

Murru waaruu

(On Track)

Economic Development Seminar Series



Seminar 2

Using The Acquired Assets — Background Paper



The purpose of this paper is to provide background information and to promote dialogue and debate at a seminar held on 18-19 April 2023 that will focus on the subject matter.

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All artworks and creative designs in this *Murru waaruu*Seminar Background Paper have been created by **Rohit Rao**.
Rohit is a young artist and graduate student at the Australian National University Fenner School of Environment and Society.

Rohit is interested in using art and stories to challenge and communicate complex social and ecological issues and working with communities to imagine and implement alternatives to meet them. Marramarra murru is a local Ngambri, Ngunnawal and Wiradyuri term that describes the creation of pathways. The pathways were created by Biyaami, the creator and protector who gifted and shared them with the ancestors. Passed on from generation to generation, these pathways serve to ensure survival and wellbeing through the maintenance and transfer of knowledge, lore, custom and cultural authority, as well as facilitating trade.

Like these ancient pathways, the *Marramarra murru* First Nations Economic Development Symposium identified contemporary pathways to economic self-determination for Australia's First Nations peoples.

We speak to each other in many different ways such widyung (which way?), widyundhu (which way you?) or widyunggandhu (how you?). First Nation languages can be described as free word order languages which have a different foundational principle from that of English, a fixed word language. In fixed word order European languages such as English, everything is based on one framework or another of continuum (linear) logic. In the free word order of Australian Indigenous languages, it appears that the foundational frame is one of an unchanging (although manipulative) network of relationships. Behind these two different systems of logic is a different basic assumption about the nature of the cosmos.¹

Australian Indigenous people place a very high value on relationships and identity and constantly think about relationships with other people, with the spiritual world, with place, and with the things in the living and spiritual world. The identity of all things (and people) is defined by their relationships with, or to, all 'identities' in the social, the spiritual and the physical environment.²

Our identity, relationship, actions, focus and transformation help keep our people 'on track'. A Ngambri, Ngunnawal and Wiradyuri term for this is **murru waaruu**.

Foreshadowed by the *Marramarra murru* Symposium, the *Murru waaruu* First Nations Economic Development Seminar Series, the subject of this document, will comprise a series of topic-specific seminars that are designed to bring together leading scholars and practitioners to develop solutions for

specific relevant issues, ensuring we remain on track to deliver a compelling, evidence-based case to transition the existing First Nations economic development policy paradigm in Australia to one the supports economic self-determination.

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¹ Grant, S. and Rudder, J. 2014, *A Grammar of Wiradjuri Language*, Restoration House, Canberra, page 4.

² Ibid.

Contents

Introduction	7
Rights as an economic asset	7
Economic self-determination is fundamentally underpinned by property rights	7
United Nations Declaration on the Rights of Indigenous Peoples and economic rights	7
Status of Australian First Nations' economic rights	8
Trajectory of Australian jurisprudence	9
Importance of competitive advantage	9
Land rights as an economic asset	10
Australian land tenure framework: an overview	10
A typography of Australian First Nations land rights and interests	11
State Aboriginal Land Trust lands	11
Northern Territory Aboriginal Land Rights Act lands	12
Indigenous Land and Sea Corporation facilitated lands	12
New South Wales Land Rights lands	12
Native Title lands	13
Indigenous Land Use Agreements	14
Indigenous Protected Areas	14
The nature of the Australian land resource	16
Creating value from land rights and interests	17
Land management and the conservation economy	17
Agriculture	18
Carbon farming	22
Minerals and petroleum	23
Renewable energy and decarbonisation	27
Geological sequestration	35
The spacecraft launch, ground station and astronomy sectors	37
Municipal services	40
The opportunities and constraints	40
Sea Country rights as an economic asset	41
The nature of the Australian marine resource	41
Management of marine territories and access rights in Australia: an overview	42
The marine estate and zones	42
Jurisdiction, access and management within maritime zones	46
The Offshore Constitutional Settlement: State and Commonwealth jurisdictional divisions	47
Fisheries and other living aquatic resources	48
Wild-catch fisheries and aquaculture	49
Coastal waters: State and Northern Territory fisheries	51
Coastal waters: other potential management arrangements	52
Coastal waters: implementation and practical effect of jurisdictional arrangements	54
Offshore: the Australian Fishing Zone	54
Subsea minerals	54
Coastal waters: State and Northern Territory subsea mining	54
Offshore: subsea mining beyond coastal waters to the Continental Shelf Limit	55 56
Hydrocarbons Constal waters: State and Northern Tarritory offshore ail and gos	56 56
Coastal waters: State and Northern Territory offshore oil and gas	56 57
Offshore: hydrocarbon extraction beyond coastal waters	57 58
Wave, wind and other renewable energy generation	58

Environmental protection	60
A typography of Australian First Nations' sea country rights and interests	63
Native Title rights to sea country	63
The Aboriginal Land Rights Act – intertidal sea country	64
Other State regimes – some specific rights and interests	64
Indigenous Protected Areas	64
The opportunities and constraints	66
Water rights as an economic asset	68
The nature of freshwater resources in Australia	68
Emerging concerns in water – climate change and changing rainfall	71
Water rights in Australia: an overview	74
Principles of Water Access: Precedent and Policy	74
First Nations water rights – policy, principles and actions to date	77
Developing area in spotlight: Northern Australia	79
Hydrogeographics of Northern Australia	79
Water Planning in Northern Australia	81
Contemporary Landscape: Policy and Practice	83
A typography of Australian First Nations water rights and interests	83
Creating value from water rights and interests	84
The constraints	84
Intellectual property rights as an economic asset	85
Intellectual Property law in Australia: an overview	85
Basis of Australian Intellectual Property Law	85
A typography of Australian First Nations intellectual property	86
Creating value from First Nations intellectual property	91
The constraints	91
First Nations interests in financial assets	92
A typography of Australian First Nations interests in financial assets	92
Assets held under statutory instruments	92
Trust associated with land access arrangements	100
Creating value from First Nations financial assets	103
The constraints	103
Appendix 1: First Nations sea country awards under the Native Title Act	105
Western Australian sea country under Native Title	105
Northern Territory sea country under Native Title	114
Queensland sea country under Native Title Act	115
New South Wales sea country under Native Title Act	123
Victorian sea country under Native Title Act	123
South Australian sea country under Native Title Act	124
Appendix 2: Indigenous Protected Areas featuring sea country	127
Western Australian Indigenous Protected Areas featuring sea country	127
Northern Territory Indigenous Protected Areas featuring sea country	129
Queensland Indigenous Protected Areas featuring sea country	132
New South Wales Indigenous Protected Areas featuring sea country	133
Victorian Indigenous Protected Areas featuring sea country	133
South Australian Indigenous Protected Areas featuring sea country	133
Tasmanian Indigenous Protected Areas featuring sea country	134



Introduction

The first seminar in the *Murru waaruu* series focused on developing a framework for future First Nations treaty and associated settlements across Australia that is optimal from the perspective of creating rights and assets that can be used by First Nations interests as the basis for economic self-determination.³ Given the potential scale and relatively untapped nature of such arrangements as a future source of economic rights and assets, securing such a framework is very important.

However, this should not distract from opportunities associated with the economic rights that have and continue to be reclaimed under current policy and legislative frameworks across land, sea country, water and intellectual property, as well as financial assets that are accumulating in structures associated with various legislative instruments and trusts associated with private arrangements to which First Nations interests are party.

In the case of rights that have and continue to be reclaimed under current Australian legislative frameworks, these have historically been heavily skewed to cultural and cultural related rights, rather than rights of an economic nature and in the vast majority of cases, this remains the case. With respect to financial assets that are accumulating under various legislative structures and trusts associated with various private arrangements, these funds have a specified purpose but structurally speaking are typically characterised by a growing *corpus* earning conservative returns from mainstream investment markets, with the First Nations beneficiaries having limited control over how those funds are invested, quantum of distributions or how distributions may be used.

The subject of this second seminar in the *Murru waaruu* series –using the acquired assets –focuses on the rights and assets that continue to accumulate, exploring how they might be better used to underpin economic self-determination and barriers in this regard. This Seminar Background Paper seeks to achieve this by examining land rights, rights to sea country, rights to water, intellectual property rights and financial assets separately in each of the following sections. However, before exploring each of these complex areas in detail, it is important to establish the nature of rights as an economic asset, the general status of Australian First Nations economic rights and the trajectory of Australian jurisprudence in this regard, as well as the importance of establishing competitive advantage that can be derived from specific rights as the basis for economic self-determination.

Rights as an economic asset

Economic self-determination is fundamentally underpinned by property rights

As a fundamental enabler of economic development and social justice, and through their role in promoting the rational behaviour of individuals and enterprise, rights in property (land, water, marine resources, intellectual, financial and other forms of property) underpin the functioning of modern society, efficient market outcomes and the overall economy. It is therefore not surprising that the increasing recognition and protection of the property rights of an individual as against all others, including the State, has been one of the fundamental pillars of democratic reform across the globe and a key characteristic of modern democratic nations. As a case in point, Section 51(xxxi) of the Australian Constitution stipulates that property rights may only be restricted or disturbed for 'proper purpose' and requires that the State must provide compensation on 'just terms' if the property rights of a citizen are interfered with.

In the context of the subject matter of this background paper, it is important to note that property rights are often assumed to be binary—I own this, or I do not own this. In fact, property rights can be considered to exist on a continuum, ranging from a mere permission to access, through to absolute ownership and possession at the exclusion of others. Property rights can also be individual or communal in nature and rights over a specific property of numerous individuals can co-exist.

United Nations Declaration on the Rights of Indigenous Peoples and economic rights

Australia is a signatory to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Whilst not legally binding on the Australian or State Governments, by signing UNDRIP Australia has at the very least acknowledged to its international peers that it recognises that Aboriginal and Torres Strait Islander peoples in Australia (Australia's 'First Nations' or 'First Peoples) possess specific rights. Those rights that are of particular relevance to the subject matter of this Seminar Background Paper are set out in the following Table 1.

³ https://anufirstnations.com.au/murru-waaruu-on-track-seminar-series/

⁴ United Nations Declaration on the Rights of Indigenous Peoples ('UNDRIP'), GA Res 61/295, UN GAOR, 61st Sess, 107th plen mtg, Supp No 49, UN Doc A/ RES/61/295

Table 1 - Relevant Articles of the United Nations Declaration on the Rights of Indigenous Peoples

UNDRIP Article	Relevant Text
Article 3	the right to self-determination[to] freely determine their political status and freely pursue their economic, social and cultural development.
Article 4	in exercising their right to self-determinationthe right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions.
Article 5	right to maintain and strengthen their distinct political, legal, economic, social and cultural institutions, while retaining the right to participate fully, if they so choose, in the political, economic, social and cultural life of the State.
Article 8(2)	States shall provide effective mechanisms for prevention of, and redress for any action which has the aim or effect of dispossessing them of their lands, territories or resources
Article 20(2)	Indigenous peoples deprived of their means of subsistence and development are entitled to just and fair redress.
Article 26(2)	the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership
Article 28(1)	the right to redress, by means that can include restitution or, when this is not possible, just, fair and equitable compensation, for the lands, territories and resources which they have traditionally owned or otherwise occupied or used and which have been confiscated, taken, occupied, used or damaged without their free, prior and informed consent.

Further arising out of UNDRIP and other mechanisms is the concepts of Free, Prior and Informed Consent (FPIC) and Access and Benefits Sharing (ABS). At their base level, these concepts require genuine inclusion, disclosure and respect for the traditional decision-making processes of Indigenous peoples, requiring effective and meaningful participation, with an end-goal of ensuring sustainable outcomes over time and across generations.⁵

Status of Australian First Nations' economic rights

On face value, the Australian First Nations estate and other asset base appears significant, comprised of large areas of land, growing sea country and water interests, unique intellectual property and billions of dollars in legislative structures and trusts to which First Nations people are beneficiaries. In the context of Australia being a natural resource rich, modern, free market-oriented, rules-based economy with strong regional trading relationships, this asset base should, *prima facie*, present Australian First Nations with a world of opportunity.

However, the economic utility of the Australian First Nations

estate and asset base is highly constrained. For example:

- In the case of most First Nations land tenure, that tenure is subordinate to other co-existing tenure;
- First Nations land tenure lacks fungibility, whereby almost all grants of land (including grants of freehold title) incorporate caveats that restrict the land's use to mostly non-commercial purposes, including inalienability, which substantially hampers the ability of First Nations people to trade their lands or use their land as collateral for financing;
- Where First Nations water rights exist, they are typically defined as cultural flows that cannot be used for economic purposes and where they can be, the volumes allocated are typically so small that they are of limited commercial use;
- First Nations intellectual property, particularly that which pertains to traditional knowledge, is not adequately protected under Australian law leaving it vulnerable to non-First Nations exploitation and presenting challenges with respect to 'commercialising' that intellectual property;
- Funds held in various legislative structures have very prescribed purposes and management processes under which the First Nations interests have limited control; and
- While distributions from trusts that hold financial resources accrued under private commercial arrangements can often be used to support economic

⁵ Australian Institute of Aboriginal and Torres Strait Islander Studies (2021), Engaging with Traditional Owners, fact sheet published May 2021

endeavours, the opportunity to deploy capital at scale is undermined by what are perceived by many beneficiaries as paternalistic control over financial resources that belong to them.

This is not an asset base conducive to economic selfdetermination, but rather one that promotes a form of 'economic apartheid', as some First Nations leaders have described it, whereby First Nations Australians are unable to use their rights and assets for economic development with the same protections and flexibility as other Australians.

Trajectory of Australian jurisprudence

Whilst demonstrably not as advanced as some comparable jurisdictions such as the United States, Canada or New Zealand, the trajectory of Australian jurisprudence as far as it pertains to recognising First Nations rights to use their interests in land and resources for control and economic purposes is becoming increasingly clear:

- The Wik Peoples v The State of Queensland & Ors; The Thayorre People v The State of Queensland & Ors [1996] HCA 40 referred to as the 'Wik Case', the High Court of Australia held that the mere granting of a pastoral lease does not confer exclusive possession, with the rights and obligations of the holder of a pastoral lease dependent on the specific lease terms and the law under which it was granted and does not necessarily extinguish native title rights. However, if there is any inconsistency between the rights of the native title holders and the rights of the holder of the pastoral lease, the pastoral lease prevails.
- Western Australia v Ward (2002) 213 CLR 1-referred to as the 'Ward Case', the High Court of Australia confirmed that proof of native title does not require occupation of lands but is based on traditional laws and custom, that native title can co-exist with other land rights (such as pastoral leases) and that the native title cannot be extinguished outside of the Native Title Act.
- Northern Territory v Arnhem Land Aboriginal Land Trust (2008) 236 CLR 24 – referred to as the 'Blue Mud Bay Case', the High Court determined that coastal Aboriginal land granted under the Aboriginal Land Rights (Northern Territory) Act 1976 includes the intertidal zone and that the holder of a licence to fish cannot enter and take fish from the intertidal zone on Aboriginal land without the permission of the traditional owners.
- Akiba v Commonwealth (2013) 250 CLR 209
 referred to as the 'Akiba Case', the High Court

- of Australia determined that Commonwealth and Queensland legislation, which prohibited taking of fish and other aquatic life for commercial purposes without a commercial fishing licence did not extinguish native title rights of certain communities in the Torres Strait to take resources from defined areas of water and trade those catches in accordance with custom and tradition.
- · Griffiths v Northern Territory of Australia (No 3)
 [2016] FCA 900: Northern Territory of Australia v
 Griffiths [2017] 256 FCR 478; Northern Territory
 v Griffiths (2019) 269 CLR 1-referred to as the
 'Timber Creek Cases', the High Court established
 detailed guidance as to how compensation for the
 impairment of native title rights and interests should
 be calculated which includes economic and cultural
 loss elements as well as compensation for the time
 value of money.

Importance of competitive advantage

Any discussion pertaining to opportunities to create economic value from rights must not only consider the commercial limits of those rights, but also the competitive advantage that can be created from those rights. As the basis for acquiring and growing market share and achieving economic surplus, competitive advantage is a fundamental concept in assessing economic opportunities and can be examined through the following three lenses:

- Absolute advantage is a structural source of economic advantage whereby a supplier (individual, company or jurisdiction) of a good or service can produce and deliver a product at volumes required by a customer more efficiently (and therefore more cheaply) than any of its competitors. This translates into both achievable economic surplus and the minimum price that the supplier can bear to maintain and grow market share.
- Comparative advantage is a structural source of economic advantage that refers to a supplier's ability to produce a particular good or service at a lower opportunity cost than its trading partners and determines, in free market settings, what goods and services a specific supplier should specialise in and forms the basis for supply chain relationships.

 Competitive advantage can be, and most often is, based on the aforementioned structural sources of advantage, but incorporates everything else that is brought to bear such that a customer is compelled to purchase one supplier's product over another. This can include a range of factors such as alignment with customer perceptions of risk and their values and beliefs.

In the context of capitalising on opportunities for economic self-determination from rights and assets that have been and will continue to be reclaimed, in many if not most cases First Nations will need to give consideration to the extent to which a natural resource associated with those rights can form the basis for absolute or comparative advantage, as well as to the extent unique aspects of First Nations cultural and intellectual property can be used to create competitive advantage. For this to truly underpin economic self-determination, this will need to be done in ways that creates wealth and deliver the social, cultural and environmental outcomes that the specific First Nations entity desires.

Land rights as an economic asset

From a geographical perspective, rights pertaining to land in Australia is the largest asset possessed by Australian First Nations, with First Nations people's right and interests in land recognised over approximately 50 percent of the Australian landmass. However, in the vast majority of cases, the ability for First Nations people to extract value from these interests is significantly curtailed. For example:

- Much of First Nations tenure co-exists with other third-party rights and interests in the land and in those instances, First Nations interests are typically subordinate to those of the other party;
- Even in instances where First Nations have exclusive tenure or freehold title (see below) the tenure or title typically carries caveats that restrict its use, including for economic development purposes, or limit its ability to be used as collateral for attaining finance; and
- In the few instances where First Nations have exclusive land use rights and adequate fungibility of land assets, they are typically in geographies where the land has limited conventional economic value.

Australian land tenure framework: an overview

Despite the existence of continually practiced and sophisticated notions of sovereignty over land and legal traditions dating back millennia, when wrongfully colonised by Britain under the doctrine of terra nullius, 6, the Botany Bay British Colony and subsequent British colonies (later States) inherited the English common law system and Imperial legislation in effect at the time. Lands that encompassed the colonies and their surrounds were claimed in the name of the Crown, with land packages transferred to freehold and sold or granted to new settlers and released convicts. Progressively, the 'waste lands' were also claimed in the name of the Crown. ultimately forming the colonies that became States after Federation. As new townships were settled, similar transfers from Crown land to freehold land occurred to facilitate residential and commercial developments. This was the process of dispossessing First Nations people that the High Court in the 1992 Mabo judgement described as a 'legacy of unutterable shame'.

^{6 (1992) 175} CLR 1

⁷ An Act to Provide for the Administration of Justice in New South Wales and Van Diemen's Land 1828, 9 Geo IV, c.83

For practical purposes there are two broad-classes of tenure in Australia:

Crown lands

Crown lands in Australia are lands held by the Crown in the right of a specific Australian State or the Commonwealth. Commonwealth Crown land holdings comprise those in the Northern Territory, Australian Capital Territory and Jervis Bay Territory, as well as small areas across the nation used for government purposes such as defence. State Crown lands are governed and regulated by specific State legislation and can be vacant land or land that has been allocated for a purpose such as conservation estate, infrastructure or leased to third parties for uses, including commercial uses (for example a pastoral lease) which are registered under the Torrens System and are typically characterised by long tenor and rights to renewal, rendering them broadly akin to freehold title.

· Freehold lands

Freehold (or fee simple) tenure provides the most complete form of land ownership in perpetuity. Subject to any caveats that may exist, owners of freehold land may sell, lease or mortgage that land free from restriction other than local planning and environmental legislation.

In 2016, 229.7 million hectares, or just under 30 percent of Australia was the subject of freehold title.8 This includes most residential and commercial land in the major cities and towns in Australia, large rural areas on the east coast, south-eastern and south-western parts of the continent and importantly, around 50 percent of the Northern Territory, which is the subject of a special form of First Nations freehold title (see below). Approximately 23 percent of the Australian landmass is the subject of Crown land which is either vacant or set aside for various government or public purposes, First Nations reserves, development or town planning. Approximately 20 percent of the Nation is the subject of a large conservation estate - the National Reserve System which is a network of protected areas, comprising Commonwealth, State and territory reserves. Indigenous lands and protected areas operated by non-profit conservation organisations and ecosystems protected by agriculturalists on their private properties.9 The balance is Crown Land that has been leased for commercial purposes, particularly pastoral operations.

An important feature of land tenure in Australia is that rights pertaining to land can co-exist, particularly with respect to

⁸ Australian Bureau of Statistics (2021), *National Land Account: experimental estimates*, Australian Bureau of Statistics, Canberra

Crown Land. For example, it is not unusual for a mining lease, pastoral lease and native title rights to co-exist on the same area of land.

Active tenure management systems in Australia include General Law Title, Strata Title, Native Title and Possessory Title. However, the most prominent by far is the Torrens System. Developed in South Australia in 1858 and based on the Lloyds of London Shipping Register, the Torrens system is title registry framework that registers all interests in a property including transfers, mortgages, leases, easements, covenants, resumptions and other rights in a single Certificate of Title, which once registered with the State through the State specific mechanism is guaranteed by the State to be correct, providing conclusive evidence of ownership, or indefeasibility of title.

A typography of Australian First Nations land rights and interests

On the basis that Britain's claim to the Australian continent under the law of nations doctrine *terra nullius* has been determined under the highest jurisprudence in the nation as being illegitimate, ¹⁰, and that no Australian First Nation has ever ceded their lands to Britain, many First Nations Australians consider themselves to have at least rights and interest in the entirety of the Australian continent. However, for the purposes of the subject matter of this Seminar Background Paper, the First Nations Estate is defined as being areas of land over which First Nations peoples and communities have ownership, management or other contemporary legal rights, ¹¹, as determined and enabled under Australian legislation or instruments of that legislation. The following subsections provide a summary of the key types of Australian First Nations land interests therein.

State Aboriginal Land Trust lands

Enabled by various State legislation,¹², State Aboriginal Land Trusts are appropriated with land within the State jurisdiction, usually former missions or reserves, and hold it on behalf of First Nations people. A once common feature of Australian States, only Western Australia and South Australia continue

⁹ Department of Climate Change, the Environment and Water (2023), *National Reserve System*, Australian Government, Canberra

¹⁰ Mabo v Queensland (No. 2) (1992) 175 CLR 1

¹¹ Australian Bureau of Agricultural and Resource Economics and Sciences 2020, *Australia's Indigenous Forest Estate*, ABARES, Canberra.

¹² Aboriginal Land Trust Act 1966 (SA), Aboriginal Affairs Planning Authority Act 1972 (WA), Aboriginal Land Rights Act 1983 (NSW), Aboriginal Lands Act 1970 (Vic), Aboriginal Lands Act 1995 (Tas), Aboriginal Land Act 1991 (QLD) and Torres Strait Islander Act 1991 (QLD)

to operate statutory Aboriginal Land Trusts, with other States having divested those lands to First Nations interests. The tenure is usually inalienable freehold but sometimes includes pastoral or general-purpose leases. Regardless, in the vast majority of instances, significant caveats apply that constrain permitted uses of the land, including development restrictions.

Northern Territory Aboriginal Land Rights Act lands

The First Nations tenure created by the Aboriginal Land Rights (Northern Territory) Act 1976 is unique among other Australian jurisdictions in both its within jurisdiction geographical extent and rights associated with the tenure. A full description of tenure created under the Aboriginal Land Rights (Northern Territory) Act 1976 is beyond the scope of this Seminar Background Paper. However, aspects that are worthy of note include:

- All of the tenure, Aboriginal land, is established in the form of inalienable freehold:
- Aboriginal land covers over 50 percent of the Northern Territory including approximately 85 percent of the coastline;
- A mechanism is established in the form of the Aboriginal Benefits Account (ABA), whereby the Commonwealth makes payments into the ABA generally equivalent to the royalties paid by mining companies operating on those lands which are to be used for the benefit of Aboriginal people in the Northern Territory including directing 30 percent to traditional owners affected by mining (see below);
- Four Land Councils funded by the ABA Northern Land Council, Central Land Council, Tiwi Land Council and Anindilyakwa Land Council – are established and afforded wide ranging powers under the legislation including powers to consent to leasing and mineral exploration on Aboriginal land in accordance with the instructions of traditional owners; and
- Amendments that were passed in 2021 to establish a Northern Territory Aboriginal Investment Corporation, with a Board comprising a majority of Land Council representatives and which will receive approximately half (\$680 million) of the current accumulated balance of the ABA to use for economic development and other purposes (see subsequent section on financial assets).

Indigenous Land and Sea Corporation facilitated lands

Initially established in accordance with the Land Fund

and Indigenous Corporation (ATSIC Amendment) Act 1995 (Cth), the original Indigenous Land Corporation (ILC) was a component of the Commonwealth's response to the Mabo High Court decision, whereby its principal purpose was to provide a mechanism for land to be acquired for First Nations interests who are unlikely to benefit from the Native Title Act 1993 (Cth) (see below). Since 2005, the ILC has operated as a statutory authority under Part 4A of the Aboriginal and Torres Strait Islander Act 2005 (Cth) and charged with the specific responsibility for assisting Aboriginal and Torres Strait Islander persons to acquire land and manage and improve First Nations-held land so as to provide economic, environmental, social or cultural benefits to Aboriginal and Torres Strait Islander persons.

Legislative changes that came into effect in early 2019,¹³, resulted in:

- The Indigenous Land Corporation (ILC) changing its name to the Indigenous Land and Sea Corporation (ILSC):
- The ILSC's remit being extended beyond the land estate to include interests in the fresh and seawater estate; and
- The previous Land Account becoming the Aboriginal and Torres Strait Islander Land and Sea Future Fund and now managed by the Future Fund Board of Guardians, resulting in an increase in the funds held in perpetuity for all First Nations Australians and to now grow in line with mainstream long-term investments managed by the Future Fund.

New South Wales Land Rights lands

Differing significantly from the Commonwealth's Land Rights legislation for the Northern Territory and the Native Title regime (see below) the Aboriginal Land Rights Act 1983 (NSW) was co-designed with the original New South Wales Aboriginal Land Council (NSWALC) and provides for a self-funded and self-regulated network of independent Aboriginal bodies corporate known as Local Aboriginal Land Councils. Aspects worthy of note include:

 The establishment of a NSWALC Statutory Investment Fund which for 15 years provided for guaranteed funding through the payment of an amount equivalent to 7.5 percent of NSW Land Tax (on non-residential

¹³ Aboriginal and Torres Strait Islander Land and Sea Future Fund Bill 2018, Aboriginal and Torres Strait Islander Land and Sea Future Fund (Consequential Amendments) Bill 2018 and Aboriginal and Torres Strait Islander Amendments (Indigenous Land Corporation) Bill 2018

- land) to the NSWALC as compensation for land lost by the First Nations people of New South Wales:
- During the 15-year period, half of the funds were available for land acquisitions and administration and half was deposited into a statutory account to build a capital fund to provide ongoing funding;
- Since 1998, the NSWALC and the land council network have been self-sustaining;
- In 2018, NSWALC approved a new strategy under which it is assuming a strong focus and lead role in the areas of employment services, training and brokerage; First Nations housing; and land development and construction; and
- Local Aboriginal Land Councils, of which there are 120, can claim land as compensation for historic dispossession of land and to support Aboriginal communities' social and economic development.

Native Title lands

The national tenure framework facilitated by the *Native Title Act 1993* (Cth) is the largest in terms of geography. However, in most instances it is the weakest form of tenure. Famously characterised by Chief Justice Gleeson as a 'bundle of rights', native title tenure is not directly comparable with any common law or Torrens system land rights such as freehold or leasehold tenure.

Since proclamation of the *Native Title Act* and largely as a result of jurisprudence (particularly the *Mabo*¹⁴, *Wik*¹⁵, *Ward*¹⁶, *Blue Mud Bay*¹⁷ and *Akiba*¹⁸ cases – see above) and in some cases subsequent amendments to the legislation, the operation, rights and conveyed interest associated with the native title framework have become reasonably established. Again, a full analysis of this area of law is beyond the scope of this Seminar Background Paper, but for the current purpose, it is useful to note the following key features of native title:

Native title rights are extinguished by pre-existing exclusive possession

Where the Crown has made a grant of land that conveys exclusive possession, rights to native title are extinguished. Determining the specific nature of tenure that extinguishes native title on this basis depends on the

terms of the grant but in most cases include grants of freehold tenure. As a result of the Wik determination, pastoral leases do not extinguish native title, but other forms of leases, licenses and other rights to land need to be considered on a case-by-case basis.

Specific details of native title rights vary from caseto-case

Because the nature of native title is determined from the traditional laws and customs observed by specific First Nations people who have claim to the native title, the specific nature of native title rights will differ depending on the specific traditional laws. customs and practices of the First Nation claiming the native title rights. These can be highly variable and include rights to access. resource usage, fishing, hunting, erecting structures, practicing traditional ceremonies. conducting practices to pass-on knowledge and cultural authority and other traditional practices. Of particular relevance is that they may (or may not) include exclusive access to and usage of land (exclusive possession), and the commercialisation (or otherwise) of the natural resources upon it.

In most instances native title rights are subordinate to other rights pertaining to the land

With the exception of where 'exclusive' native title has been determined, the native title rights granted over a specific area of land may coexist with the other non-native title rights such as rights granted under a pastoral lease. In a majority of cases, courts have determined native title rights as subordinate or secondary to other forms of rights and interests over land granted by the Crown. For example, in the 25 years preceding 2018, in only 2 percent of cases was a determined litigant able to secure positive determination over their ancestral land without the consent of developers, government and others holding interests in the land that is the subject of the determination.19

¹⁴ Mabo v Queensland (No. 2) (1992) 175 CLR 1

¹⁵ Wik Peoples v Queensland (1996) 187 CLR 1

¹⁶ Western Australia v Ward (2002) 213 CLR 1

¹⁷ Northern Territory v Arnhem Land Aboriginal Land Trust (2008) 236 CLR 24

¹⁸ Akiba v Commonwealth (2013) 250 CLR 209

¹⁹ Hunter, P. (2018), The Native Title Act – the first 25 years – old and new challenges, Richard Cooper Memorial Lecture, Federal Court of Australia

States constitutional rights to mineral and petroleum resources prevail

In accordance with the Australian Constitution, the States own all rights to in situ minerals, petroleum and geothermal resources within their jurisdiction (see below). These rights do not ordinarily transfer with a grant of freehold title and similarly, native title rights are not recognised over such resources.

Native title rights are held by a special purpose vehicle acting as trustee or agent

In accordance with Division 6 of the Native Title Act and the Native Title (Prescribed Bodies Corporate) Regulation 1999 (Cth), when the Federal Court makes a determination of native title under the Act, the associated native title rights and interests must be held in a special purpose vehicle known as a Prescribed Body Corporate (PBC) either on trust for or as agent of the common law holders of those rights and interests. In addition to administering the native title rights. PBCs may also perform a range of community governance, service delivery. cultural and economic development functions associated with those native title rights. There are currently around 200 PBCs in Australia.



Indigenous Land Use Agreements

Terms under which third parties may access and use First Nations lands are negotiated with the First Nations interests in that land and set out in an Indigenous Land Use Agreement (ILUA). ILUAs are voluntary agreements between First Nations parties who have a legal or recognised interest in lands and parties who wish to access or use those lands, setting out the rights and obligations of each party with respect to land access and use. They are a key instrument under process that is prescribed by the *Native Title Act* but can also be used with respect to other forms of First Nations tenure.

Indigenous Protected Areas

Finally, Indigenous Protected Areas (IPAs) are established whereby First Nations interests voluntarily submit lands in which they have an interest to the National Reserve System (see above), thereby committing those lands to the national conservation estate. In return, the Australian Government provides resourcing for the First Nations interests to establish and operate an Indigenous Ranger Program (see below) to manage the IPA land.

The geographic extent of the various tenure that comprise key elements of the Indigenous Estate as defined earlier in this section are illustrated in the following Figure 1.²⁰, ²¹, ²²

²⁰ Jacobsen, R, Howell, C & Read, S 2020, Australia's Indigenous land and forest estate: separate reporting of Indigenous ownership, management and other special rights. ABARES. Canberra.

²¹National Native Title Tribunal 2022, Native Title Vision: Data Downloads, Data File Geodatabase, NNTT. Retrieved from: http://www.nntt.gov.au/assistance/Geospatial/Pages/DataDownload.aspx

²²Deloitte Access Economics 2021, *Mapping the Indigenous Agribusiness Sector*, in the possession of the Indigenous Land and Sea Corporation, Perth.

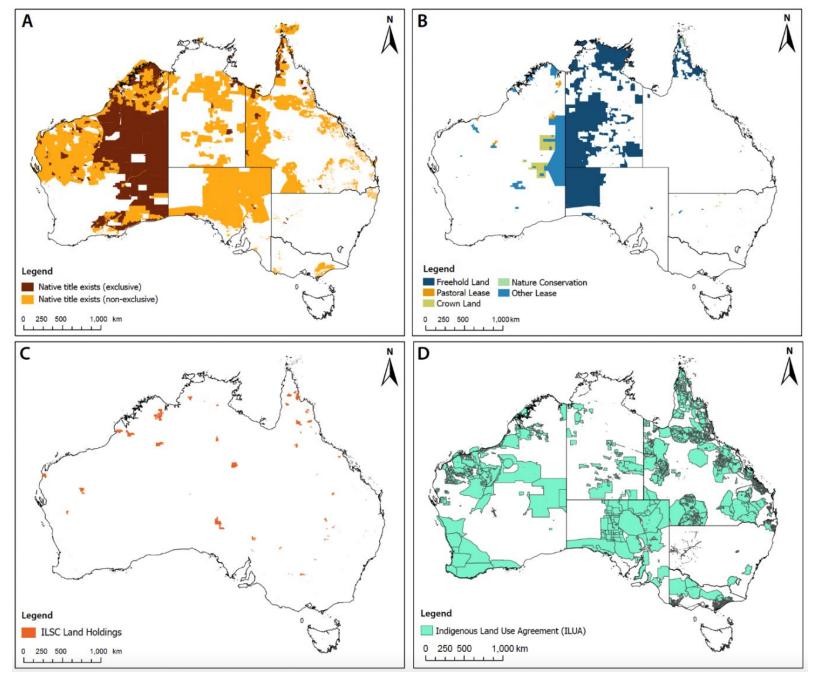


Figure 1 (A), (B), (C) and (D) – The geographical extent of different forms of First Nations Tenure that define the Indigenous Estate

The nature of the Australian land resource

Australia is overwhelmingly an arid continent. Around one-third of the landmass can be described as desert, with another third semi-desert, or flat landscape characterised by grasslands or limited vegetation. It is only in the far north, eastern, south-eastern and south-western areas where precipitation (see Figure 2²³) and topography is adequate to support vegetation that protects the land surface from substantive weathering.

