can even drink it, bathe in it or burn the leaf and smoke yourself. It's good for bad dreams as well, so if you're having bad dreams have a bath in it or burn it up and smoke it. There's two different ones of Maniyani. There's one inland and there's another river one. And everyone says the one near the river is actually better than the one inland. Because it's thicker. You don't drink it but it's good for bath, and it'll help you with your flu and all that whenever you're sick. And I've used it all the time when I'm sick and it works every time. And I've used it with my daughter and it works. She loved it when she was a baby, and it helped her go to sleep too. (Ngaliwurru Person 1)

Consistent with wider belief systems and practices, Indigenous Knowledge has common structural features across large areas. These can encompass general principles such as connectivity up and down rivers and processes for finding water. It can also include content such as the properties of plants and animals that can be found across a wide geographic range. However, other components of this knowledge may relate to specific local places and are known, held, and guarded by those from those places. These elements of knowledge cannot be easily generalised across a wider scale such as a catchment, nor is it considered appropriate to do so.

As noted at the beginning of this section, culture is a complex term, but it carries considerable weight for Indigenous Peoples. The causal and creative powers of the Dreaming, the everyday engagement through hunting, fishing and swimming, and the knowledge that can be built and shared from those foundations, are key elements of culture for Indigenous Peoples from the Victoria catchment.

4.3 People

4.3.1 **Identity and kinship**

The key elements of culture in turn provide foundations for personal identity, relatedness and obligations to others that are crucial to shaping Indigenous Peoples' sense of who they are. Participants in the Assessment expressed their identity by tracing their ancestry, their connection with places, and their language group. These language groups are useful public identifiers, but asserting particular connections and associations within those wider groups can be extremely important in certain contexts. In some cases, the places identified were current residential sites:

I'm from Daguragu. I live here. My grandma is from this Country. She is buried at the turnoff. (Gurindji Person 1)

Yarralin is my area. Because my mother, my uncle Country. (Ngarinyman Elder 2)

Daguragu is my father's land. We are looking after it now, he is gone. (Gurindji Elder 1)

Where we are now, situated on Yarralin, is from my grandfather's mother's side. (Ngarinyman Person 2)

Participants also identified themselves, their Country, and their origins through the Victoria River and its tributaries:

I don't even know what my date of birth is, because I was born out bush beside a river, at the Victoria River, this river now. (Ngarinyman Elder 3)

East Baines River, that's my very important Country. Auvergne Station, Bulla camp way. I born and raised there. That's where I come from. My granddad buried there. Every family buried there. (Ngarinyman Elder 1)

This river, the Victoria River upper, it's my grandfather's Country. That's upriver further to the west where the river actually starts, on my grandfather's side. I grew up in Daguragu right along the river. (Gurindji Person 2)

Individual identities are derived from kinship connections and through them, connections to particular places. Life-history events – birth, residence, work, and burial – can strengthen and augment such ties to places. Processes of conception, intermarriage and adoption can enable further personal, historical and relationship connections. The Assessment context may have assisted interviewees to identify themselves in terms of water sources. However, it is also true that permanent water sources are usually key locations for major life-history events, and that water flows and cycles enable people to express regional connections.



4.3.2 **Obligations and responsibilities**

These cultural and kinship ties between people and places generate obligations and responsibilities as well as connections and identities. The long residence times, continuity of Indigenous cultures, and beliefs about the ongoing presence of ancestors in the landscape creates a strong basis for an ethic of inter-generational responsibility. Living people have obligations to the ancestors and Elders both past and present, as well as to future generations, because all are connected to the same traditional lands. The following comments demonstrate this:

We got to look after our land because we got water running through, and all our animals living in the water. We can't dirty the place. We got to keep it clean for our next generation. A lot of people teach the young people how to go about it. (Ngarinyman Elder 5)

When you're young, you don't think far ahead, you are thinking of fun. Now when you get older you think, 'yep all these things you think you could use it more'. You just learn how to get that set up so the young people can actually carry it on. When you get older you are trying to walk in the shoes of the past elders and give something for the future. (Senior Ngarinyman Person 3)

For the mistakes we make, we forget it affects our younger generation that is still to come. We are not here forever, but we make the mistakes for them to fix. (Gurindji Person 2)

The old people passed away, old people. Now I have to manage it. I'm the elder for my family. (Ngarinyman Elder 2)

There are sacred sites there. The elders, I'm behind them. They've got more experience and knowledge. (Ngarinyman Elder 3)

We as Countrymen, like Indigenous folk, you honour the Country. You gotta look after it. It comes back to that as well. The consequences are human. Especially as a Dreaming site. You can't rewind that one. (Senior Ngarinyman Person 2)

Just because of sacred sites and places, we are a bit cautious about going there, because nearly all of our older people have passed on now. (Gajerrong Person 1)

These younger people, I tell them to wake up. 'Your turn now to look after the community. Because the older people who were here, now they're all gone. It's your turn now,' I told them. (Western Ngarinyman Person 1)

Our elders are around, but we need young people around most to be with them. So they can pass the knowledge in the future with kids like us, like, pass it onto teenager kids. We need to step up. (Gurindji Person 3)

Complementing Indigenous Peoples' obligations to past and future generations on their own traditional lands are the obligations they have to groups that are near neighbours or occupy land downstream from them. Traditional ties and intermarriage between groups can mean that near neighbours are often direct relatives, but obligations also extend beyond immediate and direct kinship relationships. Of particular importance to this Assessment are responsibilities to those living downstream, and this principle is clearly evident in comments made by research participants:

Protecting waterways, it's also protecting Country. Whoever that landowner is on that thing, you've gotta be accountable to somebody. (Senior Ngarinyman Person 2)

It's everybody's responsibility, because the river runs through such a vast area. It runs through, and it belongs to, different clans. So, whatever happens upriver affects the people downriver. (Gurindji Person 2)

This is all connected down there to the Victoria River. That's Timber Creek and that's Watch Creek, but they all go back connected. (Ngaliwurru Person 1)

Upstream awareness of downstream dependency influences what kind of development might be acceptable:

Not something too big, that's going to affect others, because we are at the top of that watertable for Victoria River. You've got people down in Pigeon Hole, you've got this down near Montejinni, not Montejinni, Top Spring way, the Dashwood, it runs through there, Yarralin, runs through, Timber Creek, runs right through until it comes out to the ocean. And the decisions we make affects them. And I believe everybody need to have a say, go and talking to all the clans, talking to all the people. (Gurindji Person 2)

4.4 Country

Traditional Ownership 4.4.1

The previous sections demonstrate that the principles and obligations relating to culture and to people also relate to Country itself. Indigenous Peoples understand themselves as the prior and continuing owners and custodians of their traditional Country, wherever that may lie. This entails both an awareness of what those lands and waters are, regulation of access to them, and a duty of care to see that they are maintained for the future. In pre-colonial times, formal boundaries may not have been as clearly demarcated as those that exist today for the purposes of mapping land tenure and making legal claims. Yet the owners of key areas were known, and it was those people who were responsible for managing the land- and waterscapes, regulating visitation and access, and who would be expected to negotiate formal arrangements and demarcations when disputes arose. Features such as ranges, river systems, and ecological habitats played an important role in the identification of particular areas with particular people. Ownership and the identification of roles and responsibilities in ongoing management are based on a combination of geography and kinship relationships.

The violent disruption caused by colonisation affected boundaries and demarcations. The main contemporary effect is the reduction of some internal complexity in local ownership groupings and the resulting use of broader regional group and linguistic identifiers to cover wider areas of Country. The composition of contemporary Traditional Owner groups in the Victoria catchment reflects this process of aggregation, often undertaken to simplify the formal legal process by reducing the potential number of claims. However, people retain an ongoing awareness of the internal boundaries and demarcations within Country – how they relate to water and to people:

If other tribe come, join with us, we tell them no, we tell them it's our place. You got your own, separate place. We got our own. We don't want to get mixed up with you mob. We have our own water. You have your own water. (Gurindji Elder 1)

I'm only talking for my place see. But he, but he'll still say same story, same, or similar, somewhere else. In my way, we work together, but you got to come, make those people come see me and I got to talk about, I got to talk them about my own way through my spirit. (Ngarinyman Elder 1)

You have to get the right person over the place. You got to take the right person or the Traditional Owner of the area. (Gurindji Person 3)

Every family, they speak for different sections of the river. Because you've got families that are upriver. We're right upriver. (Gurindji Person 2)

There's good fishing up the river near the spring. All along here, but more upstream. That is other people's area that one. (Senior Ngarinyman Person 3)

The comments above highlight how ownership is specific to particular areas, and how there are protocols that guide the ability to speak for those areas. The sharing of resources is an intrinsic and inherent trait in Indigenous Peoples' cultures, and the ownership of Country carries with it an obligation not just to protect, but to share with others who have kinship and connection. However, that act of sharing is itself an act of ownership and authority by the people who can legitimately exercise it.



4.4.2 Access

A primary feature of the ownership of Country is the ability to regulate access. Indigenous ownership boundaries, and the access protocols associated with them, are driven by the laws laid down in the Dreaming and Traditional Owners' relationships to them. This means that there are areas where access is not allowed, areas where access is restricted to a few, and processes and protocols for making these judgments. Access protocols can also have a temporal component, for example, when areas of the Country are closed following a funeral, or when the condition of a particular person is understood to pose a risk. Once permission is given, there are also protocols for introducing new people who have gained permission to access the Country. Indigenous protocols about introduction to Country apply to Indigenous Peoples from elsewhere, as well as to others who will need regular and consistent access to both Country and Indigenous Peoples:

When any people from anywhere come, we going to give them welcome, for water and that. You can drink and you can bottle. Country will know him. You got to go that way and drop that water then get that water. He'll get our nature from us good to him so that Country will know him. Otherwise sometimes they'll go back and get sick. It is dangerous some Country, it can make them sick. You'll break yourself leg. (Ngarinyman Elder 1)

Colonisation has impacted on Indigenous Peoples' access regimes in two primary ways. The first is that Australian legal regimes create categories of tenure such as freehold, pastoral leases, national parks, and defence land that either prevent access by Traditional Owners or significantly limit the conditions under which that access can occur. The second is that these categories of tenure either remove, or significantly limit, the ability of Traditional Owners to control access by others. Their control of access by others will be considered in Section 4.4.4 below. Comments from participants highlight how Traditional Owner access is mediated and shaped, particularly by the difference between land trusts under the ALRA regime and native title on pastoral leases.

So there's certain areas that we can go and forage. I suppose that's Bullo River [pastoral lease]. But with Amanbidji [land trust] we pretty much can roam the whole Country. That is the easiest place to go. (Gajerrong Person 1)

Auvergne Station. Usually, we go see the station manager and he lets us go hunting and fishing all around there. So, with native title, you let him know you are coming through and just go do your fishing and all that there. You can go every day if you want, but it depends on what area. So, if the pastoralists are working in a certain area and they don't want you to spook the cattle, they will tell you not to go to that area, you can go somewhere else. But there is heaps of other areas you can go to. (Ngarinyman Person 1)

We have respect and an understanding that if they are mustering in that area, we don't go fishing in that area. Part of safety, we have to respect their work area. (Senior Ngarinyman Person 3)

We don't usually go to the pastoralist station, but we go to the spring. (Ngarinyman Elder 5)

There is a complex history to and a dynamic set of relationships between Traditional Owners and the pastoral leaseholders and managers of the Victoria catchment. Some Traditional Owners were born and grew up on local pastoral stations. Some have experienced long-term employment in the cattle industry, and there are situations where relationships are predominantly amicable over long periods. However, by their nature, pastoral leases restrict public and Indigenous Peoples' access to

parts of the wider landscape, particularly rivers and other permanent water supplies. This, combined with the reduced requirements for Indigenous labour in the pastoral industry since the 1960s, has meant that Traditional Owners do not access many places as frequently as they used to.

4.4.3 **Looking after Country**

Being able to access the Country is essential to looking after it. Culture, people and Country are intertwined in Indigenous cosmologies, meaning that caring for one element necessarily means caring for and about the others. For Traditional Owners, looking after Country is an essential service, a key aspect of the obligations and responsibilities identified in the previous section. This includes general visitation, but also actions such singing and burning:

They sing the cultural areas, sometimes they sing the areas. Talk with the land. I can do that. We have certain areas that follow a song. (Ngarinyman Elder 3)

Daguragu is my father's land. We are looking after it now, he is gone. Sometimes we go with our people, to visit the place. We let some people go fishing. We let them go there. (Gurindji Elder 1)

We stay in touch with those places by camping, fishing, visiting Country. (Ngarinyman Elder 4)

Sometimes we are burning grass in that area. Looking after it. (Ngarinyman Elder 2)

I go to Wickham River sometimes, I burn. Just throw a match there sometimes. Just not when the wind blowing now. When the wind stop. (Ngarinyman Person 2)

Across regional Australia, direct management by Traditional Owners has been complemented by the rise of ICNRM programs since the late 1980s. Such formal arrangements can support elders and Traditional Owners, but can also introduce new priorities, objectives and methods in how landscapes are managed. In places where they are well established, ICNRM programs can be a key means for delivering environmental and cultural heritage management, for caring for the Country. ICNRM groups are often the focal point for external actors – pastoralists, government staff, researchers – to engage with Indigenous communities in relation to conservation and land management-related activities. These programs are also seen as an important enabling structure to support Peoples' return to Country.

In the Victoria catchment, the coverage of such programs is limited, with the Murnkurrumurnkurru (Gurindji) ranger program facilitated by the CLC operating around Daguragu and Kalkarindji being the primary Indigenous-led ranger program. Under the joint management arrangements, Indigenous rangers are employed by the Parks and Wildlife Commission of the Northern Territory in the management of Judbarra National Park, and participants' comments about such rangers were positive. Ranger positions and partnerships can be a particularly effective form of collaborative land management for Indigenous Peoples who do not have full control over their own territory. In locations where rangers are not currently located, securing future positions is a major aspiration, discussed in more detail in Section 6. Where rangers are operating, comments about them highlight collaboration with Traditional Owners:

We look after those places. The TOs. Sometimes the rangers help. They ask us. Sometimes when they want to go somewhere, they say, 'We are going to this place'. Get the Traditional Owner permission. Not only us, but other places around here, other people own it too. (Gurindji Elder 1) It's also us rangers, because we do clean-up around the fences because of the animals. They want them at the water like cattle, like horses. We do fence around and cut the grasses and do fire-breaks as well. (Gurindji Person 3)

We all work together up there. Around my area, ranger already got 4WD drive tracks, and they're looking after my Country. (Ngarinyman Elder 1)

We got ranger bloke that goes out. The ranger bloke know to go and have a look. We go out, we keep an eye out yourself as Traditional Owners. If another Traditional Owners go out there, they let us know what's been happening or if there's any damage. Water is important. (Ngaliwurru Elder 2)

The rangers come out, they come from Timber Creek. That's where the rangers pick up a couple of people to bring here and show them around. That's what we are doing, caring for our Country and water. (Ngarinyman Elder 5)

The rangers and elders look after Country. Because we do work closely with the elders whenever, you know, we wanted to do something like the burning stuff. We have to get the elders' permission if we want to go get a crocodile out of the water and all that. The elders will call us, or we'll call them to ask them, 'Is it all right if we go here to get it?' The rangers have a boundary that they work in. You've got elders and the lease people that actually work with the elders. All of that inside there is where the ranger works. (Ngaliwurru Person 1)

The primary focus of comments in the interviews was on environmental management action undertaken by Indigenous rangers. Yet those rangers also have an important role to play in cultural heritage management. Indigenous cultural heritage has a number of components, including:

- archaeological sites (such as artefact scatters, hearths, stone tool knapping areas, scarred trees, and stone arrangements)
- places associated with traditional stories or traditional knowledge
- places of historical importance
- places of contemporary importance (e.g. for Indigenous customary and recreational uses, educational opportunities, and the resources they provide).

Much cultural heritage remains undetected, undocumented and/or unregistered. Ensuring the ongoing integrity and protection of culturally significant places is a key aspect of looking after Country for both Traditional Owners and Indigenous rangers.

4.4.4 Managing others on Country

The cultural attachments to traditional Country experienced by Indigenous Peoples lead to a sense of ownership, to a sense of obligation to near neighbours and to past and future generations, and to ongoing attempts to appropriately manage natural and cultural resources. This, in turn, leads to a series of expectations with respect to managing the activities of non-Indigenous people on Indigenous lands. Such expectations are multifaceted and encompass aspects of the discussion of potential meanings of 'engagement' highlighted in Section 1.3.1. In managing Country, three powerful primary actors that Traditional Owners in the Victoria catchment are obliged to co-exist

with on their Country are: (i) large pastoral companies; (ii) the Australian Government, which is responsible for both Judbarra National Park and the Bradshaw Field Training Area and (iii) the Northern Territory Government, which is responsible for a wide array of land tenure and land and water management matters, as well as major community services. Other, more-transient actors active across the catchment include mining exploration companies and tourists. In managing these other actors, Traditional Owners need to have their status recognised and their protocols for safe conduct respected:

These places are very significant. There's things there, sometimes, that we don't want to tell anybody. If we tell 'em, they only gonna go there and destroy 'em. Or they go there, tell 'em, and they get, spiritually, they get hurt. We pre-warn them, we inform them, and people don't take that into consideration. 'Ah, it's superstitious!' Are we? Or what? We're trying to protect you, on our own Country, where you come from different Country, of different sweat, different everything. But you don't want to take our values and our beliefs serious too. Water is one of them too. (Senior Ngarinyman person 2)

I've had a bit of a drama with couple of the leaseholder people. There is a spot near the roadhouse that is a sacred spot, and leaseholders have been abusing it. Yeah, because long time ago they did get permission and they've been going down there, but I've been going down after them. Like, I'll see their chopper fly out a bit, and then as I'm fishing, I'll see dead fish in the water not even scaled out properly or filleted out properly. They're just floating around in the river, which from a traditional point of view is a waste, and also we don't usually leave dead fish there. We burn it, use up the whole fish and then burn it. I've been told it's just cultural to do it, to burn it and also say thank you to elders that have passed away for giving us that fish and looking after us while we're there. It does bring good luck, and next time we go down there, we'll be looked after again by our elders. (Ngaliwurru person 1)

The river is popular with short-term visiting fishing tourists, and these visitors can be present in high numbers and cause similar issues:

You've got people that use the Vic River for fishing constantly. So Amateur Fishing Association, once a year in May weekend they have heaps of people going up and down the river with boats. (Ngarinyman Person 1)

We like to see that water all the time full. But we got sometime problem when people go there with that motorboat. Like, rubbishing that Country, making water dirty and stirring it up too much with the boat. (Ngarinyman Elder 1)

For Traditional Owners, a failure to follow protocols may affect not only future fish stocks, but the presence of the water itself:

That happened a few times that they left dead fish. Then we went back, there was no fish there. (Ngaliwurru Person 1)

I asked, 'Why the water got dry?' Something was wrong here. Maybe nobody been sort of give it the right introduction, a welcome to the people. (Ngarinyman Elder 1)

Participants highlighted both challenges and examples of collaboration among various stakeholders. These include overall river management, specific actions like preventing cattle from bogging down, and protecting sacred sites:

The local TOs (Traditional Owners) and the station all play a role in managing the Country and the river. We're all familiar with each other and the rangers. Tourists come and they go there as the customer – everybody needs the river and has a hand in it in one way or another. (Senior Ngarinyman Person 3)

Cattle usually walk down the river and couldn't come up, some of them falling down, bogged. So they made that bore water now, so cattle just drink on the trough, it's only standing. Now they got bore and they got fence right along the river, you know, block them off now. That's in my Country. I'm glad we put all that fence, keep cattle out of the water now. In Auvergne Station, we working both way. Auvergne are using our Country, we get killer (cow) every once a month free. I'm entitled to get one. (Ngarinyman Elder 1)

I work in Auvergne too. When they want to put bore drill or build more tank, they come see me. I just do clearing. I think it's the Territory Government, that Aboriginal [Areas] Protected Authority (AAPA) mob. That the mob I work with. (Ngarinyman Elder 1)

They show them where the sacred sites are, and they already got markers there to let pastoralists know they can't go onto those areas. (Western Ngarinyman Elder 1)

Indigenous Peoples' consent for any activity or change is usually given based on a set of conditions. There was an awareness among Indigenous participants interviewed in this Assessment that, even when protocols are followed and consent is provided, compliance with those conditions is not always a given, particularly in development contexts. There are a range of additional ways in which Indigenous custodians manage relations with non-Indigenous and nonlocal people wishing to engage with them and their Country. However, understanding the different models of potential engagement reviewed in Section 1 and how they are applied in an Indigenous context provides some important foundations. Overall, the data presented in Section 4 highlights the significance of culture, people and Country for Traditional Owners from the Victoria catchment, and how those three foundations shape interactions between Traditional Owners themselves and between them and the wider world. These points and principles underlie the responses specifically focused on water and development presented in Section 5.

