



**Submission in response to: Managing Water in the
Fitzroy River Catchment: Discussion Paper For
Stakeholder Consultation**

30 June 2021

Submitted to:

Branch Manager

Water Allocation Planning

Locked Bag 10

Joondalup DC WA 6919

Submitted via email to: fitzroywaterdiscussionpaper@dwer.wa.gov.au

For further information on this submission, please contact:

Dr Anne Poelina (Chair, Martuwarra Fitzroy River Council) chair@martuwarrafitzroyriver.org

Citation

RiverOfLife, M., Poelina, A., Butterly, L., Carmody, E., Perdrisat, M., Taylor, K., Manero, A., Grafton, Q., Williams, J. (2021) Submission in response to: Managing Water in the Fitzroy River Catchment: Discussion Paper For Stakeholder Consultation. DOI: 10.6084/m9.figshare.15088404

Executive Summary

Our ancestor Woonyoomboo with our sacred ancestor serpent created the Martuwarra (Fitzroy River) and its tributaries. The Martuwarra is a gift to human and non-human beings, such as the birds, the fish, water creatures, animals and all the plants within this system ... we advocate the protection of all river tributaries and wetlands which re-charge and connect the ancient aquifers underground to surface water systems.

[Walalakoo Aboriginal Corporation Research Committee in Martuwarra Fitzroy River Council, A Conservation and Management Plan for the National Heritage listed Fitzroy River Catchment Estate, p 10]

The authors of this submission and the WA Government agree that the Martuwarra-Fitzroy River is of great importance. As noted in the foreword to the 'Managing Water in the Fitzroy River Catchment: Discussion Paper for Stakeholder Consultation' (**Fitzroy Paper**): 'The Fitzroy River has unique environmental and cultural values of national and international importance that make the river and the surrounding Fitzroy Valley one of the most extraordinary assets in the State'.¹ It must be the intention of the State Government and all relevant stakeholders that the Martuwarra-Fitzroy River is kept alive and healthy for the benefit of future generations. In this submission we emphasise that the way to protect the Martuwarra-Fitzroy, whilst balancing responsible and sustainable economic development (particularly in Aboriginal communities), is through co-designing a water governance model with the Martuwarra Fitzroy River Council (**Martuarra Council**).

At the base of this submission is the recommendation to co-design a governance model, that includes both a statutory catchment authority and legislation specific to the Martuwarra-Fitzroy, that brings together the Martuwarra Council, the WA Government and all relevant stakeholders. In doing so, the WA Government must recognise the Martuwarra Council as a key legal and cultural entity in relation to the Martuwarra-Fitzroy by engaging with the Martuwarra Council in co-designing the governance model. In return, the members of the Martuwarra Council are ready, and enthusiastic, to share their knowledges, their First Law [Indigenous laws and legal systems] and their innovative ideas for co-designing a governance model.

In this context, this submission emphasises that the WA Government must commit to the principle of Free, Prior and Informed Consent (**FPIC**) as the basis for all consultation processes and all substantive policy and legal reforms (including co-design of the governance model) with respect to the Martuwarra-Fitzroy. We request that the WA Government engage further with the Martuwarra Council so that both entities can collaboratively work together to operationalise FPIC.

¹ Government of Western Australia, *Managing water in the Fitzroy River Catchment: Discussion paper for stakeholder consultation* (Discussion Paper, November 2020) p 1 (**Fitzroy Paper**).

This submission also provides specific recommendations in relation to the regulatory and scientific context in which the Martuwarra-Fitzroy conversation is taking place. We emphasise several concerning uncertainties in relation to both water regulation and science that must be acknowledged before we can move forward. Further, we emphasise that the best available climate change information, combined with the precautionary principle, must be used to guide obtaining informed consent from Traditional Owners and water planning in the Martuwarra-Fitzroy.

We also draw specific attention to the wider regulatory context in which these submissions are being received and the broader Martuwarra-Fitzroy planning process is proceeding. First, WA's water laws are in urgent need of a major overhaul and do not contain provisions about Aboriginal water allocations. Second, in 2020 we saw the devastating destruction of Juukan Gorge and the clear acknowledgement that both WA and Commonwealth heritage laws are inadequate. Third, the Independent Review of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**) also revealed major deficits in the way that statute regulates Aboriginal heritage.² This regulatory background means that the WA Government cannot rely on this inadequate regulatory system to protect the environmental and heritage values of the Martuwarra-Fitzroy. Therefore, in the immediate term, the WA Government should prioritise how it can better recognise and protect the Martuwarra-Fitzroy through the co-designed water governance model.

Finally, we emphasise the unique and exciting opportunity that is available to the WA Government and all relevant stakeholders to work with the Martuwarra Council to co-design a governance model. As is identified in the Fitzroy Paper, we are in the unique position to 'plan rather than react' and it is a 'relatively undeveloped catchment with significant environmental and cultural values'.³ The Martuwarra-Fitzroy planning process is currently in its early stages. This means that the WA Government now has the opportunity to use the principles of FPIC to collaborate with the Martuwarra Council on a unique process, which could be a Western Australian first, in co-designing a water governance model.

This submission has been co-authored by the Martuwarra Council, the Water Justice Hub and the Environmental Defenders Office through a collaborative process. We look forward to our continuing conversation with respect to the Martuwarra-Fitzroy and the journey of co-designing the governance model. We would welcome the opportunity to meet with the WA Government on any of the issues raised in these submissions.