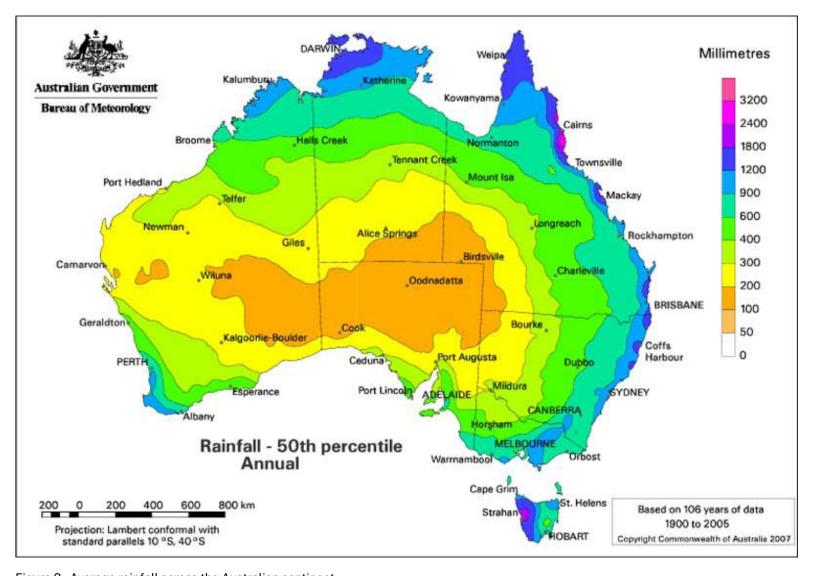


Figure 2 - Average rainfall across the Australian continent

²³ Australian Bureau of Meteorology (2006), Rainfall: 50th Percentile Average, Australian Government, Canberra

Not surprisingly, it was these climatically moderate, more fertile and from a European perspective, more liveable environments (particularly in the south-eastern areas), that were the focus of the earlier colonial settlements and agricultural industry – even today, the Murray Darling Basin catchment accounts for around 40 percent of the value of Australian agricultural production.²⁴

While the more arid areas present comparatively greater challenges with respect to agriculture (some of which can potentially be substantially mitigated by subsurface water resources), it hosts some of the world's most valuable mineral and hydrocarbon resources and is characterised, in many cases, by significant renewable energy generation potential.

Creating value from land rights and interests

Land management and the conservation economy

Globally, conservation efforts are attracting increasing funding from both the public and private sector. It is estimated that the current total global investment in conservation is between USD \$133 and USD \$144 billion per annum. While the public sector still carries the vast majority of the financial burden, restoring and conserving places of natural beauty and important ecosystems has rapidly become big business. Historically the principal dominion of governments, for a range of reasons including maintaining social license to operate, achieving price premiums for products, offsetting the environmental impact of developments, creating environmental assets that can be securitised and traded, tourism or entirely altruistic motivations, private sector investment in environmental repair and conservation has reached an estimated USD \$18 billion per annum. Of this, NGOs and philanthropic organisations account for approximately USD \$2.3 billion, with the balance incorporating supply chain investments, biodiversity offsets. private equity investments, carbon markets and payment for ecosystem services.25

With around 50 percent of Australia's GDP estimated to have a moderate to very high direct dependency on nature, ²⁶, it

is not surprising that land management and conservation is an increasing policy priority for Australian governments, including a notable shift in that policy toward facilitating private conservation investment.

The geographic extent of Australian First Nations land interests (see Figure 1) combined with a demonstrably effective structure for deploying Traditional Ecological Knowledge (TEK) and other expertise for the purposes of land management and conservation—Indigenous Ranger Groups-implies that growing public and private investment in conservation presents a significant opportunity to further advance First Nations economic self-determination.

Indigenous Ranger Groups integrate TEK with mainstream conservation practices to protect and manage land and sea assets. Specific activities undertaken by Indigenous Ranger Groups include bush fire mitigation, protection of threatened ecosystems and species and biosecurity compliance. The Indigenous Ranger Group sector has been one of the most successful sectors of the Australian First Nations economy. with around 120 separate land and sea ranger groups operating across the nation. Indigenous Ranger Groups are supported by governments and undertake fee-for-service work for government agencies, as well as the private and notfor-profit sector. In certain circumstances, where the work of Indigenous Rangers on First Nations lands can generate Australian Carbon Credit Units (ACCUs) under an approved Clean Energy Regulator methodology (such as Savanna fire management methods), ²⁷, those units can also potentially be monetised.

The following Figure 3²⁸ summarises the activities of Commonwealth funded Indigenous Ranger Programs as of December 2022.

²⁴ Murray Darling Basin Authority (2022), *The Murray Darling Basin and Why it is Important*, Murray Darling Basin Authority, Canberra

²⁵ Coalition for Private Investment in Conservation (2021), *Conservation Finance 2021: An Unfolding Opportunity*, Cornell Atkinson Centre for Sustainability, IUCN and South Pole

²⁶ Australian Conservation Foundation (2022), *The nature-based economy: How Australia's prosperity depends on nature*, Australian Conservation Foundation

²⁷ Emissions Reduction Fund (2022), Savanna fire management – emissions avoidance, Clean Energy Regulator, Australian Government, Canberra

²⁸ National Indigenous Australians Agency (2022), *Indigenous Ranger Programs*, Australian Government, Canberra

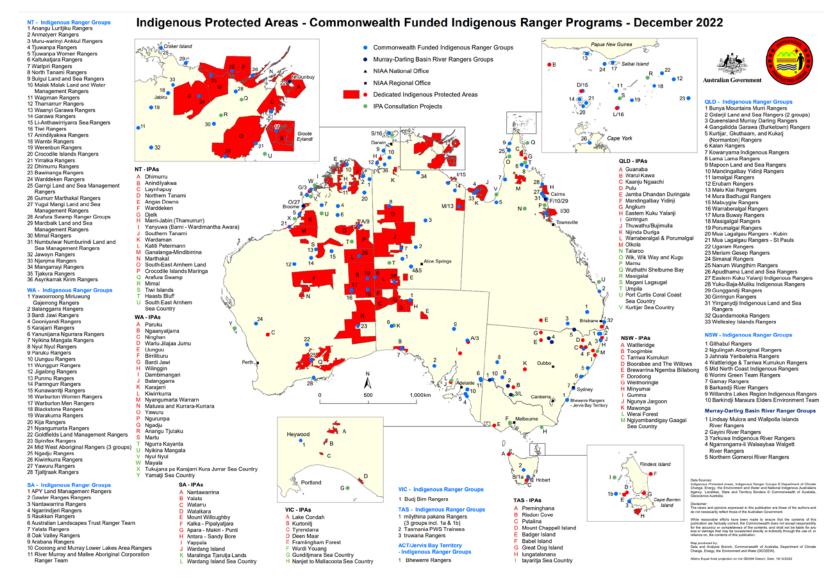


Figure 3 – Indigenous Protected Areas – Commonwealth funded Indigenous Ranger Programs (December 2022)

Agriculture

Prior to colonisation, First Nations Australians deployed Traditional Ecological Knowledge (TEK) to improve the productivity of harvesting natural resources for the purposes of food production. Such practices are understood to have included the modification of landscapes to create natural pastures that attracted animals to areas where they could be more productively harvested, burning

landscapes to encourage regeneration of vegetation and fish trapping systems. ²⁹,³⁰ In the absence of inputs such as superphosphate and other fertilisers and soil improvers,

²⁹ Gammage, B. (2012), *The Biggest Estate on Earth: How Aborigines made Australia*, Allen and Unwin, Sydney

³⁰ Pascoe, B. (2018), *Dark Emu: Aboriginal Australia and the Birth of Agriculture*, Magabala Books Aboriginal Corporation, Broome, Western Australia

mechanised equipment, animals that can be adequately domesticated and relatively small markets for food, this was arguably the most effective and rational way of producing food from Australia's relatively constrained natural agricultural conditions.³¹

Today, Australia's diverse agriculture industry is a key component of the national economy, servicing both domestic and international markets.

With Australians importing only 11 percent of their food requirements,³², it is also the source of food security for the nation. The relatively homogenous and common broadacre and intensive and extensive pastoral farming systems that variably produce beef cattle, cereal and non-cereal broadacre crops, sheep and sheep derived products and dairy products account for 70 percent of Australian agricultural Gross Value of Product (GVP).³³ The sector contributions to Australian agricultural GVP are illustrated in Figure 4,³⁴, below.

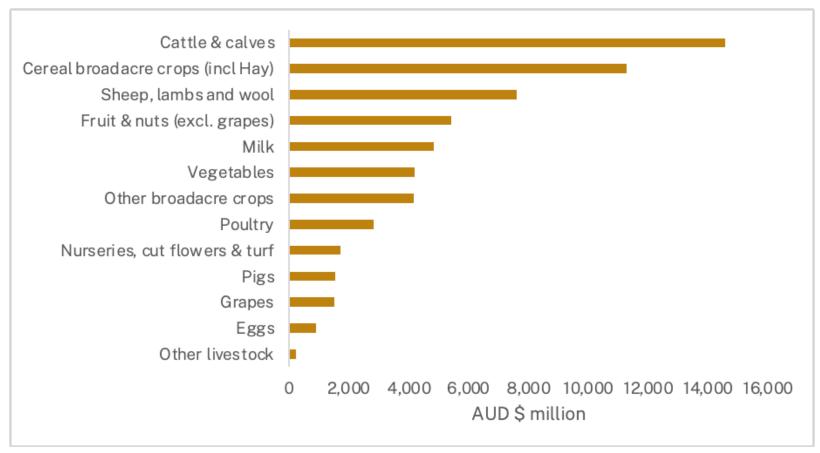


Figure 4 – Value of Australian agricultural production by commodities (2019 - 2020)

³¹ Barnett, R., Doran, B., McArthur, L., Normyle, L., Quereshi, E. and Vardon, M. (2022), Baseline Study: Agricultural Capacity of the Indigenous Estate, Australian National University First Nations Portfolio, Indigenous Land and Sea Corporation and Cooperative Research Centre for Northern Australia

³² Australian Bureau of Agricultural and Resource Economics and Sciences (2020), *Australia's Indigenous Forest Estate*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra

³³ Australian Bureau of Statistics (2021), *Value of Agricultural Commodities Produced*: 2019-20, Australian Bureau of Statistics, Canberra

³⁴ Australian Bureau of Statistics (2021), *Value of Agricultural Commodities Produced: 2019-20*, Australian Bureau of Statistics, Canberra

The majority of production from these key sectors occurs in what is referred to as the sheep-wheat zone in the south-west and south-east of the Australian continent under typically crop-pasture rotational farming systems, grazing operations using modified pastures and/or irrigated lands. With the exception of relatively small irrigation areas, the vast majority of the remaining agricultural estate in Australia is the subject of extensive, primarily beef, grazing operations. This is illustrated in the following Figure 5.35

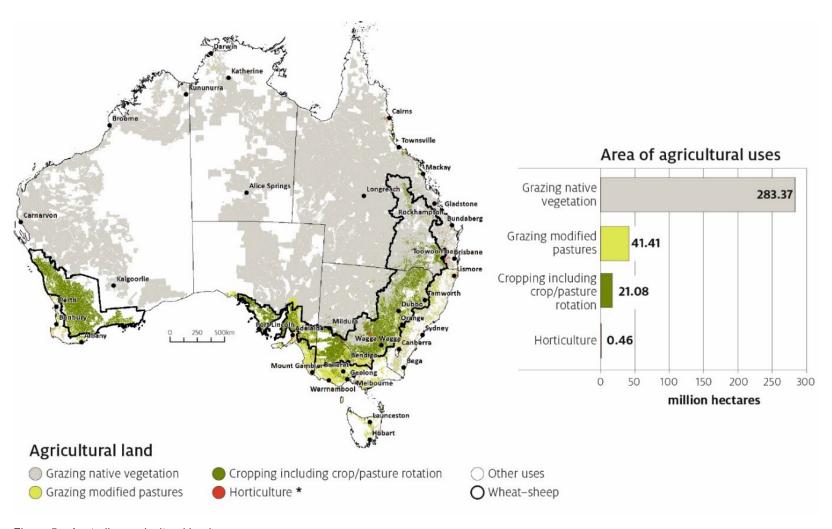


Figure 5 – Australian agricultural land use

As a result of this national production profile, the state of Victoria accounts for a full third of the value of Australia's agricultural production, followed by Queensland (22.7%), New South Wales (18.8%) and Western Australia (14.1%). The contributions of each state to Australian agricultural GVP are summarised in the following Figure 6.³⁶

³⁵ Australian Bureau of Agricultural and Resource Economics and Sciences IN: Department of Agriculture, Fisheries and Forestry (2023), *Snapshot of Australian Agriculture*, Australian Government, Canberra

³⁶ Australian Bureau of Statistics (2021). Value of Agricultural Commodities Produced: 2019-20, Australian Bureau of Statistics, Canberra

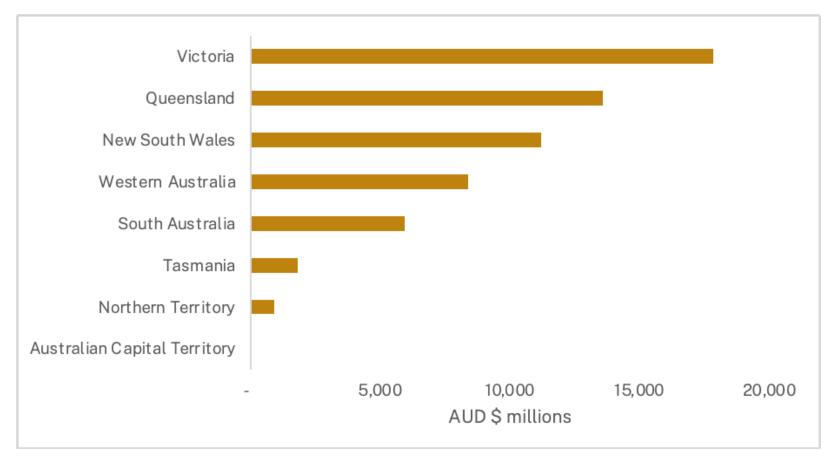


Figure 6 – Value of Australian agricultural production by state and territory (2019 - 20)

Understanding the relative concentration of agricultural GVP in the southern areas of the country (and primarily in the sheep-wheat zones and high rainfall areas of south-western and south-eastern Australia) is important context for any discussion on the agricultural potential of First Nations land interests, as the relative area of Indigenous Estate in the southern half of the Australian continent, particularly within the more productive agricultural areas, is demonstrably much less than is the case for the northern half and central parts of the continent.³⁷ As can be seen in Figure 6 below, with the exception of very small areas of First Nations land interests, which is primarily Indigenous Land and Seas Corporations

vested or granted properties, various reserves and other First Nations land, the vast majority of the more productive Western and Eastern Wheat-Sheep and southern high rainfall zones, from where the majority of Australian agriculture value is derived is land in which First Nations do not have extensive interests.³⁸ This tenure paradigm also applies to a significant area of southern and central Queensland and Cape York where primarily beef cattle grazing occurs on fee simple tenure. However, a significant portion of First Nations land interests is characterised as Indigenous managed, comanaged or non-exclusive native title that shares tenure with pastoral leases.

³⁷ Barnett, R., Doran, B., McArthur, L., Normyle, L., Quereshi, E. and Vardon, M. (2022), Baseline Study: Agricultural Capacity of the Indigenous Estate, Australian National University First Nations Portfolio, Indigenous Land and Sea Corporation and Cooperative Research Centre for Northern Australia

³⁸ The large area of ILUAs identified in in South Western Australia and Victoria identified in Figure 1(D) are the result of settlement arrangements with the Western Australian and Victorian Governments and do not deliver significant agricultural holdings to First Nations interests.

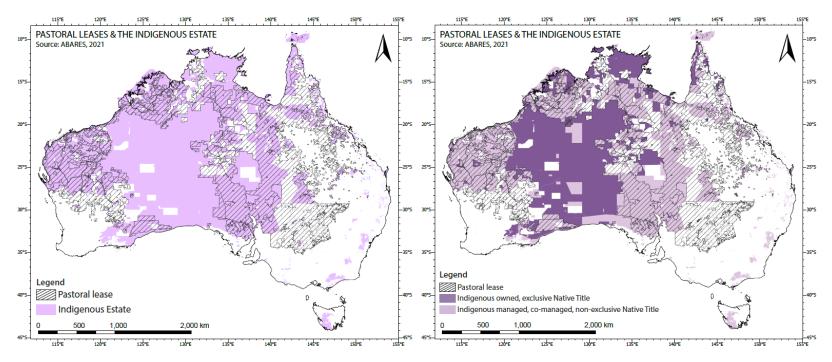


Figure 7 - Indigenous Estate and Pastoral Leases

In the context of Australia's diverse and modern primary industry today it has been estimated that there are approximately 100 First Nations owned and operated agricultural, fishing and farming enterprises in Australia.³⁹, ⁴⁰ From an agricultural perspective, they operate in a diverse range of sectors including northern and southern beef production, sheep, horticulture and traditional produce. Variably, these enterprises deploy conventional primary production practices, are based exclusively on the application of TEK or deploy hybrid models that seek to produce economic surplus as well as other environmental, social and cultural benefits.

Carbon farming

Within the context of discussing the application of TEK to land care, conservation and agricultural enterprise, the practice of carbon farming should be highlighted.

Carbon farming refers to the practice of managing land or agricultural enterprise to maximise the amount of carbon that is sequestered, and/or to minimise greenhouse gases (mainly carbon dioxide ($\rm CO_2$) and methane ($\rm CH_4$) that is emitted. Essentially, it revolves around specific agricultural or land management practices that are tailored for the conditions and enterprise needs that optimise the ability of plants and soils to store carbon and minimise emissions of carbon from animals. It can include a range of practices including planting of native plant species, changing grazing practices and changing feeds to reduce livestock $\rm CH_4$ emissions.

Carbon farming can deliver a number of conservation, land restoration and production systems benefits and under certain parameters be monetised either through product premiums associated with sustainable production or generation of Australian Carbon Credit Units under methodologies approved by the Clean Energy Regulator. As with Indigenous Ranger Programs (see above), the integration of TEK with conventional farming practices provides potential opportunity for First Nations agricultural enterprise to create unique value through carbon farming practices.

³⁹ Deloitte Access Economics (2021), *Mapping the Indigenous Agribusiness Sector*, in the possession of the Indigenous Land and Sea Corporation, Perth ⁴⁰ Barnett, R., Doran, B., McArthur, L., Normyle, L., Quereshi, E. and Vardon, M. (2022), *Baseline Study: Agricultural Capacity of the Indigenous Estate*, Australian National University First Nations Portfolio, Indigenous Land and Sea Corporation and Cooperative Research Centre for Northern Australia

⁴¹ Greening Australia (2023), *What is carbon farming?* (https://www.greeningaustralia.org.au/what-is-carbon-farming/)

Minerals and petroleum

The geology of the Australian continent is one of the world's most important sources of a range of minerals and hydrocarbon products. Further, much of the landscape is considered underexplored, whereby valuable minerals may exist under regolith and sedimentary basins that cover approximately 80 percent of the continent.⁴² The underexplored nature of much of Australia, combined with rapidly escalating demand for a range of minerals associated with the manufacture of equipment that supports the world's decarbonisation efforts is driving renewed government and private sector interest in the identification and development of new mines and downstream processing opportunities.⁴³

Despite its relatively under-explored nature, Australia is one of the world's largest producers of bauxite, iron ore, lithium, gold, lead, diamonds, rare earths, uranium and zinc and is a significant producer of ilmenite, zircon, rutile, metallurgical and thermal coal, manganese, antimony, nickel, silver, cobalt, copper and tin. These and other minerals are produced from over 350 operating mines located in every state and territory except the Australian Capital Territory.⁴⁴ In 2019, the total value of production from these mines was AUD \$234 billion, accounting for 60 percent of all Australian merchandise exports and 12 percent of GDP.⁴⁵

Importantly, Australia is a major producer of several critical minerals that are used as feedstock for supply chains that manufacture equipment that is used in endeavours to decarbonise such as lithium-ion batteries and magnets that are used in wind turbines. In this regard, Australia is one of the largest producers of key products such as class 1 nickel powder and briquettes, lithium and light and heavy rare earths and is increasingly the subject of investments in domestic capacity designed to manufacture key chemical products from these minerals. Furthermore, the relatively new market interest in many of these minerals means many of them haven't been key targets for previous exploration investments.





Across the globe, no type of tax on mining causes as much controversy as royalty tax

World Bank (2006)



⁴² Geoscience Australia (2014), Searching the Deep Earth: A Vision for Exploring Geoscience in Australia, Uncover Australian Exploration Geoscience Research, Australian Academy of Science

⁴³ King, M. (2023), 'Unlocking the mineral potential of Australia', *Media Releases: The Hon Madeline King, MP*, Australian Government, Canberra

⁴⁴ Geoscience Australia (2022), *Australian mineral facts*, Australian Government, Canberra

⁴⁵ Geoscience Australian (2022), Value of Australian Mineral Exports, Australian Government Canberra.

The following Figure 8⁴⁶ illustrates the locations of major mines in Australia.

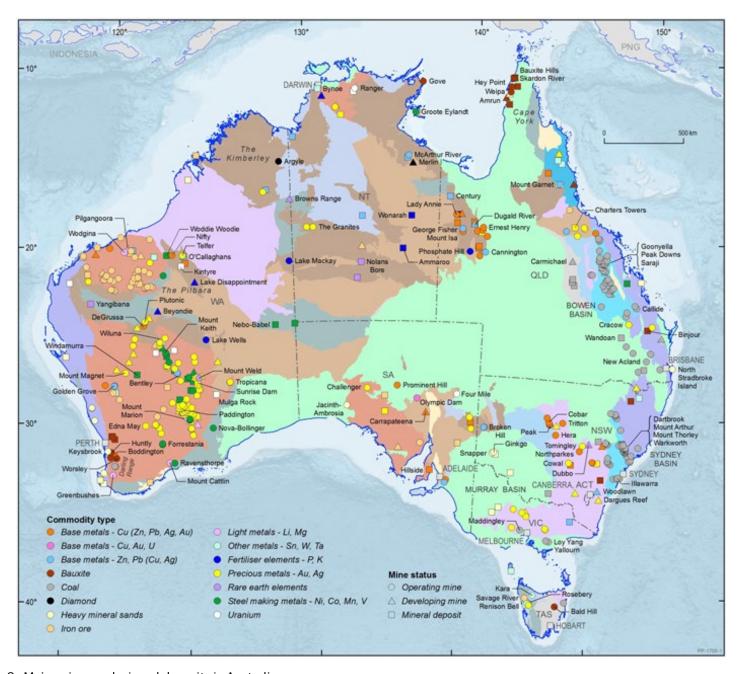


Figure 8 - Major mines and mineral deposits in Australia

⁴⁶ Geoscience Australia (2018), Australia leading the world in the latest mineral resource statistics, Australian Government, Canberra

Australia is also one of the world's largest producers and exporters of natural gas, with Liquified Natural Gas (LNG) exports in 2021-22 reaching AUD \$90 billion.⁴⁷ The following Figure 9,⁴⁸, illustrates Australian natural gas basins, production facilities and supporting infrastructure.

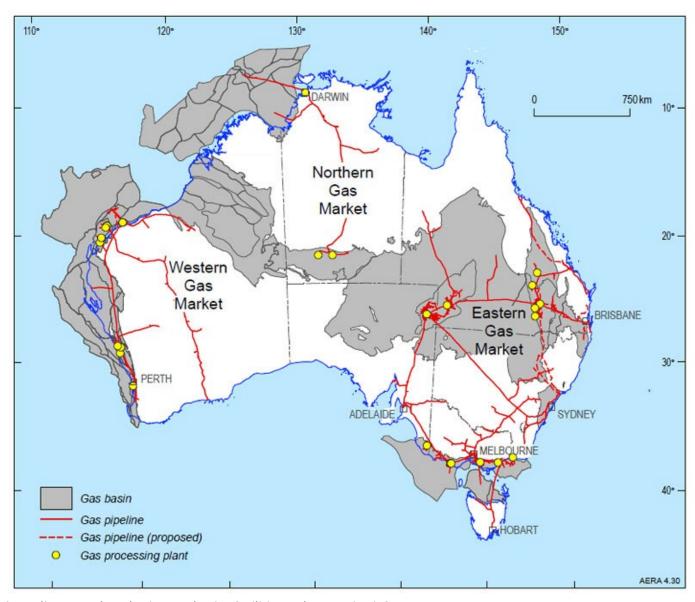


Figure 9 - Australian natural gas basins, production facilities and supporting infrastructure

⁴⁷ Australian Petroleum Production and Exploration Association (2022), 'Importance of new gas supply to Australian economy underscored by another upgrade for record-breaking LNG exports', *Media Releases*, October 4

⁴⁸ Geoscience Australia (2020), *Gas*, Australian Government, Canberra

The prospect of royalties?

Adopting various forms, most commonly as a specific royalty (levied against the quantity of the commodity sold) or *ad valorem* royalty (levied against the value of the sold commodity), royalties are a form of tax used by governments to ensure that the State receives a return from the sale of its natural resources.

As discussed in a later section, the inclusion of royalty-like payments to First Nations interests as a term of commercial land access arrangements between mining companies and First Nations interests in land that is prospective for the commercial production of minerals has become more-orless standard practice in the Australian mining industry. Further (and as discussed below), the allocation of the right to charge royalties on minerals production from governments to First Nations interests in lands is not without precedent in Australia. However, putting in place a national framework whereby First Nations interests receive royalty payments from miners under a regulated framework faces the challenge that it would require specific arrangements under the jurisdiction of each of the States.

While for all intent and purposes mineral royalty frameworks across Australia resemble a tax, from the perspective of Australian governments they are typically considered to be more akin to a price that is paid by miners for the right to extract and sell *in situ* minerals that are, in most cases, the property of the States.

Australian State governments have a Constitutional right to receive a return on *in situ* mineral resources that occur within the boundaries of the State. This Constitutional right has its roots in circumstances prior to Australia becoming a federation, is consistent with the Australian Constitution, and has been reinforced by multiple constitutional conventions. These circumstances are summarised as follows:

- When Britain proclaimed its colonial settlements, beneficial ownership of all lands vested with the Crown, with control exercised by the British Government in accordance with British law at the time.
- Under British common law, ownership of land includes rights to coal and minerals (except gold and silver) within the boundaries of that land. Therefore, when land grants are made by the Crown, surface rights as well as rights to minerals pass to grantees or purchasers.
- As colonial settlements expanded, colonial administrators progressively sought control of the

- 'waste lands of the Crown'.
- In the mid-1800s, the British Parliament ratified a constitution conferring powers on the colonial legislatures pertaining to land and minerals that allowed the colonial legislatures to reserve all coal and mineral (except construction materials) for the Crown when making Crown grants of land.
- In 1901, the Constitution of the Commonwealth of Australia was proclaimed and Section 51 (which identifies the head of power under which the Federal Parliament may make laws) does not identify minerals as an area in which the Federal Parliament has jurisdiction and therefore minerals remain under the jurisdiction of the State legislatures.

The resultant vesting of ownership of *in situ* minerals within State boundaries with States, combined with their constitutional right to make laws pertaining to those minerals, provides the States with both the right and the legal mechanism to charge a fee to third parties wishing to extract and commercialise those minerals. In this sense, a royalty is a price paid by a third party to the State for the 'license' to extract and commercialise natural resources that are owned and regulated by the State.

There is precedence in Australia for First Nations to receive regulated royalties for minerals taken from their traditional lands, albeit not in the context of State jurisdiction. In 1953 an ordinance from the Commonwealth Minister for Territories permitted mining on Aboriginal Reserves in the Northern Territory, conditional upon royalties being payable into an Aborigines Benefits Trust Fund to ensure that the benefits from mining undertaken on Aboriginal Reserves were shared with the Traditional Owners.

Proclamation of the *Aboriginal Land Rights* (Northern Territory) *Act 1976* resulted in Aboriginal land rights extending to extensive areas of the Northern Territory. As a result, the Aboriginal Benefits Trust Fund Account was replaced by the Aboriginal Benefits Trust Account established under Part VI of the *Aboriginal Land Rights* (Northern Territory) *Act 1976*. With the exception of royalties pertaining to certain historical uranium mines, the Commonwealth Government has delegated the power to impose and collect royalties to the Northern Territory Government since the early 1980s.⁴⁹ However, in recognition of the precedent established by the 1953 ordinance and rights conveyed under the *Aboriginal*

⁴⁹ Mineral Royalty Act 1982 (NT), Petroleum Act 1984 (NT)

Land Rights (Northern Territory) Act 1976, the Commonwealth Government has continued to make an annual payment to the Aboriginal Benefits Account for an amount that is equivalent to the royalty receipts of the Northern Territory Government and Commonwealth Government from operations located on all Aboriginal Lands in the Northern Territory, known as a Mining Royalty Equivalent (MRE) Payment. This is discussed further in the section of this paper on financial assets.

Renewable energy and decarbonisation

Despite significant global expansion of renewable energy capacity, as illustrated in the following Figure 10, 50 , global carbon dioxide (CO $_{\circ}$) emissions are expected to continue to rise.

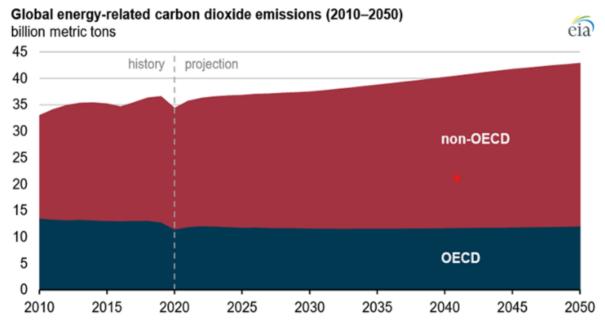


Figure 10 – Global energy-related carbon dioxide emission (2010 to 2050)

Source: U.S. Energy Information Administration, International Energy Outlook 2021, Reference case, October 2021 Note: OECD is Organization for Economic Cooperation and Development ...

Driven by a number of factors, including industrialisation of the developing world, switching costs and technical and economic limitations that constrain the ability of most renewable energy systems to deliver dispatchable baseload energy at municipal and industrial scale, this predicament exists in a context whereby governments have significant domestic and, through various multilateral arrangements, international policy commitments to reduce net emissions. Furthermore, in response to both policy and capital and product market expectations, the private sector is increasingly making net zero emission commitments at an individual corporate and sector level. Some of the most relevant examples for the purposes of this Seminar Background Paper are summarised in the following Table 2.

⁵⁰ United States Energy Information Administration (2022), International Energy Outlook 2021, United States Government, Washington D.C.

Table 2 - Emission reduction targets and instruments of relevance to Australia

Agreement	Target(s)	Parties	Instrument	
Paris Agreement ⁵¹	Limit global temperature increase this century to no more than 2.0 °C above pre-industrial levels, with an aspirational target of no more than 1.5 °C.	193 nation states (including Australia) and the EU, representing 98 percent of global greenhouse gas emissions.	Multilateral agreement ratified by national governments and parliaments that are party to the Agreement	
Australian Government ⁵²	43 percent reduction on 2005 emission levels by 2030.	Australian government agencies and instrumentalities	Climate Change Bill 2022 (Cth)	
Australian Mining Industry ⁵³	Net zero emissions by 2050	Members of the Mineral Council of Australia	Aspirational agreement	

The paramount instrument in the framework set out in Table 2 above is the Paris Agreement. The parties to the Paris Agreement have agreed to undertake rapid emissions reduction efforts in accordance with the best science. However, according to the United Nations Environmental Programme the Paris Agreement parties remain significantly offtrack to meet even its less ambitious objective of limiting global warming to 2.0 °C above pre-industrial levels, with current policy settings projected to result in global warming of 2.8 °C over the course of this century. Indeed, to return to an emissions trajectory whereby future global temperatures will be limited to the range set by the Paris Agreement objectives, a 30 to 45 percent reduction on current emissions is required. ⁵⁴ Achieving this will require dramatic action.

While it is true that global emissions accountability is concentrated -in 2020 the People's Republic of China (PRC), United States and India accounted for over 50 percent of Scope 1 emissions - Australia is not an insignificant emitter, with its 1.12 percent of global emissions making it the World's 15th largest emitter. Further, representing only 0.33 percent of the global population, Australia's emissions are high from a per capita perspective, which is the result of the nation's energy generation profile (75 percent of Australia's emissions) and its emissions intensive industry (with industrial processes accounting for a further 20 percent of the nation's emissions). The following Figure 11,56, summarises the current emissions profile of Australian jurisdictions.

⁵¹ Conference of the Parties, Adoption of the Paris Agreement, December 12, 2015, UN Doc FCCC/CP/2015/L.9/Rev/1 (Dec 12, 2015)

⁵² Climate Change Act 2022 (Cth)

⁵³ Minerals Council of Australia (2021), *Climate Action Plan*, Minerals Council of Australia, Canberra

⁵⁴ United Nations Environment Programme (2022), The Closing Window: Climate crisis calls for rapid transformation of societies, United Nations

⁵⁵ Department of Climate Change, Energy, the Environment and Water (2022), Australia's National Greenhouse Accounts, Australian Government, Canberra

⁵⁶ Department of Climate Change, Energy, the Environment and Water (2022), Australia's National Greenhouse Accounts, Australian Government, Canberra

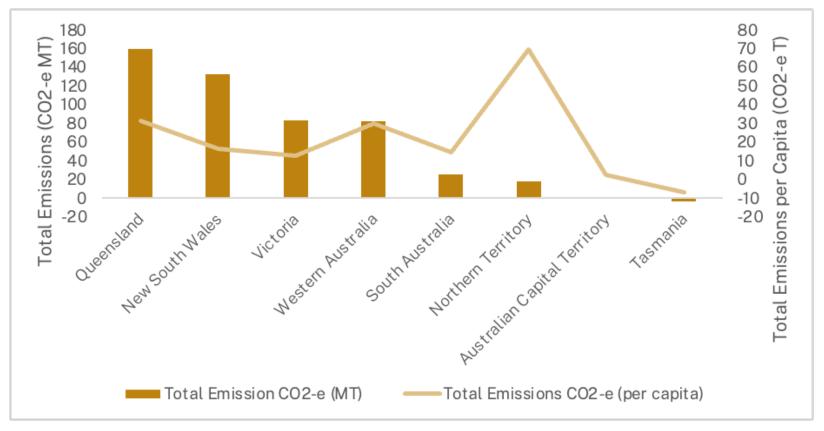


Figure 11 – Australian jurisdictional emissions – total and per capita (2022)

Importantly to the subject of this Seminar Background Paper, the opportunity for Australia to contribute to global decarbonation efforts through both renewable energy generation and CO₂ sequestration intersects significantly with First Nations interests in land. As illustrated in the following Figure 12, much of the Australian continent, including significant areas where there are First Nations land interests, are characterised by significant solar photovoltaic (PV) energy generation potential.

44

...incremental change is no longer and option: broad-based economy-wide transformations are required to avoid closing the window of opportunity to limit global warming to well below 2oC.

— United Nations Environment Programme, 2022

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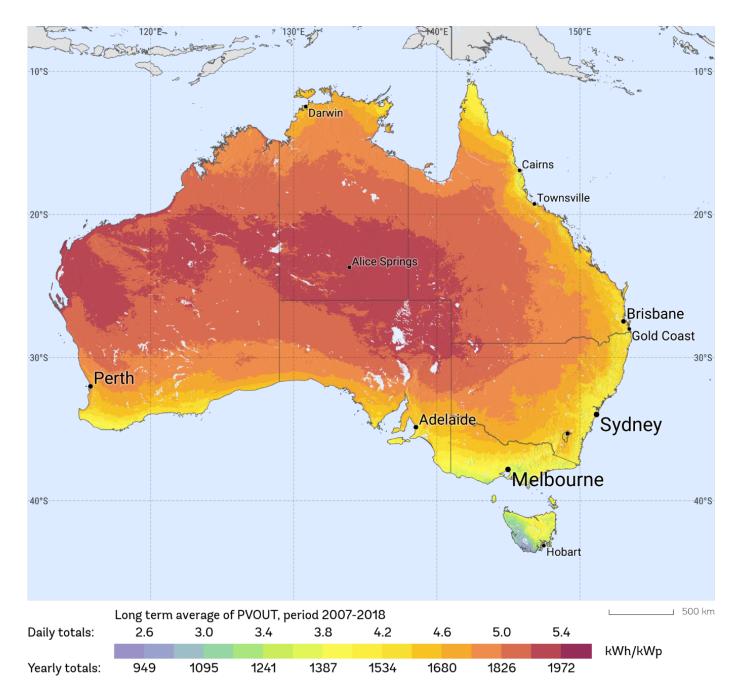


Figure 12 - Average photovoltaic power potential

Similarly, as illustrated in the below Figure 13, much of the Australian landmass includes areas of land in which First Nations have interests that are characterised by considerable wind resources.