5 Indigenous Peoples, water and development in the Victoria catchment

5.1 Introduction

Section 5 focuses on water values and issues as well as on responses to development and its impacts. Participant comments highlight the critical importance of water across the catchment. Traditional Owners' views on water extraction and use are influenced by access to multiple clean water sources and seasonal availability changes. Key risks of water-related development and Indigenous roles in water decision-making are also identified.

5.2 The importance of water

The high value attributed to water is clearly evident from the statements of all the Indigenous participants in the Assessment. Water is intrinsic to life — plants, animals and people. It provides places for life to thrive and supports community health and livelihood, and it is vital to customary practices. Water, as part of Country, has agency to respond to human action and to connect people, and has significance in its presence and absence. Indigenous Peoples within the catchment of the Victoria River highlighted a variety of values that relate to water and the need to find balance between them:

Water's pretty much life. If you don't have adequate water, you pretty much have nothing. It's like fuel for not just your drink, it's for the land really. (Gajerrong Person)

Water is important for drinking, fishing, and the land. The animals all need water so they won't die. (Ngarinyman Elder 6)

Water is for survival, everyone needs water and water is pretty significant, for drinking and that. Everyone needs, like everything goes on water. Drink water to survive, get the fish out of the water to eat. All types of wildlife are around water, and then you've got food source, drinking, hygiene, shower, you can clean yourself. (Ngarinyman Person 1)

Water is used for everything. We are drinking our own water and looking after the animals. It helps everything grow. (Gurindji Person 1)

Water is important to us to drink it, and to have a swim, and keep animals to drink. So people can drink it, and animals can come and drink it, and swim. You need water, without it we die. (Gurindji Elder 1)

Water is important to TOs, old people or Traditional Owner of the Country, because in this land, some is sacred site. This water is the main one to everybody. You need water around here. Where you got to get the water, you got to travel miles away. We do need water. It's important for us. (Gurindji Person 3)

Water is very important for us, it's very important for everybody. Like the saying goes, water is life. This river means life for everybody. Our river is just here, as you do know, and Daguragu is just

there for our people. Especially weekends, everybody goes fishing. It's a shop and it's also recreation for our kids, for families, to go and sit down, get together. Because, in remote areas, we don't have a lot of facilities. Like, in the cities where families can take their kids to the park or families can take them to the waterpark, we don't have that. Families here say, 'Right. We'll take the kids to the river.' (Gurindji Person 2)

Water is important for drinking, swimming. Animals and plants, they all drink one water. (Ngarinyman Elder 2)

The water is our life. That's how we survive. It's got all those things that will provide for you, that water, fish, for drinking and you need to tell story to old people, young kids, old people tell a story. (Ngaliwurru Elder 1)

Very important that water. It's for animal and man. Water is important, for we've got lot of food in that water. We eat fish, turtle, water goanna, yabby, mussel. (Ngarinyman Elder 1)

Water means life for all mankind and for animal. Land, bush tucker, fruit, and it's in the story. We got song for water, what else? Songlines, stories. Food sources that stays in the water. We all worry about water. Water is our life, that's our survival, to keep us going. (Ngaliwurru Elder 2)

Water is important to go fishing and important to animals, drink, and birds and the cattle. It's important, maybe someone walking in the heat, they know where the river is and go down there and cool themself. Fishing, camping, boiling. (Ngarinyman Person 2)

Water, it's important for everyday living. If you don't have water, you don't have animals, and you don't have feed, regardless of if it's living on land or living in the water. (Senior Ngarinyman Person 2)

Water, it is important because people usually go hunting and fishing in the water. (Ngarinyman Elder 3)

Water's very important for everyone. We can't live without it. Like it can cause erosion as well, but we need to have it, as the drinking place for animals, and even for us going fishing and camping. (Ngarinyman Elder 4)

All participants expressed that water is existentially crucial to human life, and to the life of the Country. Water is particularly significant in a region that experiences dramatic environmental changes. This kind of change will be discussed next.



5.3 Seasonal and environmental change

The Victoria catchment experiences variable annual and inter-annual climate cycles, and the alternating wet and dry seasons mean that surface water availability is highly seasonal in many places. Perennial river flows and permanent pools fed by groundwater provide crucial ecological refuges during sustained hot and dry conditions. The flushing action of floods in the wet season is also very important in replenishing vital resources and underpinning wetland and wider catchment connectivity. In responding to questions about water, some participants identified important weather, seasonal, and climate aspects. Local weather conditions can affect hunting and fishing success:

We live right next to a river, the Wickham River, and the weather plays a part, when the fish are on. It depends when they are on the bite. (Senior Ngarinyman Person 2)

It depends on weather. Right now [May], the weather actually provide bush food for all the family. Maybe every day can be actually for swimming, taking the kids out fishing. (Senior Ngarinyman Person 3)

On longer time frames, annual and inter-annual flood regimes connect waters and places together and can have a substantial effect on people's residence and movement:

The waters meet together in one area. They go to Timber Creek and Yarralin and Pigeon Hole. The water. They only join because of the rain more big and it flood up and they run down together. Big water flowing. (Gurindji Person 3)

Amanbidji does get cut off for extended period of time because of the creek. It's a shame that it's just flash flowing creeks. The water can't be there where you've got a fish, or animal that are able to being in these creeks. (Gajerrong Person 1)

The Easter weekend this year was just impossible, with the devastating floods at Timber Creek, Kalkarindji, Pigeon Hole, Daguragu, you know, on that road. Them areas, we just couldn't get to with the amount of water that was still laying around on Country, it was just impassable. (Senior Ngarinyman Person 2)

Two participants identified the significance of long-term climate change to how water is protected, stored, and used:

There's climate change and we need to find a way to preserve, how to save water. (Ngarinyman Person 1)

They may say, 'Oh, it's ever flowing in the flood,' that's in the wet season, but the seasons are changing. The moisture in the air is changing and that's going to affect the rainfall because it affects the oceans, temperature change. And we have to really think about what we're doing to our waters in the riverway because it's going to affect the air around us. It's going to affect the moisture in the air that goes to the ocean. (Gurindji Person 2)

The presence of water, effectively its quantity, is a key marker and point of observation in the combination of seasonal, annual and inter-annual variability. Observations of seasonal and interannual variations, and of long-term systemic and climate changes, are part of the context through which Indigenous Peoples across northern Australia assess new development options and their potential vulnerabilities.

5.4 Water quality

Sustained residence in remote communities and homelands and the flourishing of Indigenous Peoples now and into the future depends on clean water supplies. This includes domestic water piped to residences, but also the water on the Country that is a key aspect of cultural and economic life. The previous section on Indigenous Knowledge emphasised Indigenous Peoples' ability to source good-quality water out on Country in times of scarcity. This is complemented by being aware of the risks of consuming water at particular times and from particular sources. This can be when water is stagnant, as well as when it is flooding:

The billabong, swamp – the water sits there and they're not capable to make tea or drink. People go fishing, they get fish and some of them are not too sure to eat or bring it back home. Some of them do bring fish back home. I'm worried about that one on the side, because it's not running. (Ngarinyman Person 2)

From when the wet come through to right now, we don't use the river water, we get bore water. We drink a lot of that because when it's flooding, we get the floodwaters and then it go all brown and yucky and then we don't drink it. (Ngarinyman Elder 5)

Bore water technology is crucial for reliable drinking water supplies in remote communities. However, bore water quality can also be a source of concern:

We have groundwater for our drinking taps. And I tell you what, it is so high in calcium. People talk about health problems with Indigenous People. In a lot of cases, it is because the water is so hard, the groundwater. And the machinery that we have, the tanks, the filters is not enough to clean all the minerals out. And, unfortunately, that's what gets stuck in our bodies, causes a lot of renal failure. And mainstream society doesn't know about that. (Gurindji Person 2)

They've got a big set-up here. Because we were running the water there one, a couple of years ago, and the water was looking like Coke Zero coming out of the tap, so they had to do a big upgrade. (Ngarinyman Person 1)

Pastoralism is the primary current industry activity in the Victoria catchment and has been operating for well over a century. This may be one reason for there not being extensive comments in the interviews about industry impacts on water quality – one industry is longstanding, and others are not present to any substantial degree. However, reflecting on the presence of minerals in their area, one participant did note water quality concerns about mining.

Uranium. But we don't want that. Kills the river. It's over here. Uranium and other things. The fellas we don't want them here, we don't want to open up a mine. It will broke it up, bugger up the Country, I think. (Western Ngarinyman Elder 1)

People are aware of the significance of water quality in a sustainable and healthy future. The importance of water, its variability in the landscape, longer-term changes in the quantity and quality of water, and the dependence of communities on healthy groundwater supplies, all inform people's perceptions of how water can be used, and the appropriate techniques for extracting it. These issues are considered in the following sections.

5.5 Types of water use

Water planning makes clear distinctions between different types of water use. The language of water planning is not used frequently by participants from the Victoria catchment, reflecting that only a small area in the east of the catchment is covered by an existing plan. Previous comments, particularly about hunting, fishing and swimming, and about the importance of water generally, highlight 'non-consumptive uses' or 'environmental flows' in water-planning terms. Currently, land uses in the Victoria catchment are very limited in number – pastoralism, conservation and defence make up the vast majority of the catchment area, and these are not heavy water users in comparison with an industry like agriculture. However, there is clear understanding among the research participants of current water users in the Victoria catchment and the ways in which water can be used:

Well, for the Vic River you've got parks conservation. You have pastoralists, regular water, water station, plus their livestock. Some areas they've got irrigation. Like they've got, they do farm for livestock, food, Coolibah Station along the Vic River. Then you've got communities that benefit from water that are along the Vic River, you have got heaps of Aboriginal communities, stations. Plus you've got Vic River roadhouse that benefits from the underground water and plus from Vic River water too. They pump it out of the river every now and then. (Ngarinyman Person 1)

5.5.1 Community supply

Community supply was a frequent reference point in responses to questions about water use. This was due to issues with community water supply and associated community safety in the Victoria catchment, combined with limited commercial water extraction:

We're drinking bore water. That's about it. We got seven bores. It's only because of the rain. If you don't get good rain here, you don't get much water – they got to close off some of them bores because they're dry. (Western Ngarinyman 1)

We need water for the bore for housing. For the cattle and for everything. Water, we can go drink the bore waters. (Gurindji Elder 1)

Some place we have droughts in some of the communities. The bores were bone dry. Like Gilwi⁹ community with their own, that place will go dry, so we were on water restriction here for a while. (Ngaliwurru Elder 1)

Bidgee is another one. Always have trouble out there, and they have to limit their water every day, so they're not allowed to water the garden or have a garden out there. If they do run the hose a bit longer or leave it dripping, they'll go dry and have to wait for someone to come out and fix something or help them get water out there. (Ngaliwurru Person 1)

We talked about putting big swimming pool here, and water ... I don't know what you call that thing, water park. A swimming pool and a café there, somewhere for the kids to go swimming. There is saltwater crocodile in the Victoria River. I know it's only a rumour, but I don't know if it's

 $^{^{\}rm 9}$ Gilwi is a small community 20 km southeast of Timber Creek.

true or not, but that came in last 2, 3 years back. One there in there. In the wet season, kids still swim, they swim everywhere. I don't know if crocodile still here. That's why we're trying to put park with water. Keep the kids safe. (Ngarinyman Elder 3)

Where bores are in use, participants also noted that the presence of surface water was a further important element in ensuring the safety of community supplies:

Kids couldn't have showers, and even the river wasn't safe to go swimming. But they did go down and fetch water from the creek for people for tea. The further it goes, the drier it gets. So Gilwi is usually the first one to get dry. They had kids and other people going down fetching water at the creek. (Ngaliwurru Person 1)

Well, most of us have gone to rainwater tank, when we catch rainwater for our houses now, because our bores have gone dry. There is a bit of a query about it, so we're getting into the stage of start putting tanks, rainwater tanks in our houses. With river water, it depends where you are, I suppose. You know some people, we still use flood water that runs, it goes into our little turkey $nest^{10}$ and we use it to pump. If we can't get water, we can use that as a source for drinking water during the flooding. (Ngaliwurru Elder 2)

We had that when I was growing up, and we did the same thing what the Gilwi mob did. We usually have a shower in the morning down at the river and then get ready for school. But yeah, I think we had more water than Gilwi did. We used to go down with a big flour drum and carry it back home. Before we have breakfast, dinner, we'd go down. (Ngaliwurru Person 1)

We've got plenty of water. Our bores, if they would run out, we could use the river. But we treat river water for our home so it's safe. (Senior Ngarinyman Person 3)

A number of respondents referred to the Northern Territory Government-owned Power and Water Corporation being in control of community supplies, and of the importance of communication about matters that arose related to community supplies. Underlying this was the responsibility of the Northern Territory Government more broadly:

Water should be included as an essential service. Government should take responsibility for fixing up the infrastructure, because that is water wastage. Instead, they say, 'Turn your tap off!' They put the responsibility on council and NGOs. Northern Territory Government should treat water supply to communities seriously as an essential. (Senior Ngarinyman Person 2)

Participants demonstrated a strong focus on community access to water of sufficient quantity and quality to support healthy community life and amenity. This focus informs responses about other uses of water that were identified by participants, reviewed in more detail in the following sections.

¹⁰ A turkey nest is a term for an off-stream water storage, usually built by earthworks, that does not capture surface water.

5.5.2 **Pastoralism**

The prevalence of pastoralism in the catchment means that it was regularly noted as a main use for water supplies:

Water is for cattle, horse as well as a bore and farming, trees, plant and for animals as well. (Gurindji Person 3)

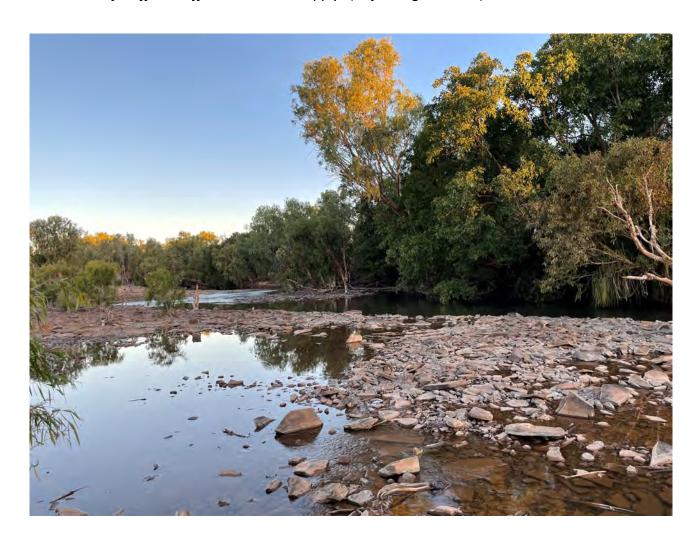
Water. Well, it all depends on the feeding of the cattle. They're looking for water, for the station hands and all the cattle. (Western Ngarinyman Elder 1)

Cattle drink at the trough. Drinking from the bore. (Gurindji Person 1)

Cattle use the bore and the river water too. Sometimes the cattle go to the river and drink water, but the river has got a fence around. They get the fence out of the way, then they drink river water. (Gurindji Elder 1)

The use of water for pastoralism is generally accepted in principle, but some concerns were expressed about usage that is seen as wasteful or excessive, about cattle impacts on water quality and about a general lack of detailed information:

We are not sure how the number of cattle they're stocking in yards, whether they're overstocking, all this sort of stuff that affects the water supply. (Gajerrong Person 1)



5.5.3 Agriculture

Participants referred to agriculture as another use for water. Part of the awareness of agriculture was based on past and current small-scale agriculture undertaken for community purposes:

Long time ago, when we were teenagers, we had watermelon seed. I go down there by myself with the watermelon. I come back with the tractor and a lot of watermelon. Wet season, put seed in there. We want watermelon and we know where to pick them up. (Ngarinyman Person 2)

Dad used to have a farm with some land. He used that water there to grow stuff. It was a garden thing. Trying to make community garden. (Senior Ngarinyman Person 3)

I live in a pastoral property, and we use the water for ourself for drinking and to feed cattle, and for our gardening. We have our little vegetable garden house. We keep fruit trees and whatever plant. (Ngaliwurru Elder 2)

Based on their knowledge, some participants considered agriculture as a prospective use for water, also noting the distinction between surface water and groundwater supplies:

It is good to use good water for farming and cattle. Because some other water, especially the billabong, I think that water should be enough to farm if they have a bore there, a pump, water pump. To maybe run a mango farm or something like that. (Ngarinyman Elder 3)

We can use water maybe just for farming, yeah. Farming and cattle. But now we're living on bore water for drinking. But you still can use river water. You can go out fishing. (Ngarinyman Elder 4)

We need a bit of backup from the river, I think, because you need water to water your grass and things, and grow some vegetables. The shire was showing people how to grow vegetables, cabbages, and all that fruit, and also grow trees. Pharmacy things. But they can't do that, because you need water from the river somewhere. Pump into some sort of tank. You have to restore it, and then use it, you know? And then you can use your bore water as the same thing. But carefully, you know. You better look after it. (Western Ngarinyman Elder 1)

The above comments were made primarily in the context of community agricultural initiatives, but participants also demonstrated knowledge that other actors are potentially interested in agricultural development on larger scales, and incorporating cash crops such as cotton, or introducing aquaculture:

I think they're trying to build a farm or something. See if they can use water. I don't know, just heard from the west. A bit of story, 'Oh, they might come into your area.' Maybe cotton, or a fish farm like that, you know. But no one hasn't come yet. (Western Ngarinyman Elder 1)

The proximity to the Victoria catchment of Kununurra and the Ord River development does mean that participants are aware of how major agricultural development can look. Once it exists, it can be regarded favourably in terms of water management systems and outcomes:

There got to be a rule there for water if you have a big farm area. Kununurra, for example. They've got beautiful thing there. They have a regular system that growing good for them. They've got plenty of water but good system. The farming there is good. They've got a waterway that tap into

the Argyle¹¹ water. Plenty of water. They're rich with water, that mob. They survive when they get a big wet there, they just overflow and yeah, plenty of water. (Senior Ngarinyman Person 3)

The pre-existence of the Ord River Dam (the Kununurra Diversion Dam was finished in 1959 and the main Ord River Dam in 1971) and the emphasis on rules for water management are important caveats on this attitude to the Ord River Irrigation Area. Prevailing attitudes to new instream dams are discussed in section 5.6 below.

5.5.4 Road construction and maintenance

A further use of water noted by participants is for road construction and maintenance. It is unclear what volumes this requires, but it is highly visible, as it is generally undertaken on the roads between towns and communities and involves extraction from surface water sources in the vicinity of those roads:

Normally they've been using river water for, I think so, they haven't gone to fix up their road, using it as they spray the road, you know the gravel road, to keep the dust down. (Western Ngarinyman Elder 1)

You got other businesses, like roadworks. Most times they pump out of the rivers, and they usually pump out of the Vic River, even the salt water, they use on the road. (Ngarinyman Person 1)

Awareness of the need for effective domestic, community and town supplies, and of constraints on those supplies, plays a key role in Traditional Owners' thinking about water in the Victoria catchment. A significant proportion of the remainder of this report reviews the relationship between Indigenous Peoples and commercial uses for water. Participants demonstrated a clear awareness of this type of water use, even if they did not use the term. As will be shown, such development was viewed as potentially positive if it created opportunities for Traditional Owners, less so if it was seen to benefit non-Indigenous people or to have significant negative impacts.