² Graeme Samuel, *The independent review of the Environment Protection and Biodiversity Conservation Act 1999* (Final Report, 28 January 2021) p. 57 (**Review of EPBC Act**).

³ Fitzroy Paper, pp 1 and 11.

Contents

Recommendations.....	7
1. Introduction	13
2. The Martuwarra Fitzroy River Council	14
3. First Law – foundation of caring for the Martuwarra-Fitzroy.....	16
4. Fundamental principle of free, prior and informed consent.....	18
5. Principles of Good Water Governance	20
6. Aboriginal water dispossession	21
7. Identification of overarching uncertainties.....	22
8. Adaptive management approach	23
i. Establish a Fitzroy advisory group.....	24
ii. Monitoring of water resources, environmental and cultural values will be required	28
iii.Future investigations and work will be identified	29
9. Not allowing the Martuwarra-Fitzroy River or its tributaries to be dammed (and/or diverted)	30
i. Infrastructure that spans the width of the Martuwarra-Fitzroy River and its tributaries will not be allowed	31
ii. Off-stream water storage infrastructure	32
iii.Floodplain harvesting – scientific and regulatory uncertainty.....	33
10. Licensing, review and monitoring in relation to both groundwater and surface water	35
11. The two options for consideration in the Fitzroy Paper.....	37
12. Taking groundwater.....	38
i. Option 1 of the Fitzroy Paper: Up to 108.5 GL/year of groundwater could be available for allocation	39
ii. Restrict abstraction from the Alluvial Aquifer	40
iii.Restrict abstraction from the Devonian Reef Aquifer.....	41
13. Taking surface water from the Martuwarra-Fitzroy River	41
i. Stage the allocation of surface water resources	41
ii. Individual projects could be required to stage water development	42
iii.Rules could control when surface water harvesting could occur	43
14. Providing opportunities for Aboriginal economic development	44
i. Fitzroy Paper Proposal: Establish a Fitzroy Aboriginal Water Reserve for native title holders to use for economic development on their native title lands.....	44
ii. Fitzroy Paper Proposal: A water licence would be required to access the Fitzroy Aboriginal Water Reserve.....	49

15. Regulatory requirements for protecting cultural and environmental values.....	49
i. Best practice engagement with Traditional Owners will be required as part of the regulatory approvals processes	49
ii. Development should avoid areas with environmental and cultural values including those already listed under existing legislation.	50
iii. Fitzroy National Park.....	50
iv. Water licensing requirements will be aligned with requirements of other Commonwealth and State environmental and heritage regulatory approvals.....	51
16. Conclusion	54

Recommendations

The Martuwarra Fitzroy River Council

Recommendation 1: The WA Government recognise the Martuwarra Council as a key legal and cultural entity in relation to the Martuwarra-Fitzroy by engaging with the Martuwarra Council in co-designing the Martuwarra-Fitzroy governance model. In return, the members of the Martuwarra Council are ready, and enthusiastic, to share their knowledges, their First Law and their innovative ideas for co-designing a governance model.

Recommendation 2: At a *minimum*, the WA Government must engage Traditional Owners in a culturally sensitive way throughout the process, not just as another stakeholder, but as the primary shareholders of knowledge about their cultural heritage; recognising their identity, ownership and custodianship and the connections they maintain with the River and its groundwater systems.

First Law – foundation of caring for the Martuwarra-Fitzroy

Recommendation 3: Greater recognition must be given to the centrality of Living Waters – which link material and spiritual connections - as being important to cultural and natural heritage in the region.

Recommendation 4: The WA Government, and other relevant stakeholders, should recognise the value of First Law (as well as related traditional knowledge, wisdom and water stewardship) in existing intergenerational management of the River Country by engaging with the Martuwarra Council to incorporate First Law into the co-designed governance model.

Fundamental principle of free, prior and informed consent

Recommendation 5: The WA Government must commit to the principle of Free, Prior and Informed Consent as the basis for all consultation processes and all substantive policy and legal reforms (including co-design of the governance model) with respect to the Martuwarra-Fitzroy.

Recommendation 6: In the context of FPIC, the WA Government should ensure Aboriginal people understand and have adequate knowledge of the planning issues and understand the consequences and outcomes that may result from any governance model or plan, and the contribution of their cultural knowledge, values and perspectives.

Recommendation 7: In the context of FPIC, the WA Government should respect the cultural diversity of the Indigenous communities in the Martuwarra-Fitzroy River catchment by providing opportunities for consultation that are accessible to all and timeframes that allow all people to be able to participate.

Aboriginal water dispossession

Recommendation 8: The WA Government must acknowledge impacts of Aboriginal water dispossession and commit to reversing Aboriginal water dispossession by working with the Martuwarra Council (and other Traditional Owners) to co-design the Martuwarra-Fitzroy governance model.

Recommendation 9: The WA Government must acknowledge the need for distributive equity for Traditional Owners who are downstream from proposed developments and the associated risks to their Country, waters and culture.

Identification of overarching uncertainties

Recommendation 10: Use best available climate change information to guide water planning in the Martuwarra-Fitzroy catchment and, if necessary, commission additional independent research in relation to climate change.

Recommendation 11: Acknowledge uncertainty about impacts of extraction and the limited understanding of groundwater/surface water connections and make sure decision-making processes reflect this uncertainty and seek to mitigate risk.

Adaptive management approach

Recommendation 12: Collaboration must start with the co-designing of the long-term governance model for the Martuwarra-Fitzroy.