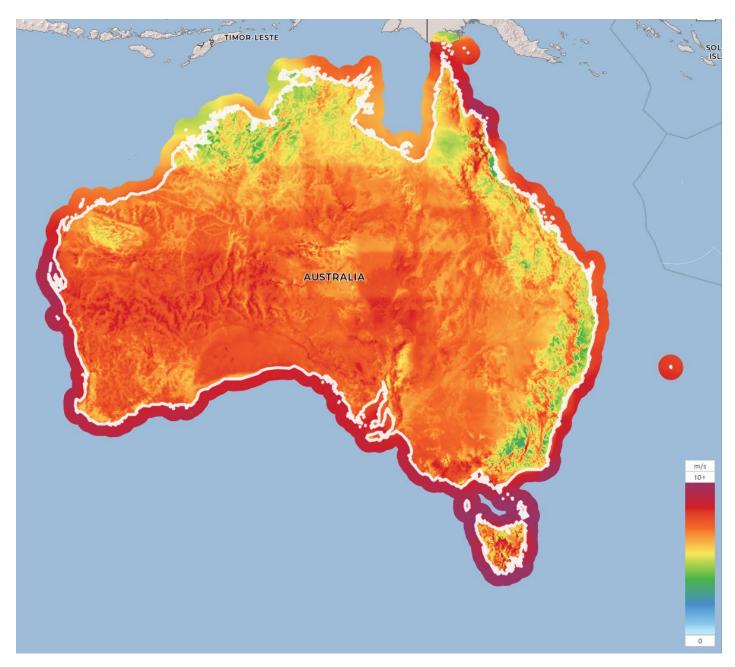


Figure 13 – Average wind speed

This national renewable energy profile has not been lost on the mainstream economy, with numerous ventures endeavouring to convert this natural resource to electricity or energy products. However, the question as to what this energy can realistically be used for beyond relatively small immediate local municipal and industrial (primarily mining industry) markets remains. Possibilities are discussed in the following subsections.

44

"Australia [has a] high-wage economy and distance from global markets...
Australia has a product cost disadvantage compared to other nations including the US... based largely in part on differences in labour costs, transport costs, capital efficiency and overheads.

...The nation's firms are also poorly connected into global value chains, possessing among the lowest level of backward linkages among the OECD."

Australian Manufacturing Growth Centre – Manufacturing Competitiveness Plan 2022

22 February 2022



Given energy is one of the fundamental inputs to almost all manufacturing processes and the development of a robust manufacturing sector remains an elusive objective of most Australian governments, it is not surprising that the prospect of using this energy as a potential source of low-cost clean energy for manufacturing purposes has been raised. However, the Australian manufacturing sector is not just challenged by energy costs.

For several (mostly structural) reasons, Australia is one of the world's least competitive and most volatile manufacturing economies. In addition to high energy costs, relatively high labour productivity, water, chemical and logistics costs that are embedded in both operating and capital expenditure result in high total product costs that render most products of Australian manufacturing uncompetitive. Small domestic consumer and business markets mean that to achieve economies of scale Australian manufacturers need to penetrate export markets early in development where the high total product costs and additional logistics costs render their products uncompetitive in international markets. An absence of protectionist trade policy that is prevalent in many competing manufacturing economies serves as an additional barrier and the volatility of the Australian dollar translates to volatility in Australia's small manufacturing sector-on average growing by a fifth above average size in market upturns and shrinking by a fifth below average size in downturns, dramatically more so than most other jurisdictions. 57 Finally, our main regional trading partners – East Asia (particularly the PRC) and United States – are some of the most competitive manufacturing economies in the world, whereby the comparative advantage case for Australia exporting raw materials and energy to and importing finished products from these economies is compelling.

As noted below in Table 3⁵⁸, Australia ranks poorly across many measures of manufacturing competitiveness-manufacturing contributes by far the smallest proportion of national GDP, Australia bottoms manufacturing competitiveness rankings on a trajectory worsening over time, and falls near the bottom quartile on many estimates of 'future economy' market readiness.

⁵⁷ Australian Manufacturing Growth Centre (2022), *Manufacturing Competitiveness Plan 2022*, April 2022

⁵⁸ Derived World Bank (2022), DataBank - Manufacturing, vlaue added (% GDP), data series ISIC rev.4, www.data.worldbank.org; Deloitte (2016), Global Manufacturing Competitiveness Index, April 2016, www.deloitte.com; World Economic Forum (2020), Global Competitiveness Report Special Edition 2020, December 2020

Table 3-Comparative rankings of Study Region manufacturing competitiveness

	Deloitte Global Manufacturing Competitiveness Index			World Economic Forum Global Competitiveness			
	Mnfct. % of GDP	Mnfct. Compet. Index (2016)	Mnfct. Compet. Index (2020 est)	Energy transitions	Skills & training investment	Future market facilitation	Future market R&D incentivisation
PRC	27%	100.0	95.3	77.5	67.0	49.7	50.0
ROK	25%	76.7	77.0	81.8	60.0	46.7	53.4
Japan	20%	80.4	78.0	76.9	51.3	53.5	54.7
Indonesia	19%	55.8	61.9	62.7	49.0	45.0	45.6
India	14%	67.2	77.5	72.6	43.5	40.2	32.5
USA	11%	99.5	100.0	71.2	68.2	57.7	57.3
Australia	6%	55.1	53.4	73.0	63.5	44.0	42.9

If the overall Australian manufacturing economy is uncompetitive, the relatively remote location where much of the identified renewable energy resources are located means that manufacturing facilities in these locations will be even less so.

Exporting the energy?

Given the manufacturing challenges faced by Australia, much of the entrepreneurial attention is on the prospect of exporting energy created from Australia's renewable resources to the energy hungry regional manufacturing economies, ultimately replacing the nation's exports of natural gas and coal to the region as its manufacturing economies continue to decarbonise. However, this entails transmitting the energy generated from these renewable resources over relatively long distances.

While there remain significant technical and economic challenges with respect to exporting renewable energy at scale, two key vectors are the main *foci* of current endeavourdirect export via subsea cables or export via chemical vectors, mainly hydrogen or ammonia.

Direct current transmission

A significant challenge in transmitting electricity over long distance by cable is the loss of electricity as a result of factors such as resistance. This means that renewable resources that are in proximity to their point of use have significant advantage over those that are distant. However, advances in High Voltage Direct Current (HVDC) technologies will potentially provide capacity to deliver electricity over distances of up to 3,000 kilometres with only around 10 percent loss of electricity.⁵⁹

This technology underpins the Suncable Australia-Asia Powerlink project, a proposal to transmit renewable energy generated in the Northern Territory to Singapore and other electricity markets in southeast Asia.⁶⁰

⁵⁹ Burke, P., Beck, F., Aisbett, E., Baldwin, K., Stocks, M., Pye, J., Venkataraman, M., Hunt, J. and Bai, X. (2022), 'Contributing to regional decarbonization: Australia's potential to supply zero-carbon commodities to the Asia-Pacific'. *Energy*, Vol. 246

⁶⁰ https://suncable.energy/australia-asia-power-link/

Hydrogen and ammonia

Another potential method of exporting renewable energy generated from domestic resources to more energy intensive markets is in the form of green hydrogen, or a vector for green hydrogen such as ammonia. At the risk of over-simplifying the process, this involves using the generated renewable electricity to split hydrogen atoms out of a water resource and then exporting that hydrogen to be used as a combustible fuel that does not produce CO₂ or other greenhouse gas (GHG) emissions. As discussed below, this presents certain challenges, some of which can be overcome by manufacturing the green hydrogen into ammonia and using the ammonia as a combustible fuel. The combustion of ammonia does not produce CO², but it does produce other NOx and Sox emissions.

As a fuel hydrogen demonstrates characteristics that render it attractive as a store of energy:

- High specific energy the energy per unit of mass of hydrogen is approximately 2.5 times greater than that of natural gas and methane and 3.5 times that of gasoline, meaning that compared other common fuels it holds orders of magnitude more energy by weight.
- Low ignition energy the energy required to ignite hydrogen is 15 times less than that required to ignite natural gas, 10 times less than methane and 5 time less that gasoline presenting, prima facie, more efficient combustion and release of the stored energy.
- GHG emissions free combustion when used as a fuel, the only by product from the combustion of pure hydrogen is water.

However, other physical characteristics of hydrogen pose some difficulties to its widespread adoption as a global energy source:

- Small molecular size hydrogen molecules are very small (1.00784 μ). In fact, diatomic hydrogen (H₂) is the smallest molecule known to humankind. This means that hydrogen very easily leaks through joints, flanges and other valve components, and in some cases, materials typically used in storage vessels and pipelines. Moreover, pressurised hydrogen is prone to seeping into materials (such as steel) used in conventional gas pipelines and storage vessels, resulting in accelerated asset deterioration, compromised asset integrity and safety issues.
- Very light as a result of its small molecular size hydrogen is also extremely light, with a density

that is approximately 7.5 times less than natural gas and methane. This means that under standard temperature and pressure (STP) conditions, large vessels are required for its storage. For example, the volume required to store 1 kilogram of hydrogen gas at STP (approximately the amount needed to drive a standard vehicle 100 kilometres) would require an 11,000-litre storage vessel. Therefore, compressing hydrogen gas to a density that renders it practical as a fuel in most applications requires both significant energy input and very robust storage vessels that can withhold the pressure, resist leakage and seepage, and are designed to withstand the structural integrity issues associated with a very small molecule size.

- Very low liquefication temperature currently, the technique for storing a maximum volume of hydrogen in a specific vessel size is to liquify the hydrogen by cooling it to 252.76°C (approximately 20°C warmer than absolute zero). This degree of cooling is 90°C or 56 percent colder than the temperate required to liquefy natural gas. Maintaining liquid hydrogen at this temperature presents significant technical challenges that require vessel design approaching perfect isolation. As a result, under current cryogenic technology the boil-off rate of hydrogen (0.3 percent per day) is 2.5 times greater than the boil off rate of LNG (0.12 percent per day), meaning that significant cargo is lost during transport.
- **Safety -** the safety risks associated with manufacturing, storing and transporting hydrogen is an additional key challenge that industry will need to overcome. As discussed above, very little energy is required to ignite hydrogen, which burns very quickly (the flame velocity of hydrogen is 8 times that of methane) and burns well at concentrations between 4 percent and 75 percent in air, an extremely wide range compared to other common fuels. Further, hydrogen fires are odourless, characterised by a pale blue flame that is almost invisible in daylight. and without significant radiated heat, making them difficult to detect. While the small, lightweight nature of hydrogen molecules leads it to disperse quickly in open air, mitigating safety risks in some settings. where ignition occurs in a confined space a very significant explosion shockwave will result.

The storage and transmission challenges presented by these characteristics can be mitigated by binding hydrogen molecules into a chemical compound that does not present the same storage and transmission challenges. The hydrogen can then be split out closer to the point of usage. However, because this requires additional capital and energy cost, typically a more commercially sensible prospect is to use a hydrogen carrier compound that can be directly combusted and still provide adequate energy efficiency and reduction in GHG emissions.

While there are several hydrogen carrier compound candidates, the most commonly used chemical compound vector for transporting and storing hydrogen is ammonia (NH₃). Ammonia presents a number of advantages in this regard:

- Density when liquefied, ammonia contains 48 percent more hydrogen by volume than hydrogen gas.
- **Safety** as a result of established systems and a less volatile substance, transportation of ammonia is far safer than the transport of hydrogen.
- Zero carbon combustion the combustion of ammonia does not produce CO₂.
- Established non-energy applications ammonia has application in a wide range of other non-fuel applications such as fertiliser manufacture (its main current use), refrigerant and cleaning agents, with this diverse market mitigating risk associated with investing in ammonia manufacture capital to service a nascent energy market.
- Mature technology ammonia is readily manufactured by established and existing processes, including renewable energy-oriented processes.

While as a hydrogen carrier compound for energy markets ammonia is the best existing option, it also presents a number of drawbacks:

- Pollutants while the combustion of ammonia avoids CO₂ emissions it does produce nitrogen oxides (NOx), which when emitted contribute to air pollution and acid rain. While catalytic removal systems can be used to capture NOx emissions, they are typically vented to the atmosphere.
- **Energy efficiency** -ammonia's efficiency as a fuel is compromised by three specific characteristics of ammonia high ignition temperature, low flame velocity and slow chemical kinetics.

For this reason, in fuel applications, ammonia is typically blended with other conventional fuels such as natural gas and coal to reduce emissions while ameliorating some of its drawbacks as a fuel. Despite these difficulties, ammonia is generally regarded as at least an important transition fuel to a pure hydrogen economy. Countries such as Japan are enacting plans to source ammonia for co-firing purposes, with ammonia expected to account for around 1 percent of Japanese electricity production. Other potential hydrogen carrier compounds that are being investigated include chemical hybride toluene to methylcyclohexane (TolMCH).

Another potential application for green hydrogen is hydrogen fuel cells. An established battery-like technology, fuel cells revolve around an electrochemical process that converts the chemical energy of a fuel and an oxidising agent into electricity through redox reactions. In conventional batteries, output energy is derived from the stored latent chemical energy in the constituent metals and ions or oxides already present in the battery, while fuel cells require a continuous source of fuel input (ie. hydrogen gas) and oxygen.

The main application for hydrogen fuel cells is in the transport sector. However, to date penetration has been limited. While regulation and the absence of hydrogen refuelling infrastructure is a limiting factor, physical storage limitations, cost and competition from lithium-ion battery technology are significant limiting factors.

Geological sequestration

Geological and other forms of Carbon Capture and Storage (CCS) have been a focus of significant attention both domestically and globally—there have been very successful examples as well as not so successful examples of its application.

Within the context of global net-zero ambitions, CCS has significant support as an essential tool to remove GHG emissions already present in the atmosphere, as well as a role in reducing the emissions footprint of extractive or emissions-intensive industries currently operating. Indeed, the United Nations (UN) Intergovernmental Panel on Climate Change (IPCC) recommendations and pathways to limit global warming to 1.5 degrees Celsius rely on CCS for many best-case scenarios, including accounting for over 15 percent of all

⁶¹ Erdemir, D. and Dincer, I. (2020), A perspective on the use of ammonia as a clean fuel: challenges and solutions, Energy Research, Wiley

⁶² Financial Times in: Erdemir, D. and Dincer, I. (2020), A perspective on the use of ammonia as a clean fuel: challenges and solutions, Energy Research, Wiley

emission reduction by 2070 under the International Energy Agency's (IEA) Sustainable Development Scenario.

Within Australia and globally, it is increasingly likely that CCS will be mandated for new extractive projects or heavily emitting industry in order to gain environmental approvals and reach mandated emissions intensity goals. At the same time, shifting attitudes amongst consumers as well as ESG committees within corporates or project financiers, and shareholder activism will create additional pressure to implement all available means of reducing emissions footprints, including CCS.

Within Australia, several studies led by industry consortiums, Geoscience Australia and other public and private actors have demonstrated the broad suitability of significant areas of the Australian geology for CCS, as illustrated below in Figure 14.⁶³ Several of the more prospective demonstrate intersection with First Nations interests in land.

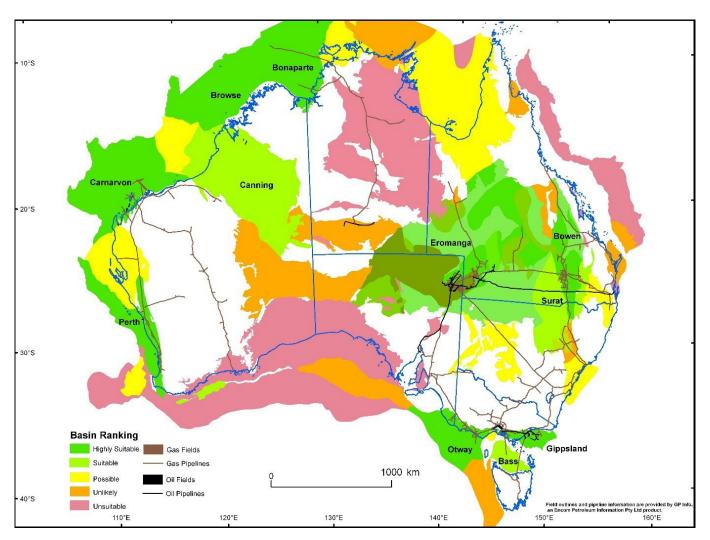


Figure 14 - Geoscience Australia National Carbon Mapping and Infrastructure Plan - Geological suitability for CCS

⁶³ Derived Figure 18: Australia's basins ranked for CO2 storage potential in Geoscience Australia (2009), National Carbon Mapping and Infrastructure Plan, Commonwealth Government, Canberra, ACT

The spacecraft launch, ground station and astronomy sectors

In 2020, the global space economy was valued at USD \$385 billion and is expected to grow to USD \$1 trillion by 2030,⁶⁴, with the space exploration sector alone estimated to reach USD\$2.7 trillion by the 2040s.⁶⁵ The consolidated space economy consists of government funding for space activities, as well as commercial space revenues, which are generated as the result of either business-to-government or business-to-business transactions in space hardware and services.

Key sectors of the global space economy are rapidly becoming privatised. 'New Space' refers to a clear trend whereby the space industry, once dominated by the military and public sectors, is increasingly penetrated by private companies, due primarily to cost reductions associated with technology improvements making it possible for SMEs and start-ups to enter the space industry. It is typified by commercial developments (compared to government with a traditional national security focus) and disruption and financed largely by externally-oriented government innovation programmes and private capital. For example, in 2020, global government space budgets totalled approximately USD \$83 billion, of which approximately USD \$13 billion (or 15 percent) was estimated to be contracted for downstream commercial services. Additionally, in the same year, commercial space revenues were estimated at approximately USD \$315 billion, 66, or almost four times the value government space budgets.

The commercial downstream segment, which includes operations and satellite services, generated revenues of USD \$293 billion in 2020, representing 97 percent of the total commercial market. The largest revenue drivers remain satellite navigation and communication, which comprised 58 and 34 percent of commercial revenues respectively in 2020, driven by business-to-consumer applications.⁶⁷

The Australian space industry is comparatively small but growing. Over the period 2015 to 2020, it grew at 8 percent per annum to reach AUD \$6.5 billion. 68 The Australian Space

⁶⁴ SpaceTech Analytics (2021), SpaceTech Industry 2021 / Q2 Landscape Overview

Agency (ASA) was established in July 2018 as a non-statutory, whole-of-government entity located within the Australian Department of Industry, Innovation and Science, with a statutory basis for the Agency to be considered as a term of reference in its four-year review. The ASA has an ambitious goal of doubling the size of Australia's space industry to AUD \$12 billion and creating 20,000 new jobs by 2030.⁶⁹

Future growth of the Australian space industry will be underpinned by a number of competitive advantages that Australia possesses:

• Southern hemisphere satellite ground stations

The Australian continental landmass covers a significant portion of the southern hemisphere, is geo-technically stable, sparsely populated with limited industrial activity (particularly in the Northern half and central parts of the continent) and is generally characterised by consistently clear skies. These characteristics provide an ideal environment for basing southern hemisphere satellite ground stations, several of which are currently operated by various Australian government agencies and private companies.

Capabilities in ground systems, software and applications

A long history of operating ground stations for satellites and space missions of various international space agencies has resulted in a world-class native capability in ground systems, space data software and applications.

Close strategic relationships with key space industry nations

The Australian Government has longstanding formal relationships with several key global space agencies including National Aeronautics and Space Administration (NASA), European Space Agency (ESA), Japan Aerospace Exploration Agency (JAXA), United Kingdom Space Agency (UKSA), Canadian Space Agency (CSA), French National Centre for Space Studies (CNES), German Space Administration (DLR) and Korea Aerospace Research Institute (KARI).

· Significant scope for equatorial launch capability

Australia is geographically well positioned to support satellite launch services as it has uninhabited areas close to the equator with flight paths over the ocean. Launches near the equator can deliver 20 to 40 percent more payload to orbit than from higher latitudes and provide access to sun

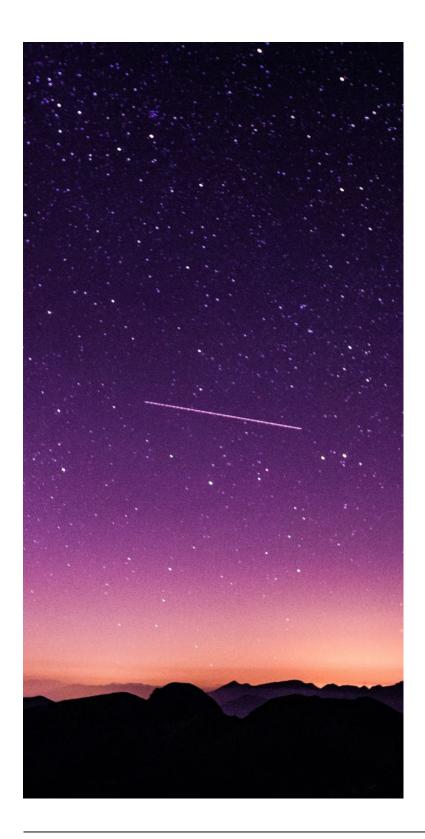
⁶⁵ Bank of America (2020), Space 2.0

 $^{^{66}}$ Euroconsult (2020), Space Economy Report 2020, December 20^{th} 2020, 7^{th}

 $^{^{67}}$ Euroconsult (2020), Space Economy Report 2020, December 20^{th} 2020, 7^{th} Edition

⁶⁸IBISWorld (2020), Industry Report OD5545-Satellite Communications and Astronauts in Australia, January 2020

⁶⁹ Hon. Karen Andrews, MP, Minister for Industry, Science and Technology (2019), Statement of Expectations for the Australian Space Industry



synchronous orbits that are highly sought after for earth observations from space.⁷⁰

Domestic industry space dependency

The operations of cornerstone industries of the Australian economy such as mining, oil and gas, agriculture and transport have a significant and growing dependency on space services, particularly space sourced data. This represents a natural and growing domestic market for space services.

Proximity and well established diplomatic and trade relationships with key nations that comprise the Asian space market

Australia has longstanding, extensive and diverse trading relationships with most Asian nations, some of which are governed by bilateral and multilateral trade agreements. Many of these nations have government space budgets and significant industry that invests in space services.

Satellite ground stations

Satellite ground stations are facilities designed to track satellites and collect and stream satellite data to a variety of users and applications. Across Australia there are currently approximately 45 satellite ground stations operated by Australian, United States and European organisations performing a range of telecommunications, research, weather monitoring and defence tasks. As the satellite sector of the space industry grows, so too will demand for satellite ground station real estate.

Spacecraft launch services

In recent years there has been a dramatic escalation in satellite deployment, driven by significant progress toward the commoditisation of two aspects of space endeavour – launch services and access to satellite technology.

Over the past 15 years the number of successful space launches has grown at compound annual growth rate (CAGR) of 5.0 percent to an average of one launch every three days. The United States and People's Republic of China (PRC) have each accounted for around a third of the launches over the past 15 years, Russia around 20 percent, Europe 10 percent and India and Japan approximately 5 percent each.

⁷⁰ Acil Allen (2017), Australian Space Industry Capability: A Review, Department of Industry, Innovation and Science, Australian Government, Canberra

Importantly, over the same period the growth in low earth orbit (LEO) launches, the primary vector for satellite deployment, has grown at a CAGR of over 7 percent. This is illustrated in the following Figure 15.⁷¹

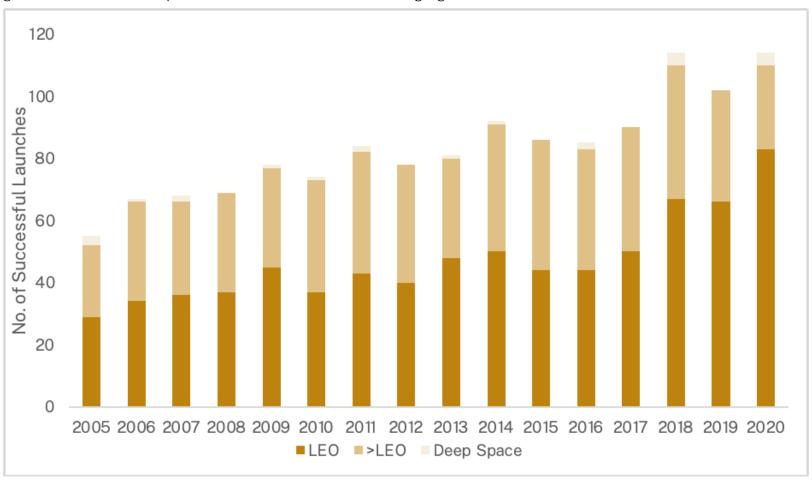


Figure 15 – Successful Space Launches – All Nations (2005 to 2020)

This rapid growth in successful launches has been enabled by rapid development and maturation of contemporary launch vehicle technology, expansion of global space agency capability and the commercialisation of launch services through private companies such as SpaceX. A total of 2,663 satellites were launched world-wide by commercial clients and government agencies over the decade, the former representing 47 percent and the latter 38 percent of satellites launched during this period.⁷²

Technological advances of electronic and mechanical miniaturisation, additive manufacturing, and commercial-off-the-shelf (COTS) componentry is largely responsible for generating the market opportunity to deliver on the 2030 projection of USD \$1 trillion in projected revenue. Much of the New Space capability will be delivered through nano satellites (or 'CubeSats') and launched to Low or Medium Earth Orbit.

Equatorial Launch Australia, operator of a multi-user commercial space port – Arnhem Space Centre – in East Arnhem Land in the

⁷¹ Space Launch Report (https://www.spacelaunchreport.com/log2020.html)

⁷² Euroconsult (2020), Space Economy Report 2020, December 20th 2020, 7th Edition

Northern Territory, 12° south of the equator conducted three successful launches for NASA in 2022.73

Astronomy

Much of regional and remote Australia is characterised by very limited light pollution, rendering it highly suitable for southern hemisphere optical night observations. While most advanced astronomy now revolves around radio-astronomy technologies, opportunities for optical astronomy tourism are prospective in certain areas of remote and regional Australia.

Certain areas of particularly remote Australia are also characterised by very high levels of radio-silence, rendering them highly suitable for the deployment of radio-astronomy hardware. There are currently nine radio telescopes of various scale operating across Australia performing various astronomy research and operated by organisations such as the CSIRO, and several Australian universities and under various international collaborations. Among these is the globally renowned Square Kilometre Array Pathfinder.

Municipal services

In regional and remote locations, particularly where the portion of total population that is First Nations is high (as is the case for much of northern Australia), there is a strong case for First Nations organisations to perform a far greater role in municipal services. In many of these locations, First Nations NGOs already perform key roles in the delivery of range of community services such as health, education and other social services. Either in collaboration with existing local governments or by taking over local government functions, this could be extended to other municipal services.

The opportunities and constraints

While significant economic value has and continues to be extracted from terrestrial Australia by non-First Nations interests, there remains significant opportunities for First Nations to have greater participation in existing landbased industries—land care and conservation, minerals and petroleum exploration and production, and agriculture—applying unique competitive advantage in those sectors, as well as in emerging and new sectors of terrestrial-oriented industry such as renewable energy generation, carbon farming and space sector services.

However, the nature of First Nations land tenure and rights remains a significant barrier to using these opportunities as a vector for economic self-determination. To address this, new pathways and reform is required that:

- 1. Provides First Nations interests in co-existing tenure greater economic rights and opportunity for benefits sharing with other holders of rights and tenure; and
- Where First Nations rights and tenure are relatively exclusive, a significant reduction in the caveats over that land that limit its fungibility as an economic asset.

The challenge in achieving these outcomes is that they must be achieved such that communal rights over traditional lands where Traditional Owners have only just reclaimed some rights after over two centuries of dispossession are not lost. In this context, it is likely that the solution will not only be found in regulatory reform, but also innovative financing solutions and assistance policy.

⁷³ https://ela.space/



Sea Country rights as an economic asset

The nature of the Australian marine resource

With an Economic Exclusion Zone,⁷⁴, totalling some 8.2 million square kilometres, Australia's marine jurisdiction is the third largest in the world behind France and the United States. This body of water, particularly its coastal and littoral areas, have sustained First Nations communities, supported culture and traditional values and produced products that have been the subject of national and international trade for decades.

The Australian marine jurisdiction supports around 11 percent of known marine species, including 5,000 species of fish. It hosts significant marine ecosystems – coral and rocky reefs, mangroves, sea grass beds and kelp forests - that provide globally important ecosystems services, including underpinning the viability of several globally significant fisheries. The subsea geography in significant areas of Australian marine jurisdiction also host very large resources of natural gas and other petroleum products (see previous section), with certain areas also characterised by wind conditions that are suitable for renewable energy generation. In the context of current regional geopolitical tensions, it is also of increasing strategic relevance.

Summarised in Figure 16,75, below, in 2017-18 Australia's 'blue economy' was estimated at \$81.2 billion. The value of Australia's blue economy is expected to reach \$100 billion by 2025.76

Canberra

⁷⁴ An exclusive economic zone (EEZ), as prescribed by the 1982 United Nations Convention on the Law of the Sea, is an area of the sea in which a sovereign state has special rights regarding the exploration and use of marine resources, including energy production from water and wind.[1] It stretches from the outer limit of the territorial sea (12 nautical miles from the baseline) out to 200 nautical miles (nmi) from the coast of the state in question.
⁷⁵ Australian Institute of Marine Science (2020), The AIMS Index of Marine Industry 2020, Australian Government,

⁷⁶ National Marine Science Committee (2022), Ocean Policy Science Advisory Group IN: National Marine Science Committee (2020), National Marine Science Plan 2015 to 2025: The Midway Point, Australian Government, Canberra

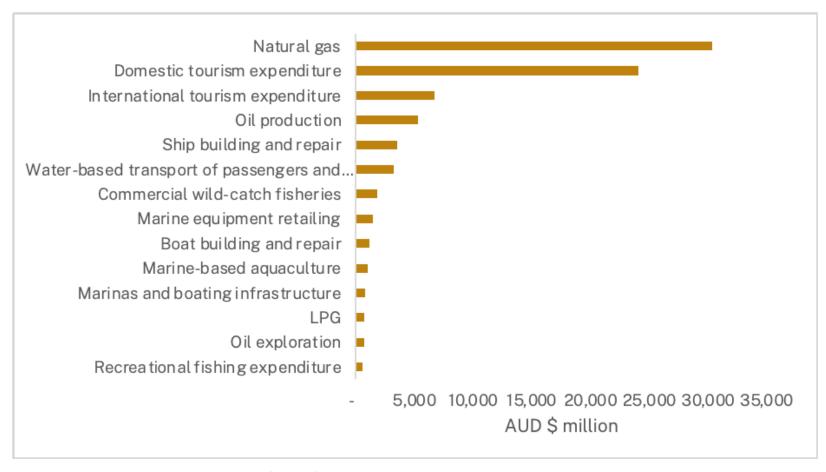


Figure 16 – Estimated value of marine industry (2017-18)

The ecosystem services that the Australian marine estate provides, including climate regulation, carbon dioxide absorption, nutrient recycling and coastal protection are estimated to be worth an additional \$25 billion.⁷⁷

Management of marine territories and access rights in Australia: an overview

Not dissimilar in nature to the Australian terrestrial estate, Australia's marine estate is the subject of a patchwork of overlapping tenure, access and management arrangements which are determined by both international law and the Federal character of Australia's political and governance systems.

The marine estate and zones

At its greatest extent, as illustrated below in Figure 17,78, the total of Australia's maritime territory comprises some 8.2 million square kilometres of Exclusive Economic Zone (EEZ), together with a further 2.5 million square kilometres of seabed to the limits of

⁷⁷ National Marine Science Committee (2020) IN: Gibson, E. (2021), Oceans and the blue economy, Science, Technology, Environment and Resources, Parliamentary Library, Australian Government, Canberra

⁷⁸ Derived Geoscience Australia (2023), data queries Australian Marine Spatial Information System, http://www.ga.gov.au/amsis

the continental shelf. This includes waters associated with the Australian mainland and Tasmania, as well as Australia's Antarctic territories and the Cocos (Keeling), Christmas, Kergeulen, Heard-McDonald, Lord Howe, Macquarie and Norfolk Islands.

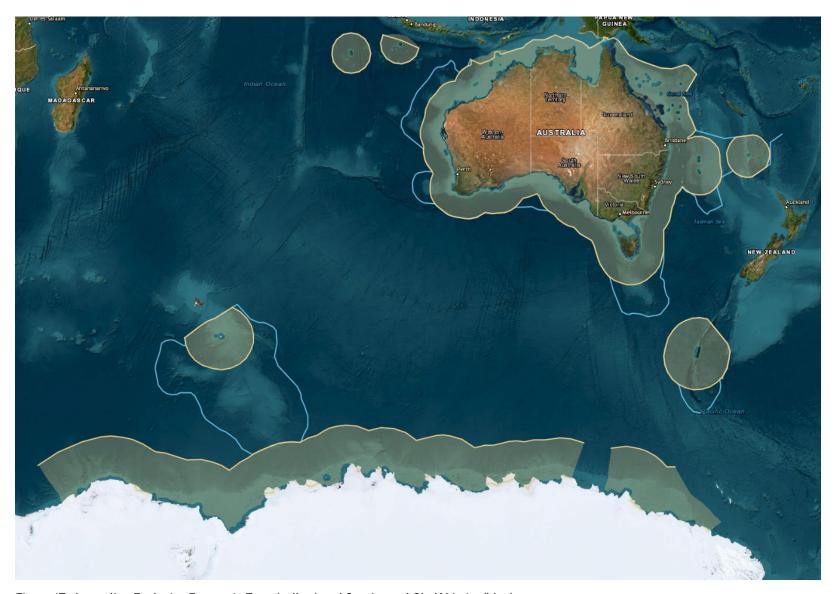


Figure 17 - Australian Exclusive Economic Zone (yellow) and Continental Shelf Limits (blue)

Where these maritime zones abut or would overlie those of other nations, as may be observed above, the midpoint between the zones is instead used. Within this broad expanse of territory lie multiple progressively smaller zones, over which different entities exercise different levels of jurisdictional control.

Closer to shore, within Australia's EEZ are found the Contiguous Zone and Territorial Seas, shown below in Figure 18,79.



Figure 18 - Australian Contiguous Zone (yellow) and Territorial Sea (purple)

⁷⁹ *Ibid.* As the focus of this paper is on the Australian mainland and Tasmania, for reasons of scale only these areas are shown.

Further inshore still, the three nautical miles extending seaward from the Territorial Sea Baseline, 80, adjacent to a State or Territory comprise the Coastal Waters.

To demonstrate these respective zones in proportionate scale, their application to a relatively uncomplicated portion of the Australian marine estate off the south-west of Western Australia is shown below in Figure 19.81 Continental Shelf limits are shown in full colour, Exclusive Economic Zone (EEZ) limits are shown in yellow, Contiguous Zone limits are shown in bold purple, Territorial Seas are shaded yellow, and Coastal Sea limits are shown within that in fine purple.