5.6 Types of water extraction

Commercial use of water requires the extraction of commercial quantities. Indigenous Peoples' perceptions of whether a particular commercial activity is appropriate may be directly affected by how the required water is obtained and by historical experience. As a result, participants' views about methods of water extraction will be considered before analysing types of commercial development in more detail. In response to questions about water extraction, a significant number of participants asserted the importance of the natural flow regime. This is essentially resisting any kind of major water extraction that has an impact on that flow, regardless of how it is undertaken:

The water should stay in the river. Leave it as it is. (Gurindji Person 1)

We want to leave the water in the river. (Ngarinyman Elder 2)

Water, we need it, natural, we need it to keep going. (Gurindji Elder 1)

¹¹ A reference to Lake Argyle (Figure 2-1)

If you save the water, how would that affect the natural environment and then the animals and all that if we still forage off the land there? (Gajerrong Person 1)

I don't agree with pumping water from the natural river. Because my backyard, my back river, my property, when I was growing up, that water almost be level to the bank. Today that water all dry, even go right down to the ... You can now walk across to the other side of the river. Before you couldn't. (Ngaliwurru Elder 1)

Well, each way has their, what do you call ... something bad will happen no matter which way you built it. (Ngaliwurru Person 1)

Let it flow. No storage, let it flow. Lateral flow. (Senior Ngarinyman Person 2)

We wouldn't want anything changed about the river or water. We want it to be the way we want it to be, in this community. (Ngarinyman Elder 3)

It is clear from these comments that for a number of participants, any kind of major water extraction that has a discernible impact on the presence of surface or groundwater levels is undesirable. This general position about the importance of the natural river flow is important context for the more specific responses about the use of different extraction methods in circumstances where extraction does occur now or could occur in the future.

5.6.1 Instream dams

There was consistently strong resistance across the catchment to the idea of instream dams in the Victoria River:

We don't want that big dam here. I would first say no. Some of the group might agree, some maybe don't. We would need to get a whole group here, have a meeting to decide. (Western Ngarinyman Elder 1)

A dam in the river, it's bad. We want the river flow. They can pump. (Ngarinyman Elder 2)

No dams. We don't need dam. There's no room. Leave it like that. River water is right. We don't need dam. Dams are no good. Let the flow go into the billabongs when the floodwater comes. (Gurindji Elder 1)

Water should remain in the river. I really believe that, because, you look, for instance, in the Kimberley, some parts got flooded out where there's old paintings and that sacred ground and that Argyle, for instance, Diamond Mine or Argyle Station, my grandparents worked there, they worked through that Country, and now it's all under water. And, for agriculture. (Gurindji Person 2)

I think dam just ruins everything. Having just a little bit more tank would be good than a dam. (Ngaliwurru Person 1)

No dams, just leave it natural way. (Ngarinyman Elder 1)

They want to do that new one at Adelaide River. That's been ongoing for the last 5 years. But here, we just don't have the ... what purpose is that gonna do the community or the stations? I don't see any purpose in it. (Senior Ngarinyman Person 2)

We don't want a dam. Eventually, when we have a flood it'll wash the community down. I think dam is where they struggle with the biggest, the land, you know. But we lucky here, we are very, very lucky. We don't have dam. Clogged up the dams they can overflow – no. (Ngarinyman Elder 5)

I've spoken to a few of them old people here, and I think it's bad if we've got to build a dam. I mean what will happen during the floods? This river here, comes right up, and if we've got a dam it might break. We're always threatened by a flood here. They only ... these old people only have an hour to evacuate from here, but the water went down, the rain stopped, that's why we didn't move from here. (Ngarinyman Elder 3)

A lot of people look at dams to control water flowing down to the bottom, but you've got to think for your land, for yourself, for your water. (Senior Ngarinyman Person 3)

If you've got a dam you can affect the big river. Surely the water is going to build up. It won't stop there, it will back up. It'll keep coming out and cover the whole Country. That's what I'm frightened of. There are burial sites along this river. It's very important that they don't get covered. (Ngarinyman Elder 4)

Some participants did note that there were circumstances where a particular type of dam, purpose for a dam, dam management regime, and/or the primary beneficiary of a dam may reduce their level of opposition to it. In some cases, these were Traditional Owners occupying roles that obliged them to emphasise social and economic development considerations:

A dam is pretty much like a catch-22 situation really. On one side it's a good idea – a dam for water catchment and then to preserve water. But how much infrastructure building is going to damage or impact the land? I think that's where people are a bit half and half about it. With these dams, with research that's been done, how are you able to monitor how much the amount of water that's been wasted? All right. And to build a dam, how much water can it hold? And then monitoring the water usage. (Gajerrong Person 1)

Maybe, I don't know. Maybe you just catch it during the flood, only time. Flood time. Pump a little into those dams. Otherwise, be like Murray-Darling. (Ngaliwurru Elder 1)

Give us an example of how it can happen elsewhere. Then we can think about it. (Western Ngarinyman Person 1)

I'm not sure about this one. I could say dam but my mind is on this land that I'm on, see? What advantage we could have. I'm looking at flood time. I'm looking at what would work. I can see the advantage and disadvantage of a dam. Damage to sacred sites and fishing and Country on one side, benefits to farming and hydropower on the other side. But it is up to the Traditional Owners that own that place to decide. (Senior Ngarinyman Person 3)

Opposition to instream dams was a consistent view across the Assessment participants, primarily based on concerns about unknown future impacts. Where this opposition was qualified, those qualifications relied on dam management regimes, benefits accruing locally, and Traditional Owners being the primary decision makers about dam development, in ways that have not yet occurred in dam development anywhere in Australia.

5.6.2 Offstream storages, bores and other options

Where water extraction was needed, participant's stated preferences encompassed both surface water and groundwater extraction. Some comments about surface water extraction referred to flood harvesting, although that term is not yet used locally:

Tanks and dams are best. Not like big dams, but the dams that they have around the station. Turkey nests. They pump water out of the rivers to go to those turkey nests and for crops and that. And from here they pump the water, it goes out there to a turkey nest. (Ngarinyman Person 1)

When you need water, find a big river and pump it out, just run it through the pipe. (Gurindji Person 3)

I think collecting from during the flood to when it's finished to store it. I don't know how to store it but water into a tank or like an irrigation way into communities. (Ngaliwurru Person 1)

Water, the best way is to pump into the tank, that's all. You don't take too much. (Ngarinyman Elder 1)

When it's raining time, it's okay to catch the water. But when it's not, you can probably wait and catch it when it's raining. You can have a lot of water then. (Senior Ngarinyman Person 3)

Bore water was still a favoured option, despite concerns about bores running dry:

If we want water, we just need a bore. A bore is better. (Gurindji Person 1)

It's good, though, like we get water from river and the bore, a lot of water, that's really good, though. (Ngarinyman Elder 5)

But that bore, bore is not bad. We all like bore now. Bore water here is good water. (Ngarinyman Elder 1)

If the bores go dry, then we won't have taps to run. (Ngarinyman Elder 6)

When the hill go down that way, that hill, you can put a bore there and get stacks of water from there. When it's downhill, you know? (Gurindji Elder 1)

With respect to water storage, ring tanks, otherwise known as turkey nests, can be larger structures for irrigation purposes. However, the context for comments about water storage in tanks was usually for community or outstation supply. This suggests that many participants were commenting on local-scale pastoral or community water extraction and storage, rather than on larger-scale precinct irrigated agriculture extraction:

Now they got all the tank everywhere now, they got cattle out of the water now. Bore water, bore water. (Ngarinyman Elder 1)

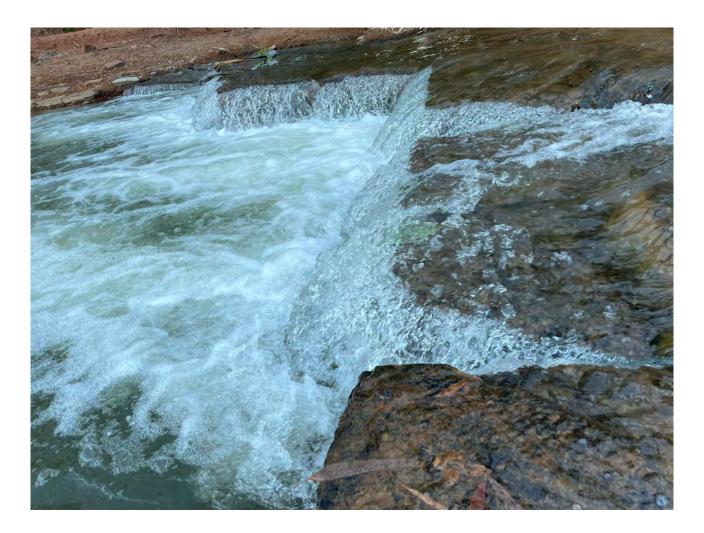
A tank is the best way to store water. Pump it and put it in a tank. (Gurindji Elder 1)

I can't think of any other good way, only one thing is the tank. (Ngarinyman Elder 3)

We have a water tank for drinking. The cattle and the birds, they've got river beds, the dam. They're happy with it. (Ngarinyman Person 2)

Best way is to fill the tanks and the tap, now that they figured out how to put polyethylene pipe into the ground to run the bore, the water from the bore up to the big tank, and from tank now they, they still today use that for their drinking water. It's really easy anyway, because we can turn on the tap, water our garden, grass. It's not really hard like those days before. (Ngarinyman Elder 5)

The interview data on water extraction and storage indicates concerns about any alteration to the natural flow of the river. This leads to strong and widespread opposition to instream dams. Other forms of extraction and water storage have some support from some participants. However, it is clear that further information and education about extraction options and their impacts is required to build awareness and meet future Traditional Owner decision-making needs.



5.7 Awareness of existing development

Some key forms of on-Country development that feature in discussions in northern Australia include pastoralism, tourism, agriculture, aquaculture, mining, hydrocarbon extraction, and energy generation. Each of these forms of development depends on a range of enabling conditions and services – such as residential infrastructure, health and education services, energy and transport – that also represent economic development and labour participation opportunities for catchment residents. Some of these forms of development, particularly agriculture, have comparatively high levels of water use. Others, such as mining and hydrocarbon extraction, may not require water volumes as high as those of agriculture, but have potentially significant effects on water quality.

Interview participants in the Victoria catchment have had varying levels of exposure to this wider suite of industries. Although direct experience of working in pastoralism operations has declined

among Indigenous Peoples in the Victoria catchment in recent decades, and the industry is dominated by large corporations, its catchment footprint is longstanding and widespread. Some local communities either continue to run smaller-scale pastoral operations, or they have leasing arrangements with other operators for their land. Traditional Owners' perspectives on the industry reflect this historical mix of involvement, distance, opportunity and impact. The other major land use activity interview participants have significant experience of is managing landscapes for cultural and environmental values, and the tourism activity that derives from that. This more recently established industry is valued for the healthy Country and NRM outcomes it enables, as well as the direct economic benefits gained by those participating in it.

The limited diversity in current development activity in the Victoria catchment, notably the absence of the two industries with the highest-profile water use and impacts on water assets (agriculture and mining), was one aspect of participant's responses:

There's no farms here, we haven't got a farm out here. And there's no mining. (Gurindji Person 1) We had no mining in our region, so we're full forever grateful for that. (Senior Ngarinyman Person 2)

We don't have mining. We don't have mining in our region. We don't have agriculture in our region. (Ngaliwurru Elder 2)

Nevertheless, participants know that mining exploration does occur in the Victoria catchment. They also know that fodder production is an aspect of the contemporary pastoral industry and that the usage patterns of pastoral stations are changing:

They maybe, live, grow sorghum for the cattle, and they sell them, some people. They sell them to other people for the money. You see a lot of truckload go past from everywhere. (Ngarinyman Elder 1)

Because they are allowed to do agriculture tourism plus pastoral stuff on their Country now. Yes, so most stations are all changing, so going into other avenues. Instead of only ... doing cattle work. Yes. They, some are good for tourism, others are good for food stock, like they do agriculture. (Ngarinyman Person 1)

These aspects contribute to an underlying awareness that the catchment represents an asset that is of potential interest to developers from industries with higher water use than currently:

We got a water catchment and you got a mining, agriculture and business. (Ngaliwurru Elder 1)

The understanding of existing development types, and of the potential for new development types to appear in relatively short time frames, informs responses regarding the impacts of development.

5.8 Impacts from development

The key types of development discussed above – pastoralism, agriculture, mining and tourism – differ in their natural water resource requirements and their range of impacts. Perspectives on particular industries can and do vary, but some potential elements of development, such as instream dams, are consistently rejected, because of the scale and nature of their potential impacts. Industries that have a significant effect on the landscape are generally regarded more

negatively than industries that support the maintenance and/or improvement of Country. Even in industries such as tourism that are more favourably regarded, the expansion of development can create impacts that are unwanted due to their nature or scale. The comments below about environmental impacts are divided into concerns expressed about the impacts from existing activities and those from potential future activities.

5.8.1 **Environmental impacts from existing activities**

Pastoral activity is the dominant industry and has been present for a long time, but its effects on the landscape and on water supplies are still felt:

The cattle, all the trampling, rip everything out, cause a lot of soil damage. Salinity changes in the soil. Plants change. You've got introduced plants. They change everything. Bringing other species that don't belong to that area affects every balance. (Gurindji Person 2)

The cows come and steal our water from the station. (Ngarinyman Person 2)

The cattle, that has caused a lot of damage to the land, to the plants, and therefore it affects the water, because they drain all the water too to feed the cattle, pump out more water, search for more water. (Gurindji Person 2)

When it gets dry season and water is pretty hard to get, you don't want to be, like the station pumping more water out of the river just for livestock, and the humans need to survive out of the same water source. (Ngarinyman Person 1)

The other main impact of existing activity that was noted was the effect of road construction:

We actually had heaps of complaints about that, because they did ... what was it ... the roadworks last year; one of the highways did a roadwork and stuff and they had a truck taking out water near One Mile and Myatt and they just sort of drained it out, and they didn't leave much in there and made a big mess there. And then they did the one at the bridge where they did the same thing: big hose leading down to the river blocking everyone's fishing spot and making a big noise while they're trying to fish. (Ngaliwurru Person 1)

5.8.2 **Environmental impacts of potential future activities**

Such concerns about the impact of existing activities underpin wider responses about the future effects of potential development on water. This includes mining:

That Beetaloo Basin. It just, we just don't like to see the impact, that devastation impact, if it's gonna impact those waterways. With Countrymen saying about the side effects, the negative effects of it, mining and gas and everything. It is always about money and all that, but the health and underlying things on Country, that's still, for Countrymen, is emotional. We don't want to see that big aquifer contaminated. Is that gonna take into consideration? Or is it going to be pushed aside? Environmental impact. (Senior Ngarinyman Person 2)

You know how they divert the river. Because they wanted to mine, they divert the river. (Ngaliwurru Elder 1)

There are also significant concerns about the potential impact of agriculture, particularly cotton:

You got agriculture people, they pumped so much. That's it. (Ngaliwurru Elder 1)

In small pockets, maybe when you have community farms, that's all right. But if it gets too big now, and you're talking about something where you've got these big farms like them cotton farms that they're proposing with Daly River, that's too big. Because, you're going to use a lot of pesticides, you've got to get everything to control the water, you've got to put all these things in. Land clearing, destroying plants and animal habitat. That puts a strain somewhere. Where's all the waste going to go to? It's got to spill back into the waterbed. (Gurindji Person 2)

Environmental impacts from development can be diverse, complex and industry-specific. Participants' comments identify underlying issues with existing industries (such as pastoralism) that use small amounts of water, as well as heavier water users (such as agriculture). They also encompass a wide spread of impacts to water, soil, animals, plants and, through them, human beings. The comments also include concerns about scale, and note that smaller developments with lesser impacts are more acceptable. This will be considered further in Section 6.

5.8.3 **Cultural impacts from development**

The distinction made between environmental and cultural impacts is an artificial one for Indigenous Peoples, but for governments it can be an important one in terms of assigning responsibility and organising and resourcing action. For Indigenous Peoples, the protection of Indigenous cultural lifeways and cultural heritage is a significant area of ongoing concern in relation to both current and future development activity. Water-related development poses particular risks for cultural attributes and heritage places, as there is a clear relationship between water sources and past and present Indigenous habitation. The deep interconnection between water and culture has been highlighted in previous sections, and the cultural heritage importance of riverine corridors and waterholes is well established (McIntyre-Tamwoy et al., 2013), particularly in rocky areas where habitation and art sites are better preserved. Likely impacts from water resource development on cultural heritage and lifeway sites include:

- inundation and large-scale earthworks over the water storage footprint
- erosion and wave impact along the storage margins
- increased regional population and associated visitation
- pollution
- access restrictions (new land tenure and fencing arrangements)
- impacts on culturally and economically valuable food resources.

Inappropriate development has direct consequences for ancestral powers and consequently for human beings. This in turn obliges people to predict cultural impacts and try to avoid them. In the Victoria catchment, referring to the presence, behaviour, and absence of ancestral rainbow snakes is a powerful and meaningful way for Traditional Owners to think about and express the cultural impact and cultural sustainability of how Country is used:

If something go wrong, maybe get something like rainbow egg or something like that from the water, that rainbow he will go look around to find that egg or he'll flood the Country again. We all know that rainbow serpent looking after water, and the fish will all get related to him. If he go, hey all the fish dying there too. Right around Australia, people say the same, same story. (Ngarinyman Elder 1)

Keep it the way it is. I mean, you never know – you dig somewhere where you got rainbow, you might start that up. We had one on the river here at the Country there. The grader went through the wrong way. Dig that rainbow. You dig the wrong place and the water coming out underground. The place where you used to camp, it's rocky, sandy camping out, when the grader went through. It just mucked up all over. (Ngarinyman Person 2)

See they bore all the time, but when you start sort of muck around, you know, and you frighten them with that all, what they call them, nature thing, water won't be there any more. Spirits will take it away, old people will take it away. (Ngarinyman Elder 1)

We haven't had any mining here for a long time. But we had one that was actually a diamond mine, but it didn't kick off real good because the elders were like, no, don't want you. The hills actually have a Dreaming in there, that's why the elders stopped it. Yeah, the pink diamonds actually where, well, the story is there's snake's venom. So, if you take it, you get bad luck for you or your family. (Ngaliwurru Person 1)

Indigenous Peoples are aware that this way of talking about powers and presences in the landscape, about impacts on those powers, and about how those powers respond, is not always accepted by non-Indigenous people. Comments like this were made in the interviews. One alternative Traditional Owners use is to refer to cultural heritage and sacred sites more generally – the language used by the government and legal systems to refer to such cultural value:

I don't think I'd want any mining. We just look at Borroloola. 12 They did damage sacred sites and they are trying to deny it. We don't want the river diverted. (Senior Ngarinyman Person 2)

They are on the maps and that, they show them where the sacred sites are. And they already got markers there to let pastoralists know they can't go onto those areas. So then it's all up to TOs who look after that area. And if they do find damages, damages and that ... they have to contact, I think it's AAPA or something, that mob. And that mob usually come out to talk to the TOs about what other development they do, and like their agriculture. And they show them how far they are off the sacred sites. (Ngarinyman Person 1)

Traditional Owners in the Victoria catchment are interested in the forms of development that can benefit local people. This interest in development is combined with understanding of the potential for impacts, and a range of concerns about those impacts. This provides the context for concerns about current and potential future acts of development and their impacts on key environmental assets – water, soil, animals and plants. These flow on into concerns about how changes wrought by water resource and landscape-scale development can affect Indigenous cultural heritage and lifeways.

¹² Borroloola is a community located on the bank of the McArthur River in the Gulf of Carpentaria, NT. The participant is likely referring to the McArthur River mine, a zinc and lead mine in the area owned by Glencore corporation.



5.9 Water planning

One key response to such concerns about development impacts is to manage the natural resources upon which development depends, particularly water. In the NT, there is a statutory water-planning, allocation and licensing regime in place that meets some requirements of the NWI (https://www.pc.gov.au/inquiries/completed/water-reform#report). In a joint submission to the Australian Government, the NLC and CLC expressed the view that the NT government is failing to comply with the NWI on multiple grounds (NLC and CLC 2024). The impact of water planning is also limited by coverage – the vast majority of the Victoria catchment is not covered by a declared Water Control District, let alone a detailed water plan. As noted previously, there are also large areas of formally designated Aboriginal Land. Participants' comments about decision making with respect to water reflect these two underlying institutional circumstances.