Recommendation 13: Adaptive management must include monitoring and evaluating the impact of changes to flows from extraction and the impacts of climate change and changing land use. These impacts must be monitored and evaluated with respect to both natural *and* cultural values and significant cultural places. Following monitoring and evaluation, there must be ways to respond and make necessary changes to water extraction(s) efficiently and effectively. Further, Traditional Owners must be directly involved in this monitoring.

Recommendation 14: The WA Government must collaborate with the Martuwarra Council to co-design the water planning and governance model in the Martuwarra-Fitzroy catchment. This governance model must include legislation specific to the Martuwarra-Fitzroy catchment.

Recommendation 15: The Martuwarra-Fitzroy should have a specific statutory body, similar to a catchment authority, that brings together the Martuwarra Council, the WA Government and all relevant stakeholders. This is one part of the co-design process.

Recommendation 16: As an initial step, to progress recommendations 13 and 14, the WA Government should meet with the authors of this submission to discuss other Australian/overseas examples and begin the conversation about the co-design process in the Martuwarra-Fitzroy River context.

Recommendation 17: In designing the Martuwarra-Fitzroy governance model, the model must ensure (catchment-wide) higher order objectives and these objectives must be legally enforceable.

Recommendation 18: In designing the Martuwarra-Fitzroy governance model, the model must have a buffer zone to protect the River and its floodplains and this buffer must be legally enforceable.

Recommendation 19: In designing the Martuwarra-Fitzroy governance model, the model must integrate First Law and traditional ecological knowledge as Indigenous science into the planning framework and these features must be legally enforceable.

Recommendation 20: The co-designed governance model could be complemented by gazettal of the catchment as an Indigenous Protected Area.

Recommendation 21: There must be robust monitoring for environmental and cultural impacts.

Recommendation 22: There must be robust metering of water extractions, and this includes ensuring the quality of all meters in the Martuwarra-Fitzroy region.

Recommendation 23: The WA Government must ensure that the metering system is compliant with the Non-Urban Water Metering Framework and metering of this standard must be a condition of licences. The WA Government must introduce telemetry, and in the meantime, ensure that self-reading meters is not permissible for reporting purposes.

Recommendation 24: Due to the limitations of current WA water legislation, consideration must be given to a statutory catchment authority in the context of the Martuwarra-Fitzroy and legislation that is specific to the Martuwarra-Fitzroy.

Recommendation 25: *At a minimum*, if a water allocation plan is going to be prepared, the WA Government will need to undertake extensive consultations with the Martuwarra Council as to what additional research and investigations are necessary.

Not allowing the Martuwarra-Fitzroy River or its tributaries to be dammed (and/or diverted)

Recommendation 26: We support the WA Government's stance that new dams, weirs, barrages and other infrastructure that span the width of the waterway would have a significant impact on the flow of the river and should not be supported.

Recommendation 27: In line with principles of FPIC, the construction of *any* infrastructure (for example, infrastructure that does not 'span the width' of the Martuwarra-Fitzroy) should require formal consent by Traditional Owners and be subject to public review and scrutiny.

Recommendation 28: All diversions (including floodplain harvesting) must be accounted for and integrated into water management processes for the catchment, including through

appropriate measurement, licensing, and incorporation into water accounting, and hydrological and climate modelling.

Recommendation 29: The WA Government needs to undertake an urgent audit to assess all private structures (including storages) and estimate likely current volumes being diverted from floodplains. This audit must then be made publicly available and incorporated into all water management processes (ie. modelling, water accounting, sustainable diversion limits for the catchment and licencing).

Recommendation 30: In the context of FPIC, Traditional Owners must be consulted about regulatory issues relating to floodplain harvesting.

Licensing, review and monitoring in relation to both groundwater and surface water

Recommendation 31: Adopt a moratorium on all new extractive water licences until the Martuwarra-Fitzroy (co-design) planning process is completed.

Recommendation 32: Adopt a precautionary principle approach to all water allocations, recognising a sustainable allocation will not be able to be determined on a system-wide basis in the absence of longitudinal ecological data and groundwater and surface water connections, and to address the need for conservative baselines and ongoing monitoring.

Recommendation 33: All extractions must be managed to minimise adverse impacts, within clearly agreed and transparent limits, on flows, particularly in seasons of low inflows in the catchment. To reduce the risks of such adverse impacts, there should be strict pumping rules, annual licence reviews, accurate meters and effective compliance measures (such as licensees' penalties and spot checks).

Recommendation 34: There should be greater public transparency about adaptive management monitoring (and review) of water plans and about licence conditions, monitoring and compliance.

Recommendation 35: Build the capacity of Traditional Owners as a workforce to monitor compliance activity. The WA Government must commit to invest in building local Indigenous community capacity (e.g. through community researcher and ranger groups) to do this kind of compliance work).

The two options for consideration in the Fitzroy Paper

Recommendation 36: Rainfall variation, in the context of climate change, must be taken into account in relation to both proposed options (groundwater only (Option 1); surface water and groundwater (Option 2)).

Recommendation 37: The proposed allocation limit, in both options, is too high given the uncertainty as to rainfall variation and the Martuwarra Council's submission that the flow regimes are already allocated to traditional and environmental uses and values, sustaining people and places, plant, animal and fish populations and customary harvestable production as well as community and spiritual connections.

Taking groundwater

Recommendation 38: Measurement, documentation and modelling of the recharge mechanisms must be undertaken before Option 1 (*at a minimum*) is pursued.

Recommendation 39: Proposed groundwater extractions should only occur with metering of all bores, telemetering of the extraction from each bore to a central data point, outlier analysis and monitoring of extractions, and a system with adequate compliance and enforcement mechanisms.