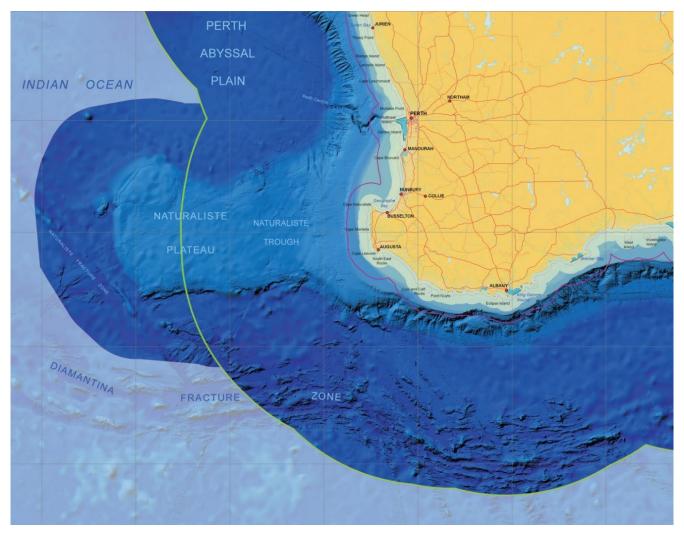


Figure 19 - Illustrative application of Australian Maritime Zones to south-west of Western Australia

⁸⁰ The reference point from which the seaward limits of a nation's maritime zones are measured. Typically this corresponds with the low water line along the coasts (including islands), with some allowances for joining of discrete points (straight baseslines) where coastlines are deeply indented or with island fringing, or drawn across the natural entrance points of bays and rivers (bay/river closing lines).

⁸¹ Derived Hatfield, A. et al (2010), Australia's Maritime Jurisdiction off Southwestern Western Australia, Geoscience Australia

Jurisdiction, access and management within maritime zones

As alluded to above, these differential zones are important because at international law,⁸², they support increasing degrees of control by Australian governments (principally the Commonwealth, but as noted below also States and Territories to a lesser extent) over all vessels and aircraft which pass within them, whether Australian-flagged or not, as they come closer to the Australian coastline. While relatively complex, for present purposes these jurisdictional controls and powers may be summarised as given below in Table 4 below.

Table 4-Comparison of Maritime Zones

Zone	Extent	Jurisdiction	Access and management
High Seas	All areas not included in other maritime zones.	Nil	No State may claim sovereignty. In general, Flag States (those in whose jurisdiction a vessel is registered) retain exclusive rights to exercise jurisdiction over vessels at sea.
Continental Shelf Limits	Seabed and subsoil within to EEZ and beyond that to outer edge of continental margin.	Commonwealth	Sovereign rights to extent of exploring and exploiting minerals and resources of seabed, together with sedentary organisms. Jurisdiction over marine scientific research, biodiscovery of benthic species, protection of benthic environment.
Exclusive Economic Zone	Waters, seabed and subsoil to extent of 200 nautical miles from territorial sea baseline.	Commonwealth	Sovereign rights to explore, exploit and preserve all natural resources of the waters, seabed and subsoil, and over economically productive uses such as generation of energy from water, currents and wind. Jurisdiction over establishment and use of artificial structures/installations, scientific research, and protection of marine environment.
Contiguous Zone	Zone extending 24 nautical miles from territorial sea baseline.	Commonwealth	Jurisdiction to extent necessary to exercise control over all vessels to prevent infringement and enforce compliance with customs, fiscal, immigration, sanitary and other laws and regulations applying within its Territorial Sea.
Territorial Sea	Airspace, waters, seabed and subsoil to extent of 12 nautical miles from territorial sea baseline.	Commonwealth	Full sovereignty, subject to relevant international laws. Most notable limitation is 'right of innocent passage' for foreign-flagged ships permitting transit.
Coastal Waters	Waters and seabed extending 3 nautical miles seaward from territorial sea baseline.	States & Northern Territory	At international law, considered Territorial Seas. However, by virtue of Offshore Constitutional Settlement, jurisdiction is vested in relevant State (and Northern Territory) as if area formed part of that State (or the Territory).

⁸² Principally derived from the UN *Convention on the Law of the Sea* (1982) UNTS 1833 but also including the Antarctic Treaties and multiple bilateral treaties signed between Australia and Indonesia, France, New Zealand, Papua New Guinea, the Solomon Islands and Timor Leste (East Timor).

The Offshore Constitutional Settlement: State and Commonwealth jurisdictional divisions

While at international law the Commonwealth Government is the primary actor and party charged with responsibility for overseeing and implementing Australian rights and obligations, as a consequence of Australia's federal system day-to-day management and control of the marine estate is shared between the Commonwealth and State Governments (and the Northern Territory). This is primarily in relation to Coastal Waters (as noted above in Table 4).

As noted above, under the Australian Federal system as created by the Constitution, the powers of State and Commonwealth governments differ. The current status and evolution of State powers in relation to the sea and seabed within Coastal Waters is relatively complex, and an in-depth analysis of these matters falls outside the scope of this Seminar Background Paper. However, very briefly, emerging from the United Nations Conferences on the Law of the Sea commencing in the late 1950s, and catalysed by the discovery and development of Australia's vast offshore hydrocarbon resources (see earlier section). Australian governments of all levels first seriously commenced negotiations to codify and clarify the division of powers between Commonwealth and the States in the 1960s. The first Petroleum (Submerged Lands) Act 1967 passed pursuant to the Offshore Petroleum Agreement established a framework of joint agreed mining codes, with State Ministers granted devolved powers as 'designated authorities' of the

Commonwealth. Under the Settlement, petroleum royalty revenue was split between the Commonwealth and States. However, the underlying issue of resource ownership and legislative powers was left unaddressed.

Developments over the next few years illustrated that further clarity was required, and in 1973 the *Seas and Submerged Lands Act* reserved wholly to the Commonwealth sovereignty over all Australian waters, the continental seabed, and (as it follows) the aquatic resources found therein. Promptly challenged in the High Court, the legislation was upheld, with States denied any property rights or legislative power over the territorial seas. In recognition of the better position of States to administer and control their territorial waters, the Commonwealth and States reached agreement in 1979 on what became known as the Offshore Constitutional Settlement, ⁸³, ('OCS'), under which title to the internal waters and sea, seabed and mineral resources found within it, to a limit of three nautical miles ('Coastal Waters'), passed to the States.

As a result, with the exception of joint management arrangements already entered into, in most areas States and the Northern Territory broadly hold sovereignty over the aquatic resources, waters and seabed of their coastal waters, and hence have the power to legislate for their regulation and management. In other areas, sovereignty and control is effectively shared with the Commonwealth government, as very broadly summarised below in Table 5 and examined in more detail in following sections.

Table 5 - Division of powers and responsibilities under the Offshore Constitutional Settlement

Subject matter	Coastal Waters	Territorial Seas	EEZ
Fisheries	States/Northern Territory (by agreement States/NT may request Commonwealth to manage or jointly manage).	Mixed, joint or Commonwealth depending on fishery location and agreement struck between States/NT and Commonwealth.	Commonwealth
Minerals	States/Northern Territory	Commonwealth	Commonwealth
Oil & gas	States/Northern Territory	Commonwealth	Commonwealth
Wave/wind gen	States/Northern Territory	Commonwealth	Commonwealth
Environmental protection	Shared between States/NT and Commonwealth.	Commonwealth	Commonwealth
First Nations tenure (Native Title)	Commonwealth		
Other First Nations interests and resource access	States/Northern Territory	Commonwealth	Commonwealth

⁸³ Implemented via the Seas and Submerged Lands Act 1973 (as amended), the Coastal Waters (State Powers) Act 1980, Coastal Waters (State Title) Act 1980, Coastal Waters (Northern Territory Powers) Act 1980 and Coastal Waters (Northern Territory Title) Act 1980

Fisheries and other living aquatic resources

Despite the existence of continually practised and sophisticated First Nations legal traditions dating back tens of thousands of years, at the time of colonisation Australia was classified by the British as a land without any pre-existing social order or regulation (*terra nullius*). As a result, the new colonies were considered 'settled colonies', and hence inherited the English common law system and Imperial legislation in effect at the time. ⁸⁴ Under this historical position, fish and other living aquatic resources were essentially incapable of ownership until caught, and thus every person was entitled to freely fish. ⁸⁵

Since Federation, this historically unfettered right has been progressively narrowed. States have responded to changing scientific and ecological knowledge, exercising their mandate on behalf of the public to preserve and regulate the exploitation of an important renewable natural resource. In general terms, all States have moved from a permissive laissez-faire management approach to the progressive development of 'rights-based' approaches since the 1980s—government control of which fish may be caught, where, when and in what quantities, through licences, quotas and other control schemes. As implemented by legislation, fishing rights are granted to recreational, customary and commercial fishers which dictate their degree of access.

Wild-catch fisheries and aquaculture

In 2019-2020, seafood and other aquatic product produced from the Australian fisheries and aquaculture sector had a total value of AUD \$3.2 billion, which was approximately equally contributed to by wild-catch and aquaculture production.⁸⁷ Production from Tasmania is more than twice that of any other jurisdiction, accounting for just over onethird of all fisheries and aquaculture production in Australia, with the next three largest jurisdictions – Western Australia, South Australia and the Commonwealth – accounting for an additional 43 percent. This is illustrated in the following Figure 20.⁸⁸



⁸⁴ An Act to Provide for the Administration of Justice in New South Wales and Van Diemen's Land 1828, 9 Geo IV, c.83

⁸⁵ Eg. per Harper v Minister for Seas Fisheries (1989) 168 CLR 314

 $^{^{86}}$ Yanner v Eaton (1999) 201 CLR 351 at [28] per Gleeson CJ, Gaudron, Kirby and Hayne JJ

⁸⁷ Australian Bureau of Agricultural and Resource Economics and Sciences (2021), *Australian Fisheries and Aquaculture Statistics 2020*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra

⁸⁸ Australian Bureau of Agricultural and Resource Economics and Sciences (2021), *Australian Fisheries and Aquaculture Statistics 2020*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra

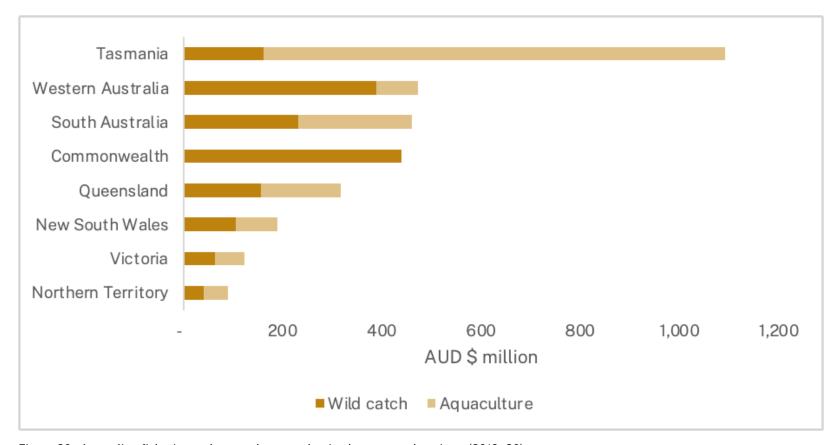


Figure 20 - Australian fisheries and aquaculture production by state and territory (2019 - 20)

Wild catch fisheries

The Western Rock Lobster fishery in Western Australia, Southern Rock Lobster fisheries of South Australia, Victoria and Tasmania, and to a much lesser extent the Tropical Lobster fisheries of the North, account for 42.6 percent of the value of the wild-catch sector and is the second largest sector of the Australian fisheries and aquaculture industry, accounting for 16.4 percent of the total value of production.

Accounting for approximately 19.1 percent of the value of wild catch fisheries, 65 percent of wild caught prawns are caught in Queensland and Commonwealth Fisheries. Abalone accounts for 9.6 percent of the value of wild catch fisheries, with 93.7 percent of that value produced from the southern states of South Australia, Victoria and particularly Tasmania. The following Figure 21,89, illustrates the value of production from Australian wild catch fisheries.

⁸⁹ Australian Bureau of Agricultural and Resource Economics and Sciences (2021), *Australian Fisheries and Aquaculture Statistics 2020*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra

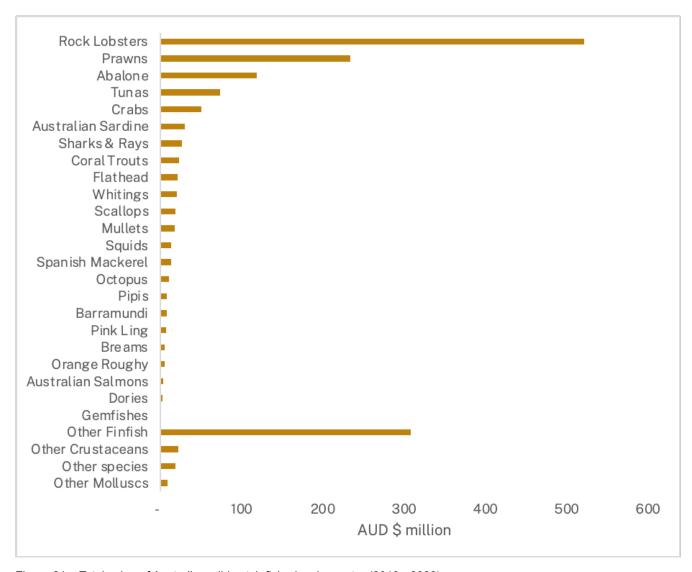


Figure 21 – Total value of Australian wild catch fisheries, by sector (2019 - 2020)

Aquaculture

The largest sector of the Australian fisheries and aquaculture industry, sea cage production of Atlantic Salmon (an invasive species) in Tasmania, accounts for 55.7 percent of national aquaculture production and 28 percent of the value of all fisheries and aquaculture production. The *purse sein* production of Bluefin Tuna in South Australia accounts for 8.6 percent of the value of aquaculture production, with prawn aquaculture production undertaken predominately in Queensland accounting for 8.4 percent. Oysters account for a further 7.2 percent of aquaculture production where both native and invasive species are produced in New South Wales, South Australia and Tasmania. The following Figure 22,90, summarise aquaculture production by sector.

⁹⁰ Australian Bureau of Agricultural and Resource Economics and Sciences (2021), *Australian Fisheries and Aquaculture Statistics 2020*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra

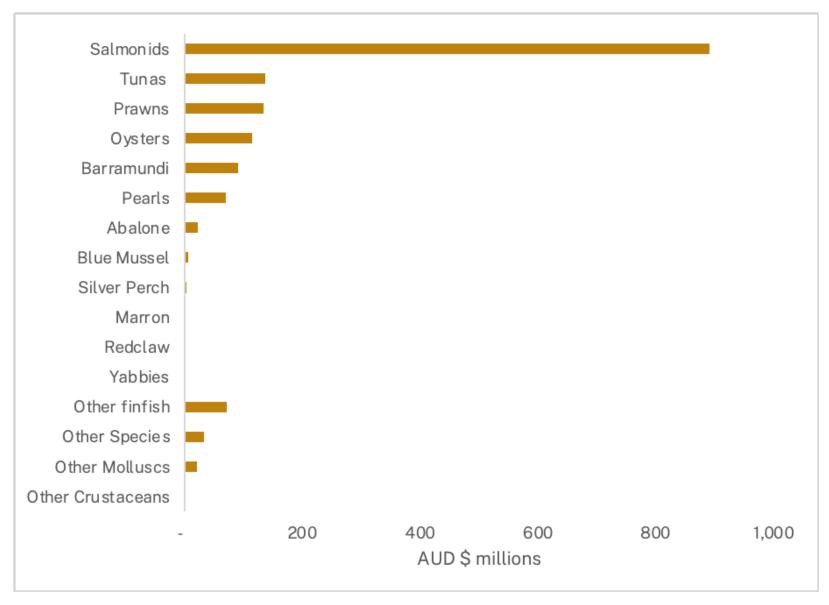


Figure 22 – Australian aquaculture production by sector (2019 - 2020)

It is clear from this analysis, that like agriculture, a majority of fisheries and aquaculture GVP is derived from territorial waters in the southern half of the continent and whilst legally recognised rights pertaining to coastal waters (the intertidal zone) and claims over sea country are a relatively recent phenomenon, they are primarily in northern Areas.

Coastal waters: State and Northern Territory fisheries

As a result of the Offshore Constitutional Settlement (discussed in more detail above), Australia's Coastal Waters and their aquatic resources are principally managed and controlled by the States and the Northern Territory. As a result, with exception of a few outliers, access and control arrangements for most near-shore activities will fall within State purview, with State legislation

summarised below in Table 6. Also noted are any provisions relating to access and control of the use of aquatic resources by First Nations peoples.

Table 6-State and Northern Territory fisheries management regimes

Jurisdiction	Instrument	First Nations/customary fishing
New South Wales	Fisheries Management Act 1994	s34C – no recreational permit fee for Indigenous fishers s37 – system of permits for Aboriginal cultural fishing. Where Native Title
Queensland	Fisheries Act 1994	determination made, permits must not be inconsistent with Native Title rights. s14 – defence from prosecution under Act for Aboriginal/Torres Strait Islander
South Australia	Fisheries Management Act 2007	Part 6 Div 2 – where recognised Native Title interests, provides for creation of Aboriginal Traditional Management Plans and related provisions.
		No general traditional/customary exemptions.
Tasmania	Living Marine Resources Management Act 1995	s12 – system of permits for 'Aboriginal cultural and ceremonial activities' s60 – broad exemption from licencing regime for 'an Aborigine who is engaged in Aboriginal activity'
Victoria	Fisheries Act 1995	s11AA – where settlement under <i>Traditional Owner Settlement Act 2010</i> , broad exemptions from licencing regime. No similar provisions for Native Title holders or general traditional/customary exemptions.
Western Australia	Fish Resources Management Act 1994 (transitioning out of effect)	s6–exemptions for non-commercial fishing by Aboriginal person 'in accordance with continuing Aboriginal tradition'.
	Aquatic Resources Management Act 2016 (transitioning into effect)	s6–exemptions from management regime if take is for 'that person or the person's family' and not for commercial purpose.
Northern Territory	Fisheries Act 1988	s93 – exemptions from management regime for traditional/customary fishers.

Coastal waters: other potential management arrangements

While most fishing activities within Coastal Wates will fall under State/Territory control as summarised above, the OCS also provides for two other potential types of management regime:

- **Commonwealth management**, wherein a fishery can, by agreement between the Commonwealth and all affected States (or the NT), be transferred entirely to Commonwealth control; and
- **Joint Authority management**, wherein the Commonwealth and one or more States (or the NT) can agree for a single nominated entity to manage all fishing activity relating to an area or species under a unified regime.

There are currently seven Commonwealth-managed fisheries with any substantial intersection with Coastal Waters, summarised below in Table 7, and four Joint Authorities (and one Fisheries Committee) summarised in Table 8.

Table 7 - Commonwealth-managed fisheries with Coastal Waters intersections

Fishery	Location/Coastal Waters intersection	Managing entity
Eastern Tuna and Billfish Fishery	Waters extending from Cape York south and westwards to the Victorian/South Australian border.	Australian Fisheries Management Authority
Norfolk Island Inshore Fishery (former)	Shelf waters proximate to Norfolk Island. Not currently commercially fished.	Australian Fisheries Management Authority (following dissolution of Norfolk Island Government in 2016)
Northern Prawn Fishery	Waters extending from Cape Londonderry in Western Australia eastwards to Cape York in Queensland.	Australian Fisheries Management Authority
Skipjack Tuna Fishery (East)	Waters extending from Cape York south and westwards to the Victorian/South Australian border. Not currently commercially fished.	Australian Fisheries Management Authority
Skipjack Tuna Fishery (West)	Waters extending from the Victorian/South Australian border westwards and north to Cape York. Not currently commercially fished.	Australian Fisheries Management Authority
Southern and Eastern Scalefish and Shark Fishery	Coastal Waters intersection-waters extending from Israelite Bay in Western Australia through to Sydney in New South Wales (across several sub-fisheries)	Australian Fisheries Management Authority
Southern Bluefin Tuna Fishery	All marine waters of Australia out to limits of EEZ.	Australian Fisheries Management Authority

Table 8 - Fisheries Joint Management Authorities

Fishery	Fisheries managed	Managing entity	Participating jurisdictions	Management regime
Queensland Fisheries Joint Authority	Gulf of Carpentaria Inshore Fin Fish Fishery	Department of Infrastructure and Regional Development	Commonwealth, State of Queensland	Fisheries Act 1994 (Qld)
	Gulf of Carpentaria Line Fishery	(Qld)		
	Gulf of Carpentaria Developmental Fin Fish Trawl Fishery			
Northern Territory Fisheries Joint	Timor Reef Fishery	Department of Industry,	Commonwealth, Northern Territory	Fisheries Act 1988 (NT)
Authority	Demersal Fishery	Tourism and Trade (NT)		
	Finfish Trawl Fishery			
	Offshore Net and Line Fishery			
Western Australian Fisheries Joint Authority	Southern Demersal Gillnet Fishery	Department of Primary Industries and Regional	Commonwealth, State of Western Australia	Fish Resources Management Act 1994 (WA)
	Demersal Longline Managed Fishery	Development (WA)		
	Northern Shark Fishery			
Torres Strait Protected Zone Joint Authority	All commercial, traditional and customary fishing within the Torres Strait Protected Zone	Protected Zone Joint Authority	Commonwealth, State of Queensland, Torres Strait Regional Authority	Torres Strait Fisheries Act 1984 (Cth)

Coastal waters: implementation and practical effect of jurisdictional arrangements

While necessarily a high-level and incomplete summary, as detailed above the management and control of fisheries within Australia's Coastal Waters primarily depends on the species targeted and its distribution.

Where the fishery occurs primarily in-shore, with few exceptions the management and regulation of that species will be a matter for State and Territory governments, either in their own right or via exercising devolved Commonwealth authority through a Joint Authority arrangement. Where the fishery spans both near-shore and more distant waters, management and regulation will primarily be a matter for the Commonwealth.

Offshore: the Australian Fishing Zone

As noted above in Table 4, by operation of international law the regulation of fisheries throughout Australia's marine territories, from the territorial sea baseline out to the limits of the Exclusive Economic Zone, is a matter for the national government of Australia, ie. the Commonwealth. It is only internal domestic political considerations which place some matters under State or Territory control, and from both an international and Constitutional perspective the authority exercised by those sub-national governments is devolved from the Commonwealth itself.

Accordingly, outside Coastal Waters or areas in which the Commonwealth has entered into a Joint Management Authority agreement under the OCS, fisheries management is a matter for the Commonwealth, formalised in the Seas and Submerged Lands Act 1973 and Fisheries Management Act and Fisheries Administration Acts of 1991. The management regime of these Acts (and subsidiary and associated legislation) collectively establishes Commonwealth authority over what the Commonwealth terms the Australian Fishing Zone, with management controls and access through the Australian Fisheries Management Authority. The Australian Fishing Zone is coterminous with the EEZ, with the two exceptions - within the Torres Strait and the Australian Antarctic Territory, where fisheries are instead subject to the special measures under the Torres Strait Fisheries Act 1984 or managed predominantly for conservation and research under the provisions of the UN Convention on the Conservation of Antarctic Marine Living Resources.91

Beyond the AFZ/EEZ, Australia does not have sovereignty

or rights to control fishing broadly. Instead, through the issue of High Seas permits, the Commonwealth regulates the conduct of Australian-flagged vessels in accordance with international treaty obligations, including those derived from its membership in the South Pacific Regional Fisheries Management Organisation, 92, and Southern Indian Ocean Fisheries Agreement. 93

Subsea minerals

Due to the colonial heritage of Australia (discussed briefly above), the evolution of Australia's modern legal system has resulted in title to mineral resources found within their territories vesting in the States, while minerals located outside State borders are the property of the Commonwealth.

The resultant vesting of ownership of *in situ* minerals within State boundaries with those States, combined with their Constitutional right to make laws pertaining to those minerals, provides States with both the right and the legal mechanism to both control access to those mineral resources via systems of licencing, permits and so on, and the ability to charge a fee–a royalty-to third parties wishing to extract and commercialise those minerals.

Coastal waters: State and Northern Territory subsea mining

Under the terms of the OCS, States and the Northern Territory are vested with proprietary rights and title in respect of the seabed of their adjacent territorial seas, out to the 3nm limit of the Coastal Waters. Under the terms of the OCS, State offshore mining legislation applies to Coastal Waters, however the States and the Commonwealth agree to 'as far as is practicable' ensure that common principles, rules and practices apply.

Accordingly, uniform complementary legislation has been passed by Queensland, New South Wales, South Australia and Western Australia. However, as summarised below in Table 10, in the Coastal Waters of Victoria and Tasmania the same minerals licencing and management regime applies as if those minerals were found onshore, while offshore mining has been banned in the Northern Territory since 2012. Despite the complementarity of some legislation and overall management regime, there is no common royalty system across Australian waters, with all States, Territories and (as

^{91 1982} UNTS 1329

⁹² Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean 2009 UNTS 2899

⁹³ Southern Indian Ocean Fisheries Agreement 2006 UNTS 2835

discussed below) the Commonwealth government applying different rates and calculations.

Table 10 - State and Northern Territory offshore minerals management regimes

Jurisdiction	Instrument	Notes
New South Wales	Offshore Minerals Act 1999	
Queensland	Offshore Minerals Act 1998	Complementary uniform legislation modelled on Offshore Minerals
South Australia	Offshore Minerals Act 2000	Act 1994 (Cth)
Western Australia	Offshore Minerals Act 2003	
Victoria	Underseas Mineral Resources Act 1963	In current form, merely extends broader Victorian mining legislation (<i>Mineral Resources (Sustainable Development) Act 1990</i>) to apply to seabed and subsea minerals as if those minerals were located onshore.
Tasmania	Mineral Resources Development Act 1995	Per s3, 'land' is defined to include the seabed and subsoil, hence the general minerals management regime under the Act applies to seabed and subsea minerals as if those minerals were located onshore.
Northern Territory	-	Per Ministerial declaration issued under Environment Protection Act 2019 and earlier gazetted notices under the Mining Act 1979, subsea mining is prohibited in the entirety of the NT Coastal Waters.

Offshore: subsea mining beyond coastal waters to the Continental Shelf Limit

Beyond the 3nm limit of Australia's Coastal Waters to the limits of the Continental Shelf, as summarised above in Table 4, under international law the management and regulation of subsea mining is a matter for the Australian national government – the Commonwealth. However, due to the evolution of Australian common and constitutional law, in particular the absence of a relevant Head of Power, ⁹⁴, for the Commonwealth to legislate in respect of minerals resources, management is shared between the Commonwealth and the relevant State/Territory.

As result of the OCS (discussed above), and as laid out in the *Offshore Minerals Act 1994* (Cth) and associated legislation,⁹⁵, management and regulation of the offshore minerals estate beyond Coastal Waters is achieved via a two-tier system of Authorities: the Joint Authority and Designated Authority. At a high level, this is summarised below in Table 10. Royalties collected on behalf of the Joint Authority are split on a 60:40 basis between the relevant State/Territory and the Commonwealth.

⁹⁴ s51 Australian Constitution, although since Australia's accession to and ratification of UNCLOS arguably s51(xxix) relating to external affairs would provide ample authority.

⁹⁵ In addition to the OCS legislation, principally the Offshore Minerals (Exploration Licence Fees) Act 1981 (Cth), Offshore Minerals (Mining Licence Fees) Act 1981 (Cth), Offshore Minerals (Retention Licence Fees) Act 1994 (Cth); Offshore Minerals (Works Licence Fees) Act 1981 (Cth) and Offshore Minerals (Royalty) Act 1981 (Cth).

Table 10 - Management of subsea mining under the Offshore Minerals Act

Entity	Function	Comprised of	Implemented via
Joint Authority	Final decision re grant, renewal, cancellation and refusal of titles and permits, strategic planning and direction.	Commonwealth Minister for Resources Relevant State or Territory Minister holding minerals/ resources portfolio	As-required meetings of Ministers. Decisions of the Joint Authority cannot be delegated, and in the case of any conflict the Commonwealth view prevails.
Designated Authority	Day-to-day management, implementation of Joint Authority decisions, collection of fees, receipt and commissioning of reports/studies.	State/Territory Department/s responsible for minerals/ resources management.	Internal division of Department. Designated Authority is single point of contact for all applicants – Joint Authority acts solely through Designated Authority.

As is apparent, while notionally subsea minerals and resources is the responsibility of the Commonwealth and the Commonwealth retains ultimate decision-making power, at a practical level much of the day-to-day administration and point of contact for project proponents remains State and Territory authorities.

Hydrocarbons

While from a Constitutional and common law perspective hydrocarbon resources (oil and gas) are not substantially different from other minerals, due to their strategic implications, historically higher value and easier commercialisation pathways, the treatment of Australian offshore oil and gas differs in important respects from other minerals.

Firstly, specific circumstances apply to production from the North-West Shelf oil and gas fields off northern Western Australia. As commercialisation of these fields predated the OCS, royalties are payable directly to the Commonwealth and shared between the Commonwealth and the State of Western Australia. Royalty schedules are set by the State of Western Australia in consultation with producers and agreed between the State and the Commonwealth, in accordance with the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cth) and Offshore Petroleum (Royalty) Act 2006 (Cth). At present, royalty rates roughly equate to a 60:40 split in favour of Western Australia.

Second, unlike in the case of subsea minerals, the historical process of arriving at the OCS has resulted in uniform regulatory regimes applying to the vast majority of Australian oil and gas production, detailed below.

Coastal waters: State and Northern Territory offshore oil and gas

As with subsea minerals, the OCS vests ownership of oil and gas resources found within State territorial waters, with their control and regulation reserved to the States. Accordingly, States (and the Northern Territory) are each empowered to apply differential access, control, management and royalty regimes to oil and gas production.

However, as a result of the historical evolution of Commonwealth/State relations and negotiations over resource ownership surrounding the initial *Petroleum (Submerged Lands) Act 1967* (Cth) and the later evolution of the OCS as envisaged in the *Petroleum (Submerged Lands) Act 1982* (Cth), for the most part State (and Territory) management regimes are substantially similar, as summarised in Table 11 below. As with minerals, there is no common royalty system across Australian waters, with all States, Territories and (as discussed below) the Commonwealth government applying different rates and calculations.

Table 11-State and Northern Territory offshore oil and gas management regimes

Jurisdiction	Instrument	Notes	
New South Wales	Petroleum (Offshore) Act 1982		
Queensland	Petroleum (Submerged Lands) Act 1982		
South Australia	Petroleum (Submerged Lands) Act 1982	Substantially uniform legislation across	
Western Australia	Petroleum (Submerged Lands) Act 1982	jurisdictions.	
Tasmania	Petroleum (Submerged Lands) Act 1982		
Northern Territory	Petroleum (Submerged Lands) Act 1981		
Victoria	Offshore Petroleum and Greenhouse Gas Storage Act 2010	Overall management regime remains substantially similar, while aiming to be 'modernised' to reduce proponent compliance costs. Also includes provisions relating to greenhouse gas capture and storage and related matters. Uniquely, Victoria delegates all health hand safety responsibilities to the National Offshore Petroleum Safety Authority	

At a practical level, to minimise proponent costs and regulatory burden, there has been a concerted effort on the part of both the Commonwealth and States/Territories to ensure relatively consistent regulations and management regimes apply both to Coastal Waters and Australian waters further afield. Substantially contributing to this commonality is the role of State (and Territory) Departments in their membership of Joint Authorities, discussed below.

Offshore: hydrocarbon extraction beyond coastal waters

Beyond Coastal Waters, as discussed above, the OCS establishes a management regime wherein Commonwealth legislation alone applies (currently the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth) (OPGGS Act)), however day-to-day management is shared between a number of different entities, each with distinct roles.

While relatively administratively complex, for present purposes these are summarised below in Table 12. In essence, much decision-making remains in the hands of the State/Territory whose Coastal Waters are adjacent to the further offshore maritime zone in which the project is located (the relevant 'offshore area').

Table 12 - Management of offshore oil and gas under the Offshore Petroleum and Greenhouse Gas Storage Act and associated legislation

Entity	Function	Comprised of	Implemented via
Joint Authority	Release of exploration areas, decisions relating to bids for exploration, grant, variation, refusal, suspension, extension, cancellation and surrender of title, overall resources management strategic decisions.	Commonwealth Minister for Resources Relevant State or Territory Minister holding minerals/ resources portfolio	Per s66 OPGGS Act, Joint Authority may delegate authority to appropriate Commonwealth, State or Territory officials or departments. As of 2022, all Joint Authorities have delegated decision-making authority to the adjacent area State or Territory Department with oil and gas portfolio responsibility. Broadly, Ministers will retain oversight of strategic or contentious decisions, and in the event of any conflict Commonwealth view prevails.
Joint Authority (sole)	As above	Commonwealth Minister only.	For particular areas (Tasmania, Eastern Greater Sunrise, offshore island territories, Bayu-Undan offshore area) the 'Joint' Authority consists solely of the Commonwealth Minister via their Departmental delegate.
National Offshore Petroleum Titles Administrator (NOPTA)	Providing administrative, technical and scientific support and advice to Joint Authority, maintaining titles register, overseeing collection of data and monitoring compliance.		
National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)	Regulation of occupational health and safety (OHS), structural integrity, and environmental management in connection with offshore petroleum activities in Commonwealth waters, and in coastal waters where powers have been conferred by the relevant State or the Northern Territory (currently only Victoria).	Independent statutory agency.	

Interestingly, unlike in Coastal Waters, as a result of the absence of any relevant s51 head of power the Commonwealth does not charge a 'royalty' for the commercialisation of oil and gas resources⁹⁶. Instead, the primary mechanism for collecting revenue from offshore oil and gas is the Petroleum Resource Rent Tax,⁹⁷, under which a 40% tax is levied on profits generated from the sale of marketable petroleum commodities above a specified rate of return and after all relevant deductions.

Wave, wind and other renewable energy generation

In general, non-extractive uses of the marine estate such as wave energy generators, wind turbines or floating solar installations lack the same degree of Constitutional intersection as minerals and resources, and hence with some minor exceptions fall broadly within general frameworks pertaining to safe usage of the marine estate, navigation of vessels around structures, electrical safety, grid connections, and required environmental approvals (discussed in more detail below).

As summarised above in Table 4, at international law the right to derive benefit from the energy of water, currents and winds within

⁹⁶ With the exception of the North West Shelf area, discussed above, wherein the Commonwealth collects royalty payments on behalf of the WA State Government which are then shared between the two entities.

⁹⁷ Petroleum Resource Rent Tax Assessment Act 1987 (Cth)

Australia's EEZ is reserved to the Australian government, as is the installation of any structures and transmission lines required to achieve the desired purpose. Under domestic law, the same distinctions between powers to manage, regulate and control access to and use of the Australian marine estate under the OCS applies to renewable energy generation, ie. Coastal Waters are governed by the States and Northern Territory while those further offshore are under Commonwealth control.

At a practical level, however, the nature of offshore generation and offshore wind in particular (by far the most commercial current pathway) means that any significant energy generation footprint would predominantly occur more than three nautical miles from the shore. In these areas, winds are stronger and more consistent, while projects are likely to impact on fewer stakeholders such as recreational fishers and other users of the marine environment. As such, generator footprint will typically fall under Commonwealth control. However, in order to usefully commercialise those generators, a connection to on-shore structures are typically required, including transmission lines, sub-stations, grid feed-in, depots and other structures. These connectors and structures will thus be located either in Coastal Waters or onshore, and hence will fall under State and Northern Territory regulation and control.