5.9.1 **Traditional Ownership in water-planning process**

Participants frequently asserted that their status as Traditional Owners should provide authority and priority in water-planning processes. This incorporated recognition that others are involved with water decision making and water use, but Traditional Ownership was a unique position that should be respected:

We should be involved in making future decisions about water views promptly. Indigenous People. As Traditional Owners of the areas, we're talking about water or even talking about bore water, you know, wet-season flooding. You talk to Traditional Owners from each of the areas. Just Traditional Owners have the voice and tell the government how it's going to happen. (Ngaliwurru Elder 2)

I just hope the people that want to do something just come see the main TO for the Country. Then we'll work together, so we'll have no problem with the water. Anybody that come and get water got to go through the TO. (Ngarinyman Elder 1)

What area are they going to get the water from? It should be Indigenous People deciding, it depends what purpose they've got or are going to use it for. All parties should be involved – the parties that want to use it and the party that belong to that area – Traditional Owners. (Senior Ngarinyman Person 3)

Just TOs should decide. Normally just TOs, but everyone should get involved in that. Water is important and some pastoralists got a big area. They have got their own area that they are working. (Ngarinyman Elder 4)

Participants' statements highlight that the status of Traditional Ownership has some specific and significant implications for water-planning processes. Further comments about Traditional Ownership and the rights it does or should convey appear in Section 6.2.

5.9.2 **Notification**

As Traditional Owners, multiple participants expressed dissatisfaction with notification and consultation about water extraction and use decisions.

No. No consultation, no notification, no mention to anyone about water. So you don't know what's really happened in and around the rivers unless you witness it. You don't know, if there is a station from where you live and they've been pumping more water out. (Ngarinyman Person 1)

There is no consultation about water. No one is talking to us about it. Nothing. (Ngarinyman Elder 6)

I don't get notified if the pastoralists use water. I do question them though, because I did go back to NLC and query because they'd set up a camp outside of the community. This is just for the pastorals on their grazing lease area. And then they're pumping water from the creek. And then they apparently put a swimming pool. So, I went back to NLC and questioned them as to how many litres of water are they pumping? How much are their drinking supply? Who's monitoring what they're doing? No one made us aware of it. They've just given people the go ahead to do what they please. (Gajerrong Person 1)

These examples relate to pastoral industry use. Such responses are likely to be far stronger if the extraction is much more substantial, for example, as needed for agricultural development.

5.9.3 Information provision and process

Concerns about notifications on water use changes reflect broader issues of needing better information, consultation, and engagement in water decision-making. Many emphasised the need for transparency and accessible information:

We need more consultation and then explaining it to people's understanding, because there is still language barriers when explaining these sort of stuff, and they're making people sign off and agree on things that they don't have full understanding of. Any type of communication, whether it's negative, or even if it's a positive outcome, at least they're being transparent about whatever happens with the water usage on the land. (Gajerrong Person 1)

We need to get more information to the Traditional Owners. Go out to community and talk about the value of water and the water rights, water plan, property rights, you know go back to

Traditional Owners. But explain in plain English and get that rights back to them and then they can work with the government to make the decision. Do that at workshops, information day. (Ngaliwurru Elder 2)

The government has a responsibility to talk to people with transparency. Be transparent when you're talking about water to the people and tell them how it will affect them. Because people might think, 'Oh, that sounds like a good plan,' but they're not thinking of coming generations. Not here and now or 5 years or 10 years, beyond that. (Gurindji Person 2)

Gadiya [non-Indigenous people], they should come and tell us. They don't tell us. They're supposed to come up and talk to me. (Ngarinyman Elder 2)

I think there needs to be more engagement. There's reports from NT Government, or their department, with NLC and CLC, all, and all the four land councils. 13 They talk to them about water rights. But also, the water security. But it doesn't get filtered down. (Senior Ngarinyman Person 2)

The biggest thing is, people need to know more about water rights, who actually owns the water. Yes, do you need the licence or whatever still? Like most TOs don't know about it. It's only for like NT has, NT Government has it. I only know too, sitting on the Land Council. (Ngarinyman Person 1)

Further comments were made about the importance of the right forms of communication – the use of translators, visual aids, and appropriate language. It was also seen as important that those doing the communicating needed to be familiar with the local context – the two primary actors identified are the NT government and the land councils (the NLC and the CLC in the Victoria catchment).

5.9.4 **Indigenous representation**

Traditional Owners can be recognised, notified, and informed, but this still leaves open the question of how they are included or represented. There was a clear understanding that this representation needed to be part of a formal structure – a board – and that there needed to be more than Traditional Owners on such a board. Others proposed Indigenous-only meetings, committees, or advisory boards:

We don't have Indigenous members on the Water Board, like what they call them. Water and Advisory Board, Water Board. We're not, I haven't heard any Indigenous person on that or maybe they are, maybe not, I don't know. But if that's the case, it's their people on the Water Board making decision about, they call them Water Resources. They should send notices around and let us know that. (Ngaliwurru Elder 2)

To change, you need some more people around – asked to sit and talk about water. Meetings. Talk about it and understanding where water come from, what water do. They got to realise what land and where they taking the water from. (Gurindji Person 3)

13 This is a reference to the other two statutory land councils (the Tiwi Land Council and the Anindilyakwa Land Council) in the NT that are not responsible for the Victoria catchment.

You've got cattle, we've got grazing company, you've got a cattlemen's association, ¹⁴ they have a voice at the table. You've got fishing, fisheries have a voice at the table. Water, only Gadiya [non-Indigenous people] have a say on the water board. There's no advisory body for Indigenous People that I know of. I don't care what anyone says, I've never seen anyone come here in remote area and talk about a water board with any Indigenous People on it. And I would like to see that. I would really like to see that, because it is about moving forward now. They know the Country. (Gurindji Person 2)

Our bigger people need to be involved in decision making about water. A committee from that area. Form a committee from those community. You get represented because water is our life, our survival, through songs, Dreaming. What do you need to say in terms of a water plan? Be part of that negotiating, talking, having that voice. (Ngaliwurru Elder 1)

Then even, to have a Water Committee Board would, people get positions from different communities. And they talk about the issues and get together with other groups, like with pastoralists and all that, they get big information. Like a workshop. (Ngarinyman Person 1)

5.9.5 Limits, monitoring and enforcement

Once Traditional Owners are informed and the appropriate representative structures are in place, participants also noted the significance of establishing effective limits and of monitoring and enforcing those limits. This includes the need to refer problems back to Traditional Owners, and also to not allow financial incentives to undermine good management:

There should be a cap thing with the water usage, and even monitoring that as well, because there's no point trying to negotiate deals when they don't even have a cemented schedule about the water usage. So, they should actually put that where the Traditional Owner makes the initial agreement, and then they monitor and then if there are concerns, or there's a breach, they go back to the Traditional Owners. (Gajerrong Person 1)

You can have all these little advisory boards that make the recommendations. It comes back to the same path, to talking and coming to agreement. Everybody coming to what is right. And I know people will say, 'Oh, what is right doesn't necessarily go down when you're looking at money.' But water is different. You can't make too many errors when it comes to water. People kill themselves over water in some countries and we don't want to get to that point. (Gurindji Person 2)

We know when people do abuse them rules – we know. Don't take too much water. (Senior Ngarinyman Person 3)

These comments reflect those of others in previous sections emphasising Traditional Owner recognition, sustainability, and care for the Country. It is important that any water-planning arrangements in the Victoria catchment reflect the unique position of Traditional Owners and the circumstances of the area.

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¹⁴ A reference to the Northern Territory Cattlemans' Association

5.9.6 Water planning and community water supply

One final issue to emerge from the data is the relationship between water planning and community supply. Questions about water that were open-ended but oriented towards water planning at a landscape scale repeatedly elicited responses focused on community supply. This included communities running out of water, how and why this occurred, notification about problems and repairs, and general communication issues. The Northern Territory Governmentowned Power and Water Corporation is responsible for water supplies in the main communities from which people were speaking. It is important that future planning processes emphasise how the water resources that underpin community supplies are managed and protected in water planning. It is also important that people clearly understand the role that a service provider plays, and that the reasons for changes or disruptions to supplies are investigated and understood. The responses will differ according to whether they derive from infrastructure problems or issues with the underlying resource.

5.9.7 **Strategic Aboriginal Water Reserves**

Some participants understood that the Commonwealth's Aboriginal Land Rights (Northern Territory) Act 1976 processes do not include complementary water rights on Aboriginal Lands. No participant referred to the creation of Strategic Aboriginal Water Reserves (SAWRs) through the NT water-planning process, reflecting the low level of knowledge of existing planning instruments and the fact that large areas are not covered by existing water plans. However, the amount of land held by Traditional Owners in the catchment means that, should water plans be implemented under current laws, significant SAWRs would be triggered. Participants' statements about the need for Traditional Owners to have control over water decision making imply that they should have a first-priority water right, share or allocation of water that is being extracted, and also that they should derive direct benefits from water use by others. This is consistent with the intent of SAWRs, as well as an aspect of Indigenous development, reviewed in more detail below.

5.10 Catchment planning

In terms of roles and responsibilities, there is a clear distinction between water planning (usually managed by a government department of water) and wider catchment and landscape management. The latter may be the responsibility of a range of people and institutions, encompassing government departments and agencies (lands, national parks, local government, etc.), community groups, and landholders and land users. Section 4 demonstrated that Indigenous ownership systems involve clear geographic obligations to near and downstream neighbours as well as to future generations. As a consequence, activities to support wider catchment management are an important aspect of Indigenous Peoples' obligations to care for Country. Currently, TNRM does not appear to have a high profile among Traditional Owners and the Victoria River District Conservation Association, which produced the first NRM plan for the Victoria catchment in 2004, is now a pastoral-oriented Landcare group, which again does not seem to have a high profile among Traditional Owners.

Management of the wider Victoria catchment is viewed by participants as a necessarily shared responsibility between Traditional Owners, Indigenous residents, government agencies, and

non-Indigenous owners and leaseholders. NTPWS provide some protection, but they do not perform the same management functions as water planning, catchment management and/or development planning processes. Responses by participants in this Assessment indicated interest in involvement with each of these as a means of fulfilling their obligations as traditional custodians to use 21st century management and planning tools and institutions. Effective use of the tools, and participation in the institutions, will require clear articulation of Traditional Owners' development objectives. These are discussed in the next section.



6 Indigenous Peoples' development objectives

6.1 Introduction

The Traditional Owners of the Victoria catchment have a range of development objectives that reflect the underlying principles of culture, people and Country outlined in Section 4, and the perspectives of water and development potential outlined in Section 5. The key objectives identified below encompass recognition and resource rights, regional governance and decision making, and Country-based business and enterprise options.

6.2 Recognition and resource rights

For Traditional Owners, securing recognition of and rights to their Country is both a moral imperative and a key development objective. This stems from their prior and unique status as Traditional Owners, their responsibility to care for Country, and their need to foster socioeconomic opportunities. In recent decades, the primary focus for securing recognition and rights has been ALRA, native title and the AAPA registration processes. The native title regime continues to evolve, but the vast majority of claimable land in the Victoria catchment has already been claimed. No live land or native title claims were referred to in the interviews, and unless supported by an organisation like the ILSC, Traditional Owners lack access to the direct financial resources to purchase what are now extremely valuable pastoral leases on the open market. Securing further land that is culturally and historically significant will always be a primary development objective. Even though land and water are inseparable aspects of Country, water rights remain unsecured. This is crucial background to the contributions of participants asserting the need for recognition of Traditional Owners' water rights, enhanced roles in water decisions, and social and economic development needs. The absence of existing water rights was a clear point of concern:

Because at the moment, the government has the water rights, not the TOs. The TOs own the land not the water. So obviously the government own the water not the TOs. So pastoralists can, pastoralists or agriculture mob, they can put in an application to the NT government for water allocation. So they can get how many gigalitres they want and get that exact amount. (Ngarinyman Person 1)

We don't get the water rights. And that was sly thinking of the government. (Gurindji Person 2)

We don't have water rights. Aboriginal People don't have good water right. We don't make decision on water. That's a bad thing. Traditional Owners should be part of the negotiating. (Ngaliwurru Elder 1)

Other participants expressed a closely related view, emphasising control over water and water decision making, and the interconnection between water and land:

Traditional Owners should control water and who decides. (Gurindji Person 1)

Community, elders, they should be the decision makers and can notify what's going on, what's in this water situation. Because there's not too much water here. (Western Ngarinyman Elder 1)

It should be the blackfellas deciding on water. It should be the TOs. (Ngarinyman Elder 2)

Aboriginal People should decide about water. We are doing it in all riverine Country, talking about water the same, similar to me what I'm talking. Same word, like talking like rainbow serpent, Dreamtime, cultural way. (Ngarinyman Elder 1)

If somebody want to use water for here, for example, they have to come see us. You can't just put a bore down. You can't just chuck a hose down in the river bed over there. We belong to that land. (Senior Ngarinyman Person 3)

TO should be making decisions about water. It is on our land. It's on our land. They got to come and talk to us first. Then we'll say yes or no. (Gurindji Elder 1)

TO's should make decisions about water. Just all the TOs. Government need to listen to TO's. Go to meetings with them and explain what they need and all that. (Ngarinyman Elder 6)

Traditional Owners in the Victoria catchment seek recognition as owners and managers of water. Their ability to control access to water resources is crucial to looking after the Country properly. It is also a major development objective, as people are aware that constrained rights, for example native title access rights, compared with freehold landholdings, can only provide limited returns and benefits:

Native title is different, that's all it is. It's something through the government that there's a title. Like usually you got TOs, but they are only getting some benefit from that area, from the right to negotiate. They didn't receive big mob royalties on it, like on the Aboriginal Land Trust – they are the mob that gives the bigger benefits. (Ngarinyman Person 1)

Legal, policy and regulatory pathways that facilitate rights and recognitions enable control over resources. These in turn can be used to enable desirable economic development. At present, the major representative land councils have, on behalf of the people they represent, expressed significant dissatisfaction with the current system of water planning in the NT (NLC and CLC, 2024). The responses from Traditional Owners in the Victoria catchment do not contain detailed knowledge of water planning, but very clearly show how recognition, rights and development are mutually intertwined.



6.3 Informed and empowered Traditional Owners

Participants emphasised that they need information provided in ways that are transparent, comprehensible, and which enable and empower Traditional Owner decision making. This includes regular and reliable communication, and the involvement of multiple organisations – the Northern Territory Government, local government, and land councils.

We need a consistent message, everyone in an engagement. They talk about transparency, accountability, but no matter what level of government – like housing, infrastructure and all this other stuff – I think, 'Hey, excuse me, mate? I don't wanna be rude or anything, but you're here to talk about transparency, accountability and all this other bullshit. You just, you just blabber on about something I couldn't even understand!' (laughter) I thought how's this mob gonna understand all of that? That's, that's just what I been seeing and believing in my community, the last 20-odd years now. (Senior Ngarinyman Person 2)

Government come and say, 'We gotta allocate so much licence of this cattle station or this mining mob.' Don't come blindside, not only us mob, but everywhere. All Countrymen just need to be informed, properly. That's all. That's all. Not too much to ask. (Senior Ngarinyman Person 2)

We need to talk about water. We never had a water meeting for how we going to run this. (Western Ngarinyman Elder 1)

The biggest thing is communication, better information for the TOs and other parties like the pastoralists, the government. The Land Council plus the councils like the Shire Councils. (Ngarinyman Person 1)

You've got to have better talking between parties, better information, and keep it regular. Not once every 6 months, and then we say, 'Where's the report? Where's the report?' Still, 2 or 3 years and the report doesn't come back. But keeping people informed on regular basis, because it's about respect and about communicating. (Gurindji Person 2)

Improved information quality and frequent information flow provides the basis for better decision making by Traditional Owners and, through that, better outcomes from NRM and natural resource development processes.

6.4 Traditional Owner group and regional water governance

Decision making is a collective process, and improving local group and regional water governance is an important development objective for Traditional Owners in the Victoria catchment. Local Traditional Owner organisations operate with geographical challenges (as both board and wider membership can be residentially dispersed) and with demographic challenges (as they can have large numbers of members who are relatively undereducated and/or young by wider Australian corporate board standards). Nevertheless, they can be important and valued institutions:

Gurindji Corp [Gurindji Aboriginal Corporation] keep on running what they call, their company. Everyone in the company, they just help each other out. (Gurindji Person 3)

You can't just sit down and just wait for government to hand you some money. You've got to get it. You want people working on Country. We don't have a corporation structure, but we will get one. (Ngarinyman Elder 4)

In the NLC jurisdiction of the Victoria catchment, the absence of local native title organisations significantly affects the contemporary recognition and strength of local Traditional Owner governance regimes. The objective of improving governance is effectively an ongoing one that will require effort on the part of groups, and also resourcing by those who want and need such grouplevel collective decision making.

The interview data reported in Section 5.9 showed that participants understand themselves to be the people who should be responsible for water decision making on their Country. In development terms, this prioritises the creation of representative and governance structures for water, of which Traditional Owners are an integral part. Such bodies or committees would take a catchment-wide perspective and be inclusive of a wide array of stakeholders and interests:

If there was a big farming here, you'd probably have a committee. If this was rich, rich farming area, you'd probably got to set up a committee to control everything, especially with water. So nobody putting bores where they want to put it. They have to have a licence. (Senior Ngarinyman Person 3)

The river is everybody's responsibility, I would say. People maybe from the desert must say, or from the sea, from another area, maybe say on the coast, 'That's their business down there.' But that is the wrong attitude to have. It is everybody's business, because once you displace the people from their water source, they become foreigners in their own land. It causes unrest for everybody. Displaced people are not happy people. (Gurindji Person 2)

We need to have people speaking about this problem. You need to find a way to get it done. Work together. (Ngarinyman Elder 4)

Everybody gotta be involved in deciding about water. All stakeholders, regardless of thing ... Well, it takes everybody, you know? Policy makers in Darwin, Canberra, they got to come and listen to whoever it impacts, how it affects the community. It can't just be dollar signs all the time. It's the Peoples' livelihood. Not only livelihood, Peoples' values and beliefs, culture. All that is bundled into one. And that's why that all stakeholders should be involved with it. (Senior Ngarinyman Person 2)

We all rely on the land. We all rely on the water. So, I really believe it's everybody's business and everyone has to really tread carefully when dealing with water, when making such decisions. (Gurindji Person 2)

Traditional Owner, council and government got to get involved. Say it together as one. Get involved again and talk together about the water. (Ngarinyman Person 2)

Water governance issues and associated objectives span internal Traditional Owner group decision making, regional coordination, and liaison with catchment and geographic neighbours. The skills needed to understand wider stakeholder and government requirements are vital. Building local Traditional Owner governance and operational capacity is crucial, but it is also clear that more coordinated regional development conversations are needed, to reach longer-term social and economic objectives. Effective internal Traditional Owner corporate structures and wider regional governance structures and processes are also important for managing external pressures for development. Participants identified this pressure in responding to the Indigenous activity of the Assessment, and also identified the Assessment itself as a manifestation of that pressure. Indigenous Peoples have their own development objectives that they do not want to see compromised through further inappropriate or unauthorised development by others.



6.5 Country-based business and enterprise options

There is a clear desire among Indigenous landholding corporations across Australia to better use the assets under their control. In many cases, shortages of capital, knowledge and skills make this difficult without external assistance. Equally, there are a range of developments across Australia pursued by non-Indigenous people in which Indigenous Peoples have an interest, often through land and lease holdings. Finally, a range of organisations are seeking new outcomes from their activities, often as a consequence of making arrangements for corporate social responsibility or creating a Reconciliation Action Plan.

Each of these circumstances can give rise to partnerships and agreements between Indigenous and non-Indigenous parties that can enable Indigenous Peoples to pursue their own development objectives, participate in achieving the development objectives of others, and/or limit or manage the impacts of development in which they are not directly involved. Partnerships and agreements can vary from small-scale single activities on local properties to large regional agreements.

Recognition and resource rights, informed and empowered Traditional Owners, and good corporate and regional water governance arrangements are all important, because they support the successful development of Indigenous businesses and enterprises. Participants made a range of observations about the type of business and enterprise development they would like to see. Using these structural considerations as foundations, participants reviewed the industry opportunities immediately available to them, including pastoralism, agriculture and tourism. Some comments on these industries with regard to water use appeared in previous sections. The following comments focus on Traditional Owner business activities and future objectives.