Recommendation 40: Climate change must inform any groundwater allocation limits.

Recommendation 41: We agree that abstraction should be restricted from the Alluvial Aquifer, however, *when* the water is abstracted (such as in the dry season) should also be part of the restrictions.

Recommendation 42: We agree that abstraction should be restricted from the Devonian Reef Aquifer, however, *when* the water is abstracted (such as in the dry season) should also be part of the restrictions.

Taking surface water from the Martuwarra-Fitzroy River

Recommendation 43: Significantly more research is required before extraction decisions about surface water are made. This includes research into nutrient and agricultural pollutant loading on the coastal wetlands, and on the King Sound Estuary.

Recommendation 44: More research into current levels of extraction is required before decisions can be made about surface water allocation to individual projects.

Recommendation 45: We agree that controls should be instituted to ensure minimum flows before any surface water extractions can occur. They should also be instituted with respect to sufficient cumulative flows over a preceding period of time, to ensure to sustain cultural and environmental values.

Recommendation 46: All water extractions, with the exception of town water supplies and for stock, Indigenous communities and domestic use, should be treated as a residual. Then, only after defined cultural, environmental and sustainable outcomes are achieved should water extractions be permitted.

Recommendation 47: Annual individual water allocations of between 0 and 100 percent are required to take into account seasonal variability in water availability. The method for determining annual allocations must be codified, documented and completely transparent.

Providing opportunities for Aboriginal economic development

Recommendation 48: The WA Government must engage with Traditional Owners around WA, but in this case the Martuwarra Council, with respect to the concepts of Aboriginal Wa-

ter Reserves. In the context of FPIC, there needs to be more discussion, and consent from Traditional Owners, about the full range of economic development models.

Recommendation 49: To access the Aboriginal Water Reserve, Traditional Owners should not have to apply for a 'regular' licence (under the RiWI Act), rather an alternative and specific system should be negotiated with Traditional Owners.

Regulatory requirements for protecting cultural and environmental values

Recommendation 50: Best practice engagement must equate to Free, Prior and Informed Consent.

Recommendation 51: The Martuwarra Council must have a role in determining areas which have environmental and cultural values that must be protected.

Recommendation 52: There should be no abstraction of groundwater or harvesting of surface water within the new Fitzroy National Park. The only exception to this should be water for cultural purposes used by Traditional Owners.

Recommendation 53: An environmental assessment of any upstream extractions that may impact the environmental and cultural values of the National Park should be undertaken.

Recommendation 54: Water licensing requirements should be aligned with the requirements of other Commonwealth and State environment and heritage regulatory approvals. However, the focus should be on bringing all approval processes in line with principles of FPIC.

Recommendation 55: Given the current status of surrounding Commonwealth and State regulatory approval processes, in the immediate term, the WA Government should prioritise how it can better recognise the Martuwarra-Fitzroy as a heritage place through the co-designed water governance model.

Recommendation 56: The WA Government should consider use of the strategic assessment process under the EPBC Act to manage cumulative impacts of water licensing in the Martuwarra-Fitzroy.

Recommendation 57: All of the recommendations cited to ensure the protection and wellbeing of the Traditional Owner's sacred ancestral serpent being's right to life [*Yoon-goorookoo, Galbardu, Kurrapurrngu, Mangunampi, Paliyarra and Kurunga*] to live and flow. This will ensure the natural, environmental and cultural values of the Martuwarra-Fitzroy River National Heritage Listing and WA Aboriginal Cultural Heritage values are respected, and protected for current and future generations, nationally and globally.

1. Introduction

This submission is part of a broader response to a continuing conversation about water governance in the Martuwarra-Fitzroy Catchment. In this context, this submission must be read in conjunction with the Martuwarra Fitzroy River Council's (**Martuwarra Council**): 'A Conservation and Management Plan for the National Heritage listed Fitzroy River Catchment Estate' which is available online.⁴ The 15 position statements in that document underlie these submissions.

In this submission we have concentrated on directly responding to the six areas identified in the Fitzroy Paper – adaptive management approach to protect the health of the Fitzroy River; not allowing the Fitzroy River or its tributaries to be dammed; taking groundwater; taking surface water from the Fitzroy River; providing opportunities for Aboriginal economic development; and, regulatory requirements for protecting cultural and environmental values – as well as the two extraction options proposed for discussion.

However, our submission contains six important sections upfront. First, an explanation of the membership and cultural authority of the Martuwarra Council and why the WA Government must recognise the Martuwarra Council as a key legal and cultural entity in relation to the Martuwarra-Fitzroy. Second, an explanation of First Law as the foundation of caring for the Martuwarra-Fitzroy. Third, a brief summary of the fundamental principle of free, prior and informed consent which is crucial to the continuing conversations with respect to the Martuwarra-Fitzroy. Fourth, a brief overview of the principles of good water governance that should guide all discussions about the Martuwarra-Fitzroy. Fifth, a brief explanation of the impacts of Aboriginal water dispossession in Australia and the need for the WA Government to commit to actively reversing this dispossession. Finally, an identification of overarching uncertainties in the Fitzroy Paper stemming from associated scientific research and regulatory frameworks. These uncertainties will be further discussed at relevant parts of the submission but it is important to identify them upfront as they represent core concerns about the Fitzroy Paper's proposals.