Conceptually, this is illustrated below in Figure 23.98

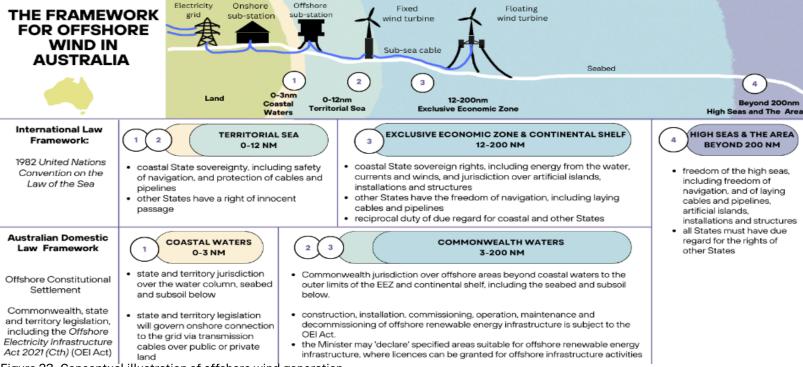


Figure 23 - Conceptual illustration of offshore wind generation

At domestic law, the regulatory environment applying to offshore renewable energy generation has been fragmented and unclear for many years, with a dedicated regulatory framework under the *Offshore Electricity Infrastructure Act 2021* (Cth) ('OEIA') and accompanying Regulations only coming into effect in November of 2022. In broad summary, the OEIA establishes a regime of licenses and permitting, together with new protection measures to ensure safety of installations and other users. Offshore installations will also need to be compliant with environmental protection obligations (discussed further below) at both a State/Territory and Commonwealth level, as well as general provisions regarding electricity transmission, grid control and ancillary matters.

⁹⁸ Derived Goodman, C. (2022), Unlocking the Legal Framework for Offshore Wind in Australia, discussion paper 1 November 2022, College of Law, Australian National University

These broad categories of decision-making stages, and responsible entities, are summarised at a very high level below in Table 13. Table 13 - Offshore energy generation conceptual regulatory framework

Stage/aspect	Jurisdiction	Decisionmaker	Notes
Area identification and release	Commonwealth	Commonwealth Minister for Energy	Offshore energy installations outside Coastal Waters are only permitted in areas declared 'suitable areas' under the OEIA. For an area to be suitable it must be not only technically feasible but also balance environmental sensitivity and other stakeholder impacts. A consultation process is required before an area may be so declared.
			Currently only the Bass Strait off Gippsland in Victoria has been declared a suitable area, while an ongoing consultation process is afoot for an area of the Pacific Ocean off Hunter in New South Wales, closing in late April 2023.
			Announced priority areas that will be subject to future consultations include the Pacific Ocean off Illawarra NSW, the Southern Ocean off Portland Vic, the Bass Strait north of Tasmania, and the Indian Ocean off Perth WA.
Operational/works and area access licensing	Shared	Commonwealth Minister for Energy	A number of licenses and permits will be required to facilitate any energy generation project.
and permitting		State/Territory Minister holding relevant energy portfolio	These include those associated with the holding of OIEA permits (which may be feasibility, commercial, R&D or transmission/infrastructure), permits and licenses associated with energy transmission and grid connection, if relevant permits associated with marine protected areas, and such arrangements as might be necessary to access public or private land to conduct works or lay cable.
			A full assessment and analysis of the relevant regimes applying in each State and the Northern Territory falls outside the scope of this paper.
Environmental permitting	Shared	State, Territory and Commonwealth environmental protection agencies	The issue and holding of an operational/works permit does not obviate requirements for a project to also satisfy broader environmental protection obligations. Proponents must thus demonstrate that they are capable of meeting required environmental conditions to operate.
Monitoring, data collection and compliance	Shared	Commonwealth – NOPSEMA State/Territory – relevant Department	The OEIA establishes the office of the Offshore Infrastructure Regulator, with responsibilities in Commonwealth waters for overseeing work health and safety, infrastructure integrity, monitoring and compliance, enforcement actions, research and strategic advice, and environmental management. This function is currently assigned to NOPSEMA.
			Within Coastal waters, similar functions will be performed by State (and Territory) Departments holding relevant portfolio responsibilities.

Environmental protection

As touched on above, an overarching aspect of marine estate management and access which cuts across most (if not all) uses of that estate is environmental protection. Detailed further below, this is a relatively complex area of law, in which both Commonwealth and State governments attempt to strike an appropriate balance between preservation of the natural environment and adoption of proper precautionary approaches with a desire to ensure maximum availability of the marine estate for commercially productive, recreational, traditional or customary usage.

One significant aspect of nuance in this area is the basis on which each level of government is able legislate in respect of the environment. As noted above at Table 4, at international law environmental protection (and associated activities, such as marine scientific research) is an area in which the Australian national government (ie. the Commonwealth) has power over out to the extent of Australia's EEZ, and in some respects out to Continental Shelf Limits. However, under Australia's domestic federal political system, the Commonwealth has no general s51 environmental protection head of power under the Constitution.

Hence, Commonwealth attempts to legislate and control environmental matters must be carefully framed to fall within a

permissible Constitutional power or rely on authority granted to it by the States and Territories (which under their own Constitutions or founding instruments hold plenary power to legislate over any matter not exclusively reserved to the Commonwealth). As with subsea minerals (discussed above), the primary avenue under which the Commonwealth has asserted control over environmental matters has arguably been s51(xxix) of the Constitution, which empowers the Commonwealth Parliament to make laws relating to external affairs and the implementation of international treaties to which Australia is a signatory.

Thus, Australia's accession to and ratification of major international treaties (with higher-profile examples summarised below in Table 14) enables the Commonwealth to legislate with respect to these matters.

Table 14 - Examples of international marine environmental protection treaties affecting Australia's marine estate and their subject matter

Treaty	Subject matter	Notes
International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties 1969 (as modified by the Protocol Relating to Marine Pollution by Substances other than Oil 1973)	Spills of hazardous substances from vessels and their prevention and control	Authorises States to take any measures, including on High Seas outside their national jurisdiction, to prevent harmful effects to their coastlines or marine zones from certain defined hazardous substances.
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972 (as modified by the London Protocol of 1996)	Ocean dumping and other disposal at sea of waste	As modified by London Protocol, prohibits dumping/disposal at sea (eg. by incineration) of all wastes except those on permitted list (dredge material, sewage, fish waste, other natural organic material, mining spoil, clean construction spoil, carbon dioxide from CCS).
United Nations Convention on the Law of the Sea 1994	Marine environment generally	Part XII of the Convention places a general obligation on all signatory states to protect the marine environment within their maritime jurisdiction.
		Specific duties include taking reasonable steps to prevent marine pollution from any source, control pest species, prevent dumping, and to cooperate to best give effect to these obligations.
International Convention for the Prevention of Pollution from Ships 1973 (as modified by the Protocol of 1978)	Specific categories of marine pollution	Establishes international regime under International Maritime Organisation under which signatory states must regulate their flagged vessels wherever they may be found.
		Contemplated classes of pollutants and matters covered include oil, noxious liquids, garbage generally, sewage, air pollution and fuel standards.
Convention on Conservation of Nature in the South Pacific 1976	Creation of marine protected areas throughout South Pacific region	Commits signatories to creation of networks of marine protected areas to conserve ecological, heritage, cultural, scientific or aesthetic value, requires parties to prohibit killing or taking of fauna unless authorised and controlled by law.
Convention on the Conservation of Antarctic Marine Living Resources 1980	Marine organisms and fisheries in Antarctic territories	Provisions limiting fishing effort, establishing marine protected areas and ancillary matters.
Convention for the Protection of the Natural Resources and Environment of the South Pacific Region 1986	South Pacific component of UN Regional Seas programme	Formalises cooperation and information exchange between regional actors to prevent and minimise impacts of marine pollution, including in emergency response to incidents
		Australia has not acceded to the companion Protocol for the Prevention of Pollution of the South Pacific Region by Dumping.
International Convention on the Control of Harmful Anti-fouling Systems in Ship 2001	Chemical anti-fouling coatings applied to ship hulls	Prohibits usage of certain harmful chemicals in anti-fouling coatings applied to ship hulls, and bars ships using such coatings from landing at any controlled ports.
International Convention for the Control and Management of Ships' Ballast Water and Sediments 2004	Ballast water takeup and discharge	Aims to prevent environmental damage caused by spread of marine organisms and pathogens resulting from transportation from one marine region to another via ship ballast water takeup and discharge.

Other potential applications of international law to the Australian marine estate may also arise under other broader non-maritime-specific instruments, such as those relating to endangered species generally (eg. the Convention on International Trade in Endangered Species of Wild Fauna and Flora 1975 (CITES) or the Convention on Biological Diversity 1992), numerous multilateral and bilateral treaties relating to migratory birds (eg Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat 1975), and those relating to world heritage (such as the registration of the Great Barrier Reef as a designated World Heritage Area under the Convention Concerning the Protection of the World Cultural and Natural Heritage 1972).

Accordingly, while the theoretical division of power between Coastal Waters and other Australian maritime zones established by the OCS also applies to the ability to regulate for marine environmental protection, in practice Commonwealth legislation and regimes will apply to all areas of the marine estate. Further, as a result of the Constitutional primacy of Commonwealth legislation, in the event of any conflict between State/Territory and Commonwealth law, the Commonwealth would prevail. At a practical level, the on-ground effect of this overlapping jurisdiction has been for Commonwealth law to serve as the environmental 'baseline' which applies to the entirety of Australia's maritime zones. Within their jurisdiction (ie. within Coastal Waters), where not inconsistent with Commonwealth laws, State and Territory legislation may impose additional criteria or conditions which project proponents would need to abide by.

The most typical example of this would be the need for a proponent to obtain relevant environmental approvals from both Commonwealth and State/Territory Departments of the Environment for activities occurring within Coastal Waters. This would occur under the normal processes established in each State (and the Northern Territory) under their prevailing legislation, summarised below in Table 16 (overleaf).

Table 16-Summary of Australian marine environmental management and protection regimes

Jurisdiction	Legislation	Notes
Commonwealth	Environment Protection and Biodiversity Conservation Act 1999	Applies primarily where project would affect defined Matter of National Environmental Significance. Any action having or likely to have an impact on the marine environment is so classified.
		In some circumstances, a bilateral agreement may exist between a State and the Commonwealth, allowing the State (where accredited) to also act as assessor for matters which would fall under the EPBCA.
		Marine Bioregional Plans under the EPBCA aim to serve as the primary strategic planning framework for marine environmental areas around Australia.
New South Wales	Environmental Planning and Assessment Act 1979; Maine Estate Management Act 2014; Biodiversity Conservation Act 2016	General environmental protections and duties are found under the BCA, while planning and ancillary matters regarding the marine estate are found under the EPAA and MEMA.
Victoria	Environment Protection Act 2017; Marine and Coastal Act 2018	'General environmental protections and duties are found under the EPA, while planning and ancillary matters in the marine estates are addressed in the MCA.
Queensland	Nature Conservation Act 1992; Environmental Protection Act 1994; Water Act 2000; Marine Parks Act 2004	General environmental protections and duties are found under the EPA and NCA. Where freshwater resources are affected the Water Act may be relevant, if marine protected areas are affected the MPA may be relevant.
South Australia	National Parks and Wildlife Act 1972; Coast Protection Act 1972; Environment Protection Act 1993; Marine Parks Act 2007	General environmental protections are found under the NPWA and EPA. Developments affecting coastlines particularly or marine parks will likely require approvals under the CPA and MPA.
Western Australia	Waterways Conservation Act 1976; Environmental Protection Act 1986	General environmental protections are found under the EPA. For some declared areas, inlets and estuaries, the WCA may be relevant.
Tasmania	Environmental Management and Pollution Control Act 1994; Living Marine Resources Management Act 1995	General environmental protections are found under the EMPCA, with additional marine-specific provisions relating to declared areas or habitats under the LMRMA .
Northern Territory	Environment Protection Act 2019; Fisheries Act 1988, Marine Pollution Act 1999	General environmental protections are found under the EPA, with additional marine- specific provisions relating to impacts on fish habitat or potential for pollution under the FA and MPA.

A typography of Australian First Nations' sea country rights and interests

Native Title rights to sea country

As discussed earlier in this paper, the most extensive distribution of legally recognised First Nations property rights is found in the national system of Native Title. Since the Croker Island case, 99, of 2001, Australian courts have recognised that Native Title rights over sea country may rightly be asserted by Traditional Owners and First Nations. A full discourse of the principles relating to native title is beyond the scope of this Seminar Background Paper, however as has emerged from that case and subsequent jurisprudence, there are several broadly recognised principles of Native Title and its application to sea country:

Native Title rights over sea country may only be nonexclusive

As discussed briefly above, due to international law principles (particularly innocent passage) and inherited common law rights to fish and navigate waters, Native Title rights granted over sea country can only be non-exclusive. Therefore, Native Title holders cannot control who access their sea country or the purposes for which others may use it.

• Native Title rights will vary on a case-by-case basis, but may include commercial purposes

As with Native Title more broadly, the 'bundle of rights' approach will apply, under which the rights which may be asserted by Native Title holders will be those which may be demonstrated to have formerly existed and traditional/customary law. This will require a case-by-case approach in which First Nations will bear the evidentiary burden. In most circumstances to date, Native Title rights to sea country have been found to include the taking of fish and other aquatic resources for personal, familial, traditional or customary/ceremonial purposes. However, per the *Akiba*, ¹⁰⁰, decision, in more modern

awards where precedent may be established, Native Title rights may include the right to use sea country for any purposes, including to generate an income by taking aquatic resources for sale or trade.

• Sea country and economic rights are a relatively recent development

As discussed earlier in this paper, Native Title is a relatively recent development under Australian law, while the recognition of sea country has only come about since 2001 and broad First Nations rights to exploit sea country for commercial purposes since 2013. As a result, for Native Title claims made in earlier years, including the large body of cases where a claim has been lodged and iudicial and Tribunal processes are ongoing. in most instances sea country and economic rights will not be a feature of the Native Title rights awarded. While s13 of the Native Title Act does allow for existing awards to varied, to date there appears to be no circumstances under which an older award has been subsequently modified to include sea country or economic rights.

Across Australia, there have been 37 awards of Native Title featuring any significant component of sea country, summarised below in Table 16 and detailed in Appendix 1.

⁹⁹ Commonwealth v Yarmirr (2001) 208 CLR 1

¹⁰⁰ Akiba on behalf of the Torres Strait Regional Seas Claim Group v Commonwealth (2013) 250 CLR 209

Table 16-Summary of Native Title awards of sea country

Jurisdiction	Determinations	Note
Western Australian	16	
Queensland	13	
South Australia	5	
Victoria	2	
Northern Territory	1	The primary pathway for First Nations peoples of the Northern Territory to assert property rights has been the Aboriginal Land Rights Act.
New South Wales	0	As at the date of this paper, no Native Title claims for sea country have been successfully made in New South Wales.
Tasmania	0	As at the date of this paper, no Native Title claims of any kind have been successfully made in Tasmania.

The Aboriginal Land Rights Act – intertidal sea country

Detailed above, by far the most significant First Nations property rights regime after Native Title is the system unique to the Northern Territory of 'Aboriginal land' under the Aboriginal Land Rights (Northern Territory) Act 1976. While the Act itself does not explicitly contemplate sea country, since the Blue Mud Bay case, ¹⁰¹, of 2008, the High Court has recognised that the awards of land under the Act 'to the low water mark' do include the intertidal zone and the waters that from time to time flow above the land.

In the particular context of the Northern Territory, these intertidal waters can be highly valuable fishing grounds and home to species of particular economic note, including barramundi, mud crabs and trepang. Thus, the grant of fee simple interest under the Act allows Northern Territory First Nations to definitively exclude all others from the intertidal sea country of their traditional lands, and invalidates any other permits or licences issued by (for example) the Northern Territory government which purport to allow other parties access.

Other State regimes – some specific rights and interests

While all States and Territories across Australia are increasingly adopting First Nations perspectives and values under water management and allocation regimes, Statebased regimes have typically not touched sea country from a proprietary rights perspective. Principally, this is due to Constitutional factors, wherein State-based land rights regimes have converted Crown land (or in limited circumstances freehold) to First Nations ownership. As sea country is not capable of supporting traditional Torrens or common law land title, it thus falls outside this ambit.

However, some national jurisdictions have in recent years moved towards grants of specific rights and interests over sea country, which fall short of outright title but nonetheless are economically valuable. These include awards of abalone fishing quota units by the Tasmanian State Government to the Land and Sea Aboriginal Corporation of Tasmania, and a trial scheme by the Queensland Government to establish Indigenous early-stage or trial commercial fisheries.

Indigenous Protected Areas

Discussed in more detail above, Indigenous Protected Areas (IPAs) do not confer proprietary rights upon First Nations or explicitly enable economic usage of the marine estate. However, they are an important avenue by which First Nations may exert control of and fulfil traditional, customary or spiritual obligations to Country, and to ensure that the natural

¹⁰¹ Northern Territory of Australia v Arnhem Land Aboriginal Land Trust (2008) 208 CLR 1

environment of their traditional lands is maintained in good condition. This may thus enable and enliven enterprises carried out elsewhere. Further, in most instances, IPAs will be structured on a 'fee for service' basis in which the Commonwealth, State or Territory government will co-fund Indigenous Ranger groups to carry out land management activities (see discussion on Indigenous Ranger Groups in the Section on Land Rights).

Across Australia, there are currently 12 IPAs featuring sea country, summarised in Table 17 below and detailed in Appendix 2.

Table 17 – Summary of current Indigenous Protected Areas featuring sea country

Jurisdiction	IPAs	
Northern Territory	5	
Western Australia	3	
Queensland	2	
Tasmania	2	
New South Wales	0	
Victoria	0	
South Australia	0	

While the area of sea country covered by IPAs is at present small compared to the terrestrial estate, the Commonwealth has in recent years deployed significant funding to increase the marine, coastal and estuarine footprint of IPAs across Australia under the 2021 \$100 million Ocean Leadership Package and related funding streams. In May 2022, 10 additional IPA projects were announced as receiving funding to finalise consultation, Traditional Owner management input and related stakeholder engagement, which when operational are collectively estimated to add some 62,000 square kilometres of sea country to the national footprint. These projects are illustrated below in Figure 24.¹⁰²

¹⁰² Derived Sea Country Consultation Projects in Sea Country Indigenous Protected Areas Program-Grant Opportunity, Department of Climate Change, Energy, the Environment and Water, Commonwealth Government, https:// www.dcceew.gov.au/environment/land/indigenous-protected-areas/seacountry-grant-opportunity, website accessed April 2023



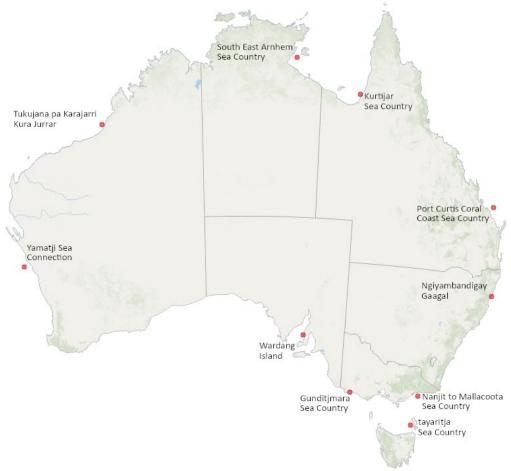


Figure 24-Future Indigneous Protected Areas featuring sea country

The opportunities and constraints

As with the terrestrial estate, while there has been and continues to be significant appropriation of wealth from Australia's marine environment by non-First Nations interests, there remains opportunity for First Nations to harness economic prosperity from increased participation in established industry such as fishing and aquaculture and management and conservation of the marine estate, as well as new industries such as offshore renewable energy generation.

Within this portfolio of opportunities, arguably the most important and contentious is access to commercial fishing rights. While all Australian jurisdictions allocate fishery resource to traditional or customary fishers (together with allocations to recreational and commercial fishers), traditional or customary licenses either do not allow commercial benefit or if they do (e.g. Northern Territory

Coastal Licenses) only do so in a very limited way. The increasing desire for First Nations Sea Country interests to be able to economically benefit from fish resources contained within their Sea Country is placing pressure on jurisdictions to identify solutions. Whilst limited, some progress has been made in this regard. In the case of South Australia, a policy of allocation to First Nations interest in new fisheries is in place and the Tasmanian Government has recently allocated units in its commercial abalone fishery to First Nations interests. In other circumstances the ILSC has acquired commercial licenses on behalf of First Nations fishing interests.

Maintaining the property rights of existing commercial fishers, particularly in the case of limited entry fisheries, and facilitating rights to economic self-determination for First Nations using the fishery resource is a dilemma that is yet to determine a solution that is implementable at scale.



Water rights as an economic asset

The nature of freshwater resources in Australia

The Australian continent is characterised by comparatively very low average annual rainfall of 466 millimetres over the period 1961 to 1990, and significant rainfall variability. As shown below in Figure 25,¹⁰³, the Australian rainfall pattern is concentric around the continent's extensive arid core, which extends to the coastline in the central west and along the Great Australian Bight. Outside of these areas, there is a broken margin of more humid conditions which results in increased precipitation as it approaches the coast, particularly along the eastern coast of the continent and the northern tropical areas.¹⁰⁴ Highly seasonal and variable rainfall across the continent means that some areas are dependent on large downfalls that typically occur at a particular time of year and as a result of variability, can result in significant drought if disrupted.

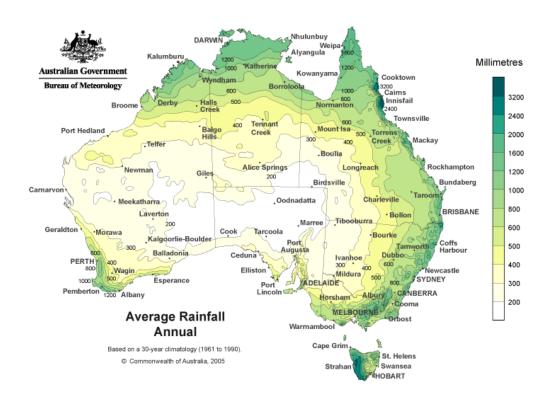


Figure 25 - Average Australian rainfall by location 1961-1990

Equally important as surface water flows are groundwater resources, which across Australia have dramatically different characteristics. Illustrated in Figure 26,¹⁰⁵, below, these aquifers demonstrate distinctly different characters and productivities.

¹⁰³ Bureau of Meteorology (2005), Average Rainfall – Annual, Commonwealth Government, Canberra, ACT

¹⁰⁴ Geoscience Australia (2022). Climatic Extremes, Australian Government, Canberra

¹⁰⁵ Department of Climate Change, Energy, the Environment and Water (2021), Australia: State of the Environment, Australian Government, Canberra

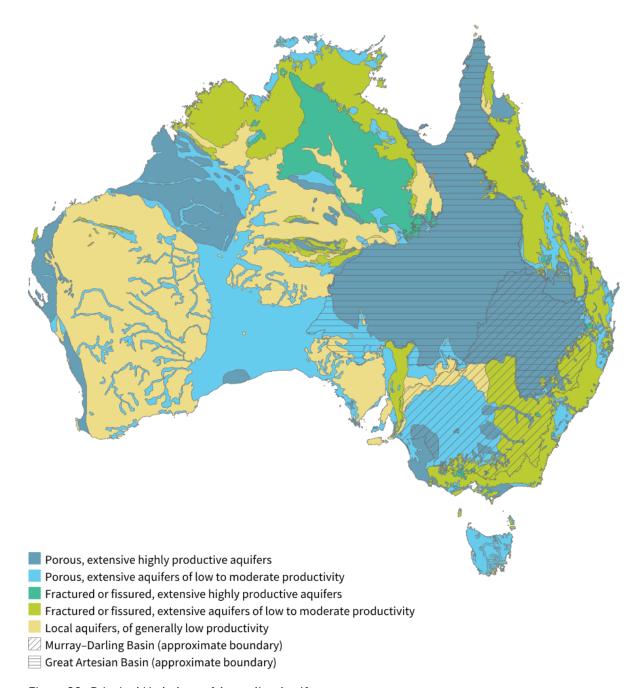
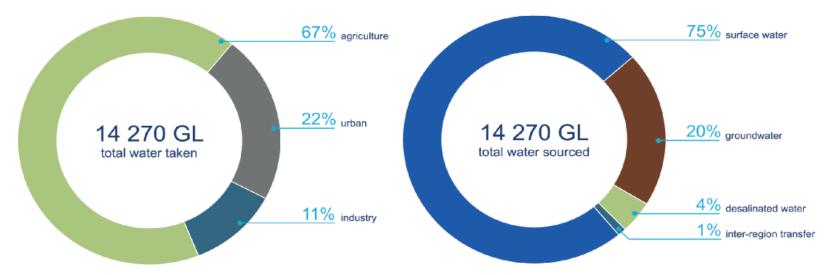


Figure 26 - Principal Hydrology of Australian Aquifers

The transition of much of the south-eastern and south-western areas of Australia to broadacre and intensive livestock and crop production, together with the introduction of pastoral grazing to northern Australia and altered waterways in areas like the Murray Darling Basin and Ord River regions to support irrigation, was a key feature of early British colonisation of the Australian continent over the course of the 19th and 20th centuries.

As shown below in 27,¹⁰⁶, agriculture remains by far the largest water user sector, responsible for some two-thirds of annual take. Further, of the water used in Australia, the vast majority – a full three-quarters – is reliant upon annual rainfall via surface water capture. Of this, as shown in Figure 28,¹⁰⁷, the three Murray-Darling Basin States of New South Wales, Victoria and Queensland account for by far the largest share.



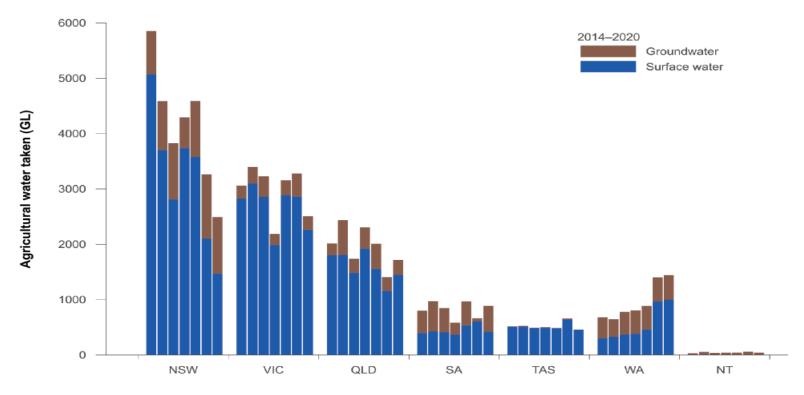
Water taken by category and source in 2019-20

© Commonwealth of Australia 2021, Bureau of Meteorology

Figure 27 - Water used in Australia by sector and source

¹⁰⁶ Derived Water taken by category and source in 2019-20 in Bureau of Meteorology (2021), Water in Australia 2019-20, http://www.bom.gov.au/water/waterinaustralia/, website accessed April 2023

¹⁰⁷ Derived Volume of Agricultural water taken in Bureau of Meteorology (2021), Water in Australia 2019–20, http://www.bom.gov.au/water/waterinaustralia/, website accessed April 2023



Volume of agricultural water taken from surface water and groundwater in each State and Territory, 2013–14 to 2019–20

© Commonwealth of Australia 2021, Bureau of Meteorology

Figure 28 - Economic usage of surface and groundwater by State/Territory

Emerging concerns in water - climate change and changing rainfall

As noted above, the Australian climate has always been variable, with recurrent drought a natural feature of the landscape. However, compelling evidence is emerging that due to the effects of anthropogenic climate change, the Australian climate is rapidly drying. This will necessarily have implications for First Nations and other users of water resources, with traditional lands subject to drought, availability of water for traditional, customary, spiritual and economic purposes reduced, and flow-on effects throughout Country.

As show below in Figure 29,¹⁰⁸, rainfall across the continent has reduced on average, with this effect particularly noticeable in the southern and westerly portions.

¹⁰⁸ Derived Annual rainfall during 2019-20 compared with historical records in Bureau of Meteorology (2021), Water in Australia 2019-20, http://www.bom.gov.au/water/waterinaustralia/, website accessed April 2023

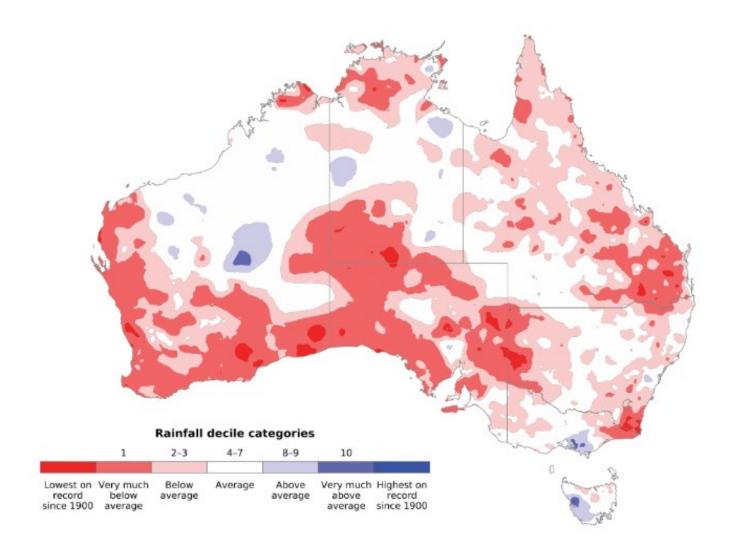


Figure 29-2019-20 rainfall across Australia compared to long-term records

However, this overall reduction has been paired with an increase in high-intensity periodic extreme rainfall, particularly associated with North Australia, as shown in Figure 30.¹⁰⁹ In short, while Australia as a whole is becoming drier, the rain which does fall is falling more heavily and in a shorter time span, thus greatly exacerbating flood risks in the wet season and overwhelming water storage infrastructure. Meanwhile, less rainfall during the rest of the year increases drought and bushfire risks, contributes to higher average temperatures, and threatens viability of regional or remote communities not connected to scheme water.

¹⁰⁹ Derived Northern wet season (October-April) rainfall deciles for the last 20 years (2000–01 to 2019–20) in CSIRO (2022), Australian Climate Trends, https://www.climatechangeinaustralia.gov.au/en/changing-climate/, website accessed April 2023

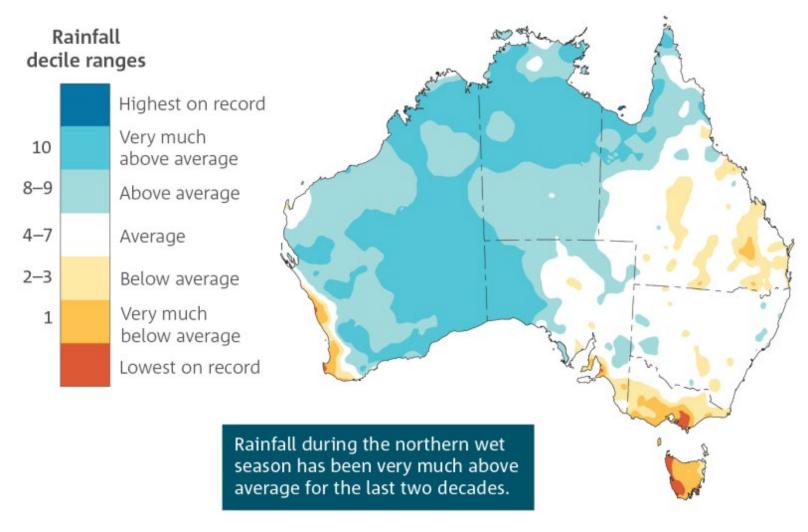


Figure 30 - Northern wet season (Oct-Apr) decile averages

While some uncertainty remains, all indications are that these general trends will be further exacerbated by larger increases in global temperatures, illustrated below in Figure 31.¹¹⁰

¹¹⁰ Derived Spatial maps of projected change in CSIRO (2022), Future Climate Scenarios, https://www.climatechangeinaustralia.gov.au/en/changing-climate/, website accessed April 2023

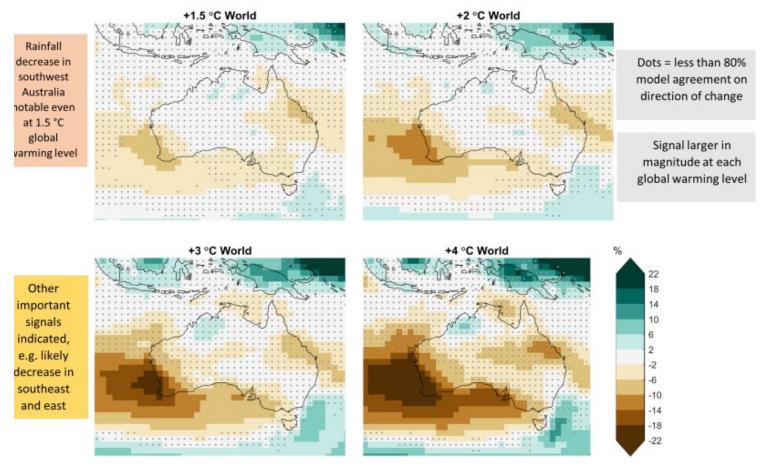


Figure 31-Projected warming scenarios and impacts on Australian rainfall

Water rights in Australia: an overview

Principles of Water Access: Precedent and Policy

Australian water law frameworks have historically failed to distinguish or make adequate provision for the particular interests and circumstances that arise from the intersection of First Nations interests in natural resources and the broader principles authorising and controlling water use. Despite the geographical extent of First Nations legal interests in land (see Section on land rights), in 2010 it was estimated that First Nations interests represented less than 0.1 of total freshwater diversions in Australia, and more recent research indicates that there has been little improvement – across ten catchments that comprise the Murray Darling Basin within the jurisdiction of New South Wales, First Nations entities collectively currently hold entitlements to 0.2 percent of the surface water.

¹¹¹ Jackson, S, Langton, M (2011) Trends in the Recognition of Indigenous Water Needs in Australian Water Reform: The Limitations of 'Cultural' Entitlements in Achieving Water Equity, Journal of Water Law 22 109-110

¹¹² Hartwig, L., Jackson, S. and Osborne, N. (2020), 'Trends in Aboriginal water ownership in New South Wales, Australia: the continuities between colonial and neoliberal forms of dispossession', *Land Use Policy*, vol. 99, December

In the few areas where water law frameworks have recognised and engaged with First Nations interests, these interests have for the most part been characterised as being 'cultural' or 'traditional' only. While these aspects of water rights and usage are critical to First Nations peoples and communities, this framing has had the effect of isolating and insulating First Nations interests in water rights from 'normal' consumptive uses. This serves as an additional barrier to First Nations interests activating economic value from the extensive First Nations estate through pursuing normal commercial uses of their land such as irrigation, agriculture, other industry or tourism.

Historical and Legal Basis for Limited Participation

The disconnect between the degree of First Nations recognition and participation in water rights frameworks on the one hand, and the area of the Australian terrestrial, coastal and riparian estate under a degree of First Nations control and management on the other, stems from the historical framework and context of colonisation. At British settlement of Australia, water use -critical to developing communities and economies-was regulated according to British common law riparian rights. Under this system, rights to use and take water, for example for farming, attached to the property rights a landowner had over the land on which rivers flowed. Further, water not flowing within a defined river channel could be taken freely without restriction, and thus ground and surface waters, highly significant to recharge and fill rates for many Australian drainage basins, were open to heavy exploitation.

With water rights derived from property title (a system alien to First Nations Australians and in which they had virtually no participation), as European settlement displaced First Nations peoples so too did European systems of water rights displace the ability of First Nations interests to have input into water management. As the droughts of the late 19th century, Federation and a rising drive on the part of the new colonies to expand settlement and agriculture inland created an impetus for the new States to regulate water usage, Australian States and Territories progressively implemented statutory systems of water licencing and management for consumptive purposes. ¹¹³ However, these new statutory rights also attached to land, and were primarily intended to support the productive use of that land, principally through agriculture. First Nations, rarely in possession of formal

Torrens title over their traditional lands, continued to be excluded from water management, and could not lawfully make use of the water on or adjacent to those lands.

By the 1990s, two joint developments in Australian law and practice changed this paradigm significantly. Briefly, the progressive recognition of native title partly restored First Nations control over much of their former traditional lands, and the ongoing Council of Australian Governments (COAG) water reform process led to the unbundling of water rights from land title, culminating in the National Water Initiative and the current system of centralised planning and tradable water entitlements.