6.5.1 **General objectives**

Participants outlined a series of interrelated objectives for business development. Two straightforward priorities were to create direct employment and income:

They need to get a job. But I don't know at the moment, we don't have jobs. (Ngarinyman Elder 3)

You work, you have money. You do a thing, you want money. (Ngarinyman Elder 5)

A further objective for business was that its activities create wider local benefits beyond immediate employment and income:

As long as it helps the people and not the foreigners. I'm not trying to sound racist, but long as it helps the people on the ground. If there was to be a farm here, at least sell back to the shop, sell to the local stations. Sell to a bigger market, but also look after your own. Get the health of your own people better first. Not the pocket, but the body. (Gurindji Person 2)

A part of generating such local benefits was ensuring that Country-based businesses were aligned to local conditions and scaled safely and sustainably. This means avoiding making businesses so large that the scale causes impacts that diminishes other local benefits:

If you're going to grow something and put it at a market level, you grow what thrives in that area, that doesn't put too much strain, too much change. And that'll make that soil better, that's good to the soil, that's good to the water. (Gurindji Person 2)

Make a business, set it up, but do it the safe way. Don't harm the watertable or anything like that. Just try something small first. (Senior Ngarinyman Person 3)

It must be done in the right way, the right amount. (Gurindji Person 2)

This entails a process of exploration and planning, of finding the right fit between what people and the Country have to offer, what people want to do, and the external demand:

For us, we still do need to discover our industry, our business. The kids in community, maybe can make something, make use of this land. (Senior Ngarinyman Person 3)

Planning is needed to make business happen. I'm making enquiries. When I say enquiry, get professional advice, somebody in that field and ask more questions and have a planning day. (Ngaliwurru Elder 2)

You can do it with cattle, but you can do it with something else. There has to be something that someone wants around the world from Yarralin. There has to be something to sell and make business. (Senior Ngarinyman Person 3)

It also requires being discerning about advice and the motivations of those providing it:

You don't want people who get more for their own gains, their own stuff. Being abusive to the system, like water system. You've got to have somebody smart, like what you guys are doing now. Somebody could say, 'Yeah [there is] water in there,' but you've got to know how much water you can get. You meet a lot of dodgy people in your life. (Senior Ngarinyman Person 3)

Finally, in a very remote area like the Victoria catchment, any Country-based development also requires funding to overcome informational and logistical challenges:

You need a lot of money, water, funding. (Ngaliwurru Elder 1)

You've got to have funding first. You start small and put a bit of funding in, and then you've got to identify what plan you want to do and start doing it. If it is fish breeding, fish farming or whatever. (Senior Ngarinyman Person 3)

Perspectives regarding potential development can differ, both within and between Traditional Owner groups. However, regardless of the sector, smaller-scale development emphasising local agency and local capacity is generally favoured over larger-scale, externally resourced and externally directed development (Barber, 2018c; Taylor et al., 2011). Regarding water use and extraction, development that delivers a local economic return without significant water extraction is likely to be favoured over development that requires significant water to operate. These general comments and considerations underpin participants' thinking about specific industries and business opportunities. These are considered further below.

6.5.2 Agriculture, aquaculture and pastoralism

The history of the catchment, past experience of community market gardens, and the context for the current Assessment has meant that farming, particularly agriculture, is prominent in Peoples' thinking about Country-based business. Their development objectives primarily focus on community-scale gardens and farms that can provide fresh vegetables and fruit for community consumption. There is ongoing interest in establishing ventures that improve Indigenous Peoples' access to cheaper, local fresh produce and, therefore, improve health and food security. Their interest in such smaller-scale and locally oriented businesses shows how Traditional Owners are aware of balancing multiple responsibilities: to generate employment, to improve health, to preserve ecosystem-reliant and cultural-health-affirming hunting and fishing, and to maintain the integrity of water systems. There was substantial support across the catchment for communityowned and -operated agriculture:

We can grow veggies, like potatoes and pumpkins, in them black soil, in black soil. We need some more things around the community. (Ngarinyman Elder 6)

Even if you want CDP [Community Development Program] to start that off, you know. It'd be really good to have your own plant and veggies and all of that. (Ngarinyman Elder 5)

We haven't got any farm yet, but I think it's good to use water from there. There was a community garden, but that was a long time ago. I think community should own that kind of thing. (Ngarinyman Elder 3)

I wouldn't go for mining. However, with farming, I'd more think for that. It's there, available for future generations. (Gajerrong Person 1)

We might want farming ourselves. Our own veggie garden. You might want to have a little acre of watermelon farm. Pumpkin, rockmelon. (Ngaliwurru Elder 1)

In the future, what I want to see is everything grow and be green. (Gurindji Person 1)

If you found a good place to be farming, we need the water for that too. But there is no farming at Daguragu. It is a rough place. Stony place. (Gurindji Elder 1)

Market garden is ok if it was not so big. You have to look at it that it's not going to put too much strain on that watertable. (Gurindji Person 2)

I'd like to see some big farming here, sometime down the track. Could be by damming it or putting a big tank somewhere up on the hill here, to store some water up there, for whatever you need. You got to do planting or something, growing trees around your area. (Western Ngarinyman Elder 1)

The substantial general support for community-scale agricultural development encompassed some participants wanting to prioritise local plant products that already belong to, and are successful in, the landscape. This included avoiding more controversial cash crops such as cotton, and prioritising bush foods and medicinal products:

We people have to remember, if that place not meant for cotton, don't put cotton in it. You're just introducing another species altogether that's not for that environment. Put something there that's going to thrive, that's always thrived. (Gurindji Person 2)

The billy goat plum, 15 you might want to bring them closer too. You might want to set up going long way or you got to bring a close up, go down the road with the tractor and pick things like that. (Ngaliwurru Elder 1)

If you grow bush medicine, you don't know, you might find a cure for cancer. We've got a lot of bush medicine. Why can't we make oil and discover something, something good as food. Bring them into a greenhouse and grow them together. Why wait for somebody? Why should someone else use that idea when that is our backyard? The benefit can come back to us. (Senior Ngarinyman Person 3)

Aguaculture was also considered a potential option:

We don't want have a big thing, but have something small, see what's working and what don't. What's grow and what don't grow. Like fish farming, small. Or yabby thing, you know. And study, I think, study it. If you're got to grow things, like the yabby, see what market they go to. You got to make something that somebody want. (Senior Ngarinyman Person 3)

Amanbidji Land Trust still has pastoral activity overseen by the community, and one participant with a substantial work history in pastoralism commented on the importance of this option. However, pastoralism was not mentioned by many others as a priority. This does not mean that it has been ruled out as a local livelihood option, only that other options had a higher profile in the interviews.

¹⁵ Terminalia ferdinandiana, also known as Kakadu plum.

6.5.3 **ICNRM** programs

Traditional Owners across the Victoria catchment seek to engage more frequently and fully with their Country. As in other locations, a key means of reaching that objective is ranger programs and positions. As noted earlier in this report, there is limited coverage of the catchment by ICNRM programs - Murnkurrumurnkurru (Gurindji) Rangers in the southern catchment and Indigenous rangers working in the co-management of Judbarra National Park. Participants commented on the currently limited amount of Indigenous ranger coverage, as well as their objective to secure more:

We've been talking about having a small ranger office. I don't know when it going to happen. We were asking for a big meeting, get the funding. (Ngarinyman Person 2)

I've asked for a ranger program. Nothing yet. (Ngarinyman Elder 4)

We don't have rangers, we only have the station managers and TOs. (Ngarinyman Elder 6)

Caring for Country, we don't have that program here. (Senior Ngarinyman Person 2)

I wish we had a ranger mob here now and then. Before, they had them rangers from Timber Creek, coming out here looking for any kind of grass or weed. They used to go down here, where the river comes up from Waterloo Station. (Western Ngarinyman Elder 1)

There's no ranger program at Amanbidji at the moment. I think last 6 years I've tried to engage with NLC Community Development mob to engage with the community mob. But we just get a handball, or it falls on deaf ears. (Gajerrong Person 1)

We had meetings about rangers. I don't know if they're going to set it up, but yeah. (Ngarinyman Elder 3)

Ranger positions and partnerships can be a particularly effective form of collaborative land management for Indigenous Peoples who do not have full control over their own territory. Therefore, there is considerable scope for constructive expansion that is consistent with Indigenous development objectives and also has widespread support among the participants.



6.5.4 Ecological, cultural and educational tourism

The further development of appropriately scaled and focused tourism was also an important objective for research participants. This was seen as a potential pathway that enabled improvements in social and economic status:

We looked at tourism on the river a few years back. There's some paintings up on the hills, and we asked the oldies if we could take tourists up there, and they gave their blessing. So we gonna tie it in, where's it comes up the hills, and then walk tourists down to the billabong. Get a barbecue area and space around that billabong. That's the concept I was trying to entice my fellow directors about. Just to keep the tourist dollars in here. They come for 2 or 3 days, do a bit of birdwatching, and off they go. We need to chase the tourists to come down this road. Do a plan, strategic plan. (Senior Ngarinyman Person 2)

Tourism and like fishing drives. Like you take them out for a day's fishing or something. Like on the, along that area that the TOs are from. That fishing charter would be a good idea, because a lot of people don't have the time or the money to buy a big boat like you see for the fishing competition. But they would probably love just to spend an afternoon or a morning paying somebody else to take them to do a little catch about. (Ngarinyman Person 1)

Timber Creek and the adjacent Victoria River is on a major tourist route, but other communities in the catchment, notably Yarralin and Kalkarindji, are not as favourably located for tourism:

We've not had tourism much, because we are so far out from town. (Gurindji Person 2)

Highly variable road quality and conditions are further barriers to establishing major tourism in some locations. The commemoration of past Gurindji pastoral and land rights activism of the Wave Hill [Station] walk-off¹⁶ has provided a focus for Kalkarindji, but it is an annual historical commemoration, rather than being an attraction that can be visited all year round. As a result of these circumstances, the scale of opportunity varies significantly in different parts of the catchment. Nevertheless, tourism remains an important potential industry for participants and their communities in the Victoria catchment.

Indigenous development needs growing and diversified income sources. This requires a combination of strategies, including stable and significant sources of government income, structural recognition of the existing roles that Indigenous Peoples play and of the services their lands provide (e.g. carbon sequestration, biodiversity), and the development and intensification of new forms of private enterprise. Agriculture, ICNRM, and tourism are the three primary on-Country enterprise opportunities referred to in the interviews. In general, smaller-scale, locally driven opportunities are strongly favoured and considered more likely to provide opportunities for Indigenous People, and development that is consistent with Indigenous cultural principles.

¹⁶ Also known as the Gurindji Strike. Gurindji man Vincent Lingiari led 200 Aboriginal stockmen, servants and their families to walk off from Wave Hill, a cattle station in Kalkarindji on the 23 August 1996. The strike continued for almost a decade and 'created a legacy that continues to this day' (https://www.indigenous.gov.au/news-and-media/stories/legacy-wave-hill-walk-off, last accessed 13 September 2024).

7 Conclusion

7.1 Introduction

There is strong ongoing interest from all levels of government in establishing appropriate foundations for sustainable economic development, particularly in rural and regional areas. Indigenous Peoples' rights and interests in natural resources, particularly water and land, are an important factor in the initiation and management of successful sustainable development. Indigenous Peoples wish to protect the long-term health of their traditional lands and the ecosystems, resources, and cultural heritage they contain. Indigenous Peoples can also act as substantial enablers of appropriate development and have been shown here to have a range of existing perspectives and objectives that are crucial for future development.

Although Indigenous historical and contemporary participation in the pastoral industry has received a degree of attention, less information is available about Indigenous roles in wider agricultural development. In part, this reflects the relative strength of Indigenous land tenure and residence in northern Australia, which is currently dominated by pastoral activity. However, it also reflects general orientations in Indigenous-focused research towards traditional Indigenous cultures, colonial and Christian mission histories, native title and cultural heritage, and contemporary Indigenous social and health issues. The data from the Indigenous activity of the Assessment begins to address the knowledge gap regarding the intersection between water and agriculture in a key location in northern Australia. The results of this research identify some pathways for planning for sustainable Indigenous development that is grounded in existing local ideas and aspirations. The emphasis is upon achieving regional coordination that is oriented to wider long-term policy goals.

7.2 Indigenous water values, rights and interests in the Victoria catchment

Indigenous Peoples of the Victoria catchment are deeply attached to their traditional Country through a combination of cultural traditions and a history of personal and familial engagement. Three primary characteristics highlighted here are the Dreaming ancestors, hunting and fishing, and Indigenous Knowledge. These are often cited by Indigenous Peoples as crucial aspects of Indigenous culture and are complemented by a strong sense of prior Indigenous ownership of Country and ongoing rights of access and control. Some of these rights have been upheld in Australian land rights and native title law. Indigenous law goes considerably further in asserting Indigenous ownership over land and natural resources.

However, with that ownership comes a range of obligations and responsibilities. These include inter-generational responsibilities to both ancestors and descendants, as well as responsibilities to near neighbours and those living downstream. The obligation to protect ancestral lands, waters and non-renewable resources is the motivation for the strong and ongoing interest of Indigenous Peoples in cultural and environmental management. As owners and guardians of important

landscapes, Traditional Owners also have a range of principles with respect to managing non-Indigenous presence on their lands. This combination of cultural attributes, rights and obligations underpins Traditional Owner approaches to water issues, including water and agricultural development.

7.3 Development planning and water planning

7.3.1 **Development planning**

Indigenous views of water and development issues reflect their need to balance short-term opportunity with long-term sustainability, where knowledge of both can be very limited. Indigenous communities in the Victoria catchment are confronted by challenging issues, including land dispossession, significant unemployment, poor access to health services, structural impediments to economic resources, a lack of business support services, and social and family units under high levels of stress. Evidence from both regional forums in northern Australia and local participants in the Victoria catchment indicates that Indigenous Peoples have a strong desire to participate in a diverse range of sustainable economic activities. However, the form such development takes is crucial – some types of economic development can increase rather than decrease social and economic gaps between Indigenous Peoples and non-Indigenous people.

At the broadest level, Indigenous development plans and objectives articulate well with objectives specified in government policies in relation to Indigenous engagement, Indigenous socio-economic status, food security, NRM and regional development. Private interests are likely to drive water and agricultural development in the Victoria catchment, but additional government endorsement, and enablement and strategic investment in complementary and related activities will be crucial for successful outcomes for Traditional Owners. It is of particular importance that local groupplanning and community-planning processes are undertaken in a regionally coordinated way, and that the key priorities identified in such processes are resourced. In circumstances where development options are seen as favourable, such support would allow Indigenous Peoples to act as substantial enablers of appropriate sustainable development and to implement a range of existing plans.

Northern Australian Indigenous leaders have begun to reorient towards the private sector as a major initiator of economic development. Indigenous groups and peak bodies have begun to refine the concepts and engagement tools suitable for the task, promoting Indigenous Peoples as existing 'investors' in Australian natural resources and developing a 'prospectus' model to encourage partnerships with other non-Indigenous investors. For Indigenous Peoples, the objective is not just sustainable development, but sustainable development in particular locations, and activities that support the ongoing residence of people in the places that matter most to them.

Successful development partnership approaches require both partners to clearly identify shared goals and priorities. In an Indigenous context, this highlights the significance of appropriate community-based and/or Country-based planning to ensure accurate collective prioritisation. Such collective prioritisation increases the level of community investment in the planning agenda, enhancing the chances for a successful outcome. Clear statements of priorities can also identify

mismatches, avoiding the difficulties and the costs of inappropriate business choices and partnerships.

7.3.2 **Catchment management and water planning**

There is clear and strong interest in managing water as part of a suite of measures aiding the management of the Victoria catchment. The vast majority of the catchment sits outside the only current water allocation plan. Better alignment between water, catchment, and regional planning is needed to be consistent with the relationships Indigenous Peoples in the Victoria catchment have with Country and with each other. Successful Indigenous involvement in catchment- and water-planning processes would enable Indigenous Peoples to more effectively support sustainable development objectives – both their own and those of others in the Assessment area.

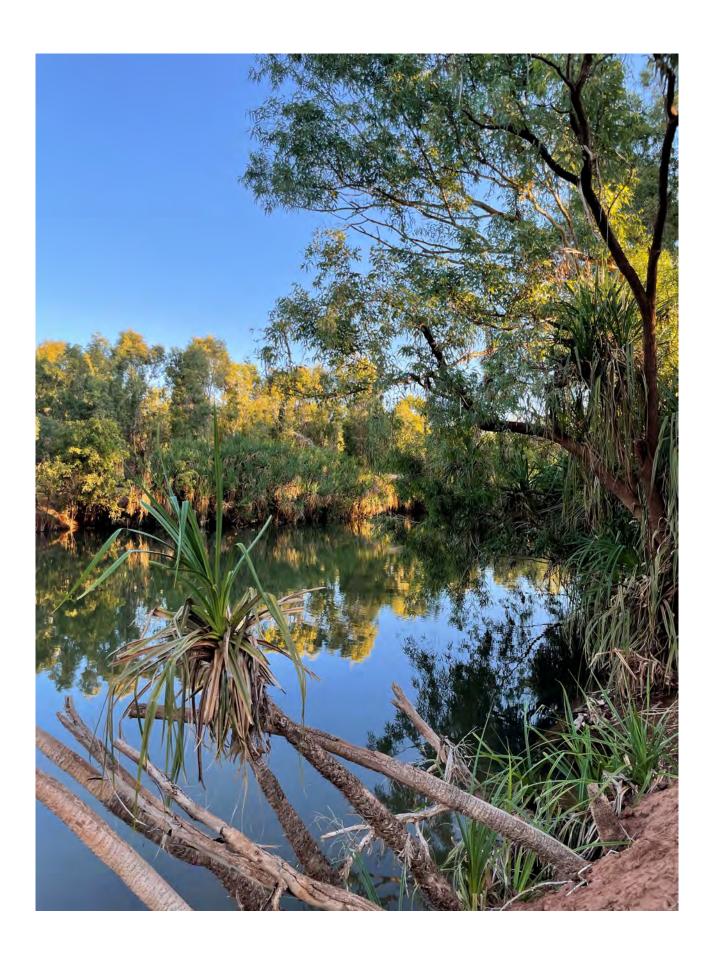
However, in building towards this objective, a range of measures to improve local capacity to participate are needed. Key pathways include:

- building on existing Indigenous water knowledge and expertise through focused, catchmentscale skills and capability building in catchment management and water management
- holding discussions about the management and regulation of water in circumstances where a water control district and water plans may be a considerable time away
- establishing formal structures for catchment-scale Indigenous catchment and water management, aligned with existing structures and processes
- holding further discussions about water rights and water-planning opportunities that are already known to a few people, such as SAWRs
- resourcing further research and sharing of information about downstream interests in water that future catchment management and water planning will need to consider.

It is crucial that Traditional Owners in the Victoria catchment can learn more and participate in discussions about water law and policy, catchment hydrology, and water planning. Three examples of literacy programs that provide culturally relevant and appropriately targeted resources that respond to community information needs are the:

- Central Land Council Native Title story booklets translated into language (https://www.clc.org.au/native-title/)
- Centrefarm Aboriginal Horticulture Limited video Economic parable ALEDA 1 (https://centrefarm.com/)
- New South Wales Aboriginal Land Council factsheet on water licences (Appendix D https://alc.org.au/wp-content/uploads/2020/04/Water-Licences-Fact-Sheet.pdf)

Involvement in catchment management and water management is a crucial pathway for accurately formalising Indigenous water values, rights and interests. It is, therefore, one component of a wider set of foundations that will underpin Traditional Owner support for, engagement with, and participation in, sustainable development in the Victoria catchment.



7.4 Water-development options

Traditional Owners' concerns about water development noted during the Assessment include: the impacts of water extraction, the unsuitability of major instream dams as an option, the effects on animals and plants, the consequences of intensified land use (e.g. weeds, water quality, chemicals, erosion), and cumulative impacts from other industries. The potentially rapid growth of cotton production, given the establishment of cotton gins near Katherine and Karratha, is of particular significance given this list of concerns. Participants also raised concerns about the impacts of water-dependent development on community water supply and recreational facilities, and they aspired to establish more-secure and higher-quality water supplies.