⁴ Anne Poelina, Jason Alexandra and Nadeem Samnakay, *River of Life: A Conservation And Management Plan For The National Heritage Listed Fitzroy River Catchment Estate (No. 1)*. (Martuwarra Fitzroy River Council; Nulungu Research Institute, The University of Notre Dame Australia, 2020). <<https://doi.org/10.32613/nrp/2020.4>> (**Martuwarra Management Plan**).

2. The Martuwarra Fitzroy River Council

In 2018, the Martuwarra Council was established as a 'collective governance model to maintain the spiritual, cultural and environmental health of the Fitzroy River catchment'.⁵ The Martuwarra Council is comprised of Traditional Owners of Bunuba Dawangarri Aboriginal Corporation RNTBC, Walalakoo Aboriginal Corporation RNTBC, Yanunijarra Aboriginal Corporation RNTBC, the Warrwa Registered Native Title Claim Group, Wilinggin Aboriginal Corporation and the Yurriyangem Taam native title claim groups.⁶

In 2020, the Martuwarra Council (with the River as the primary author) produced 'A Conservation and Management Plan for the National Heritage listed Fitzroy River Catchment Estate' which is available online (**Martuwarra Management Plan**).⁷

This document was produced through a consultative process that began in 2016. As noted above, we ask that the WA Government and other relevant stakeholders read this plan in conjunction with these submissions. We also ask that the WA Government and other relevant stakeholders look at the Martuwarra Council website: <<https://martuwarrafitzroyriver.org/>>.

The Martuwarra Council considers the Martuwarra-Fitzroy to be communal property; an asset in the commons that belongs to everyone. The River must be promoted and protected for the benefit of present and future generations. The alliance of Traditional Owners has come together to stand with One Mind and One Voice as a united Council of Senior Elders from Traditional Owner Groups of the King Sound, Fitzroy River, and its Catchment (the Martuwarra).⁸ Their work is grounded in First Law and the guardianship system of rights, responsibility, and obligations.⁹

The Martuwarra Council seeks 'formal recognition that the River's variable flow regimes are an important feature of the cultural-natural heritage of the region'.¹⁰ Therefore, quoting from Position Statement 6 of the Martuwarra Management Plan:

⁵ Anne Poelina, Kathrine S. Taylor and Ian Perdrisat, "Martuwarra Fitzroy River Council: An Indigenous Cultural Approach To Collaborative Water Governance" (2019) 26(3) *Australasian Journal of Environmental Management* 236-254. <https://doi.org/10.6084/m9.figshare.12362921.v1>.

⁶ Anne Poelina, "Martuwarra Fitzroy River Council Strategic Communications Brief", *Figshare* (Webpage, 2020) <<https://doi.org/10.6084/m9.figshare.12362921.v1>>.

⁷ Martuwarra Management Plan.

⁸ Martuwarra Management Plan, p 17.

⁹ Anne Poelina, "Martuwarra Fitzroy River Council Strategic Communications Brief", *Figshare* (Webpage, 2020) <<https://doi.org/10.6084/m9.figshare.12362921.v1>>.

¹⁰ Martuwarra Management Plan, p 24 (Position Statement 6).

...any disturbance resulting from large scale irrigation extractions or other consumptive purposes is a threat to these nationally recognised heritage values and the Martuwarra's right to flow as a living entity. All the water that makes up these flow regimes is already allocated to traditional and environmental uses and values, sustaining people and places, plant, animal and fish populations and customary harvestable production as well as community and spiritual connections.¹¹

The Martuwarra Council have, and continue, to prepare guidelines and promote policies and protocols that advise third parties (including the WA Government) to better understand and comply with the aims and aspirations of Traditional Owners, including requiring mandatory consultation on cultural and natural heritage values.¹² This is in line with the principle of Free, Prior and Informed Consent that is discussed in Section 4.

In this context, and throughout this submission, we emphasise that the Martuwarra Council are not 'just another stakeholder' and must be given stronger decision-making rights than the current 'right to comment' on the Fitzroy Paper. The Martuwarra Council are a key legal and cultural entity in relation to the Martuwarra-Fitzroy. Position Statement 10 of the Martuwarra Management Plan states:

Establish Equitable Models of Co-Governance

The Martuwarra Council recognises that heritage protection relies on having equitable and continuing models of governance that recognise cultural knowledge and build on customary law. The Council's proposed models of co-governance would formalise the respect and application of these peaceful and respectful systems of co-governing. The Martuwarra Council has invited the Western Australian Government into negotiations on a co-governance model, offering an invitation to the Western Australian government to become a formal partner in one of the world's longest standing systems of social-ecological management.¹³

In preparation for co-designing the Martuwarra-Fitzroy governance model, the Martuwarra Council have been building their capacity in ways that are innovative on an international scale. Further, the Martuwarra Council is ready, and enthusiastic, to share their knowledge, their First Law and their innovative ideas for co-designing a governance model with the WA Government and other stakeholders. The Martuwarra Council are an organisation that the WA Government must engage with and should also support, promote and be proud of.

¹¹ Martuwarra Management Plan, p 24.

¹² Martuwarra Management Plan, p 25 (Position Statement 8).

¹³ Martuwarra Management Plan, p 25.

Recommendation 1: The WA Government recognise the Martuwarra Council as a key legal and cultural entity in relation to the Martuwarra-Fitzroy by engaging with the Martuwarra Council in co-designing the Martuwarra-Fitzroy governance model. In return, the members of the Martuwarra Council are ready, and enthusiastic, to share their knowledges, their First Law and their innovative ideas for co-designing a governance model.