While this would later come to support First Nations participation in water policy and management, at the time the sequence of these two events compounded First Nations disenfranchisement. At the same time as First Nations interests were first attaining legal title to significant areas of their former traditional lands, water rights were being decoupled from land title and hence no longer automatically flowed to the new owners and managers. ¹¹⁴ Indeed, non-Indigenous third parties could obtain rights to use water on areas over which native title had been recognised, while the 'weak' nature of native title rights, requirements to demonstrate continuity of usage, and lack of common-law parallel water rights to potentially award claimants renders it difficult, if not impossible, to pursue consumptive water rights under the native title system. ¹¹⁵

The National Water Initiative

Agreed to by the Council of Australian Governments in 2004, the National Water Initiative (NWI) is a shared commitment by Australian governments to increase the efficiency of Australia's water use, improving productivity and leading to greater certainty for investment in rural and urban communities, as well as better environmental outcomes.

Under the NWI's long-term planning and allocation model, water resources must be managed in a reliable and

¹¹³ As defined in the National Water Initiative, being the use of water for private benefit including irrigation, industry, urban, stock and domestic use.

¹¹⁴ Under the 'bundle of rights' approach, native title rights in water may be granted to Indigenous peoples depending on the particular circumstances and traditions of each claimant group, however such grants are typically tied to subsistence, cultural or spiritual practices and do not contemplate economic purposes.

¹¹⁵ For the purposes of this proposal, the full ambit of the interaction between native title and water allocations has not been analysed in depth. In the event of a successful tender, the potential for jurisprudence including the *Akiba* and *Blue Mud Bay* cases to impact upon Indigenous water rights will be further detailed.

sustainable manner, taking into account community and stakeholder input, and ensuring that water is allocated for non-consumptive purposes. Initially such allocations were principally for environmental protection and river health. However, over time practices under the NWI have evolved to recognise and provide for the 'social, spiritual and customary objectives' of First Nations peoples, and to ensure that water allocated to native title holders for 'traditional cultural purposes' is accounted for.¹¹⁶

However, the non-prescriptive character of the NWI, and the general focus on the Murray-Darling Basin and south-eastern Australia, has resulted in only limited improvements to First Nations participation rates in the north of Australia, Further. the framing of Indigenous interests in water under the NWI as tied to 'spiritual and customary' or 'traditional' usages has restricted the extent to which First Nations interests are able to access water resources on their traditional lands for agricultural, commercial or other consumptive uses. Under the NWI, First Nations participation in these usages are contemplated as being served by the same open market mechanisms. A consistent theme in submissions from First Nations entities and groups on this point has been the aspects of economic justice that arise in requiring groups disposed by the operation of previous legal mechanisms to buy back 'their water' on the open market. This is particularly so in the context of heightened First Nations disadvantage in the more remote northern regions of Australia. 117

National Water Reform: Review and Response

A lack of substantive progress towards recognising and incorporating the needs and views of First Nations in water planning and management has emerged as a key finding of the *National Water Reform* inquiry report.¹¹⁸ While recognising that the NWI specifically requires all States and Territories to engage with First Nations communities in water planning and management, and that some progress has been made, the Productivity Commission found that 'most jurisdictions have routinely failed to identify and provide for Indigenous cultural values and objectives in water plans.'

While a full review of the findings of the Report are beyond the scope of this Seminar Background Paper, key factors contributing to this failure identified include convoluted or sub-optimal engagement and consultation processes, a tendency to 'roll up' all non-consumptive allocations together. conflating environmental and cultural flows, and a lack of transparency in decision-making. The Commission further noted that while providing water for economic purposes to First Nations communities can support economic wellbeing. health and living standards, and should be weighted appropriately in allocation decisions, more progress is needed in this area. Particular issues noted include the lack of any explicit reference to First Nations economic development in the NWI, a blurring of boundaries between cultural and economic usages, and the unique barriers First Nations people face in seeking access to water resources and the need for additional support by government. 119

While non-binding, a range of guidance and suggestions for State jurisdictions to adopt in setting water policy in these areas is also provided by the *Engaging Indigenous Peoples in Water Planning and Management* Module, 120, to the NWI Policy Guidelines. Principally developed in response to the earlier 2009 Biennial Assessment Report, the Module incorporates many of the same themes as the Inquiry Report, however has not been endorsed by all State and Territory governments subscribing to the NWI.

While supporting the principal Recommendations of the Productivity Commission, ¹²¹, directed at ensuring First Nations cultural objectives are identified and provided for in water plans, and that access to water should be provided to First Nations communities for economic development, in its Response to the Inquiry Report, ¹²², the Commonwealth government has noted that 'implementation is a matter for relevant States and Territories.' In particular, the

¹¹⁶ NWI cl 52-54.

¹¹⁷ See eg. summary in Environmental Justice Australia (2014) Aboriginal Water Rights: legal analysis of submissions to the Review of the Commonwealth Water Act, November 2014; Marshall, V (2016), Deconstructing Aqua Nullius: Reclaiming Aboriginal water rights and communal identity in Australia, Indigenous Law Bulletin 8/26 (2016)

¹¹⁸ Productivity Commission (2017), *National water Reform: Inquiry Report*, Report No.87, Australian Government, Canberra ACT

 ¹¹⁹ Productivity Commission (2017), 3.7: Recognising the needs of Indigenous Australians in Water Planning and Management in National water Reform: Inquiry Report, Report No.87, Australian Government, Canberra ACT
 120 Commonwealth Government (2017) Policy Guidelines For Water Planning And Management: Engaging Indigenous Peoples In Water Planning And Management: Module To Support Water Planners And Managers Develop And Implement National Water Initiative Consistent, Inclusive Water Planning And Management Processes That Support Indigenous Social, Spiritual And Customary Objectives, Canberra, ACT

¹²¹ Chiefly Recommendations 3.2 and 3.3 – Water entitlements and planning ¹²² Department of Agriculture (2019), Australian Government response to the Productivity Commission inquiry on national water reform, April 2019, Commonwealth Government, Canberra ACT

Commonwealth has emphasised its lead role in creating the 2017 Module and reiterates its willingness to normalise and support the inclusion of First Nations interests in water planning. However, while the Commonwealth investment of \$40 million into supporting Southern Australian communities in the Murray-Darling Basin to access economic water entitlements is referenced, no similar funding commitment is made for other parts of Australia.

First Nations water rights - policy, principles and actions to date

Increasingly across academic literature, decisions of regulators and the community at large, the importance to First Nations and Australia's First Peoples of water access and usage rights is attaining greater recognition. This encompasses a variety of rights, values and interests, which are placed under threat by a multitude of competing pressures and usages.

While necessarily differential across the Australian continent, these values and pressures are briefly summarised in Table 19 below. 124

Table 19 - First Nations cultural values of water and pressures on that water

Cultural values of water	Pressures on First Nations water
Creation sites and stories linking with spiritual significance along a songline or dreaming track.	Critical human need (drinking water).
Language (connects culture to place with water); when that water disappears, the language may disappear with it.	Other domestic/urban use and sewage.
Resource sites along rivers, within wetlands and next to natural springs; such sites supply traditional bush foods (hunting and gathering sites), medicines and reeds for weaving resource sites for artefacts, tools, art and crafts (e.g. water for axe head preparation).	Recreational uses and primary contact (swimming, diving)
Sustaining a cultural economy (trade of food, tools, weapons, access, water).	Mining and mining impacts (coal-seam gas, iron ore and coal)
Ceremonial sites or meeting sites (always in close proximity to water); gender- specific sites linked through language, stories or songs – men's and women's business.	Agriculture (overextraction, illegal taking of water, soil degradation, and nutrient and pesticide run-off)
Burial places and sites (known and unknown); many Aboriginal peoples' ancestors are buried in soft riverine sand adjacent to watercourses.	Industry (point-source pollution)
Teaching sites (passing on knowledge), which are passed on from one generation to another; cultural indicators in the environment suggest the right time to catch or harvest a certain species; the flowing of a river may show that it is time to pass on that knowledge.	Introduced and pest species (eg. carp)
Cultural-specific environmental conditions to sustain totemic species or cultural keystone species; water that is of sufficient quality and quantity at the right time will attract these species.	Climate change (rising sea levels, rising temperatures and changing rainfall patterns)
Sites that contain physical or tangible evidence of occupation (middens, campsites, scarred and carved trees, stone arrangements, fish or eel traps, and tribal boundaries); a living scarred or carved tree still depends on water.	Government policies and legislation (water plans)

¹²³ Eg Hon. David Littleproud MP (2018), New safeguard for Indigenous water rights, media release, June 2018

¹²⁴ Moggridge B.J. et al (2019). Integrating Aboriginal cultural values into water planning: a case study from New South Wales, Australia, Australia Journal of Environmental Management 26(3):273–286; Department of Agriculture, Water and the Environment (2022), Australia: State of the Environment 2021, Commonwealth Government, Canberra, ACT

Cultural values of water	Pressures on First Nations water
Massacre sites where frontier battles occurred with traditional groups, usually alongside water places.	Appropriation and denial of access to traditional resources (through land acquisition, limited grants of rights under land access regimes.

While these values are attaining greater recognition across Australia, as summarised below in Table 20 they are yet to be fully incorporated into water rights allocation and planning processes, nor is their adoption by any means widespread. In many jurisdictions, policy and legislative responses announced in the aftermath of the National Water Initiative (and companion programmes, discussed below) have been delayed or are yet to be finalised.

Table 20 - Recent developments in First Nations water policy

Jurisdiction	Recent developments in First Nations water policy
Commonwealth	In 2018, \$40 million was committed to acquire water for Indigenous usage across the Murray-Darling Basin System under the Aboriginal Water Entitlements Programme. As of October 2022, responsibility for delivering this programme was transferred to the Department of Climate Change, Energy, the Environment and Water, however no interests or entitlements appear to have yet been acquired/transferred.
	In the same year, the Aboriginal and Torres Strait Islander Amendment (Indigenous Land Corporation) Bill 2018 (Cth) was introduced, to allow the former Indigenous Land Corporation to use funding to acquire and transfer water entitlements.
	In 2020, the National Water Initiative (discussed above) received renewed attention, with a Committee on Aboriginal Water Interests established to provide advice to national processes.
New South Wales	Released in late 2021, the <i>Water Strategy</i> aims to serve as 20-year State-wide guiding framework for water policy and allocations. As part of the Strategy, "First Nations/Aboriginal People's rights and values and increase access to and ownership of water for cultural and economic purposes" is identified as a priority area, with several general targets involved including the development of a State-wide Aboriginal Water Strategy and increasing access to water for economic purposes.
	As of 2023, development of this AWS is still in progress, as are specific Cultural Watering Plans.
Queensland	Under its broader management framework, Queensland permits unallocated water under current water plans to be allocated to First Nations and communities to enable economic usage. Applications are assessed on a case-by-case basis.
	As of 2019, the Cape York Water Plan marked a shift towards explicitly recognising the close cultural connections of First Nations person to water and land, with provisions for granting water licenses to Traditional Owners at no cost to enable community and economic usage.
Victoria	Under the 2016 Water for Victoria State-wide strategy, numerous specific targets were included to incorporate First Nations knowledge into water management and permit for economic and community usage of water resources. A dedicated Aboriginal Water Unit within Department of Energy, Environment and Climate Action was formed, with \$10 million in funding, to advance cultural water allocations and outcomes.
	In 2018, the Yarra River/Birrarung was recognised as a legal entity, with the Traditional Custodians to be included in the advisory council, including regulatory involvement and co-management.
Western Australia	As of 2018, an Aboriginal Water and Environment Advisory Group has been formed within the Department of Water and Environmental Regulation.
	Strategic Aboriginal Water Reserves are intended to be included in the Fitzroy Water Allocation Plan and Derby Water Allocation Plan, however have yet to be finalised.
South Australia	The South Australian government has committed to including First Nations perspectives and values in three Draft Water Plans pertaining to the Murray-Darling Basin, however these have yet to be finalised.
Tasmania	No significant measures to incorporate, advance or promote First Nations values or aspirations with respect to water rights have occurred in recent years.

Jurisdiction	detail to support authoritative water management plans or as Recent developments in First Nations water policy the basis for managing environmental and investment risks.
Northern Territory	Strategic Indigenous Reserves have long existed und A Separation of the published works the best of the period of
Australian Capital Territory	And sustainability of accelerated water resource development. No significant developments. The 2019 ACT State of the Environment Report noted a need for development of a cultural values framework, including water rights, to inform future report priority areas of the North - The Fitzroy was a constant of the constant of the priority areas of the North - The Fitzroy was the North - The Fitzroy of t

Developing area in spotlight: Northern Australia

While use of water by First Nations for personal, traditional. cultural, spiritual or indeed economic purposes is a significant matter nationwide, to an extent tackling First Nations water rights in the southern half of the continent occurs in a different context to that which is the case in the north. In the south, most water resources are already maximally allocated (particularly in the south-east) if not over-allocated. Thus, 'clawing back' entitlements for First Nations users and communities, requires a significant re-balancing of interests across multiple stakeholders in a charged and tense political environment. This in no way suggests that First Nations water rights in the south should not be rigorously pursued. However, in the north, most water resources are under-utilised and under-developed, with the Northern Agenda and similar programmes commencing in recent years serving as an opportunity to embed First Nations perspectives at ground level from inception.

Hydrogeographics of Northern Australia

Generally speaking, Northern Australia has very high interannual variability of rainfall, highly seasonal rainfall, and very high rates of evaporation and plant transpiration. Hence, most streams cease to flow shortly after the wet season, a very short lag time exists between peak rainfall and peak runoff, very few of the large number of watercourses are perennial, and a small number (approximately 20) of surface water storage sites in the North have a capacity greater than 1 gigalitre. Aquifers are generally variable, with levels responding rapidly to the pronounced wet/dry seasons in the north. Surface water flows throughout the dry season frequently rely on discharge from groundwater sources, with these interactions complex and locally variable.

Given the remoteness of much of the north, many of these water resources have not been fully mapped in sufficient

of Western Australia, Darwin and surrounds in the Northern Territory, and the Mitchell River catchment area of northern Queensland. Completed in 2018, the study demonstrated that even within this smaller subset of the overall north, water resources differed significantly in their physical and social characteristics, with few commonalities between the optimal pathways to exploit these resources or the policy settings which could be applied to accelerate their sustainable usage.

The CSIRO water resource assessments undertaken as part of the *Our North Our Future White Paper* process emphasised that First Nations peoples constitute a large proportion of the northern population. In addition to a traditional cultural and spiritual connection to water, these resources play a key role in the health and economic development of First Nations communities, and that should future development of water resources in the north occur, traditional owners and other First Nations interests will naturally have strong expectations for ongoing involvement in water use, management and planning.¹²⁷

Water resources in Northern Australia are of a fundamentally different character to those in the South. Unlike the Murray-Darling Basin, Northern Australia has over fifty independent, externally draining surface water basins, flowing out to the Timor, Arafura and Coral Seas. A majority of these are illustrated in the following Figure 32. 128

¹²⁵Cresswell, R et al (2009), Northern Australia Land and Water Science Review, CSIRO Land and Water Division, Australian Government, Canberra ACT

¹²⁶ CSIRO, Northern Australia Water Resource Assessment, website accessed August 2019

¹²⁷ Indigenous values, rights and development goals in Summary Reports, ibid

¹²⁸ Adapted from Cresswell, R et al (2009), Figure 2: Australian Water Resource Council river basins in Northern Australia Land and Water Science Review, CSIRO Land and Water Division, Australian Government, Canberra ACT

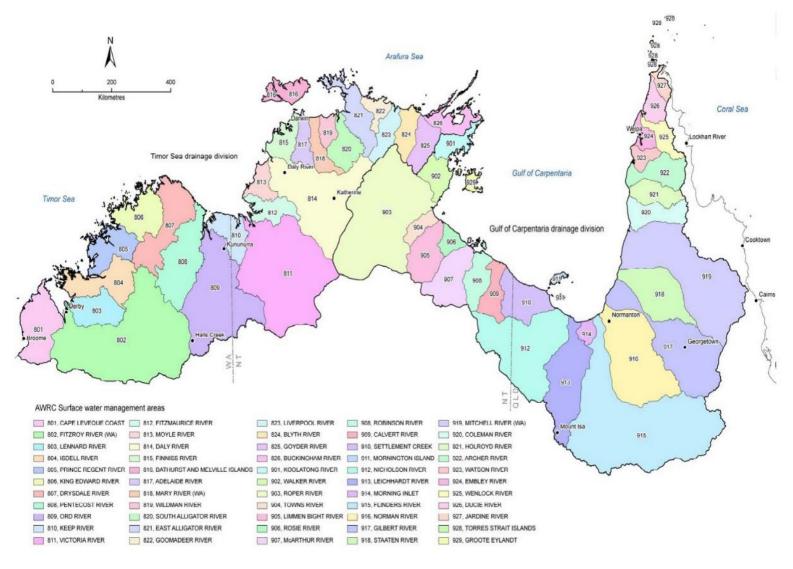


Figure 32 - Northern Australia Surface Water Management Areas

Beneath the surface water management areas illustrated in Figure 32 above, lies a complex geology, characterised by distinct aquifers that recharge differentially from the surface, each other, or (as in the case of the Mereenie aquifer) which have not recharged for thousands of years. While initially driven by the need to reduce over-allocation of stressed water resources in the Murray-Darling Basin and along the Eastern seaboard, and to respond to prolonged adverse climactic conditions, the ongoing development of the National Water Initiative (NWI) has seen increased recognition of the rights and interests of First Nations people over their traditional lands, and their increased consultation and participation in natural resources management.

¹²⁹ Carbon-14 dating and chemical analysis of the Mereenie aquifer suggests groundwater trapped within is approximately 10,000-30,000 years old.

Water Planning in Northern Australia

Further complicating the issue of First Nations water rights in Northern Australia is the lack of a single guiding framework. The Commonwealth *Water Act 2007* is restricted to the Murray-Darling Basin, and while all States and Territories are signatories to the National Water Initiative, of the Northern jurisdictions (Queensland, Western Australia and the Northern Territory) only Queensland has enacted NWI-compliant legislation. These non-compliant regimes are briefly summarised below.

Northern Territory

Water rights within the Northern Territory are controlled by the *Water Act 1992* (NT). Under the Act, declared Water Control Districts manage areas of the Northern Territory where a perceived need exists to manage water resources that face competing usage pressures, or where there is a potential for overuse of groundwater reserves, river flows or wetlands. Within a District, shown below in Figure 33, 130, permits are required to extract water.

Figure 33 - Northern Territory Water Districts

Within a District, a Water Allocation Plan may be declared. Plans will detail the area and water resource to be covered, and through community and stakeholder consultation seek to allocate the overall resource between consumptive, environmental, domestic and other usages. Four Plans have

DARWIN RURAL ARNHEM LAND DALY ROPER BEETALOO TENNANT CREEK WESTERN DAVENPORT TANAMI DESERT TI-TREE ALICE SPRINGS SIMPSON GREAT ARTESIAN BASIN AUSTRALIA

¹³⁰ Department of Environment and Natural Resources, Northern Territory Declared Water Control Districts (July 2018), Palmerston, NT

been declared to date (Tindall/Katherine, Alice Springs, Berry Springs and Western Davenport), with five more under development.

By Gazettal proclamation, certain beneficial usages of water (which can include traditional or cultural usage by First Nations groups and peoples) may be exempted from control. In addition, the Northern Territory is in the process of developing a Strategic Aboriginal Water Reserves Policy, 131, under which a reserved percentage of the total water resource within an Allocation Plan area will be made exclusively accessible for First Nations to facilitate First Nations economic development. The amount of water to be reserved will vary depending on the area of First Nationscontrolled land that exists within the Allocation Plan, and Reserves will be implemented in all future and revised Allocation Plans.

While the Northern Territory regime is statutory and provides for statutory recognition of allocation plans, it does not fully comply with the NWI as licences are time-limited, although may be renewed.

Western Australia

Water use licensing and planning in Western Australia has not significantly changed over the medium term. Water resources broadly are only controlled if they fall within a proclaimed area. Surface water proclamation areas are shown in the below Figure 34, 132, while groundwater allocations are in place for most of the State and virtually all of the portion falling within Northern Australia.

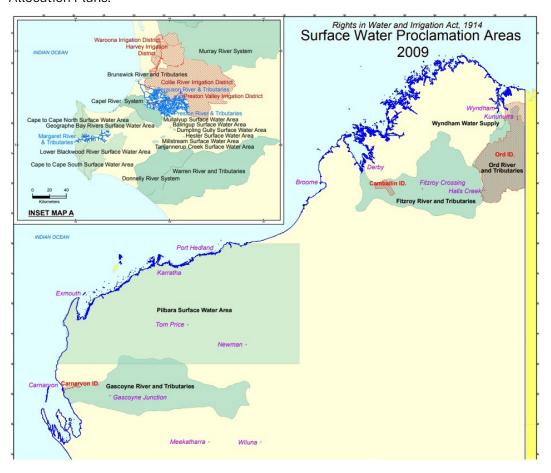


Figure 34 – Western Australian Surface Water Proclamation Areas

 $^{^{\}rm 131}$ Department of Environment and Natural Resources (2017), Palmerston, NT

¹³²Adapted from Department of Water and Environmental Regulation, Surface Water Proclamation Areas 2009, Perth, WA

Allocations are managed under the Rights in Water and Irrigation Act 1914 (WA) and guided by the Water Allocation planning in Western Australia guidelines published in 2011. Allocation plans are non-statutory but are expressed by the Western Australian Government as intended to be 'reflective of the intent' of the NWI. First Nations group feedback and comment is invited in the process of setting an allocation plan. Four water allocation plans (Ord River, La Grange, Pilbara (modified by the West Canning Basin Statement) and Skuthorpe) are in place for the North of Western Australia. A fifth plan, the Fitzroy River catchment plan, is in development and was due to be completed by 2020, however has yet to be finalised.

Contemporary Landscape: Policy and Practice

Reflecting the importance of water rights to First Nations peoples and communities, significant existing work and analysis has been conducted to date in this sphere. While a preponderance of this engagement has focused on the South, particularly the Murray-Darling Basin, the outcomes of these processes are broadly applicable and will inform future policy development in the north.

In particular, the outcomes from the First People's Water Engagement Council, formed as an advisory group to the former National Water Commission, and the First People's National Water Summit, 135, should be adequately addressed as an authoritative statement of intent from over 70 delegates from across Australia. Amongst others, these recommendations include that COAG should implement a National Aboriginal Water Strategy to complement the National Water Initiative, that an Aboriginal Economic Water Fund should be established in cooperation with States to fund its activities, and that all Australian governments should review existing legislation to enshrine Indigenous access to water.

While also initially Southern-centric, the Echuca Declaration by Murray-Darling Basin Traditional Owners, ¹³⁶, later to inform and underpin the National Cultural Flows Research Project (NCFRP), has shaped and fostered dialogue and policy development in the area of First Nations water rights. The outcomes of the NCFRP,¹³⁷, have been invaluable in developing shared understandings and methodologies to describe and measure the ways in which First Nations communities use, share and are impacted by water resources. In particular, the Working Papers produced by the NCFRP, prepared with the input of First Nations representatives and government, present a range of law and policy approaches to advance cultural flows.¹³⁸

More specific to Northern Australia, the *Our North, Our Future White Paper* sees a significantly expanded role for agriculture, aquaculture and fisheries within the north, all of which will by necessity require a commensurate significant expansion in water usage. The White Paper explicitly recognises that surface and ground water in the north serve a variety of functions, including meeting the cultural, spiritual and economic needs of First Nations communities, and calls for significant consultation and engagement with Traditional Owners in delivering water reform and investment in infrastructure.

There has also been an institutional response to the increasing recognition of First Nations water rights. In late 2018, legislative changes introduced, ¹³⁹, extended the former Indigenous Land Corporation (ILC)'s remit. These amendments came into effect on 1 February 2019, extending the now Indigenous Land and Sea Corporation (ILSC)'s remit beyond the land estate to include interests in the sea and freshwater estate. As such the ILSC now exists to acquire and grant rights and interests in land and water, and to assist First Nations interests to manage land and water country.

A typography of Australian First Nations water rights and interests

Water resources across Australia are of fundamental importance to First Nations people for cultural, subsistence, recreational and commercial purposes. Across Australia, water allocations to First Nations groups and communities

¹³³ Department of Water (2011), Water resource allocation planning series 1, November 2011, Department of Water and Environmental Regulation, Perth WA

¹³⁴ Department of Water and Environmental Regulation, *How we develop* water allocation plans, website accessed August 2019

¹³⁵ First People's Water Engagement Council, Archived, National Library of Australia/National Water Commission, website archive dated 15 June 2016

¹³⁶ Murray and Lower Darling Rives Indigenous Nations (2007), *Echucha Declaration*, published eg. National Cultural Flows Research Project

¹³⁷ National Cultural Flows Research Project, *Research Results*, website accessed August 2019

¹³⁸ Summarised eg National Cultural Flows Research Project/University of Melbourne (2018), Cultural Flows: a multi-layer plan for cultural flows in Australia – legal and policy design, MLDRIN/NBAN/NAILSMA,

¹³⁹ Aboriginal and Torres Strait Islander Land and Sea Future Fund Bill 2018, Aboriginal and Torres Strait Islander Land and Sea Future Fund (Consequential Amendments) Bill 2018 and Aboriginal and Torres Strait Islander Amendments (Indigenous Land Corporation) Bill 2018.

have historically been extremely limited.

The National Water Initiative (NWI) ¹⁴⁰. which was agreed to by the Council of Australian Governments (COAG) in 2004, is a shared commitment by Australian governments to increase the efficiency of Australia's water use, leading to greater certainty for investment and productivity, for rural and urban communities and for the environment. The NWI requires all jurisdictions to provide for First Nations access to water resources and inclusion of First Nations people in water planning and policy. As mentioned in the introduction to this section, First Nations water allocations are estimated at between 0.1, ¹⁴¹, and 0.2, ¹⁴², percent of total diversions and on the most part where first Nations water allocations exist, they are categorised as 'cultural' flows, with limited ability for First Nations water rights holders to use those water rights for commercial purposes.

Importantly, the 2020 National Agreement on Closing the Gap includes a commitment to develop a new target that measures progress towards securing Aboriginal and Torres Strait Islander interests in water bodies inland from the coastal zone under state and territory water regimes. The Joint Council on Closing the Gap, which governs this Agreement, announced following its meeting on 3 December 2021 that it was agreed to defer consideration of the Inland Waters target to the next Joint Council meeting where it will consider the finalised statistical baselining exercise to improve understanding of existing levels of Indigenous corporations' water ownership.¹⁴³

Creating value from water rights and interests

Access to water rights that are of an economic nature is fundamental to many of the options available to First Nations people to create economic value from their land estate –

agriculture, irrigation, freshwater fisheries and aquaculture and in terms of new emerging industry, the production of green hydrogen. As such, it is not surprising that the miniscule nature of First Nations economic rights to water is one of the fundamental barriers to First Nations economic self-determination in Australia.

The constraints

As discussed, in developed areas such as the Murray Darling Basin, economic and other water rights are fully if not over-allocated as a result of the policies of colonial and subsequent State Governments. In these areas allocations to First Nations interests are tiny (0.2 percent at best) and mainly not for economic purposes. This situation can only be addressed through a redistribution of economic water rights through buy-back schemes or other measures that are consistent with the law.

Outside of developed regions where there are surface and ground water resources, resources are typically not fully allocated, particularly in remoter areas of northern Australia. While First Nations economic allocations pertaining to these resources are also small, the not fully allocated nature of them provides an opportunity to secure First Nations economic water rights at scale that can support economic self-determination.

The main barrier in both geographical instances is underdeveloped water allocation and distribution policy and regulation across Australia, particularly as it pertains to First Nations economic interests.

National Water Initiative ¹⁴¹ Jackson, S, Langton, M. (2011), 'Trends in the Recognition of Indigenous water needs in Australian water reform: the limitations of 'cultural' entitlements in achieving equity', *Journal of Water Law* 22 pp.109

¹⁴² Hartwig, L., Jackson, S. and Osborne, N. (2020), 'Trends in Aboriginal water ownership in New South Wales, Australia: the continuities between colonial and neoliberal forms of dispossession', *Land Use Policy*, December Issue

¹⁴³ Seventh Meeting of the Joint Council on closing the Gap. 3 December 2021, Communique: https://www.closingthegap.gov.au/sites/default/files/2021-12/joint-council-communique-3-december-2021.pdf

Intellectual property rights as an economic asset

The unique cultural and intellectual property held by Australian First Nations holds potentially significant economic value across a range of industries including the arts, agriculture and conservation and land care. However, the absence of an effective framework for protecting First Nations intellectual property is significantly hampering the ability of First Nations to use this unique asset for the purposes of economic self-determination.

For example, it has been estimated that in 2019-20 at least \$250 million in Australian First Nations visual arts and crafts were sold, including approximately \$35 million in artwork sales through art centres and at least \$80 million in sales of merchandise and consumer products, mainly in the form of souvenirs. However, products created by non-First Nations parties accounted for an estimated \$54 million of spending, equivalent to over half of total spending on merchandise and consumer products.¹⁴⁴

Similar circumstances can be observed in Australia's growing 'bush foods' (or traditional produce) sector, with a recent survey, 145, suggesting that only around 1 percent of the sector's produce and value is generated by First Nations owned operations.

Intellectual Property law in Australia: an overview

Intellectual property law in Australia is a product of both domestic action and obligations imposed under international instruments that Australia is party to. Traditionally, the 'foundation agreements' have related to a Western-centric framework for the development, commercialisation and protection of intellectual property. However, in the context of an international push for recognition and protection of the rights of First Nations peoples, there is scope for alternate mechanisms and methods to protect the unique interests that First Nations interests hold.

Basis of Australian Intellectual Property Law

The basis for much of Australia's intellectual property framework is grounded in three international conventions relating to intellectual property law:

The Paris Convention

The Paris Convention for the Protection of Industrial Property (1883), ¹⁴⁶, originally opened for signature in 1883 but only entered into force in 1970. Establishing an international regime for reciprocal recognition and enforcement of the principal Western intellectual property protection instruments such as trademarks, patents and business names, the Paris Convention primarily pertains to intellectual property in the context of commerce and industry. Australia has been a signatory to the Paris Convention since 1925.

· The Berne and Rome Conventions

The Berne Convention for the Protection of Literary and Artistic Works (1886), 147 and the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations (1961), 148, together establish and protect the rights of the creators, performers and broadcasters of 'literary and artistic works'. In addition to the concept of copyright, these include a guaranteed minimum standard of rights such as attribution, authorship and derivation, and establish exceptions for private use, teaching or scientific research. Australia has been a signatory to the Berne Convention since 1928, and to the Rome Convention since 1992.

None of the Paris, Rome or Berne Conventions specifically recognise or cater to the rights of First Nations peoples. Arguably, some aspects of First Nations activities could fit within the existing frameworks, with the Paris Convention specifically recognising agricultural or extractive industries and natural produce as being capable of protection through trademark and the like, while the Berne and Rome Conventions would capture recorded or transcribed cultural expressions such as dance or song. The Berne Convention particularly attempts to avoid the difficulties posed to an individual-centric, private-ownership Westernised system of protection (reliant on an identifiable individual or individuals claiming a particular work) by cultural works or practices that are a collective achievement, through allowing

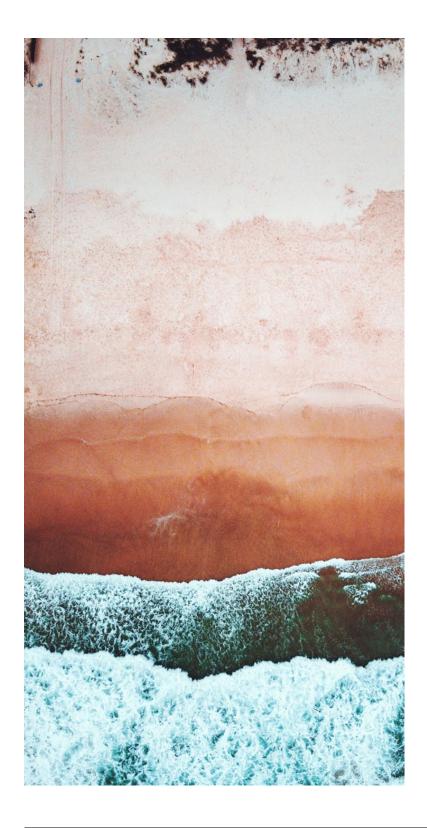
¹⁴⁴ Productivity Commission (2022), Aboriginal and Torres Strait Islander Visual Arts and Crafts, Australian Government, Canberra

¹⁴⁵ Bushfood Sensations IN: Mitchell, R. and Becker, J. (2019) 'Bushfood industry booms, but only 1 percent is produced by Indigenous people', 19 January, Australian Broadcasting Corporation

¹⁴⁶ 828 UNTS 305

¹⁴⁷ 1161 UNTS 30

^{148 496} UNTS 43



local authorities to be deemed as the responsible entity. 149

Administering, overseeing and shepherding the ongoing development of the principles underpinning the Paris, Berne and Rome Conventions is the World Intellectual Property Organisation (WIPO), a self-funded United Nations entity established under the Convention Establishing the World Intellectual Property Organization (1967).¹⁵⁰ In addition to the yearly WIPO Assembly meetings, WIPO and participant member states develop global intellectual policy and best practice through an array of committees and working groups. The bodies that are most relevant to the subject matter of this Seminar Background Paper are the Inter-Governmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), discussed further below.

A typography of Australian First Nations intellectual property

The relationships between the natural environment and First Nations peoples, their custodianship and guardianship activities, and expression of spiritual and cultural identity are often qualitatively different from the commercial/industrial or individualistic artistic endeavours more commonly protected by intellectual property law. Under the conventional intellectual property system, these practices are usually regarded as 'public domain', and hence free for anyone to use and appropriate, First Nation or not. This is a state-of-affairs that many First Nations people reject, and which, as highlighted by the introductory remarks for this section of the Seminar Background Paper leaves their interests open to misappropriation or misuse.

In recognition of this issue, WIPO has through its IGC process (inaugurated in 2000) attempted to form a consensus view on the best way to ensure First Nations interests are protected by and brought within the existing international order. In particular, the IGC has defined three broad areas of focus, summarised in the below Table $17.^{151}$

Table 17 – Key Indigenous Intellectual Property Focus of the Inter-Governmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore

¹⁴⁹ Our Culture: Our Future – Report on Australian Indigenous Cultural and Intellectual Property Rights (Final Report) (1998), Australian Institute of Aboriginal and Torres Strait Islander Studies

¹⁵⁰ 828 UNTS 1846

¹⁵¹ Derived from Traditional Knowledge, Traditional Cultural Expressions and Genetic Resources, published World Intellectual Property Organisation, accessed 01/09/18

Definition	Challenges to the Existing Framework
Traditional Knowledge Knowledge resulting from intellectual activity in traditional context, including know-how, practices, skills and innovations	Traditional Knowledge in its purest form, which frequently has ancient roots, and is passed down usually in oral form, is generally not protected by traditional methods such as patent or trademark. Specific practices or innovations may be protectable but determining the 'owner' within the understanding of Western individual-centric IP protection practices is difficult and may disenfranchise other entitle Indigenous interests.
Traditional Cultural Expression Also known as 'folklore' this includes music, dance, art, designs, names, signs and symbols, performances, narratives and architecture.	Traditional Cultural Expressions are more amenable to protection under existing systems, usually under the Berne or Rome Conventions. However, Traditional Cultural Expressions are usually bound up in and integrated in a single heritage that also encompasses Traditional Knowledge and Genetic Resources (see below). They are integral to the cultural and social identify of the community, and hence protection through existing channels may lead to artificial segregation and disenfranchisement. In particular, the obligations placed on copyright holders to enforce their rights against all other parties or lose control to public domain is difficult to reconcile with the generally communal nature of Traditional Cultural Expression practices.
Genetic Resources Biological materials that contain genetic information of value, and are capable of reproducing or being reproduced, including medicinal plants, agricultural crops and products of animal husbandry	Genetic Resources as encountered in nature are not creations of the human mind and thus cannot be directly protected as intellectual property. However, innovations based on or developed from Genetic Resources may be protected by mechanisms such as patent or plant breeder's rights. In many communities, Traditional Knowledge is closely associated with Genetic Resources through the utilisation, protection and conservation of that resource of many generations. In a modern context, Traditional Knowledge often provides researchers with insights to isolate valuable active compounds within Genetic Resources

Generally speaking, protection strategies promoted by the IGC follow the following themes:

- **Defensive Protection** which are strategies designed to ensure third parties do not gain illegitimate or unfounded intellectual property rights over Traditional Knowledge, Traditional Cultural Expressions or Genetic Resources.
- **Positive Protection** which are strategies designed to facilitate active exploitation of Traditional Knowledge and commercialisation of Traditional Cultural Expression and Genetic Resources by the originating First Nations interests in that intellectual property.