It is also clear that Traditional Owners were themselves scoping development options at smaller scales. Assuming that some water development in the Victoria catchment is likely to occur, a range of steps or pathways may be important in meeting Traditional Owner needs. These include:

- undertaking baseline cultural and environmental heritage surveys of key aquatic landscapes and sites that are likely to be affected by water development
- formal modelling of the potential impacts on those baselines
- holding formal group consultations about water-development options and preferences (e.g. extraction type, location)
- obtaining further information and discussion about the scale and potential employment and economic returns from water-development initiatives
- ensuring Traditional Owner participation and involvement in formal monitoring of the direct site impact of significant developments
- supporting projects and programs that connect Indigenous roles in water development, water planning, water monitoring and reporting, and wider catchment management.

The Assessment highlighted the importance of improved instruments and structures that recognise and empower Traditional Owners and that enable whole-of-river/whole-of-catchment approaches to communication and planning that are currently lacking in the catchment.

A range of views exist about the prospect of further water development in the catchments. These include opposition (based on the potential negative impacts and caution about perceived benefits), through to endorsement of the prospects and the economic opportunities water development may create. The diversity of views again emphasises the importance of group consultation and planning processes. The desire for recognition of Traditional Owners as key managers of water was a consistent finding across all participants, as was the need for benefits to Traditional Owners to flow from such developments.

7.5 Indigenous business and agricultural development

Nominating detailed initiatives regarding Indigenous business would be premature, based on the scoping data collected, but some key examples and key points about Indigenous business development can be noted here. These relate to land-based business ideas, issues of diversification, and prioritisation, and to the generation of partnerships and investment.

7.5.1 **Land-based Indigenous business**

Indigenous Peoples' sustainable development objectives are diverse and incorporate both the development of Indigenous-owned and -operated businesses, as well as involvement in other businesses and activities in the Victoria catchment. On Indigenous-owned lands, a range of business activities have been suggested, including:

- farming activity agriculture, pastoralism, aquaculture
- ecotourism and cultural tourism
- environmental management.

Identifying the best options in developing such businesses requires a case-by-case analysis of the specific situation for the Traditional Owners involved.

This raises the issue of diversification and prioritisation. Given the business activity list above, one potential challenge is diversification and its relationship to both the required skill base and governance. Undertaking multiple activities provides insurance against the failure of any single activity, but also increases individual and corporate management complexity and the need for skills in multiple businesses. This generates additional risks. The collective management structures common to Indigenous-owned properties afford access to a wider set of skills, but also increase the chance of disagreements over priorities and strategic direction. All groups have multiple management roles, but depending on geography, residence, assets, governance and/or skills, some may more easily sustain multiple business activities, while others may be better off focusing on a single activity or a set of closely related activities. Assessing the respective roles of diversification and prioritisation is a key step in future planning.

7.5.2 Partnerships and investment

The issues of prioritisation, governance and investment are critical to wider business partnerships with Indigenous Peoples. A range of options may be useful in improving the opportunities for business to understand and invest in Traditional Owners and their lands in the Victoria catchment. These include:

- producing one or more regional prospectuses to communicate with investors about existing Indigenous assets and opportunities
- holding further information sessions and training for Traditional Owners about the opportunities and constraints of partnerships with private industry, including discussion of the effect of any changes in Indigenous resource rights (e.g. the expansion of native title rights, securing of water rights and allocations)

- holding wider regional non-Indigenous community training about partnerships with Traditional Owners, including models for shared-benefit agreements and partnership arrangements, and employment and training opportunities
- creating incentives for Traditional Owner involvement, including pathways from training to jobs, and employer incentives to hire and retain Indigenous staff
- training younger Traditional Owners about career planning, personal budgeting, and money management, along with developing formal job skills, focusing on living and working in rural areas and/or in agricultural and NRM industries.

A full analysis of the potential for Indigenous business development, partnerships and associated investment is well beyond the scope of this report. However, the above points indicate some potential options and promising directions for further activity in this area. Such activity would benefit from further assessment of local Indigenous needs and priorities, particularly the needs of younger people of employment age.

7.6 Further information needs

The diversity of possible Indigenous development activities, and of the geographic and group contexts in which they might take place, makes it challenging to definitively generalise about the information needs and priorities in this area. The one crucial generalisation is that local engagement and, specifically, local planning are paramount to assessing and implementing development options.

Potential research priorities that may enable Indigenous development objectives include:

- improving understanding of key resource ownership and procedural rights that can be secured by Traditional Owners of the Victoria catchment
- infrastructure and other constraints hindering business development
- employment and training preferences among younger people
- the risks and benefits of agricultural intensification and/or economic diversification on Indigenous-owned pastoral properties and land trusts.

These kinds of research questions would clearly inform Traditional Owner planning processes.

In terms of Indigenous Peoples' responses to wider development, further work could focus more closely on Indigenous preferences, interests and concerns regarding agricultural development. Further consultation at the local and regional level is required to confirm current priorities, regarding these or other issues, from an Indigenous perspective. In combination, these activities would increase Indigenous Peoples' capacity to engage in and to participate in wider natural resource protection, management and development in ways they see as appropriate.

7.7 Summary

This report addresses the request from the Australian Government for further information about Indigenous water values, rights, interests, and development goals in the Victoria catchment. This request was made in the context of scoping further water and agricultural development in the

area. As a result, the scoping study makes particular reference to development issues, impacts and opportunities. The current report provides:

- general principles for understanding Traditional Owner perspectives on culture, Country and the management of natural resources
- guidance about the circumstances of local Traditional Owner groups, including tenure, residence, and organisational arrangements and affiliations
- a representative set of Traditional Owner water values derived from research participants who are senior members of relevant groups in the Victoria catchment
- information about Traditional Owner water rights and interests as they relate to the Victoria catchment
- a representative set of Traditional Owner objectives regarding water management, water resource development, and agricultural development
- additional steps that may facilitate positive Traditional Owner participation in future development and lower the barriers to investment in such development.

In providing this information, this report meets the scope for the Assessment. It also lays foundations for a range of future processes, notably catchment-based development planning. Such planning is a crucial step to ensuring successful outcomes for Traditional Owners from development initiatives. It also facilitates the effective targeting of resources to local Traditional Owner initiatives that will improve ongoing group capacity to engage in discussions of development and catchment management in the future. This combination of improved local capability and regional and catchment coordination is crucial if Traditional Owners are to play an appropriately integral role in sustainable development and the sustainable management of natural and cultural resources into the future.



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Part II Appendices

Appendix A Project information sheet



Australia's National Science Agency

Indigenous water values, rights, interests and development goals in the Victoria catchment

Hearing the voices of Indigenous people in the Victoria River catchment, Northern Territory.

The Victoria River Water Resource Assessment is a research project being led by CSIRO in partnership with the Australian Government's National Water Grid Authority. Scientists are investigating opportunities for water, agricultural, and other related development in the catchment. The work includes research focused on Indigenous people - the water values they have, the rights they hold, and the development goals that are important to them.



Listening to Indigenous views on water and related development opportunities

Indigenous people have lived on the country for many thousands of years, developing deep knowledge of the landscape and strong connections with it. Economic development can provide jobs and income, but it can also put extra pressure on the country as the number of people and businesses grow and water use increases. This project will provide better information for the government and communities when considering future water, agricultural and other water-dependent development options, such as tourism and bush foods. This includes looking at development possibilities, but the project does not directly propose or promote water development. In this project, CSIRO is listening to interested Indigenous people about what water issues exist and what kinds of future development paths they want for themselves and their communities.

Indigenous views might include the need to protect important or sacred places and to maintain water levels in the rivers for Indigenous hunting and fishing. They might also include goals and ideas for Indigenous economic development. This could be an Indigenous-run business that needs a secure water supply or Indigenous employment in businesses run by others that also need water. This valuable information will provide foundations for better future communication between Indigenous people, government planners, and private developers.

Marcus Barber and Kristina Fisher are the main researchers on this project, supported by Kirsty Wikeling. Marcus Barber has worked in many other catchments in the Northern Territory (and other states) on Indigenous water rights and interests. Kristina Fisher is an Ewamian woman from Queensland Gulf Country who has 30 years of experience working in Indigenous community engagement positions. The main research will happen in 2022 and 2023, with results to be shared from 2024.

How can I be involved?

The team want to interview Indigenous people with cultural connections to the Victoria River catchment. The team will consult with the Land Councils and local Indigenous organisations and leaders about the best way for people to participate. The work focuses on senior people able to speak for country and about development issues. Free, prior, and informed consent is very

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important, and people can choose not to be involved at all, or to only answer some questions. They can choose to do an interview by themselves, come through an organisation, or have a group meeting. The team may ask who else is important to talk to - who other key Traditional Owners are. The information the team collects will be stored on computers at CSIRO and will be used to create a public report about Indigenous water values. rights and interests in the Victoria River. No words or statements will be made public without the permission of the speaker and the team will consult communities to share the information and invite feedback. Other CSIRO staff can share information about future possibilities for the area from their studies of soil, water, and agriculture.

If you are interested in participating or have any estions about this research, you can contact MATCH using the contact details below. This research has ethics roval from CSIRO Ethics and their contact details are also below

Building on work done elsewhere in northern Australia

Our CSIRO team has conducted similar work across northern Australia. In each area, we investigated soil and water resources, water capture and storage options, agriculture, aquaculture, and other possibilities, and the risks and impacts of development. The Assessment will not assume any particular development pathway or recommend one form of development over another. The project does not seek to replace any planning processes, and it will not recommend changes to existing plans or planning processes. The results, however, can be used to inform planning decisions by citizens, communities, councils, investors and state and federal governments.







Kristine Fisher

Kirsty Wissing

Marcus Barber

The Victoria River Water Resource Assessment is funded through the Australian Government's \$3.5 billion National Water Grid Fund.





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Appendix B Ethics consent form

Consent Form: Indigenous Water Values, Rights, Interests and Development Goals in the Victoria River Catchment a Subproject of the Victoria River Water Resource Assessment

The person signing this form giving permission to take part in the CSIRO research project about Indigenous water values, rights, interests and development goals in the Victoria River catchment.

The Commonwealth Government wants to learn more about what kind of water developments (like dams and irrigation for farming) are sustainable in this area. This involves studies by scientists of groundwater, rain, floods, and soils. It also involves hearing from Indigenous people about their views, interests, and ideas about future development.

CSIRO is an independent research organisation funded by the Commonwealth Government and it has staff who working on Indigenous peoples' values, rights and interests in water. This research helps Indigenous people communicate how water is important to them. The CSIRO field researchers for this project are Ms Kristina Fisher, Dr Marcus Barber, Dr Kirsty Wissing and Ms Peta Braedon. Their contact details are below.

CSIRO ethics has given the team permission to do this research. By collecting information in interviews and meetings, the research team will create a public report which talks about Indigenous peoples' water values, rights, interests and development goals. Local people and groups decide what information should be recorded and made public.

If you sign this form, it shows that you have given your permission for the team to speak to you and that they can use what you say in reports, community resources, and research articles. Even if you sign this form now, you can change your mind and withdraw later with no penalty. You decide what information you provide can go public. You also decide if your name, your group, or neither of these is put next to your comments by ticking the boxes below. This permission can also be changed at any time before the final report is finished.

My name can be recorded with my comments	
My group affiliation can be recorded with my comments	
My comments need to appear without my name or group affiliation	

The aims of this study have been clearly explained to me and I understand what is wanted of me. I understand that it is my choice to take part and that I can stop at any time. I understand that any information I give will not be shared without my permission and that it will be confirmed with me before it is used in final publication.

Name: (printed)		
Signature:	Date:	

To contact Marcus Barber: T: 07 3833 5519 E Marcus Barber@csiro.au To contact Kristina Fisher: T +61 7 3833 5773 E Kristina.Fisher@csiro.au

Appendix C Indigenous water declarations and policies

The following declarations and policies provide context and complementary information to the local accounts of Indigenous water values presented in previous sections. A number of general statements about values and interests in water have been produced in the past ten years, and five of particular relevance are reproduced here. The first is the declaration produced at the Third World Water Forum in Kyoto in 2003. The next three are more recent declarations emerging from events held in northern Australia: Appendix C.2 is from a meeting of international Indigenous representatives held at Garma in Arnhem Land in 2008; Appendix C.3 is from a meeting of northern Australian Indigenous representatives at Mary River in 2009; and Appendix C.4 is the water policy produced by the Indigenous Water Policy Group of the North Australian Indigenous Land and Sea Management Alliance (NAILSMA). These represent progress from the oldest to the most recent, but also increasing refinement of values, goals and objectives as well as an increasing emphasis on Indigenous Peoples.

Indigenous Peoples' Kyoto Water Declaration 2003 C.1

C.1.1 Relationship to water

- 1. We, the Indigenous Peoples from all parts of the world assembled here, reaffirm our relationship to Mother Earth and responsibility to future generations to raise our voices in solidarity to speak for the protection of water. We were placed in a sacred manner on this earth, each in our own sacred and traditional lands and territories to care for all of creation and to care for water.
- 2. We recognise, honour and respect water as sacred and sustaining all life. Our traditional knowledge, laws and ways of life teach us to be responsible in caring for this sacred gift that connects all life.
- 3. Our relationship with our lands, territories and water is the fundamental physical cultural and spiritual basis for our existence. This relationship to our Mother Earth requires us to conserve our freshwaters and oceans for the survival of present and future generations. We assert our role as caretakers with rights and responsibilities to defend and ensure the protection, availability and purity of water. We stand united to follow and implement our knowledge and traditional laws and exercise our right of self-determination to preserve water, and to preserve life.

C.1.2 **Conditions of our waters**

4. The ecosystems of the world have been compounding in change and in crisis. In our generation we see that our waters are being polluted with chemicals, pesticides, sewage, disease, radioactive contamination and ocean dumping from mining to shipping wastes. We see our waters being

depleted or converted into destructive uses through the diversion and damming of water systems, mining and mineral extraction, mining of groundwater and aquifer for industrial and commercial purposes, and unsustainable economic, resource and recreational development, as well as the transformation of excessive amounts of water into energy. In the tropical southern and northern forest regions, deforestation has resulted in soil erosion and thermal contamination of our water.

- 5. The burning of oil, gas, and coal, known collectively as fossil fuels, is the primary source of human induced climate change. Climate change, if not halted, will result in increased frequency and severity of storms, floods, drought and water shortage. Globally, climate change is worsening desertification. It is polluting and drying up the subterranean and water sources, and is causing the extinction of precious flora and fauna. Many countries in Africa have been suffering from unprecedented droughts. When the terms territory, land and water are used, it is inclusive of all life such as forests, grasslands, sea life, habitat, fish and other biodiversity. The most vulnerable communities to climate change are Indigenous Peoples and impoverished local communities occupying marginal rural and urban environments. Small island communities are threatened with becoming submerged by rising oceans.
- 6. We see our waters increasingly governed by imposed economic, foreign and colonial domination, as well as trade agreements and commercial practices that disconnect us as peoples from the ecosystem. Water is being treated as a commodity and as a property interest that can be bought, sold and traded in global and domestic market-based systems. These imposed and inhumane practices do not respect that all life is sacred, that water is sacred.
- 7. When water is disrespected, misused and poorly managed, we see the life threatening impacts on all of creation. We know that our right of self-determination and sovereignty, our traditional knowledge, and practices to protect the water are being disregarded, violated and disrespected.
- 8. Throughout Indigenous territories worldwide, we witness the increasing pollution and scarcity of fresh waters and the lack of access that we and other life forms such as the land, forests, animals, birds, plants, marine life, and air have to our waters, including oceans. In these times of scarcity, we see governments creating commercial interests in water that lead to inequities in distribution and prevent our access to the life-giving nature of water.

C.1.3 Right to water and self-determination

- 9. We Indigenous Peoples have the right to self-determination. By virtue of that right we have the right to freely exercise full authority and control of our natural resources including water. We also refer to our right of permanent sovereignty over our natural resources, including water.
- 10. Self-determination for Indigenous Peoples includes the right to control our institutions, territories, resources, social orders, and cultures without external domination or interference.
- 11. Self-determination includes the practice of our cultural and spiritual relationships with water, and the exercise of authority to govern, use, manage, regulate, recover, conserve, enhance and renew our water sources, without interference.
- 12. International law recognises the rights of Indigenous Peoples to:
- Self-determination
- Ownership, control and management of our traditional territories, lands and natural resources

- Exercise our customary law
- Represent ourselves through our own institutions
- Require free prior and informed consent to developments on our land
- Control and share in the benefits of the use of, our traditional knowledge.
- 13. Member States of the United Nations (UN) and international trade organisations, international and regional financial institutions and international agencies of economic cooperation are legally and morally obligated to respect and observe these and other related collective human rights and fundamental freedoms. Despite international and universal recognition of our role as caretakers of Mother Earth, our rights to recover, administer, protect and develop our territories, natural resources and water systems are systematically denied and misrepresented by governmental and international and domestic commercial interests. Our rights to conserve, recreate and transmit the totality of our cultural heritage to future generations, our human right to exist as Peoples is increasingly and alarmingly restricted, unduly impaired or totally denied.
- 14. Indigenous Peoples interests on water and customary uses must be recognised by governments, ensuring that Indigenous rights are enshrined in national legislation and policy. Such rights cover both water quantity and quality and extend to water as part of a healthy environment and to its cultural and spiritual values. Indigenous interests and rights must be respected by international agreements on trade and investment, and all plans for new water uses and allocations.

C.1.4 **Traditional knowledge**

15. Our traditional practices are dynamically regulated systems. They are based on natural and spiritual laws, ensuring sustainable use through traditional resource conservation. Long-tenured and place-based traditional knowledge of the environment is extremely valuable, and has been proven to be valid and effective. Our traditional knowledge developed over the millennia should not be compromised by an overreliance on relatively recent and narrowly defined western reductionist scientific methods and standards. We support the implementation of strong measures to allow the full and equal participation of Indigenous Peoples to share our experiences, knowledge and concerns. The indiscriminate and narrow application of modern scientific tools and technologies has contributed to the loss and degradation of water.

C.1.5 Consultation

16. To recover and retain our connection to our waters, we have the right to make decisions about waters at all levels. Governments, corporations and intergovernmental organisations must, under international human rights standards require Indigenous Peoples free prior and informed consent and consultation by cultural appropriate means in all decision-making activities and all matters that may have affect. These consultations must be carried out with deep mutual respect, meaning there must be no fraud, manipulation, and duress nor guarantee that agreement will be reached on the specific project or measure.

Consultations include:

a) To conduct the consultations under the community's own systems and mechanisms

- b) The means of Indigenous Peoples to fully participate in such consultations
- c) Indigenous Peoples exercise of both their local and traditional decision-making processes, including the direct participation of their spiritual and ceremonial authorities, individual members and community authorities as well as traditional practitioners of subsistence and cultural ways in the consultation process and the expression of consent for the particular project or measure
- d) Respect for the right to say no
- e) Ethical guidelines for a transparent and specific outcome.

C.1.6 Plan of action

- 17. We endorse and reiterate the Kimberley Declaration and the Indigenous Peoples Plan of Implementation on Sustainable Development which was agreed upon in Johannesburg during the World Summit on Sustainable Development in September 2002.
- 18. We resolve to sustain our ancestral and historical relationships with and assert our inherent and inalienable rights to our lands and waters.
- 19. We resolve to maintain, strengthen and support Indigenous Peoples. movements, struggles and campaigns on water and enhance the role of Indigenous elders, women and youth to protect water.
- 20. We seek to establish a Working Group of Indigenous Peoples on Water, which will facilitate linkages between Indigenous Peoples and provide technical and legal assistance to Indigenous communities who need such support in their struggles for the right to land and water. We will encourage the creation of similar working groups at the local, national and regional levels.
- 21. We challenge the dominant paradigm, policies, and programs on water development, which includes amongst others; government ownership of water, construction of large water infrastructures; corporatisation; the privatisation and commodification of water; the use of water as a tradable commodity; and the liberalisation of trade in water services, which do not recognise the rights of Indigenous Peoples to water.
- 22. We strongly support the recommendations of the World Commission on Dams (WCD) on water and energy development. These include the WCD report's core values, strategic priorities, the 'rights and risks framework' and the use of multi-criteria assessment tools for strategic options assessment and project selection. Its rights-based development framework, including the recognition of the rights of Indigenous Peoples in water development is a major contribution to decision-making frameworks for sustainable development.
- 23. We call on the governments, multilateral organisations, academic institutions and think tanks to stop promoting and subsidising the institutionalisation and implementation of these antipeople and anti-nature policies and programs.
- 24. We demand a stop to mining, logging, energy and tourism projects that drain and pollute our waters and territories.
- 25. We demand that the World Bank, the International Monetary Fund (IMF), regional banks like the Asian Development Bank, African Development Bank, Inter-American Development Bank, stop

the imposition of water privatisation or full cost recovery as a condition for new loans and renewal of loans of developing countries.