Recommendation 2: At a *minimum*, the WA Government must engage Traditional Owners in a culturally sensitive way throughout the process, not just as another stakeholder, but as the primary holders of knowledge about their cultural heritage; recognising their identity, ownership and custodianship and the connections they maintain with the River and its groundwater systems.

3. First Law – foundation of caring for the Martuwarra-Fitzroy

As noted in the previous section, the work of the Martuwarra Council is grounded in First Law.¹⁴ First Law is the foundation of caring for the Martuwarra-Fitzroy and a ‘uniting principle for heritage planning’.¹⁵ As stated in the Martuwarra Management Plan:

...the Martuwarra and the life-giving effects of water serve as the unifying basis for strategic planning underpinned by First Law. First Law is the system of governance and law that Indigenous Australians have developed over tens of thousands of years. Under First Law, the Martuwarra continues to be a sacred living ancestral being. Traditional Aboriginal law focuses on maintaining the balance of the earth so that all things can prosper. This sustainable model, known as Earth-centred Law, is the basis for the Fitzroy River Declaration (Poelina et al., 2019).

Two traditional First Laws, Warloongarri (for the River) and Wunan (for the entire Kimberley region), are ancient laws for a holistic approach to regional governance that continues to be shared and respected by the Indigenous nations. These First Laws ensured the health of the Martuwarra and its Traditional Owners (Poelina et al., 2019). This Plan seeks to build on, support and sustain these approaches.

These laws are founded on the principle that the priority of law is to protect and manage the sustainable harmony of the land over the self-interests of humans. First Laws are framed around values and ethics of co-management and co-existence, which continue to facilitate inter-generational relationships between the shared boundaries of the River nations through ancient Songlines, and contemporary customs and practices. Under First law, the Traditional Owners of the Martuwarra regard the River as a living [sacred] ancestral being (the Rainbow Serpent), from source to seas, with its own “life-force” and “spiritual essence”.

¹⁴ Anne Poelina, "Martuwarra Fitzroy River Council Strategic Communications Brief", *Figshare* (Webpage, 2020) <<https://doi.org/10.6084/m9.figshare.12362921.v1>>.

¹⁵ Martuwarra Management Plan, p 37.

It is “the ‘River of Life’ and has a right to live and flow” (Poelina et al., 2019).¹⁶

Position Statement 1 and 2 of the Martuwarra Management Plan emphasise the importance of First Law. Adoption of First Law principles by the WA Government and other stakeholders will enable every person and body involved in managing the Martuwarra-Fitzroy to see the River as Living Waters enabling holistic sustenance of heritage and environmental values:

Position Statement 1: The Concept of Living Waters is Central to Sustaining Heritage Values The conventional approaches to cultural heritage conservation need to be broadened so that waters’ place in First Law, sociality, sacredness, identity and life giving are better recognised. The Martuwarra Council seeks greater recognition of the centrality of Living Waters – which link material and spiritual connections - as being important to cultural and natural heritage in the region.

Position Statement 2: Natural and Cultural Care are Interlinked The Plan is based on the underpinning position that First Law (customary law), knowledge, culture, language and the ecosystems are intricately connected. Further, the health and vitality of these connections and relationships are critical to environmental, social, physical and spiritual wellbeing and therefore, to the capabilities for cultural-natural heritage restoration and conservation. The Plan recognises the integrated and intricate connections between natural-cultural management (ethics of care), governance models and traditional knowledge systems. These are critical to the Traditional Owners spiritual, physical, and social health and wellbeing reflected through environmental health, and that the relationships between First Law, Living Waters, land and people are intrinsically intertwined.¹⁷

Living Water systems need to be respected and central to decision making processes. We address this further in Section 8 (Adaptive management approach).

Further, the WA Government and other relevant stakeholders must acknowledge Traditional Owners are considering how they best use native title, earth laws,¹⁸ First Law and Crown Law property rights to promote and protect people, land living waters and biodiversity.

Recommendation 3: Greater recognition must be given to the centrality of Living Waters – which link material and spiritual connections - as being important to cultural and natural heritage in the region.

Recommendation 4: The WA Government, and other relevant stakeholders, should recognise the value of First Law (as well as related traditional knowledge, wisdom and wa-

¹⁶ Martuwarra Management Plan, p 37.

¹⁷ Martuwarra Management Plan, p 38.

¹⁸ Australian Earth Laws Alliance, *What are Earth Laws?* <[What are Earth Laws? - Australian Earth Laws Alliance](#)>.

ter stewardship) in existing intergenerational management of the River Country by engaging with the Martuwarra Council to incorporate First Law into the co-designed governance model.

4. Fundamental principle of free, prior and informed consent

Western Australia's approach to the governance of the Martuwarra-Fitzroy should be judged against the fundamental international law principle that Aboriginal people must give their free, prior and informed consent in relation to decisions that impact protection of their heritage and Country.

EDO set out, in detail, the application of international law principles, in the context of Aboriginal heritage, in our submission to the Juukan Gorge Inquiry and also provided supplementary submissions relating to this issue.¹⁹ We particularly reference the *UN Declaration on the Rights of Indigenous Peoples (UNDRIP)* adopted by the UN General Assembly on 13 September 2007. We note that the UNDRIP is a declaration, not a convention. However, it is highly relevant that the Australian Government announced its support for the UNDRIP in 2009.

We note, in particular, UNDRIP articles 18, 19 and 26:

Article 18 Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions.

*Article 19 States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their **free, prior and informed consent** before adopting and implementing legislative or administrative measures that may affect them. [emphasis added]*

...