With a mandate to "ensure the balanced and effective protection of genetic resources, traditional knowledge and traditional cultural expressions", ¹⁵², the IGC has since 2004 published Draft Articles for consideration and review by the IGC and the wider WIPO Assembly. These have been updated steadily over the years since, with the latest drafts presented at the 32nd IGC meeting in 2016, albeit they have not been approved or subject to any final decision and have no formal status beyond as a point of reference. ¹⁵³

While the Draft Articles are in flux and contain multiple proposed definitions and optional clauses, reflecting the lack of any broad consensus view, some common themes may be discerned, 154:

¹⁵² Decision: Matters Concerning the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, Assemblies of Member States of World Intellectual Property Organisation, 55 session (October 2015)

¹⁵³ Draft Provisions/Articles for the Protection of Traditional Knowledge and Traditional Cultural Expressions, and IP & Genetic Resources, published World Intellectual Property Organisation, accessed 01/09/18

¹⁵⁴ Technical Review of Key Intellectual Property-Related Issues of the WIPO Draft Instruments on Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions, Anaya, J, published Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, 34 session (March 2017)

Definition of 'misappropriation' of Traditional Knowledge, Traditional Cultural Expressions and Genetic Resources derived from Traditional Knowledge Multiple alternative options have been proposed, with a general unifying factor being a lack of consent from First Nations peoples. The threshold for determining consent or absence of consent is a live question, with suggestions including violation of customary law, requirements for 'prior informed consent' and 'mutually agreed terms', or as established by national laws.

Identification of beneficiaries

Requirements on non-First Nations parties to obtain prior informed consent and mutually agreed terms can be complicated when it is not clear with whom they should be negotiating. The Draft Articles present two models for this, one based on local national law and one based on traditional customary law.

Scope of Protection

Little consensus has been reached as to what degree of protection States should implement. Broadly, the Draft Articles see a 'sliding scale', with the highest levels of protection given to sacred or secret Traditional Knowledge and Traditional Cultural Expressions, while Traditional Knowledge and Traditional Customary Expression widely known or not commonly expressed would merely be required to be used 'respectfully' by non-First Nations people. Genetic Resources are addressed through a disclosure regime to support 'access and benefit sharing', in which patent applicants are required to disclose the source of their knowledge regarding the Genetic Resources.

With significant ambiguity and disagreement on the Draft Articles, the pathway forwards for these reforms appears fraught, and no agreement is likely in the short to medium term.

Running alongside attempts to accord recognition for First Nations intellectual property rights within the 'traditional' WIPO structure has been a limited but generally more successful program to ensure First Nations interests benefit equally from natural resources, rooted in the Convention on Biological Diversity and more recently its companion Nagoya Protocol and the Bonn Guidelines.

The Convention on Biological Diversity (1992), 155, (CBD), which was signed by Australia and entered into force in 1993, is primarily concerned with environmental conservation, sustainable development, and equal access to the benefits stemming from the natural environment, including Genetic Resources. In particular, the CBD explicitly recognises the close and special relationship First Nations communities and peoples have with the biological resources of their home area, their Traditional Knowledge and role in safeguarding and sustaining those resources, as well as their rights to use, enjoy and benefit from them.

Some criticism and resulting advocacy around the involvement of First Nations interests in the development of these frameworks, led to the creation of the Bonn Guidelines. These guidelines were adopted unanimously by 180 States at the COP6. While non-binding and of no legal force, the Guidelines aim to assist and guide First Nations peoples, nation states, business and interested parties in allowing equitable access to Genetic Resources which First Nation peoples and communities have an interest in. Among other matters, the Guidelines address requirements for mutually agreed terms and prior informed consent, define the roles and responsibilities of users and providers, discuss incentives, accountability, means for verification and dispute settlement, and suggest precedents for both monetary and non-monetary benefits.

Working from the Guidelines as a base, continued advocacy towards a formal resolution which would provide legal certainty and an approved framework resulted in the Nagoya Protocol, ¹⁵⁷, presented at the COP 11, 2010, in Nagoya, Japan, and finally entering into force in 2014. An attempt to rectify the lack of any substantial progress on implementing the CBD's aim of ABS regarding Genetic Resources since it was first enacted nearly two decades previously, the Protocol goes significantly beyond the voluntary Bonn Guidelines and prescribes a number of requirements on signature States, including to implement and fund the operation of compliance and audit mechanisms. Provisions of particular note are as follows:

¹⁵⁵ 1760 UNTS 79

¹⁵⁶ Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising Out of Their Utilization-Conference of the Parties to the Convention (6), 2002, The Hague, Netherlands

¹⁵⁷ Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from the Utilization of Genetic Resources of the Convention on Biological Diversity, registered UNTC 12 October 2014, No. 30619

Linkages between Traditional Knowledge and Genetic Research

Contrary to the vague and generalised language relating to Genetic Resources in the CBD, the Protocol explicitly recognises that Genetic Resources are linked with Traditional Knowledge, and that Genetic Resources may be 'held by' First Nation peoples and communities through their unique knowledge and experience of biological organisms.

Prescriptive and Specific Obligations

In order to meet the ABS requirements of the CBD, the Protocol requires States Party to 'via legislative, administrative or policy measures' provide for a number of specific actions and outcomes. These include to:

- Require that benefits stemming from utilising Genetic Resources be shared with the First Nations interests whose Traditional Knowledge led to their discovery.
- Require that prior informed consent is obtained before the use and exploitation of Genetic Resources stemming from Traditional Knowledge, and that access occurs on mutually agreed terms.
- Establish a body to coordinate the process of obtaining prior informed consent, issue a compliance certificate stating the mutually agreed terms, and register the decision with the Access and Benefit Sharing Clearinghouse, 158;
- Encourage all parties to an agreement to comply with the mutually agreed terms reached and facilitate dispute resolution.

Government Involvement

To ensure the Protocol is rooted within and informs State policy and actions, it requires State parties to designate a:

- National Focal Point which must make information on prior informed consent, mutually agreed terms and the process available to interested parties, and direct parties to the appropriate First Nation peoples or communities to approach; and
- Competent National Authority responsible for granting access and issuing written evidence that access requirements have been met and register instruments with the ABSCH.

· Compliance and Monitoring

To ensure compliance, State parties are required to implement 'checkpoints' as oversight mechanisms, gathering data on compliance and reporting instances of non-compliance to the ABSCH. Further, State parties are required to ensure that Genetic Resources exploited within their territory has been appropriately permitted and the First Nation peoples or communities whose Traditional Knowledge it is associated with have given prior informed consent and the mutually agreed terms are being complied with.

Only 106 of the 196 State parties to the CBD have ratified the Protocol. Australia signed the Protocol when it first opened for signatures in 2012. However, Australia has not as yet ratified the Protocol and hence is not a party to it. Indeed, Australia's only tangible step towards compliance has been to designate a National Focal Point.¹⁵⁹

While Australia lacks an adequate comprehensive framework for protection of the intellectual property rights of its First Nations people, several specific pieces of legislation and standards at a regional, national and jurisdictional level indicate some progress, albeit limited. These specific instruments are discussed in the following subsections.

The Commonwealth: Environmental Protection and Biodiversity Conservation Act 1999

Under the Environmental Protection and Biodiversity Conservation Act 1999 (Cth) and its Regulations¹⁶⁰, access to biological resources found on Commonwealth-controlled areas is managed via a permitting system. Section 301 of the Act, together with Part 8A of the Regulations, establish that the permission of an 'access provider' is required before access to biological resources is permitted. Where the land is subject to native title, or owned by an Indigenous corporation, that entity will become an 'access provider' and their consent is required. Whether consent has been given or not is determined by the Minister, in their own judgement.¹⁶¹

Where the access is sought for commercial purposes, parties must enter into a formal benefit-sharing agreement. There

 $^{^{158}}$ An international entity established by the UN to facilitate the operation of the Nagoya Protocol, presently implemented through an online portal https://absch.cbd.int

¹⁵⁹ Presently Ms. Jaime Grubb, Director, Biodiversity Policy Section, Commonwealth Department of the Environment and Energy, Canberra

¹⁶⁰ Environment Protection and Biodiversity Conservation Regulations 2000 (Cth)

¹⁶¹ Regulation 8A.10(2)

is no prescribed form, but the agreement must contain at a minimum a statement detailing the use of and attributing the source of any Traditional Knowledge relied upon, and sufficiently detailed statements of the management and benefits to be shared in return for its use.¹⁶²

The degree to which this system is capable of protecting and advancing the interests of First Nations peoples and communities, and their Traditional Knowledge and linked Genetic Resources, is unclear. Since the permitting process commenced in 2006, only three commercial permits have been issued, all to the Australian Institute of Marine Science. 163

Northern Territory: Biological Resources Act 2006

Functioning in a similar way to the Commonwealth legislation, the *Biological Resources Act 2006* (NT) has as a stated aim to increase and facilitate 'bioprospecting' within the Northern Territory, defined as "research in relation to any genetic resources, or biochemical compounds, comprising or contained in the biological resources." The Act further specifically states that it wishes to protect and recognise the 'special knowledge' held by First Nations persons about those biological resources, and establish a framework to share the benefits arising from their use.

This is achieved through a permitting system, whereby the 'resource access provider' (including Land Trusts, native title holders, and Aboriginal associations) must agree to allow access and enter into a benefit sharing agreement before the permitting authority can issue a permit. Where 'Indigenous Knowledge' is involved, the agreement must include a statement of the source of the knowledge and the benefits given in exchange.

However, the definition of 'Indigenous Knowledge' is somewhat more restricted than Traditional Knowledge in the international sense, as it is stated to be knowledge that is 'obtained from an indigenous person or...persons', but does not include information 'obtained from scientific or other

public documents, or otherwise from the public domain'. This is problematic, as a large amount of what would otherwise be Traditional Knowledge, having been recorded in the past and therefore entered into the scientific record, is now not open to protection. Similarly, knowledge that is common to one or more groups may be deemed 'public domain', and indeed, under the existing intellectual property law regime operating within Australia, most Traditional Cultural Expressions and Traditional Knowledge not rigorously guarded from outsiders would fall within this category.

Queensland: Biodiscovery Act 2004

The *Biodiscovery Act 2004* (QLD) makes no mention at all of First Nation peoples or communities. The objects and purposes of the Act are stated purely to ensure that benefit sharing, and control of biological resources should accrue to the State of Queensland from material collected from State lands, and controls this through similar permitting processes.

However, the Queensland Government has, in addition to the Act, issued a policy statement binding upon all government agencies, entities and public bodies, the Biotechnology Code of Ethics. ¹⁶⁹ The Code is currently under review, and was last updated in 2014. The 2014 version recognises the culturally significant aspects of the knowledge of traditional owners and commits to negotiating a 'reasonable' benefit-sharing arrangement where Traditional Knowledge is used. ¹⁷⁰ No enforcement mechanisms or further details are provided as to the practical implementation of this broadly worded commitment.

Further, the Act itself has also recently undergone review, with 45 recommendations made. While initially reviewed in 2009, with no amendments viewed as necessary, the signing (but not ratification) of the Nagoya Protocol by Australia in 2012 served as a catalyst for a further review, with terms of reference specifically addressing ABS and use of Traditional Knowledge in relation to genetic and biological resources. In September 2020, the *Biodiscovery and Other Legislation Amendment Act 2020* (QLD) reformed the *Biodiscovery Act 2004* (QLD) to include protections for

¹⁶² Regulation 8A.07-10.

¹⁶³ List of Permits Issued, in Australia's Biological Resources, 2006-07 to 2018, published Commonwealth Department of the Environment and Energy.

 $^{^{164}}$ s5 BRA

¹⁶⁵ s3(2) BRA

¹⁶⁶ s11, 19, Part 4,

¹⁶⁷ s29

¹⁶⁸ s29(2)

¹⁶⁹ Queensland Biotechnology Code of Ethics in Scientific research regulation and ethics, State of Queensland, published Business Queensland

¹⁷⁰ 10: Biodiscovery in Queensland Biotechnology Code of Ethics

the use of First Nations Peoples' traditional knowledge in biodiscovery to improve alignment with the Nagoya Protocol.¹⁷¹

Now under the Act, a person is required to take all reasonable and practical steps to only use traditional knowledge for biodiscovery with the agreement of the custodians of the knowledge. This reform represents a key step in recognising First Nation peoples' traditional knowledge and supporting them to decide how their knowledge is used, and to gain fair benefits from its use in biodiscovery.

Food Standards Australia New Zealand

Food Standards Australia New Zealand (FSANZ) develops standards that regulate the use of ingredients for food products, product label requirements and food business licensing conditions. The Food Standards Code classifies bush foods as 'novel food' ingredients which are regulated by Standard 1.5.1: Novel Foods. While recognising their First Nations heritage, the standard makes no substantive provisions for the knowledge or interests of First Nation peoples in the development of bush food products, requiring only that a social scientist advise on traditional food uses. Recent developments have seen calls for government to provide for the meaningful involvement of Aboriginal and Torres Strait Islander peoples in the governance processes of the bush food commercialisation system.¹⁷²

The inability of Australian First Nations interests to be able to protect and leverage economic benefit from the competitive advantage that is encapsulated in their unique intellectual property is a major constraint to the development of a self-determined Australian First Nations economy. The fact that it is largely legal for non-First Nations interests to appropriate the economic value from that intellectual property-circumstance that is demonstrably commonplace-is manifestly inequitable and abhorrent to most First Nations people.

Further, the absence of a suitable First Nations intellectual property framework means that many custodians of First Nations intellectual property understandably guard it fiercely, often to an extent that is beyond cultural requirements. This represents a significant opportunity cost, whereby with an appropriate protection framework and in accordance with

cultural protocols, this intellectual property could potentially underpin significant sectors of a self-determined First Nations economy.

This is not a new issue. For example, the former Aboriginal and Torres Strait Islander Commission recommended in its report on a Native Title Social Justice Package in 1995 following Australia wide consultations with First Nations people that the Commonwealth Government should amend statutes relevant to intellectual property rights to safeguard the integrity and ownership of indigenous cultural property in a manner which recognises the particular features of Aboriginal and Torres Strait Islander ownership, including perpetual and communal rights. Despite taking some initiatives to improve respect for Indigenous knowledge, such as IP Australia's Indigenous Knowledge IP Hub, the Commonwealth does not seem to be any closer to implementing legislative reform.

Withstanding cultural protocols, it is likely that the full competitive advantage encapsulated in Australian First Nations intellectual property will not be able to be realised for the purposes of self-determination until there is adequate protection under the Australian intellectual property legal framework.

Creating value from First Nations intellectual property

The potential economic value of Australian First Nations cultural and intellectual property in the form of cultural artistic expression, traditional knowledge and genetic resource is immense. As discussed earlier in this section, global demand for Australian First Nations art is estimated to be a quarter of a billion-dollar industry. As discussed in the section on Land Rights, the potential value in the application of traditional knowledge in land care, conservation and agricultural practice in the context of a global economy that is increasingly environmentally constrained and in markets that value sustainability is only just starting to become apparent. And opportunities across pharmaceuticals, neutra-ceuticals and industrial materials associated with genetic resources and informed by traditional knowledge is attaining global academic and industry attention.¹⁷³

The constraints

Despite Australia being party to multiple international conventions that suggest it should not be the case,

 $^{^{171}\,} Reform$ of the Biodiscovery Act 2004, Queensland Government Department of Environment and Science.

¹⁷² Lingard, K. (2015), An inclusive governance framework for bush food commercialisation, Policy Briefing, Ninti One, Alice Springs

¹⁷³ University of Queensland (2023), *Grass-roots 'building-block'* produces sustainable materials. Nature Research Custom Media

the Australian intellectual property legal framework is demonstrably deficient with respect to protecting the cultural and intellectual property rights of Australia's First Nations – for example, a significant portion of the value of the First Nations art sector is from product produced by non-First Nations parties.

Without significant reform that protects Australian First Nations intellectual property interests in cultural artistic expression, traditional knowledge and genetic resources, First Nations Australians will continue to be constrained in their ability to use this enabler of unique competitive advantage as a vector for economic self-determination.

First Nations interests in financial assets

As a result of specific statutory instruments and private commercial arrangements, not insignificant quanta of financial assets have accumulated in funds and trusts for which First Nations people hold beneficial interests. While in all cases these financial assets have a prescribed purpose (the specificity of which varies) and in the case of all private arrangements and some statutory instruments, prescribed specific First Nations beneficiaries, the question as to whether these assets are being deployed optimally for the purposes of facilitating economic self-determination is a reasonable one to ask.

It must be stressed from the outset of the discussion contained in the following subsections that nothing in this discussion suggests the rightful beneficial interest that specific First Nations have with respect to the financial assets discussed below should be diluted or used in any way that is contrary to their desired outcomes. The discussion is merely designed to explore whether there is a case for using this resource in better support of economic self-determination, and if so, how that might be achieved.

It should also be noted that this discussion is occurring in an environment where there is a notable potential shift toward First Nations interests having greater control over these assets. For example, the passing of the Aboriginal Land Rights (Northern Territory) Amendment (Economic Empowerment) Bill 2021 means that by mid-2023, the Northern Territory Aboriginal Investment Corporation will be created and will have greater influence as to how some investments from the Aboriginal Benefits Account may be made.

A typography of Australian First Nations interests in financial assets

Significant pools of financial assets in which First Nations have beneficial interests can be broadly classified as being those held under statutory instruments and those held in trusts associated with arrangements between private sector parties or governments and First Nations interest, mainly pertaining to land access arrangements.

Assets held under statutory instruments

The main statutory instruments that make provision for financial assets to accumulate in the interests of First Nations are the Aboriginal Benefits Account and funds

associated with both Indigenous Business Australia (IBA) and the Indigenous Land and Sea Corporation (ILSC). These are discussed in the following subsections.

Aboriginal Benefits Account

As mentioned briefly in an earlier section, in 1953 an ordinance from the Commonwealth Minister for Territories permitted mining on Aboriginal Reserves in the Northern Territory, conditional upon royalties being payable into an Aborigines Benefits Trust Fund to ensure that the benefits from mining undertaken on Aboriginal Reserves were shared with the Traditional Owners.

Proclamation of the Aboriginal Land Rights (Northern Territory) Act 1976 resulted in Aboriginal land rights extending to extensive areas of the Northern Territory. As a result, the Aboriginal Benefits Trust Fund Account was replaced by the Aboriginal Benefits Trust Account established under Part VI of the Act. With the exception of royalties pertaining to certain historical uranium mines, the Commonwealth Government has delegated the power to impose and collect royalties to the Northern Territory Government since the early 1980s.¹⁷⁴ In recognition of the precedent established by the 1953 ordinance and rights conveyed under the Act, the Commonwealth Government has since made an annual payment to the Aboriginal Benefits Account (ABA) for an amount that is equivalent to the royalty receipts of the Northern Territory Government and Commonwealth Government from operations located on all Aboriginal Lands in the Northern Territory, known as a Mining Royalty Equivalent (MRE) Payment.

Under the *Income Tax Assessment Act 1936* (Cth), payments made from MRE credited to the ABA are subject to mining withholding tax at a rate specified in the *Income Tax (Mining Withholding Tax) Act 1979* (Cth). In accordance with the *Taxation Laws Amendment Act (No.3) 1994* (Cth), the current rate of tax applied to payments of mining withholding tax is 4 percent.

When the Aboriginal Land Rights (Northern Territory) 1976 Act was first proclaimed, payments could only be made to Land Councils to support administration of their regulatory responsibilities, royalty associations and grants to benefit Aboriginal people in the Northern Territory on a 40:30:30 basis. Over successive legislative reforms, including most recently in 1999, the ABA has seen its operational basis change significantly. The beneficiaries of the ABA have been

¹⁷⁴ Mineral Royalty Act 1982 (NT), Petroleum Act 1984 (NT)

broadened, specific allocations to spending categories have been removed, and broad discretion as to how funds are expended across the categories rests with the Minister.

Funds in the ABA may be expended as follows:

- Payments to Land Councils for Administration Support - In accordance with Section 64(1) payments are made from the Aboriginal Benefits Account to the four Land Councils established under the Act - Northern, Central, Tiwi and Anindilyakwa Land Council - to meet administrative expenditure associated with their statutory responsibilities in accordance with proposed estimates of expenditure that are pre-approved by the Minister.
- Payments to Land Councils for Distribution to Royalty Associations - Section 63(3) provides for Royalty Associations, a specific class of institution established to receive payments from the Aboriginal Benefits Account to compensate or provide recompense to specific Aboriginal groups for mining on their specific traditional lands. In accordance with Section 64(3) additional payments are made to the Land Councils for distribution to Royalty Associations. These payments are directly linked to the amount of MRE monies received in respect of mining operations in the areas concerned, with Royalty Associations receiving at total equivalent to 30 percent of each year's MRE payments.
- Beneficial Payments In accordance with Section 64(4) payment of grants may be made for the benefit of Aboriginal people living in the Northern Territory on the advice of the Aboriginal Benefits Account Advisory Committee and at the Minister's discretion. The Aboriginal Benefits Account Advisory Committee is comprised of representatives of the four Northern Territory Land Councils.
- Office of Township Leasing A Township Lease is a long-term lease over a Township or Aboriginal Land granted by the Northern Territory Aboriginal Land Trust to the Executive Director of Township Leasing who then manages the Township or Aboriginal Land on behalf of the traditional owners, allowing the traditional owners to undertake economic activity in the town or on the land. In accordance with Section 64(4A) payments are made to the Office of Township Leasing for acquiring and administering township leases approved under Section 19A and leases approved under Section 20CA of the Act.

 Administrative Payments - In accordance with Section 64(6) payments may be made to meet expenses associated with administering the Aboriginal Benefits Account.

The question as to whether monies managed by the Aboriginal Benefits Account are First Nations monies or public monies has always been contentious. 175 The Commonwealth Government argues that, because the cost of MRE payments are born entirely by the Commonwealth and are sourced from the Consolidated Revenue Account, the Aboriginal Benefits Account is by definition public money -managed by the Commonwealth Department of Prime Minister and Cabinet and subject to the Public Governance, Performance and Accountability Act 2013 (Cth). However, some First Nations interests argue that the ABA is instead First Nations money. While a nuanced analysis of this fraught issue is beyond the scope of this Seminar Background Paper, in short, pursuant to letters patent establishing the Aboriginal Land Rights Commission in 1972, the Commonwealth instructed Justice Woodward to vest full land and mineral rights to the Aboriginal inhabitants of the Northern Territory. Although Woodward recommended mineral and petroleum resources on Aboriginal lands should remain the property of the Crown, this was expressed as subject to a further

recommendation that First Nations interests should have full rights to royalties. This compromise has been interpreted by First Nations interests to mean that while the minerals themselves do not belong to First Nations interests, the royalty streams from commercialisation of those minerals do. This is further reinforced by the precedent prior to the *Aboriginal Land Rights* (Northern Territory) *Act 1976*, under which while minerals belonged to the Crown, royalties charged on production of minerals on Aboriginal lands in the Northern Territory were paid directly to the benefit of Aboriginal holders of rights in Aboriginal lands.¹⁷⁶

Following passage of the Aboriginal Land Rights (Northern Territory) Amendment (Economic Empowerment) Bill 2021, the recently established Northern Territory Aboriginal Investment Corporation (a Commonwealth Statutory Authority) will receive \$180 million of grant funding over the first three years of its operation and once it has developed an investment plan, and additional \$500 million as an endowment from the ABA. These funds will be invested in projects designed to grow long-term wealth and support First Nations economies, important social and cultural priorities.¹⁷⁷

The MRE payments made by the Australian Government comprise around 90 percent of the total income of the ABA, with interest comprising the majority of the balance. Whilst they have come off a peak in 2018-19, over the past decade MRE payments have grown at a CAGR of 8.6 percent this is illustrated in the following Figure 35.



Figure 35 - Mining Royalty Equivalent (MRE) Payments to the Aboriginal Benefits Account

¹⁷⁵ Pollack, D. (2015), 'The political economy of the Aboriginals Benefit Account: Relevance of the 1985 Altman Review 30 years on', Engaging Indigenous Economy

¹⁷⁶ Altman, J. (1985) Report on the Review of the Aboriginals Benefit Trust Account (and Related Financial Matters) in the Northern Territory Land Rights Legislation, Australian Government Publishing Service, Canberra

¹⁷⁷ https://www.ntaic.org.au/

Payments from the ABA have averaged 68 percent of total income over the past decade, with total equity in the account growing at a CAGR of 12.5 percent and reaching \$1.4 billion in 2021-22. This is illustrated in the following Figure 36.

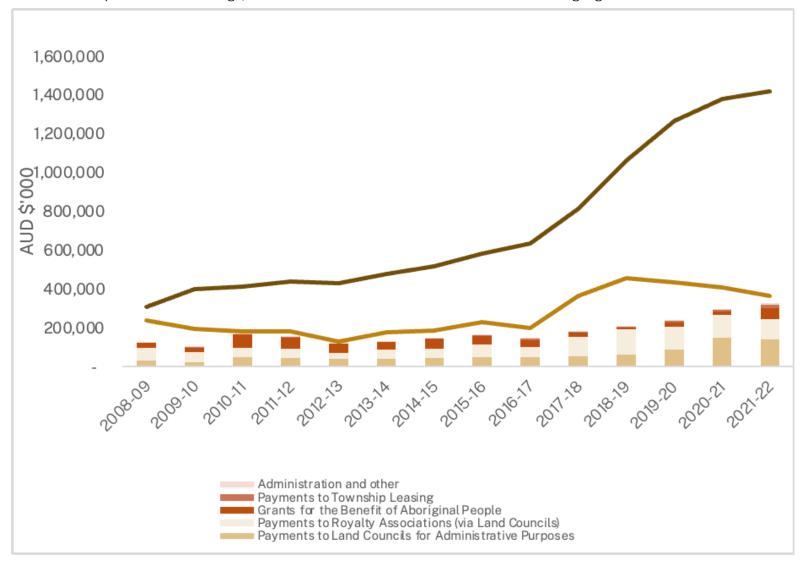


Figure 36 - Aboriginal Benefits Account - Total Income, Payments and Equity (2008-09 to 2018-19)

Indigenous Business Australia

Indigenous Business Australia (IBA) is an independent Commonwealth statutory authority established and operating under Part IV of the *Aboriginal and Torres Strait Islander Act 2005* (Cth). IBA is a 'quasi-commercial' organisation, resourcing its operations from a combination of self-generated revenue from home and business loan interest and repayments and returns from IBA's investment portfolio. IBA also receives appropriations from the Commonwealth to assist with the operations of the Housing Solutions division and receives a capital injection to use for home lending.

In accordance with its function prescribed by Section 181 of the *Aboriginal and Torres Strait Islander Act 2005* (Cth), providing home financing solutions for Indigenous people is a major component of IBA's activities.

IBA Business Solutions provides both finance and business support services to Indigenous business owners and entrepreneurs across Australia. Financing products provided by IBA Business Solutions include financial support through loans, leasing or access to capital provided directly by IBA. Business support services provided by IBA Business Solutions include access to training and workshops delivered by IBA and third parties, consultants and other specialist third-party advisors or IBA advisors, collectively offering a range of skills, knowledge and other resources required to acquire or establish a business and grow that business. It also includes advising clients and potential clients as to the likely viability of business concepts.

By partnering and directly co-investing with Indigenous organisations and businesses, IBA's Investment and Asset Management Division seeks to assist those organisations and businesses to increase their commercial capacity, grow their wealth and establish an inter-generational asset base, ultimately reducing their dependence on government assistance.

IBA's Investment and Asset Management portfolio includes a commercial property trust (the Indigenous Real Estate Investment Trust), a diversified investment fund (the Indigenous Prosperity Fund) and a portfolio of direct investments, currently totalling A\$886.3 million and generating approximately A\$46.8 million in income per annum for IBA, which is reinvested across IBA's programs.¹⁷⁸

Over the period 2009-10 to 2021-22, IBA's total equity has grown at a CAGR of 6.3 percent to approximately \$1.94 billion. This is illustrated in Figure 37 below.

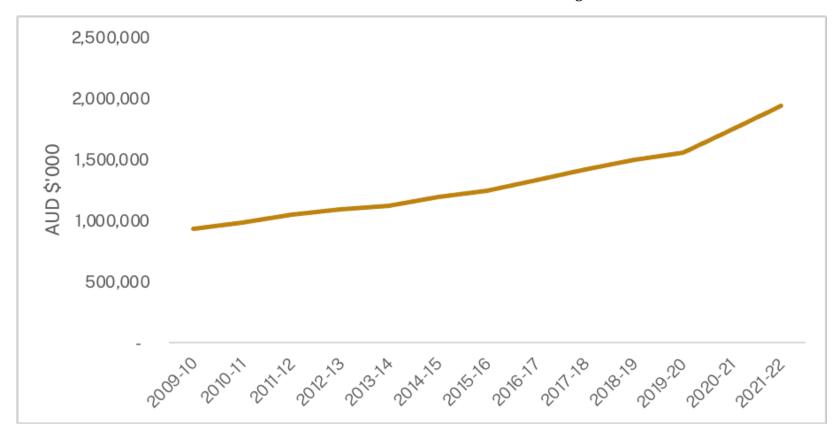


Figure 37 - IBA Total Equity (2009-10 to 2020-21)

¹⁷⁸ IBA Annual Report 2021-22

Carrying liabilities that represent approximately 5.0 percent of equity in 2021-22, this growth has been driven primarily by growth in assets, with the total assets of IBA growing at a CAGR of 6.4 percent from 2009-10 to 2021-22. As discussed above, the provision of home loans is a significant component of IBA's business, with home loans having grown at a CAGR of 6.6 percent and representing just under 42.8 percent of IBA's asset base in 2021-22. The next largest component of the IBA asset base is cash and investments. Cash reserves have remained relatively stable and represent 7 percent of the IBA asset base in 2021-22, whereas other financial investments have grown by 11.5 percent to represent 32 percent of the IBA asset base.

Investments in property have increased by 1.8 percent to represent 9.1 percent of the IBA asset base. Co-investment in Indigenous businesses has declined at a CAGR of 7.8 percent to account for 0.5 percent of assets in 2021-22 and enterprise loans have grown at a CAGR of 1.1 percent to represent 1.8 percent of assets in 2021-22. Trends in IBA assets are illustrated in Figure 38 below.

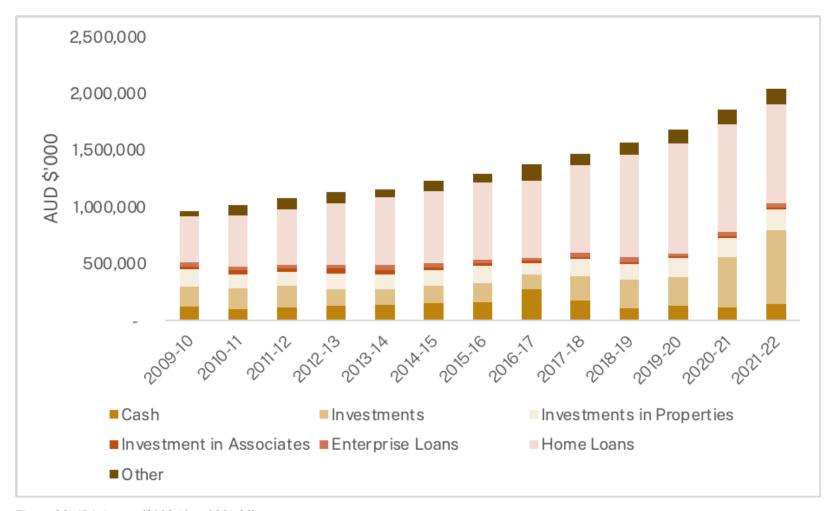


Figure 38 - IBA Assets (2009-10 to 2021-22)

IBA's total revenue has grown at a CAGR of 5.9 percent over the period of 2009-10 to 2021-22. In 2021-22, various services provided by IBA accounted for just under 26.7 percent of revenue, interest derived from its lending just over 18.7 percent and revenue from government appropriations just under 13.2 percent. Income derived from the unwinding of concessional discount accounted for 28.5 percent of revenue. The trends in IBA revenue streams are illustrated in Figure 33 below.

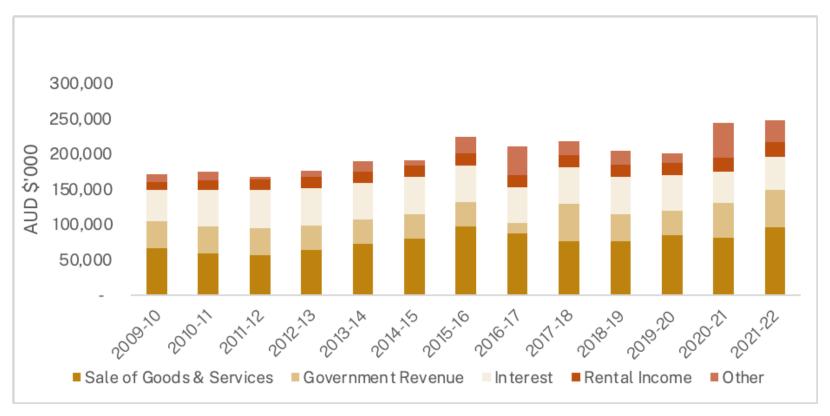


Figure 33 - Trend in IBA Revenue Streams (2009-10 to 2021-22)

Indigenous Land and Sea Corporation

Initially established in accordance with the Land Fund and Indigenous Land Corporation (ATSIC Amendment) Act 1995 (Cth), the then Indigenous Land Corporation (ILC) represented a legislated response from the Australian Government to the Mabo High Court Decision. Its principal policy purpose was to provide a mechanism for land to be acquired by First Nations interests that are unlikely to directly benefit from the Native Title Act 1993 (Cth). Since 2005, the ILC, and subsequently the Indigenous Land and Sea Corporation (see below) has operated as statutory authority established in accordance with Part 4A of the Aboriginal and Torres Strait Islander Act 2005 (Cth). It is charged with the specific responsibility of assisting First Nations persons to acquire land; and to assist First Nations persons to manage First Nations-held land so as to provide economic, environmental, social or cultural benefits to First Nations people.

At the same time as the establishment of the initial ILC in 1995, a special account was established with the purpose of providing a secure income stream to the ILC in perpetuity. Since its establishment, the Aboriginal and Torres Strait Islander Land Fund (and subsequently Land Account) has been managed by the Department of Prime Minister and Cabinet under the jurisdiction of the *Financial management and Accountability Act 1997* (Cth), with the Commonwealth making an annual payment to the account.