- 26. We ask the European Union to stop championing the liberalisation of water services in the General Agreement on Services (GATS) of the World Trade Organization (WTO). This is not consistent with the European Commission's policy on Indigenous Peoples and development. We will not support any policy or proposal coming from the WTO or regional trade agreements like the North American Free Trade Agreement (NAFTA), Free Trade Area of the Americas (FTAA), on water privatisation and liberalisation and we commit ourselves to fight against such agreements and proposals.
- 27. We resolve to replicate and transfer our traditional knowledge and practices on the sustainable use of water to our children and the future generations.
- 28. We encourage the broader society to support and learn from our water management practices for the sake of the conservation of water all over the world.
- 29. We call on the States to comply with their human rights obligations and commitments to legally binding international instruments to which they are signatories to, including but not limited to, such as the Covenant on Civil and Political Rights, the Covenant on Economic, Cultural and Social Rights, International Convention on the Elimination of All Forms of Racial Discrimination; as well as their obligations to conventions on the environment, such as the Convention on Biological Diversity, Climate Convention, and Convention to Combat Desertification.
- 30. We insist that the human rights obligations of States must be complied with and respected by their international trade organisations. These legally binding human rights and environmental obligations do not stop at the door of the WTO and other regional and bilateral trade agreements.
- 31. We resolve to use all political, technical and legal mechanisms on the domestic and international level, so that the States, as well as transnational corporations and international financial institutions will be held accountable for their actions or inactions that threaten the integrity of water, our land and our peoples.
- 32. We call on the States to respect the spirit of Article 8j of the Convention on Biological Diversity as it relates to the conservation of traditional knowledge on conservation of ecosystems and we demand that the Trade Related Aspects of the Intellectual Property Rights (TRIPS) Agreement be taken out of the WTO Agreements as this violates our right to our traditional knowledge.
- 33. We call upon the States to fulfil the mandates of the United Nations Framework Convention on Climate Change (UNFCCC) and to ratify the Kyoto Protocol. We call for the end of State financial subsidies to fossil fuel production and processing and for aggressive reduction of greenhouse gas emissions calling attention to the UN Intergovernmental Panel on Climate Change (IPCC) that reported an immediate 60% reduction of CO₂ is needed to stabilise global warming.
- 34. We will ensure that international and domestic systems of restoration and compensation be put in place to restore the integrity of water and ecosystems.

C.2 Garma International Indigenous Water Declaration 2008

C.2.1 Declaration Preamble

Context

RECOGNISING and REAFFIRMING that the Indigenous Peoples of the World are and have been since time immemorial sovereign over their own lands and waters and that Indigenous Peoples obtain their spiritual and cultural identity, life and livelihood from their lands and waters.

We assert that water has a right to be recognised as an ecological entity, a being with a spirit and must be treated accordingly. For the Indigenous Peoples, water is essential to creation; Ancestral beings are created by and dwell within water.

We do not believe that water should solely be treated as a resource or a commodity.

Nation-States, in asserting competing sovereignty over the lands and waters, have introduced and enforced unlawful and unjust mechanisms resulting in trespass of the legal entitlements of Indigenous Peoples to the ownership, use, management and benefit of the lands and the waters, without consultation, consent or just compensation where required by law.

Furthermore, Nation-States have grossly mismanaged the lands and waters of Indigenous Peoples, causing ecosystem collapse, human induced climate change, severe water quality degradation, extreme stress upon ecologies and species extinction at a scale and rate which is unprecedented; and;

Gross mismanagement of the lands and waters and denial of access of Indigenous Peoples to their lands and waters has caused severe, widespread and ongoing detrimental impacts to all aspects of the lives and livelihoods of Indigenous Peoples. This includes significant disadvantages to the health, economy and social wellbeing of many Indigenous Peoples. Cultural and linguistic diversity has also been compromised, leading to loss of culture and lifeways of Indigenous Peoples. A contributing factor is the concomitant degradation and expropriation by Nation-States of significant landscapes and sites of spiritual and cultural importance to Indigenous Peoples.

Indigenous Peoples have responsibilities and obligations in accordance with their Indigenous Laws, Traditions, Protocols and Customs to protect, conserve and maintain the environment and ecosystems in their natural state so as to ensure the sustainability of the whole environment.

Acknowledgements

We acknowledge our ancestors and elders who have honoured and maintained the land and waters to the highest standards.

We acknowledge the work of past Indigenous Peoples in drafting and implementing international instruments and customary international law that informs our work towards justice.

C.2.2 The Declaration

We the Indigenous Peoples of the World DECLARE that:

• water is not a commodity. Water is a spirit that has a right to be treated as an ecological entity, with its own inherent right to exist.

We further DECLARE that Indigenous Peoples:

- of many Indigenous Nations have inherent Aboriginal, treaty and other rights to water and waterways for navigation, customary and cultural uses of water.
- have inherent and human rights to water for basic human needs, sanitation, social, economic and cultural purposes.
- have a right to access adequate supplies of water that are safe for human consumption, hygiene and cooking.
- must be fully involved in source water and water shed protection planning and operational processes including controlling Indigenous water licenses and fair allocation policies and practices; and
- have a right to access and control, regulate and use water for navigation, irrigation, harvesting, transportation and other beneficial purposes.

Indigenous Peoples also DECLARE that States must:

- fully adopt, implement and adhere to those international instruments that recognise the rights of Indigenous Peoples and our right to land and water. These include but are not limited to the:
 - International Convention on the Elimination of All Forms of Racial Discrimination 1965 (CERD)
 - 2. World Heritage Convention 1972
 - 3. International Covenant on Cultural, Economic and Social Rights
 - International Labour Organisation Convention 169 4.
 - 5. **Rio Earth Summit Declaration**
 - Palengue Declaration 6.
 - 7. Kyoto Water Declaration
 - 8. Ramstad Convention
 - 9. Convention on Biological Diversity 1992
 - 10. UN Declaration on the Rights of Indigenous Peoples, specifically Articles 8, 20, 24, 25, 26, 27, 28, 29, 31 and 32
 - 11. International Covenant of Political and Civil Rights
 - 12. UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005)
 - 13. UNESCO Convention on the Protection of the Underwater Cultural Heritage (2001)
 - 14. UNESCO Convention on the Safeguarding of Intangible Cultural Heritage (2003)
- recognise that all traditional Intellectual Knowledge and interpretation of the knowledge is the property of the Indigenous Peoples and knowledge holder(s)
- fully engage with Indigenous Peoples and obtain their free prior and informed consent on matters affecting them. States shall engage with the Indigenous Peoples delegated representatives in accordance with Article 19 of the UN Declaration of the Rights of Indigenous Peoples, and
- continue adoption of major cuts to greenhouse gas emissions to combat human induced Climate Change, as well as other harmful compounds and chemicals that cause pollution of water sources.

C.3 Statement from the Mary River Indigenous Water Experts Forum 2009

The following is the formal statement generated from the Mary River Indigenous Water Experts Forum. For the full statement, including underlying principles and practical recommendations, see: http://www.nailsma.org.au/nailsma/forum/downloads/NAILSMA_Mary-River%20Statement_Web.pdf

C.3.1 Mary Statement, 6 August 2009

We the delegates of the Mary River Water Forum make this statement to bring to the attention of the Australian Government the fundamental principle that water, land and Indigenous Peoples are intrinsically entwined.

Indigenous Peoples have rights, responsibilities and obligations in accordance with their customary laws, traditions, protocols and customs to protect, conserve and maintain the environment and ecosystems in their natural state so as to ensure the sustainability of the whole environment.

Consideration by the Australian Government to separate land and water in future policy development for northern Australia and establish a new regime for the allocation and use of water is of critical concern to us.

As Traditional Owners we have an inherent right to make decisions about cultural and natural resource management in northern Australia. In accordance with Article 19 of the UN Declaration on the Rights of Indigenous Peoples we must have a central role in the development, implementation and evaluation of policy and legislative or administrative measures that may affect us concerning water.

Any policies and legislation that are developed in water allocation and management in northern Australia needs to ensure that Indigenous rights are paramount.

In accordance with Article 26 of the UN Declaration on the Rights of Indigenous Peoples we assert that:

- 1. We, the Indigenous Peoples, have the right to the lands, territories and resources which we have traditionally owned, occupied or otherwise used or acquired.
- 2. We the Indigenous Peoples, have the right to own, use, develop and control the lands, territories and resources that we possess by reason of traditional ownership or other traditional occupation or use, as well as those which we have otherwise acquired.
- 3. States shall give legal recognition and protection to these lands, territories and resources. Such recognition shall be conducted with due respect to the customs, traditional and land tenure systems of the Indigenous Peoples concerned.

We further assert that in accordance with Article 32 of the UN Declaration on the Rights of Indigenous Peoples, that:

1. We the Indigenous Peoples, have the right to determine and develop priorities and strategies for the development or use of our lands or territories and other resources.

- 2. States shall consult through our representative institutions in order to obtain our free and informed consent prior to the approval of any project affecting our lands or territories and other resources, particularly in connection with the development, utilisation or exploitation of mineral, water or other resources.
- 3. States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.

Indigenous Peoples have always been part of and are crucial for the maintenance of our ecosystems and therefore want to ensure minimal impact from settlement and unsustainable development across northern Australia.

We urge the government to ensure that sufficient resources are provided to enable the equitable participation of the Indigenous owners of northern Australia in the development of policies, setting of allocations and management of regulatory schemes that may evolve.

We the Indigenous Peoples of northern Australia will work with the Government to establish what water entitlement and allocation is required to satisfy our:

- (i) social and cultural;
- (ii) ecological; and
- (iii) economic needs.

The delegates of this forum support the North Australian Indigenous Land Sea Management Alliance, Indigenous Water Policy Group, representative bodies or individuals to proactively pursue positive outcomes in line with this Mary River Forum Statement.

Two nominations of people from each State/Territory from the North Australian Indigenous Experts Water Futures Forum are provided below to support NAILSMA and representative bodies in advocating this Statement.

Queensland – Ron Archer, Marceil Lawrence

WA – Anne Poelina, Andrew Wungundin

NT – John Christophersen, Mona Liddy

C.3.2 Context of this Statement

In August 2009, about 80 Indigenous experts from northern Australia convened at Mary River Park in the NT to discuss and present to the Northern Land and Water Taskforce their water interests and issues.

Convened by the NAILSMA, the 'North Australian Indigenous Experts Water Futures Forum' provided an opportunity to raise ideas and concerns about economic development and opportunities; the potential impacts of developments in northern Australia; and governance and institutional arrangements as they affect Indigenous community interests, aspirations and issues.

As outcome to that forum, the Mary River Statement was written. The Statement offers testament to the seriousness of Indigenous Peoples contribution and participation in policy decision making.

It is also sends a message that Indigenous Peoples cannot remain on the margins of discussions about development in northern Australia.

C.4 NAILSMA Policy Statement on North Australian Indigenous water rights 2009

Issued by NAILSMA and the Indigenous Water Policy Group, November 2009.

C.4.1 Introduction

As Traditional Owners we have an inherent right to make decisions about cultural and natural resource management in northern Australia. In accordance with Article 19 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), we must have a central role in the development, implementation and evaluation of policy and legislative or administrative measures that may affect us concerning water.

This Policy Statement should be seen in the context of the following assumptions:

- Water is a limited resource and in some catchments the appropriateness of the division of water
 use into consumptive and environmental allocations remains unclear. While the Indigenous
 Water Policy Group position claims a guarantee of an equitable allocation to Indigenous Peoples
 from the consumptive pool, such a rights-based claim is made on the assumption that
 environmental and cultural flows are properly assessed and protected.
- Indigenous knowledge is integral for any decision making (in accordance with Article 31
 UNDRIP). Indigenous Peoples do not wish to exacerbate avoidable environmental degradation
 associated with overallocation of water and therefore believe that water allocations should be
 based on the best available knowledge (including traditional and contemporary Indigenous
 knowledge and western scientific knowledge), sensitive to variations in the flow regime and
 open to review and adaptation.
- Maintaining water flows is fundamental to ensuring the vitality and existence of Indigenous heritage and spirituality.
- Water, land and Indigenous Peoples are intrinsically entwined. (Mary River Statement, August 2009.)

C.4.2 Recognition and reaffirmation

The NAILSMA Indigenous Water Policy Group (IWPG) maintains, in accordance with Article 19 of the UNDRIP that:

'states shall consult and cooperate in good faith with the Indigenous Peoples concerned through their own representative institutions, in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them'.

The IWPG expects the Australian Government to be responsive to the rights of Indigenous Peoples in accordance with the UN Declaration, specifically:

- to maintain and strengthen their spiritual relationship with their traditionally owned territories and waters (Article 25); and,
- to approve the commercial use and development of water on their traditional territories (Article 32.2).

The Australian Government indicated its formal support for the UNDRIP in April 2009. Preceding this, the Commonwealth, State and Territory governments of Australia committed to policies to 'close the gap' in socio-economic status between Indigenous Peoples and the broader community.

The IWPG states that recognising and enhancing Indigenous cultural and commercial rights in the ownership, management and use of water is fundamental to facilitating Indigenous economic development and reducing Indigenous disadvantage.

The recognition of native title in Australia has been a significant advance in the position of Indigenous Peoples. Indigenous rights to land and waters are recognised within the *Native Title Act 1993* (Cth). The non-discriminatory protection of native title is a recognised human right.

It is therefore important to Indigenous Peoples to build upon the rights recognised under the Native Title Act to ensure all Indigenous Peoples can benefit from the commercial use of waters on their traditional lands.

Furthermore, Indigenous Peoples are ready to engage and contribute to the Council of Australian Governments (COAG) water policies and the National Water Initiative (NWI). The NWI requires significant improvement with respect to the recognition of Indigenous rights and interests.

The Garma International Indigenous Water Declaration (2008) acknowledges that water is essential for life and that access to clean water is a human right. First Nation peoples, the Indigenous Peoples of Australia, have maintained sovereignty over their lands and waters from which they obtain their spiritual and cultural identity, life and livelihoods.

The IWPG maintains in accordance with the Mary River Statement (2009) that the Indigenous Peoples of northern Australia are the Traditional Owners and custodians of the land and waters of the region. Water land and Indigenous Peoples are intrinsically entwined.

The IWPG advocates for the recognition of Indigenous rights to the ownership, management and use of waters for both customary and commercial purposes. Its advocacy for commercial rights is a pragmatic response to the COAG Water Reform Agenda, specifically the NWI, and the sudden pace of development in northern Australia.

C.4.3 The Indigenous Water Policy Group

The IWPG is an initiative created and facilitated by NAILSMA.

Its members represent some Indigenous land councils and corporations across northern Australia and other Indigenous institutions and community groups. (For more details see http://www.nailsma.org.au).

Formed in 2006, it is the only construct in the northern Australia examining Indigenous water policy and coordinating across state and territory jurisdictions. The IWPG continues the work of the Lingiari Reports (2002) to address Indigenous rights, responsibilities and interests in water. The IWPG aims to improve people's awareness about government water reform agendas and to

engage in research relating to Indigenous rights, responsibilities and interests in land and water resources.

The IWPG is one of three initiatives of the NAILSMA Indigenous Water Resource Program. The IWPG works in parallel with the Indigenous Community Water Facilitator Program, which supports regionally based Indigenous engagement and research in water policy and management. The IWPG also works with Tropical Rivers and Coastal Knowledge (TRaCK) through its Theme 6 on Sustainable Enterprises, which examines water markets and rights relating to Indigenous interests.

C.4.4 **The Indigenous Water Policy Statement**

The NAILSMA Indigenous Water Policy Group States that:

- 1. Indigenous Peoples' traditional ownership must be fully recognised in Australian law:
- The Native Title Act 1993 should be enhanced to provide for Indigenous rights to be recognised in the modern economy regardless of legal proof of native title.

This is consistent with the Australian Government's native title policies which seek to encourage agreements that recognise both native title and non-native title outcomes for Indigenous Peoples.

- 2. To ensure cultural rights and the equitable use of the consumptive, commercial allocation of water, water legislation and policy must include:
- an allocated Cultural Flow, (in accordance with Articles 8, 25-28 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)).

Cultural Flows are water entitlements that are legally and beneficially owned by Indigenous Peoples and are of sufficient and adequate quantity and quality to maintain the spiritual, cultural, environmental, social and healthy livelihoods of Indigenous Peoples of northern Australia (refer to the MLDRIN 2008 Echuca Statement).

- 3. Any water plan in tropical Australia must, irrespective of historical allocation, should include an equitable Indigenous allocation from the consumptive pool for commercial purposes:
- An Indigenous guaranteed entitlement to water in tropical northern Australia from the consumptive pool for commercial purposes.
- For any commercial use of water, a negotiated revenue stream should be incorporated to be payable to Indigenous Traditional Owners and native title groups (in accordance with Articles 3, 5, 23, 26-28 UNDRIP).
- The establishment of an Indigenous Water Fund (or similar) that underwrites the Indigenous purchase of an equitable allocation of existing consumptive pools where it is otherwise unavailable; and in cases where compensation is entitled (in accordance with section 17 of the Native Title Act).

An Indigenous Water Fund is an Indigenous managed construct to be used for the benefit of those Indigenous Peoples currently unable to access a commercial allocation and its generated incomes (in accordance with Articles 4, 18, 20 and 23 UNDRIP).

- An Indigenous entitlement to waters should be temporarily tradable, especially on a negotiated leasehold basis that will avoid the longer-term alienation of water property rights from the Indigenous owners (in accordance with Articles 5, 23 & 26 UNDRIP).
- 4. The planning and ongoing management of water resources will be done jointly with Indigenous Traditional Owners, native title groups and State and Territory water agencies (in accordance with Articles 8, 18, 19, 23, 26-29 & 32 UNDRIP).

Disclaimer:

Nothing in this Statement is intended to adversely affect the legal rights, negotiating or policy position of any of the Native Title representative bodies nor Indigenous Peoples of northern Australia.

C.5 Indigenous Peoples' declaration for the 2023 United National Water Conference

We, the representatives, organizations, authorities, and members of the Indigenous Peoples of the seven sociocultural regions, have reflected, discussed and developed recommendations for the actions required by the international community to protect, defend and safeguard water. For Indigenous Peoples, these actions, to be effective, must recognize and implement our rights and knowledge within the framework of the 2023 United Nations Water Conference taking place in New York March 22–24, 2023. We welcome the initiative of the United Nations to bring together at this critical time the Member States, the private sector, NGOs, Indigenous Peoples and other actors to conduct the "mid-term review of the Decade of Action for Water, 2018-2028". We recognize the urgent need for the world community to define and commit to effective strategic responses to the dual water and climate crisis. We extend our appreciation to the co-hosts of the Conference, the Republic of Tajikistan and the Kingdom of the Netherlands and commend their efforts in this regard.

We have analysed the processes and discussions to date that have created the current policies at the UN and other international spaces impacting water, as the source and basis of all life. We have concluded that Indigenous Peoples, our rights, knowledge and time-tested solutions have not been effectively included nor considered in most of these discussions. We appreciate that the 2023 UN Water Conference has opened a small window for Indigenous Peoples to be heard as rights-holders, and for our contributions to be included in the outcomes.

We categorically affirm that Indigenous Peoples around the world continue to be primary actors in the care, protection and regeneration of water based on our deep and longstanding spiritual, cultural and economic relationships with water in all its forms and sources. Since time immemorial, we have relied on our own methods, techniques, sciences, ceremonies, and interdependent relationships with the ecosystems that sustain and are sustained by water as a sacred source of life.

For Indigenous Peoples, water is an inherent and inalienable right and responsibility.² Water will continue to sustain us only if conscious and committed measures are taken for its protection. We honor water as our first home. It is essential for the production of our food and for the reproduction of all species. Clean water is an essential traditional medicine, a source of healing

and life-renewal in our ceremonial and spiritual practices. **We are water and without it we would not exist.**

We therefore reject absolutely the commodification, privatization and dispossession of water being implemented by states and private-sector entities around the world. Our original sources of water are being diverted to urban areas, mega-dams, extractive industries and large-scale agriculture production, systematically violating our inherent, internationally recognized rights, inter alia, to self-determination, self-government and autonomy, means of subsistence, health, lands, territories and natural resources, and free, prior and informed consent.³ These policies and practices result in repressive and often violent outcomes for Indigenous Peoples, depriving us of our traditional lands and territories, diminishing and contaminating our water sources, and further contributing to the water crisis we are facing in our homelands caused by climate change.