Article 26

1. Indigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired.

2. Indigenous peoples have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.

¹⁹ Environmental Defenders Office, Submission 107: Submission to the Inquiry into the destruction of 46,000 year old caves at the Juukan Gorge in the Pilbara region of Western Australia <[Submissions – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au/Parliamentary_Business/Committees/Senate/Environment/Inquiry_into_the_destruction_of_46000_year_old_caves_at_the_Juukan_Gorge_in_the_Pilbara_region_of_Western_Australia/Submissions)>.

3. States shall give legal recognition and protection to these lands, territories and resources. Such recognition shall be conducted with due respect to the customs, traditions and land tenure systems of the indigenous peoples concerned.

As stated in Article 19, the UNDRIP standard for consultation with Indigenous peoples is free, prior and informed consent (**FPIC**). This is a procedural standard (in that it informs the processes of consultation) as well as a substantive standard. The process of consultation should be carried out in good faith, and in all cases with the aim of achieving agreement or informed consent to development or a measure that will affect Indigenous peoples or communities.

In this context, there should be an absence of any type of coercion by the state. Consultation should be prior, and best practice is to involve Indigenous peoples at the inception stage of any decision or policy making. Consultation should be in a language that Indigenous peoples understand and inform them of all aspects of a project or a measure, including risks of the development or the impact of measures. From a substantive standpoint, states should take into account the concerns, demands and proposals expressed by the affected Indigenous peoples or communities and due regard should be given to them in the final design of the development or measure.

FPIC should also be seen as contextual, which means that the substantive nature of FPIC depends on the circumstances. In circumstances where decisions will threaten cultural and physical survival, including sacred sites or important sites, states should seek to affirmatively obtain consent. We submit that this higher standard is relevant and should apply in the context of the Martuwarra-Fitzroy.

The Martuwarra-Fitzroy planning process is currently in its early stages. This means that the WA Government now has the opportunity to use the principle of FPIC to collaborate with the Martuwarra Council to co-design a unique process, which could be a Western Australian first, in how to move forward. We request that the WA Government engage further with the Martuwarra Council so that both entities can collaboratively work together to operationalise FPIC in this context. We also address aspects of this in the remainder of our submission.

We also note, in the broader international law context, the right to self-determination; the right to physical and mental health; the right to life and the right to take part in cultural life.²⁰ These are all rights that relate to the governance of the Martuwarra-Fitzroy and the relationships of Traditional Owners to the Living Waters. We have concentrated on the principle of FPIC in this submission as it is the core of all our recommendations in the context of developing a governance model, but underlying the principle of FPIC are these international law rights.

²⁰ *International Covenant on Civil and Political Rights*, Arts 1, 6.1; *International Covenant on Economic, Social and Cultural Rights*, Arts 1.1, 12, 15.1(a)).

Recommendation 5: The WA Government must commit to the principle of Free, Prior and Informed Consent as the basis for all consultation processes and all substantive policy and legal reforms (including co-design of the governance model) with respect to the Martuwarra-Fitzroy.

Recommendation 6: In the context of FPIC, the WA Government should ensure Aboriginal people understand and have adequate knowledge of the planning issues and understand the consequences and outcomes that may result from any governance model or plan, and the contribution of their cultural knowledge, values and perspectives.

Recommendation 7: In the context of FPIC, the WA Government should respect the cultural diversity of the Indigenous communities in the Martuwarra-Fitzroy River catchment by providing opportunities for consultation that are accessible to all and timeframes that allow all people to be able to participate.

5. Principles of Good Water Governance

The sections immediately above (sections 2 – 4) explain the Martuwarra Council’s concept of water governance that is grounded in reciprocal relationships with Living Waters on Country and the importance of FPIC. This section emphasises overarching principles of good water governance that must be implemented. These principles must be adopted generally, but also in order to support the Martuwarra Council’s governance model.

Good water governance is, amongst other things, underpinned by a climate-ready legal regime. This is particularly important in northern Western Australia where climate projections, as noted in the Fitzroy Plan, lack a clear trend and could involve increased or decreased rainfall. This makes evidence-based decision-making vital. Further, to effectively adopt such measures, there must be proper measurement of water extractions, full transparency and the ability for third parties to enforce water laws where necessary. At a granular level, we submit that the principles of good water governance relevant to the Martuwarra-Fitzroy River include:

- an evidence-based cap on extractions at catchment scale which is informed by climate projections;
- an adaptive water allocation scheme with an embedded climate projection signal;
- protecting cultural and environmental flows from extraction;
- protecting different components of the flow regime (from no flows to overbank flows), each of which is required to maintain ecosystem function;
- managing public storages on the basis of climate projections, not historic climate data;
- accurately measuring and reporting water extractions (noting the difficulty of enforcing the law at the licence holder and catchment levels in the absence of reliable evidence);

- fulsome monitoring of groundwater resources, and appropriate limits on extractions which take into account connectivity with surface water, as well as the tendency to shift to consumption from aquifers during periods of water scarcity;
- accurate water accounting which, inter alia, takes into account return flows, water theft and any potential floodplain harvesting;
- a requirement to ensure modelling for compliance purposes is based on latest levels of development and its assumptions are transparent and communicable;
- the support, particularly for enforcement, of an independent regulator;
- third party standing to enforce water laws (this is particularly important given the virtual impossibility of obtaining a writ of mandamus compelling the government to enforce its own laws); and
- more generally, provisions in water legislation that are justiciable.

We will comment more particularly on aspects of these good water governance principles throughout this submission. However, we also emphasise them in the context of reform of the RiWI Act which is urgently required.