In late 2018, legislative changes, 179, provided greater certainty to the ILC's principal source of funding and extended its remit. These

¹⁷⁹ Aboriginal and Torres Strait Islander Land and Sea Future Fund Bill 2018, Aboriginal and Torres Strait Islander Land and Sea Future Fund (Consequential Amendments) Bill 2018 and Aboriginal and Torres Strait Islander Amendments (Indigenous Land Corporation) Bill 2018.

amendments came into effect on 1 February 2019, extending the now Indigenous Land and Sea Corporation's (ILSC) remit to include interests in the sea and freshwater estate. As such, the ILSC now exists to acquire and grant rights and interests in land and water, and to assist First Nations people to manage land, sea and water country. Legislative changes have also seen the previous Land Account become the Aboriginal and Torres Strait Islander Land and Sea Future Fund.. The Future Fund is managed by the Future Fund Management Agency and Board of Guardians, with funding released annually to the ILSC through the ILSC Funding Special Account in accordance with Section 20(3) of the Aboriginal and Torres Strait Islander Land and Sea Future Fund Act 2018 (Cth). The Aboriginal and Torres Strait Islander Land and Sea Future Fund Act 2018 (Cth) includes provisions relating specifically to:

- Investment mandate requiring the Minister to issue a mandate with respect to how Future Fund monies are to be managed. The current mandate requires the Future Fund Board to adopt a benchmark return of the Consumer Price Index plus 2.0 to 3.0 percent per annum net of investment fees over the long term.
- Crediting amounts to the Future Fund providing ability of the Minister to credit monies to the Future Fund special account. Under the Future Fund legislation, the Future Fund will receive a minimum guaranteed annual payment of AUD \$45 million (2010-11 values), indexed annual by the Consumer Price Index. The Aboriginal and Torres Strait Islander Act 2005 also provides for additional payments to be made to the ILSC where the actual capital value of the Future Fund exceeds its real capital value.
- Debiting amounts from the Future Fund allowing specific transfers to the ILSC Funding Special Account so that annual payments can be made to the ILSC, and to transfer amounts to the ILSC Funding Special Account so that discretionary additional payments can be made to the ILSC.

From 1995-96 to 2003-04, an amount of AUD \$121 million per annum (indexed to 1994 values) was appropriated annually from the Commonwealth Consolidated Revenue Fund to the Land Fund (subsequently known as the Land Account). This was undertaken to achieve a self-sustaining fund. From 2004-05 the ILC received a 'realised real return' from the investments of the Land Fund.

Since 2004-05, the funds under management has in the Aboriginal and Torres Strait Islander Land and Sea Future



Fund has grown at a CAGR of 2.4 percent, from AUD\$1.4 billion to just over AUD \$2.1 billion today. This is illustrated in Figure 34 below.

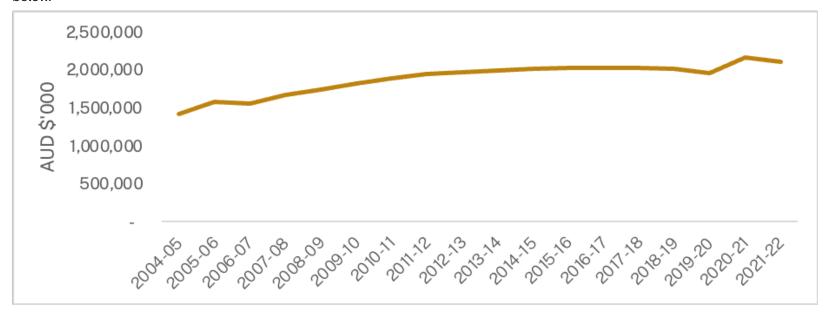


Figure 34 - Total Equity in the Aboriginal and Torres Strait Islander Land and Sea Future Fund (2004-05 to 2021-22

Trust associated with land access arrangements

Resources industry trusts

While the 1960s marked the first significant recognition of First Nation's land rights by industry, ¹⁸⁰, formal arrangements did not start to become common practice until the second decade of the 21st Century. A practice that is particularly prevalent in the Australian resources industry is for companies to enter into private, often confidential arrangements directly with traditional owners, where monetary compensation is paid into trusts for the benefit of those traditional owners as compensation for the right to conduct certain activities on their traditional lands – these payment are broadly akin to the concept of a royalty as discussed in the Land Rights section of this paper.

Payments by companies can include lump sum and periodic royalty payments and in many cases, significant sums have accumulated in trusts, particularly in the Pilbara Region of Western Australia, where it is estimated that billions of dollars exist across such structures. In most, if not all cases, the appointed trustee is an independent professional trustee and while the traditional owners have some input to how distributions from the trust are made and for what purposes they can be applied, it is understood that this is typically subject to significant constraints under the trust deed. These arrangements are discussed further below.

In most instances, the structure involves revenue in the form of lump sum payments or royalties being distributed between a charitable trust and a direct benefits trust. In accordance with the law, distributions from a charitable trust can only be made for prescribed charitable purposes such as education, health, sport, community and culture and are intended to benefit the wider local First Nations community. Subject to the rules and processes prescribed by the Trust Deed, distributions from the Direct Benefits

¹⁸⁰ In 1963. BHP signed an agreement providing a lump sum payment and royalties to access land on Groote Eylandt (Anindyliakwa Country)

trust can typically be used for a wider range of legitimate expenditure purposes, with the beneficiaries typically being individual traditional owners, their families and interests.

The governance structure associated with these trusts is understood to usually include traditional owner beneficiaries and a professional trustee, whose governance function is constrained to ensuring compliance with the trust deed. The following Figure 35 illustrates what is understood to be a typical trust structure.

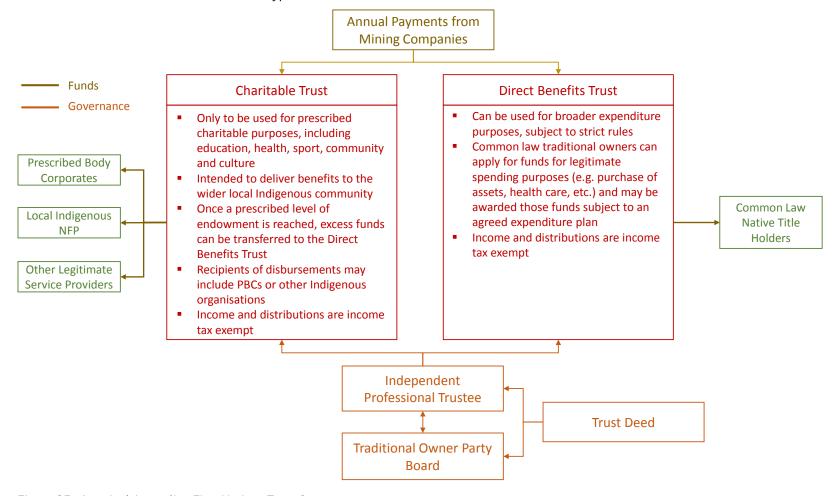


Figure 35 - A typical Australian First Nations Trust Structure

As illustrated in Figure 42 below, modelling based on information that is available in the public domain, combined with some assumptions, estimates that between 2000-01 and 2019-20 a total of approximately \$2.0 billion has been paid across trusts associated with BHP and Rio Tinto iron ore mining operations in the Pilbara. Importantly, as a result of expanding capacity and high iron ore prices, around half of these payments have been made in the period 2015-6 to 2019-20. It must be stressed that while every effort has gone into sourcing information pertaining to the land access agreements that is available in the public domain, the terms of these arrangements are treated as commercial-in-confidence by the parties and as such there is potential for significant inaccuracy associated with this estimate and as such it should only be treated as indicative.

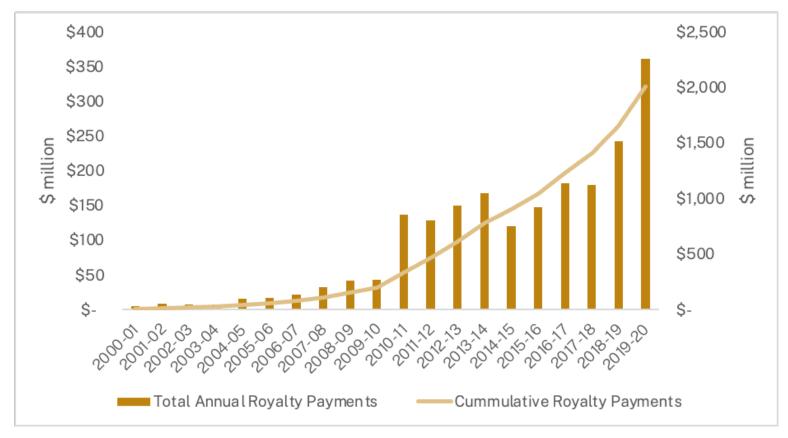


Figure 37 - Estimated payments made by BHP and Rio Tinto to land access trusts (2000-01 to 2019-20)

Regardless of the assumption driven nature of this estimate, its outcome should also be considered in the context of:

- While BHP and Rio Tinto are the largest iron ore producers in the Pilbara (collectively accounting for around 75 percent of production in 2019-20), payments are made to trust from other Pilbara iron producers; and
- The total value of iron ore produced from the Pilbara region of Western Australia in 2019-20 was \$103 billion. In 2020-21 it was \$156 billion and \$137 billion in 2021-22. **In Therefore, subject to any payment ceiling provisions that may be included in land access arrangements, it is reasonable to predict that there has been a significant escalation in trust payments over the past several years.

Settlement assets

As discussed in the first seminar of *Murru waaruu* series, ¹⁸², trusts that hold funds to the benefit of First Nations are a common feature of settlements that have taken place between First Nations and State Governments to date. While in their relative infancy, these too will grow in quantum, albeit not likely to the same extent as trust arrangements that underpin land access agreements with the resources sector.

¹⁸¹ Department of Mines, Industry Regulation and Safety, Minerals statistics Digests, 2019-20, 2020-21 and 2021-22, Western Australian Government. Perth

¹⁸² Barnett, R. (2023), Murru waaruu Economic Development Seminar Series: Seminar 1 – Treaty and Settlement Background Paper, First Nations Portfolio, Australian National University

Creating value from First Nations financial assets

It is important to stress that the financial assets that reside in the aforementioned statutory and trust structures is not 'idle capital'. The corpus forms an endowment whereby returns can be used to fund the operations and investments of statutory instruments such as IBA and ILSC and in the context of the ABA and private trusts, distributions that can be invested in purposes as prescribed by legislation in the case of the ABA and the trust deeds in the case of private arrangements. Further and as mentioned in the introduction to this section, in the case of the ABA and private arrangements, the specific First Nations beneficiaries are prescribed.

However, withstanding these circumstances and in the context of the subject matter of this paper – utilising assets for economic self-determination-the amount of the collective financial asset across these structures, whilst not able to be determined with certainty, is at least significant. With increasing opportunities to leverage these funds, not just against public sources, but also the rapidly growing responsible investment market, the question has to be asked as to whether this is the best use of this capital.

The constraints

There are two primary constraints relating to exploring if financial assets held in these structures can be better used for economic self-determination:

- 1. Understanding the opportunities that could be pursued and the sources of external capital that could be leveraged in pursuit of those opportunities; and
- 2. Greater First Nations beneficiary control over the management of the financial assets.

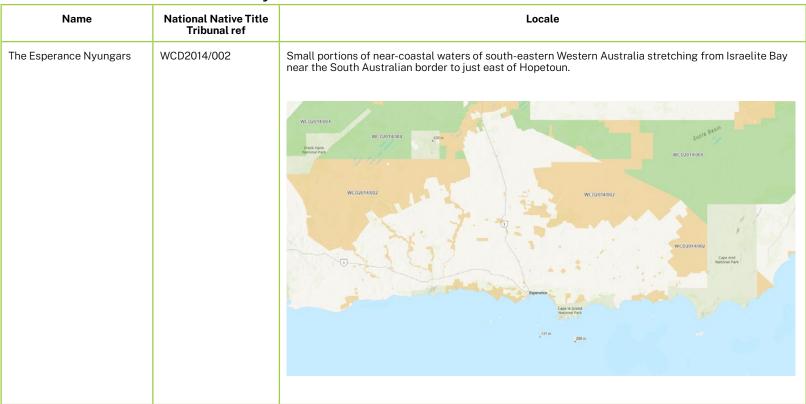




Appendix 1: First Nations sea country awards under the Native Title Act

As discussed above in this paper, awards of sea country under the Native Title regime are a relatively new development under Australian law. Separated by national jurisdiction, these are summarised below. Diagrams and summary description are intended for illustrative purposes only and should not be relied upon for any purpose.

Western Australian sea country under Native Title



Name	National Native Title Tribunal ref	Locale
Nanda People and Nanda #2; Nanda People Part B, Malgana 2 and Malgana 3	WCD2018/011 WCD2019/014	Small portions of near-coastal waters of central Western Australia bordering Kalbarri National Park extending north to Shark Bay. WCD2918/01 WCD2918/01 WCD2918/01
Gnulli, Gnulli #2 and Gnulli #3-Yinggarda, Baiyungu and Thalanyji People	WCD2019/016	Waters of north-west Western Australia off Coral Bay and Cape Range National Parks. WC02019616 WC02019616 WC02019616 WC02019616 WC02019616 WC02019616 WC02019616

Name	National Native Title Tribunal ref	Locale
Yaburara & Mardudhunera People	WCD2018/006	Small portion of near-coastal waters of north-west Western Australia west of Burrup Peninsula.
Kariyarra	WCD2018/015	Waters of northern Western Australia west of Port Hedland. Pert Hedland Recorded WCD2018/015 WCD2018/015 WCD2018/015 WCD2018/015

Name	National Native Title Tribunal ref	Locale
Ngarla and Ngarla #2 (Determination Area A)		Waters of northern Western Australia just east of Port Hedland. Ord Renges WCD2007/003 WCD2019/013 WCD2019/013 WCD2019/013
Nyangumarta People (Part A); Nyangumarta-Karajarri Overlap Proceeding (Yawinya)	WCD2009/001 WCD2012/001	WcD2012/001 WcD2012/001 WcD2012/001

Name	National Native Title Tribunal ref	Locale
Karajarri People (Area B); Nyangumarta-Karajarri Overlap Proceeding (Yawinya)	WCD2004/002 WCD2012/001	WCD2012/601 WCD2012/601 WCD2012/601
Rubibi Community	WCD2006/001	Waters and embayment of north-eastern Western Australia just south of Broome. WCD200 WCD2006 WCD2006/001 WCD2006/001 WCD2006/001

Name	National Native Title Tribunal ref	Locale
Jabirr Jabirr/Ngumbarl	WCD2018/004	Waters of north-eastern Western Australia just north of Broome.
		and Controlled Services And Co
Bindunburr	WCD2018/005	Waters and embayment of north-eastern Western Australia north and west of Derby.
		WC C2F1 59(2)

Name	National Native Title Tribunal ref	Locale
Bardi and Jawi Native Title Determination	WCD2005/003	Waters surrounding the Dampier Peninsula and Sunday Island in north-eastern Western Australia. WCD2005003
Mayala People	WCD2018/009	Islands to the north-west of Wyndham Range Peninsula.

Name	National Native Title Tribunal ref	Locale
Dambimangari	WCD2011/002	Near-shore waters of the Wyndham Range Peninsula and waters extending from the Peninsula north to Price Regent National Park.
		WCD2011/002
Uunguu Part A	WCD2011/001	Waters of far north-eastern Western Australia extending from Prince Regent National Park to Kalumburu.

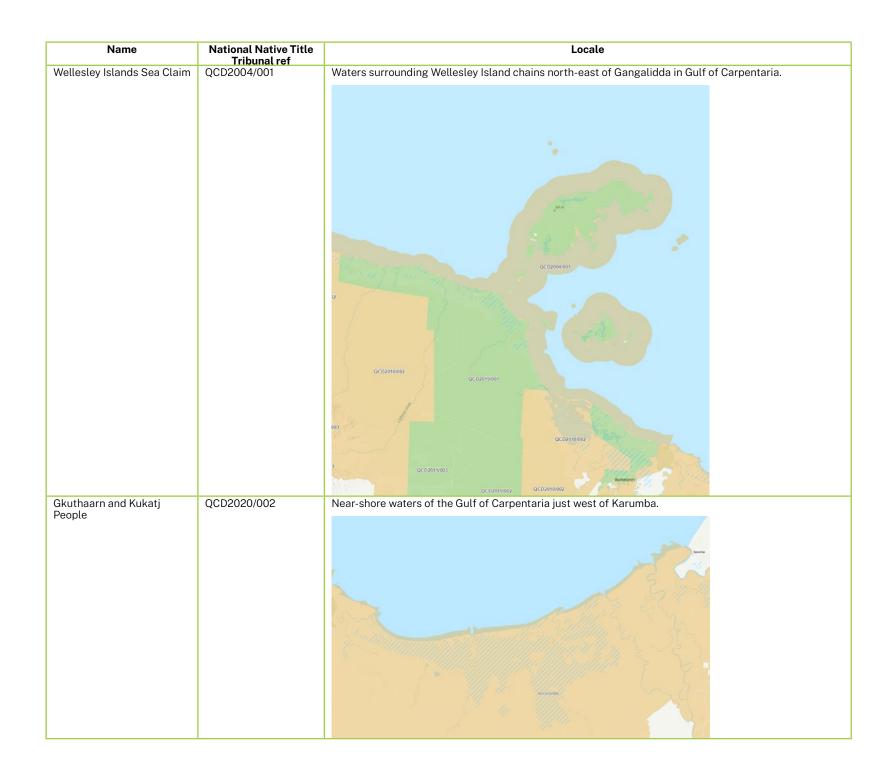
Name	National Native Title Tribunal ref	Locale
Balanggarra (Combined)	WCD2013/005	Near coastal waters of far north-eastern Western Australia.

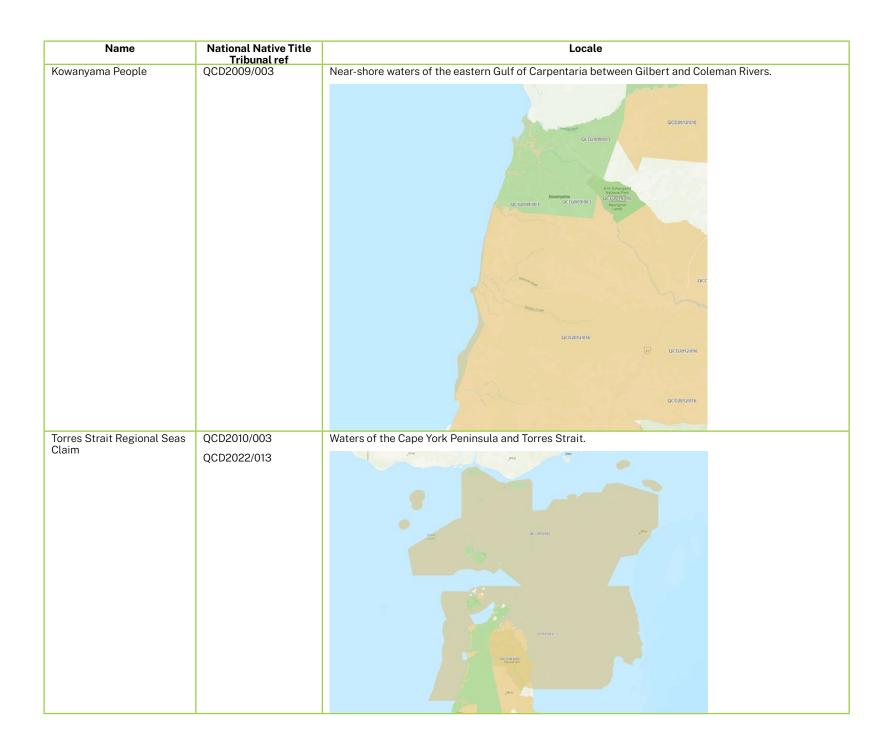
Northern Territory sea country under Native Title

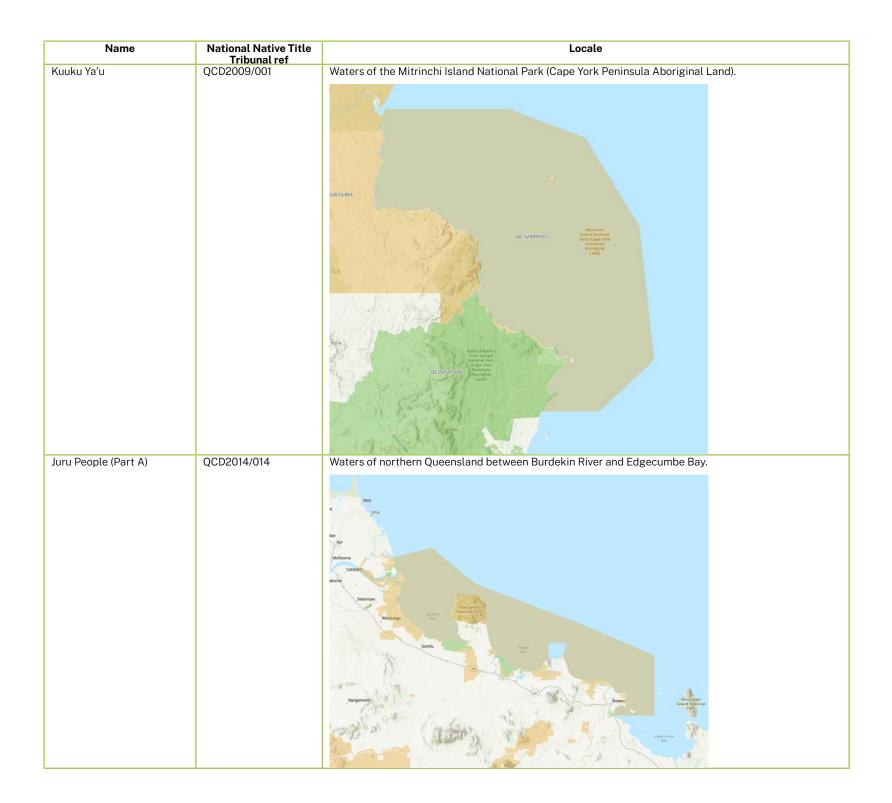
Name	National Native Title Tribunal ref	Locale
Croker Island	DCD1998/001	Waters surrounding Minjiang (Croker Island) and far eastern portion of Arafura Sea.
		(DC 20164-01). Western (DC 20164-01). Gregorian States From College (College).

Queensland sea country under Native Title Act

Name	National Native Title Tribunal ref	Locale
Gangalidda & Garawa People #2	QCD2015/003	Small portion of waters of Gulf of Carpentaria immediately adjacent to Queensland-Northern Territory border.

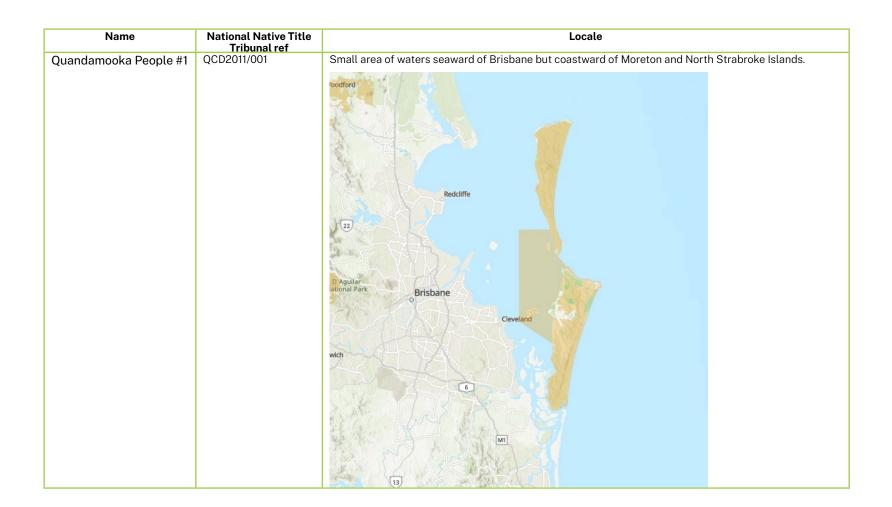


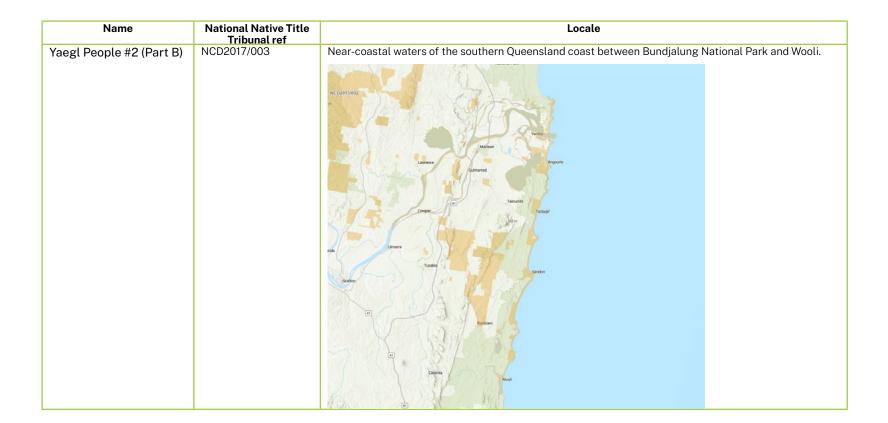




Name	National Native Title Tribunal ref QCD2020/001	Locale
Yuwibara People	QCD2020/001	Waters of the central Queensland coast between Midge Point and Cape Palmerston National Park.
Darumbal People	QCD2016/006	Various waters of the central Queensland coast between Broad Sound and the Fitzroy River, but not including the Keppel Bay Islands.







New South Wales sea country under Native Title Act

As at the date of this paper, there have been no claims by First Nations to sea country under the Native Title Act within the State of New South Wales.

Victorian sea country under Native Title Act

Table 20 - Victorian First Nations sea country under Native Title Act

Name	National Native Title Tribunal ref VCD2010/001	Locale
Gunai/Kurnai People	VCD2010/001	Various waters off Ninety Miles Beach extending southwards and westwards to Corner Inlet Marine & Coastal Park.
Gunditjmara-Part A	VCD2007/001	Near-coastal waters between Yambuk Coastal Reserve westwards to the South Australian border.

South Australian sea country under Native Title Act

Name	National Native Title Tribunal ref	Locale
Ngarrindjeri and Others Native Title Claim	SCD2017/002	Embayments, estuaries and near-coastal waters of eastern South Australia between Tilley Swamp and Cape Jervis.
(Aroa 2)	SCD2019/001 SCD2022/001	Near-coastal portions of eastern edge of Spencer Gulf and Port Augusta.

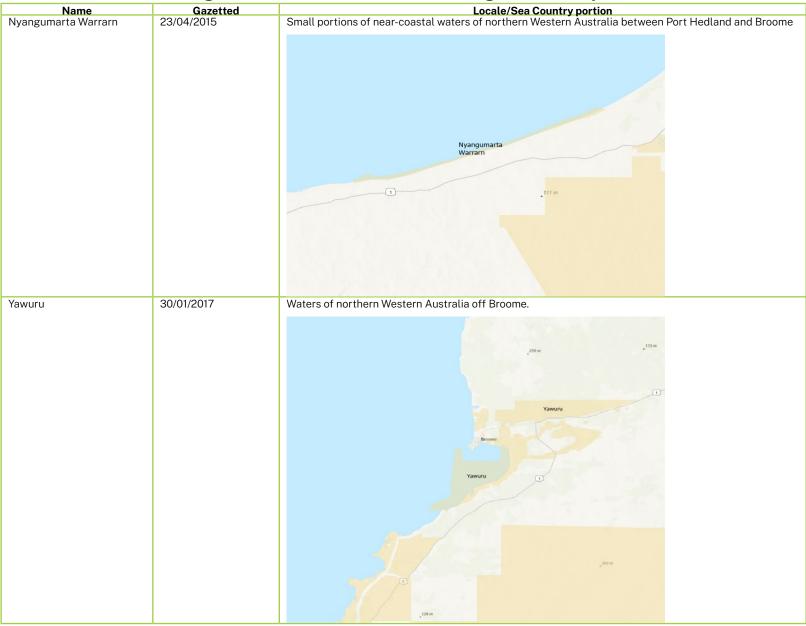
Name	National Native Title Tribunal ref	Locale
Barngarla Native Title Claim	SCD2016/001	Near-coastal waters of eastern South Australia from Port Augusta to Port Lincoln.

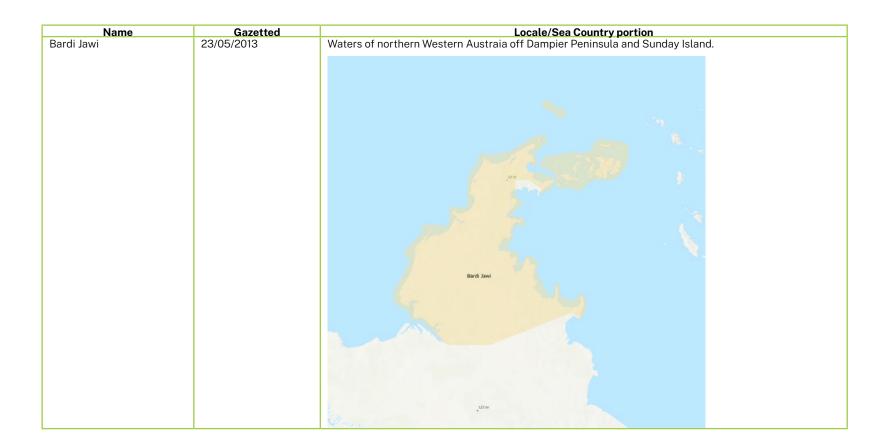
Name	National Native Title Tribunal ref	Locale
Wirangu People-Part A	SCD2022/002	Near-coastal waters of central South Australia from Venus Bay to Acraman Creek Conservation Park.
		Perhable Curgena Perhable Curgena Chandida Westal Vanerble Iniciter Calca Mortana 2007 or Tyringa 205 or David Bay Venus
Far West Coast	SCD2013/002	Near-coastal waters of western and central South Australian from Acraman Creek Conservation Park westwards to the Western Australian border.
		SCOTONIC) SERVICE OF A STATE OF

Appendix 2: Indigenous Protected Areas featuring sea country

As discussed above in this paper, while not constituting full proprietary rights, Indigenous Protected Areas can nonetheless represent an important avenue of First Nations control over traditional lands and waters. Separated by national jurisdiction, these are summarised below. Diagrams and summary description are intended for illustrative purposes only and should not be relied upon for any purpose.

Western Australian Indigenous Protected Areas featuring sea country





Northern Territory Indigenous Protected Areas featuring sea country

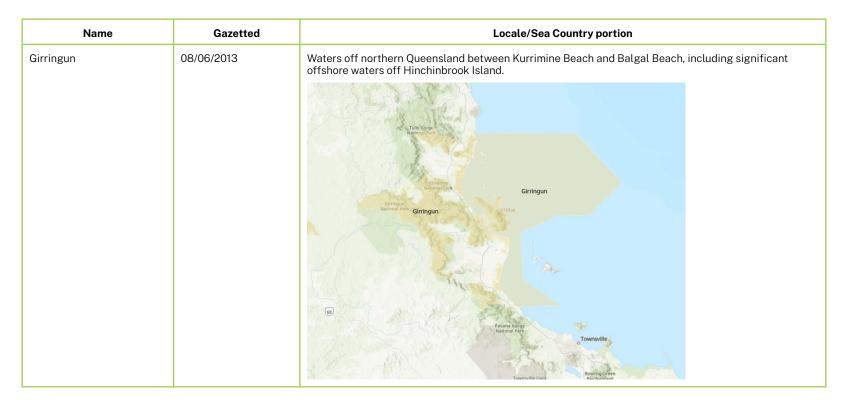
Name	Gazetted	Locale/Sea Country portion
Marri-Jabin (Thamurrurr Stage 1)	20/10/2010	Small portions of near-coastal waters north of Wadeye/Port Keats. Marn-Jabin (Tharmour) - Stage 1
Djelk – Stage 2 (overlap with Crocodile Islands Maringa)	20/03/2022	Waters of central Northern Territory between Jungle Creek and Crocodile Islands.

Name	Gazetted	Locale/Sea Country portion
Crocodile Islands Maringa (overlap with Djelk – Stage 2)	21/03/2022	Waters of central Northern Territory between Crocodile Islands and Elcho Island chain. Crocodile Islands Marriya
Dhimurru	16/03/2001	Waters of central Northern Territory off Nhulunbuy/Yirrkala.



Queensland Indigenous Protected Areas featuring sea country

Name	Gazetted	Locale/Sea Country portion
Thuwathu/Bujimulla	24/11/2013	Waters of the Wellesley Island chain in central Gulf of Carpentaria.
Eastern Kuku Yalanji	08/05/2013	Large stretch of waters off northern Queensland between Walsh Bay and Port Douglas. February Radia February



New South Wales Indigenous Protected Areas featuring sea country

There are no Indigenous Protected Areas featuring sea country within New South Wales waters.

Victorian Indigenous Protected Areas featuring sea country

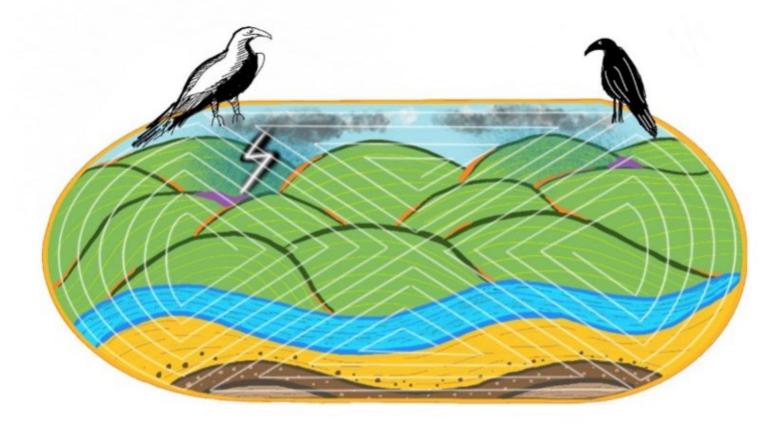
There are no Indigenous Protected Areas featuring sea country within Victorian waters.

South Australian Indigenous Protected Areas featuring sea country

There are no Indigenous Protected Areas featuring sea country within South Australian waters.

Tasmanian Indigenous Protected Areas featuring sea country

Name	Gazetted	Locale/Sea Country portion
Risdon Cove	12/06/1999	Small section of estuarine portion of Derwent River south of Meehan Range Nature Recreation Area. Meehan Range Recreation Area Risdon Recreation Area Risdon Recreation Area Risdon State Radon State Reserve
Putalina	12/06/1999	Small section of Oyster Cove south of Lower Snug Recreation Reserve. Cover Snug Cover Snug



Yukeembruk Yibaay-maliyan mayiny (The Crow and Eagle-hawk People)

Crow and Eagle-hawk men lived at opposite ends of the Brindabella (Goondawarra) mountain range. Between the two camps lived two sisters, who were under the protection of Yibaay-Maliyan because they were related to him. Yukeembruk wished to marry the sisters, but they were forbidden to him by kinship laws. Upset by Yibaay-maliyan's refusal to approve marriage, Yukeembruk decided to kill his enemy's son. While Yibaay-maliyan was out hunting he tricked the boy to eat and drink until his belly was full, then he speared him. Yibaay-maliyan returned from hunting early as he knew something was wrong. While hunting he missed two wallabies, which had never happened before. Yukeembruk tried to make Yibaay-maliyan believe that many men came to camp, killed the boy and wounded Yukeembruk himself in the leg. The two men dug a burial site, but Yibaay-maliyan who had not been deceived by the story, tricked Yukeembruk into testing the size of the grave, placed his boy's body on top of him and buried the murderer alive. Yukeembruk dug his way out like a wombat but was transformed into a Crow. Yibaay-maliyan's camp was struck by lightning and he was transformed into an Eagle.

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