We are deeply concerned that current national and international policies continue to allow widespread deforestation, mining, drilling and use of highly toxic agro-chemicals, contaminating water systems that nurture millions of species around the world. We are particularly concerned by the continuing contamination and poisoning of water sources by toxic waste produced by mining and drilling activities⁴. These include contaminants such as mercury, which have well-documented, devastating impacts on maternal, child and inter-generational health and development. Many of these extractive activities also contribute directly to the global climate crisis and further diminish Indigenous Peoples' capacity to adapt.

We affirm that Indigenous Peoples continue to carry out a vital role in the protection of the Natural World and its original biodiversity. We continue to maintain and practice our sacred responsibilities as caretakers and protectors of water in all its forms including rivers, streams, lakes, springs, rain, snow, ice and oceans. We will continue to do this as an unwavering commitment. However, for us to realize and implement this commitment, it is essential that global institutions, international organizations, national, regional and local governments, as well as national and transnational corporations fully recognize and respect our rights. These include, inter alia, rights affirmed in Convention 169 of the International Labor Organization on Indigenous and Tribal Peoples in Independent Countries, the American Declaration on the Rights of Indigenous Peoples and the rights affirmed in Nation-to-Nation Treaties and Agreements with settler governments.

We insist that all initiatives related to water, and specifically those that are carried out within our traditional lands and territories, be undertaken only with our Free, Prior and Informed Consent and full participation in decision-making by our authorities and representatives designated by our own Peoples. We reject the manipulations being carried out by some States to circumvent the true representation of Indigenous Peoples through falsified or watered-down consultation processes.

We also call upon States, international agencies, financial institutions, and the United Nations System⁷ to support all initiatives and actions developed by Indigenous Peoples regarding water, respecting the self-determination, autonomy, and self-government of our Peoples according to our own forms of organization, land tenure, and resource management systems.

We endorse the contributions to advance the respect and defense of our rights developed in the thematic reports presented to the Human Rights Council and the UN General Assembly by the Special Rapporteurs on the Right to Water and Sanitation, the Special Rapporteur on Toxics and

Human Rights, and the Rights of Indigenous Peoples. We also welcome the recommendations of the UN Permanent Forum on Indigenous Issues and the Expert Mechanism on the Rights of Indigenous Peoples in this regard.8

Finally, we condemn and reject with one voice the systematic repression, persecution, kidnapping, assassination and criminalization of Indigenous Peoples and their authorities, leaders, and representatives who are defending their rights to lands and territories including their right to water. We also reaffirm the essential role of Indigenous women as water protectors, water defenders and water knowledge holders and call for their practices, and contributions and leadership to be recognized and safeguarded.

Based on the above, we recommend that the United Nations 2023 Water Conference outcome document include firm commitments by States and the UN System to:

- 1. Recognize, support, and respect Indigenous Peoples' scientific knowledge, cosmovisions and time-tested practices for the preservation, protection, management, use, and distribution of water in all its forms, and to ensure the full and effective participation of Indigenous People in the creation and implementation of national and international policies affecting and addressing water, including Indigenous knowledge holders, women, and youth.
- 2. Respect and uphold the rights of Indigenous Peoples recognized and affirmed in instruments of the United Nations and other intergovernmental bodies in the development and implementation of national and international policies and actions for water protection, mitigation of climate change, forests, desertification, and protection/recovery of Biodiversity. These include inter alia, the rights affirmed in the United Nations Declaration on the Rights of Indigenous Peoples to Free Prior and Informed Consent, Self-Determination, and rights to lands, territories and natural resources including water.
- 3. Hold UN member states, private companies, extractive industries, landowners, UN bodies and other entities accountable for failure to fully respect and implement the rights of Indigenous Peoples, including to Free Prior and Informed Consent regarding extractive development as well initiatives carried out in the name of sustainable development, biodiversity conservation, climate change mitigation, and the creation of "protected areas" which deny access to traditional sources of food and water.
- 4. Halt the persecution, repression and criminalization of Indigenous Peoples defending rights to lands, territories and resources including water, and ensure effective mechanisms to bring perpetrators to justice.
- 5. Recognize and prioritize in their policies and programs the collective human responsibility to safeguard and protect water, and further recognize that privatization, usurpation, contamination, and commodification of water are crimes against humanity that produce conflicts, deaths and dispossessions around the world; halt the exploitation of water by mining, damming and industrial uses that are causing the destruction and contamination of water sources and waterways.
- 6. Establish mechanisms and resources to ensure the ongoing active participation of Indigenous Peoples in international discussions impacting and addressing water. We urge the United Nations Voluntary Fund to support with funds, the participation of our representatives in future discussions, and for States to support this engagement.

In conclusion, we offer the following commitment to be added to the commitments of the UN 2023 Water Conference: Indigenous Peoples commit to actively engage, coordinate and plan with national, regional and local governments as well as UN bodies, based on their full recognition of our rights and respect for the value of our contributions, in order to produce positive results for the protection of water, and promote solutions that benefit our future generations, the natural world and all humanity.

Finally, we request that the United Nations Secretary General register, post and circulate this Declaration as an official document submitted for the United Nations Water Conference.

Signed and endorsed by the following Indigenous Peoples and organizations:

- 1. International Indian Treaty Council (IITC)
- 2. Center for Support of Indigenous Peoples of the North (CSIPN)
- 3. Indigenous Peoples of Africa Coordinating Committee (IPACC)
- 4. Asia Indigenous Peoples Pact (AIPP)
- 5. World Reindeer Herders Association
- 6. Pacific Indigenous & Local Knowledge Centre of Distinction
- 7. United Confederation of Taíno People (UCTP)
- 8. Coordinadora Andina de Organizaciones Indígenas (CAOI)
- 9. Centro para la Autonomía y Desarrollo de los Pueblos Indígenas (CADPI)
- 10. Asamblea Nacional Indígena Plural por la Autonomía (ANIPA-México)
- 11. Alianza de Mujeres Indígenas de Centroamérica y México (AMICAM)
- 12. Assembly of First Nations
- 13. Caribbean Amerindian Development Organization
- 14. Schaghticoke First Nations
- 15; Kamilaroi Nation, Australia
- 16. Movement for the Survival of the Ogoni People
- 17. Aborigen-Forum Network
- 19. Foundation for the Promotion of Traditional Knowledge, Panama
- 20. Association for Indigenous Women and Peoples of Chad (AFPAT)
- 21. Unidad de la Fuerza Indígena y Campesina
- 22. Latin America Indigenous Womens Network
- 23. Association of Artisanal Fishers of South India
- 24. Six World Solutions
- 25. Sicangu Treaty Council
- 26. Three Fires Society

- 27, Ramapough Lunaape Nation
- 28. Unite for the Promotion of Batwa (UNIPROBA)
- 29. PACOS Trust, Malaysia
- 30. Project Access Indigenous Partnership
- 31. Red de Adolescentes y Jovenes Indígenas de Amazonas
- 32. Red de Jovenes Indígenas de America Latina y el Caribbean
- 33. Indigenous Environmental Network
- 34. Asian Indigenous International Network
- 35. Global Home for Indigenous Peoples
- 36. Association of Village Leaders, Suriname
- 37. Network of Indigenous and Tribal Peoples of the Caribbean Region
- 38. Grupo Guía, Perú
- 39. Congreso Nacional de Comunicación Indígena-México
- 40. AUTORIDAD TRADICIONAL MAZAHUA DE SAN LORENZO CUAUHTENCO-MÉXICO;
- 41. Red de Mujeres Indígenas y Afrodescendientes con Discapacidad de América Latina y El

Caribe

- 42. Fundación Paso a Paso A.C.
- 43. Indigenous Peoples of Africa Coordinating Committee (IPACC)
- 44. Asociación Maya UK'UX B'E. Guatemala
- 45. Asociación de Mujeres Ixq'auii
- 46. Agencia Internacional de Prensa India (AIPIN-México)
- 47. Federación Indígena Empresarial y Comunidades Locales de México
- 48. Consejo de Mujeres Indígenas Biodiversidad
- 49. Asociación de Comunidad Indígenas Consejo de Autoridades Ancestrales y Guías Espirituales de Peten "Wajxaqib' Q'anil"
- 50. Asociación de Desarrollo Integral para el Pueblo Maya AQ'AB'AL
- 51. Asociación de Asentamientos Unidos del área Ixil
- 52. Coordinadora Nacional de Viudas de Guatemala
- 53. Cabecera del Pueblo de Santiago Atitlán
- 54. Consejo de Principales de San Lucas Tolimán
- 55. Consejo de Autoridades Ancestrales de San Andrés Semetabaj
- 56. Consejo de Ancianos "Ri Ajaw Tinamit" de Panajachel
- 57. "Qatb'altzij rixin Tinamit" Alcaldía Indígena de San Marcos la Laguna

- 58. Alianza de Autoridades Ancestrales Ajpop Tinait Oxlajuj Imox
- 59. Indigenous Peoples Rights International
- 60. Right Energy Partnership with Indigenous Peoples
- 61. Sea Tribes, Indigenous Coastal Media
- 62. Network of Indigenous Women in Asia (NIWA)
- 63. Indigenous Knowledge and Peoples of Asia (IKPA)
- 64. Asia Indigenous Youth Platform (AIYP)
- 65. Indigenous Peoples Human Rights Defenders (IPHRD)
- 66. Indigenous Women in Thailand (IWNT)
- 67. Bangladesh Indigenous Women's Network
- 68. Consejo Indígena de Centro América (CICA)
- 69. Brokenhead Ojibway Nation
- 70. All Burma Indigenous Peoples Alliance ABIPA
- 71. Guainía Taíno Tribe, Borikén
- 72. Guainía Taíno Tribe, US Virgin Islands
- 73. NDN Collective
- 74. Semilla Warunka
- 75. Indigenous Peoples Major Group

Other supporting organizations:

- 1. FILAC
- 2. Pawanka Fund
- 3. Center for Earth Ethics (CEE)
- 4. NGO Committee on the Rights of Indigenous Peoples
- 5. Oxfam, Mekong Water Governance, Viet Nam

¹ Report of the Special Rapporteur on the human rights to safe drinking water and sanitation, Pedro Arrojo-Agudo on the human rights to safe drinking water and sanitation of Indigenous Peoples: state of affairs and lessons from ancestral cultures. Presented to United Nations Human Rights Council, 51st Sessions, 12 September – 7 October 2022.

² FILAC affirms that "according to the World Bank, of the 7837 million people living on the planet, 2,000 million do not have access to safe water to meet their most basic needs. 446,000 children under five years of age die annually from diseases linked to the consumption of safe water. Three thousand million people depend on transboundary river basins in constant tension for this vital element." FILAC

³ Articles 3, 10, 19, 20, 24, 26, 32, and 37, United Nations Declaration on the Rights of Indigenous

4 Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Marcos Orellana. The impact of toxic substances on the human rights of Indigenous Peoples. A/77/183

5 Organization of American States. General Assembly. American Declaration on the Rights of Indigenous Peoples. Adopted at the third plenary session, held on 15 June 2016. AG/RES. 2888 (XLVI-O/16)

6 Article 18, United Nations Declaration on the Rights of Indigenous Peoples, adopted by the United Nations General Assembly on 13 September 2007.

7 Article 41, Ibid.

Appendix D Example of a Water Literacy factsheet



Water Licences

This Fact Sheet provides information about the laws and management regimes applying to water licences and water trading in NSW.

This is one of a series of Fact Sheets which have been developed for Local Aboriginal Land Councils (LALCs) and the Aboriginal community by the NSW Aboriginal Land Council (NSWALC). Copies of Fact Sheets are available from www.alc.org.au or by calling the NSWALC Resource Centre on 02 9689

Note: While all care has been taken in the preparation of this Fact Sheet, it is not a substitute for legal advice in individual cases. This Fact Sheet is current as of June 2013.

1. What are water licences?

Water licences and approvals are generally needed to take water from a river, lake or ground water source in NSW. Licences are issued by the NSW Office of Water in the Department of Primary Industry under two pieces of legislation:

- The Water Management Act 2000 governs the issue of new Water Access Licences and the trade of Water Access Licences and allocations, where a Water Sharing Plan is in place (see Water Sharing Plans below).
- The Water Act 1912 governs water licences in areas where there is no Water Sharing Plan.

Note: Water licences are not needed for:

Domestic and Livestock - where a property owner has direct access to the water source, water can be used for domestic household and livestock purposes.

Native Title Rights - as per the Native Title Act, holders can access water for personal, domestic and noncommercial communal purposes.

Harvestable Water - Using rainwater and run-off collected in private dams.

2. Different types of water licences.

Water Access Licences under the Water Management Act 2000 and water sharing plans, give the licence holder the right to a share of the available water in a particular area or water source, allowing water to be taken at specified times, rates or in specified circumstances.

Importantly, Water Access Licences are not tied to land ownership or title. They are a form of personal property, and where they are not time limited, they can be sub-divided, consolidated or traded independently of land (see Water Trading below).

Note: Water licences under the Water Act 1912, are tied to the land and can only be transferred or sold with the land to which they are attached.

There are different categories of Water Access Licences; the most common are:

- · Regulated River (high security) and Regulated River (general security): exist on regulated rivers (rivers below large dams) and allow the licence holder to order water for release from the dam. High security licences are given a higher priority to access water than general security licences (see Water Sharing Plans below).
- · Unregulated River: exist on rivers without dams or above dams on regulated rivers. Allow licence holders to access water based on river flow and the Water Sharing Plan.
- · Aquifer: exist where there is underground water which can be recharged. Allow the licence holder to access water based on storage, recharge, and the Water Sharing Plan.
- Supplementary: generally exist on regulated rivers (rivers below large dams) and allow the licence holder to access a share of an uncontrolled high flow event.

Note: A Water Use Approval is also needed from the NSW Office of Water to use water allocated under a Water Access Licence.

Aboriginal Cultural Water Access Licences allow Aboriginal peoples to access water for personal, domestic, cultural and spiritual purposes. They are to be made available for all water sources, including rivers, lakes and groundwater where there is a Water Sharing Plan in place. The main conditions for such licences are:

- Applicants must be Aboriginal.
- The cultural purpose must be clearly defined and endorsed by the relevant Traditional Owners and Local Aboriginal Land Council.
- The licence is time limited to its cultural purpose and cannot be traded.
- The water cannot be used to make money.
- It is limited to 10 megalitres.

Aboriginal Community Development Water Access Licences are available to support Aboriginal businesses, but only in coastal areas and in some groundwater systems with Water Sharing Plans. They are also only available for groundwater or for unregulated rivers (a river above a large dam or without a large dam) during high flows

There are similar conditions to Aboriginal Cultural Water Access Licences that apply to these licences, but they can be up to 500 megalitres and can be traded in limited circumstances.

Note: LALCs have a range of Water Access Licences. To find out what licences your LALC has contact the Water Access Licence Register (see Find Out More below).

3. Water Sharing Plans

Water Sharing Plans are prepared under the Water Management Act 2000 and establish the rules for trading water and for sharing water between environmental needs and the needs of water users.

Water Sharing Plans operate for ten years before they are reviewed and can be prepared for specific river or groundwater systems or for larger areas.

Water Sharing Plans allocate shares in available water to the environment and water users ranked in order of priorities that can change with conditions; so that:

When there is lots of water - everyone gets what they need.

When water flow is getting low - everyone gets less but the environment, livestock and domestic uses take top priority, followed by some other water users such as town water supply and holders of High Security Water Access Licences.

When it's really dry - town water supply, livestock and domestic uses take priority over all licences and the environment

Priority of Water Access Licences & users

Domestic and stock **Top Priority** Local utility Major utility Aboriginal Cultural Regulated River (High Security) Aguifer access Regulated River (General Security) Unregulated River

Bottom Priority Supplementary

The NSW Office of Water is responsible for developing Water Sharing Plans, and consulting with stakeholders in their development. Draft Water Sharing plans are also placed on public exhibition for comment, before the Minister for Primary Industries, with agreement from the Minister for the Environment finally approves them.

The Aboriginal Water Initiative has been designed to ensure Aboriginal communities are engaged in the development and review of Water Sharing Plans (see Aboriginal Water initiatives below).

Note: Water Sharing Plans are being rolled out across NSW, replacing the older water management arrangements of the Water Act 1912. Existing water licence rights will be recognised under the new Water sharing plans which will eventually cover the entire state.

4. Water Trading

Water Access Licences and water allocated under such licences can be valuable economic assets, as they can be bought, sold, mortgaged, or leased fully or in part.

There are two classes of water dealings:

General dealings - are where the Water Access Licence itself is traded, the share component of the Water Access Licence (the entitlement to the share of available water) is wholly or partially traded, or the Water Access Licence is changed in any other way.

All general dealings must be registered with the Water Access Licence Register and some changes such as share component assignment also require NSW Office of Water Approval.

Water allocation assignment dealings - are where the water allocated under a Water Access Licence is traded and the there is no change of ownership or otherwise to the licence itself.

Water allocation assignment dealings must be approved and registered by the following:

- State Water On Regulated Rivers; rivers below large dams.
- NSW Office On Unregulated Rivers; rivers above or without of Water large dams.

Note: Water Access Licence dealings are not a land dealing under the Aboriginal Land Rights Act 1983, as such the LALC Board may make such a decision and NSWALC approval is not required.

Case Study:

A LALC with a rural property leased to a farmer also has both High and General Security Water Access Licences.

The Water Access Licences are not tied to the land and the LALC was able to negotiate the sale of the water allocations under the Water Access Licences to the farmer. The sale of water made money in addition to the rent paid on the property's lease agreement.

The deal has provided the farmer with water to continue agricultural activities and the LALC has gained an income stream from the Water Access Licence, whilst retaining it as an economic asset for the future.

Water trading has complex commercial and legal aspects to it and careful consideration needs to be given to any water trade.

A possible model for LALC water trading:

Understand what water assets you have? Water Access Licences may be checked on the Water Access Licence Register (see Find out More below). NSWALC staff can assist with this.



Understand what your options are. Consider the pros and cons of water trade options (see above).

Find out the current market prices and trading charges-checking with multiple water traders to ensure competitive terms.

NSWALC staff can assist with this.



The Board needs to make an informed decision on any water trade.

The Board needs to consider all aspects of the water trade before it makes a

NSWALC staff can provide advice on what the Board should consider.

5. Aboriginal Water Initiatives

There are a number of State and Commonwealth Government Aboriginal water initiatives which LALCs may wish to engage with.

NSW Office of Water - Aboriginal Water Initiative - aims to raise Aboriginal capacity to engage in water planning and management. To find out more call 02 8838 7898 or visit their website:

http://www.water.nsw.gov.au/Water-

management/Water-sharingplans/Aboriginal-Water-Initiative/Aboriginalcommunities

National Water Commission - National Water Initiative – works in partnership with the NSW Office of Water to integrate non-Aboriginal knowledge with Aboriginal community knowledge and values. To find out more visit their website: http://www.nwc.gov.au/nwi

Commonwealth Department Sustainability, Environment, Water Populations & Community - Water Reform Division, Indigenous Water Advisory Committee - provides advice on incorporating Indigenous views, beliefs and interests into the development and implementation of Commonwealth water politics and programs. To find out more, visit their website: http://environment.gov.au/water/australia/c ommunity-input/indigenous-committee.html

6. Find out more

The NSW Office of Water breaks down the various elements of water licences in a general sense. Start on the licence page: http://www.water.nsw.gov.au/Water-Licensing/About-licences/default.aspx

Our Water Our Country is a publication by the NSW Office of Water providing a look at water in NSW in relation to Aboriginal people and communities. It can be downloaded from their website:

http://www.water.nsw.gov.au/Watermanagement/Water-sharingplans/Aboriginal-Water-Initiative/Aboriginalcommunities

For the Water Access Licence Register call 1300 052 637 or visit the NSW Land and Property Information website: http://www.lpi.nsw.gov.au/land_titles/public registers/water access licence register

For Water Access Licence dealings visit the Registrar General's Directions Website: http://rgdirections.lpi.nsw.gov.au/water_deal ings/components of wal dealing forms

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