6. Aboriginal water dispossession

Aboriginal rights, values and interests are marginalised under settler-state legal instruments governing the management and sharing of water in Australia generally. There has been a failure of governments (both State/Territory and federal), as well as corporate irrigators and investors in water markets, to take any meaningful action to reverse this injustice.

As just one example, a recent peer-reviewed article by a team of respected Australian researchers found that in the New South Wales component of the Murray-Darling Basin, Aboriginal people own a mere 0.2% of available water, despite comprising almost 10% of the population.²¹ However, issues relevant to water dispossession are about more than just available water and also include, for example, having access to safe drinking water and ensuring that cultural heritage sites which are dependent on, or are near, water are not damaged. In this context, we note the EDO's submission (that is available online) to the UN Special Rapporteur on Human Rights and the Environment for input to a report on "Too Dirty, Too Little, Too Much: The Global Water Crisis and Human Rights" which fo-

²¹ Lana Hartwig, Sue Jackson and Natalie Osborne, 'Trends in Aboriginal water ownership in New South Wales, Australia: The continuities between colonial and neoliberal forms of dispossession' (2020) 99 *Land Use Policy* 104869.

cussed on water scarcity and salinity in Walgett and water infrastructure projects destroying Aboriginal cultural heritage in the southern Murray Darling Basin.²²

Further, and relatedly, there is also a need for distributive equity for Traditional Owners who are downstream from proposed developments and the associated risks to their Country, waters and culture.

The WA Government must acknowledge impacts of Aboriginal water dispossession and commit to reversing Aboriginal water dispossession. There is an opportunity here in the Martuwarra-Fitzroy to provide for Aboriginal water justice through the Martuwarra-Council, the WA Government and stakeholders working together to co-design the governance model.

Recommendation 8: The WA Government must acknowledge impacts of Aboriginal water dispossession and commit to reversing Aboriginal water dispossession by working with the Martuwarra Council (and other Traditional Owners) to co-design the Martuwarra-Fitzroy governance model.

Recommendation 9: The WA Government must acknowledge the need for distributive equity for Traditional Owners who are downstream from proposed developments and the associated risks to their Country, waters and culture.

7. Identification of overarching uncertainties

We have identified several major uncertainties that are part of the premise of the Fitzroy Paper. Given these uncertainties form part of the basis for the Fitzroy Paper's recommendations and options, they require more research and discussion before any preliminary decisions on water planning in the Martuwarra-Fitzroy are made. Although we will discuss respective uncertainties in different parts of this submission, we wanted to identify them upfront.

- Whether climate change has been adequately taken into account. We note that the Fitzroy Paper has a very brief section on climate change that suggests that rainfall in the Martuwarra-Fitzroy catchment could either increase or decrease depending on modelling used, and that given there is a lack of a clear trend, long-term (historical) climate data has been used in water modelling and planning.²³ The use of such historical data would suggest that climate change has not been taken into account to the extent that the precautionary principle would require. The overall sustainable diversion limit for the catchment and yearly allocations for individual licences should be based on future climate change. Although climate modelling for the re-

²² Dharriwaa Elders Group, MLDRIN and EDO, 'Submission responding to a call by the UN Special Rapporteur on Human Rights and the Environment for input to a report on "Too Dirty, Too Little, Too Much: The Global Water Crisis and Human Rights"' (November 2020) <<https://www.edo.org.au/wp-content/uploads/2020/12/Submission-to-UN-Special-Rapporteur-on-Human-Rights-and-the-Environment-101120.pdf>>.

²³ Fitzroy Paper, p 24.

gion indicates a range of future possibilities, following the precautionary principle, allocations should be based on a reduced rainfall scenario and the changes in rainfall sequences.

- There is much uncertainty as to the amount of water that is currently extracted from the Martuwarra-Fitzroy – particularly surface water. For example, although 6 GL of surface water extraction is licenced for the Lower Martuwarra-Fitzroy River, the: ‘Actual water use is unknown’.²⁴ Further, current hydrological understanding of the recharge mechanisms to the aquifers and the subsequent estimation of recharge volumes and throughflow rates to the confined and unconfined aquifers, are, at best, rudimentary. Such basic uncertainties make it difficult to understand the calculations behind the options presented in the Fitzroy Paper. We further address these issues in Sections 11 to 13 (and make relevant recommendations).
- A sub-section of the uncertainty related to the amount of water taken is more specifically about floodplain harvesting/diversion of overflow waters. There are uncertainties with respect to how much water might be being taken through floodplain harvesting and what sort of diminishing impact it might have on environmental and cultural values. Further, there is also uncertainty relating to the regulatory system. We specifically address this issue in Section 9 (and make relevant recommendations).

Recommendation 10: Use best available climate change information to guide water planning in the Martuwarra-Fitzroy catchment and, if necessary, commission additional independent research in relation to climate change.

Recommendation 11: Acknowledge uncertainty about impacts of extraction and the limited understanding of groundwater/surface water connections and make sure decision-making processes reflect this uncertainty and seek to mitigate risk.

8. Adaptive management approach

While adaptive management has an important role to play in ensuring long term sustainable use of natural resources, there have been considerable concerns raised about the application of adaptive management, and in particular its ability to overcome uncertainty regarding environmental responses to water extraction (especially in the context of groundwater). Thomann et al reviewed adaptive management principles and groundwater management case studies, identifying significant shortcomings in the application of adaptive management including a lack of definitions and guidelines for its use, a lack of substantive mitigation measures available to support adaptation, and a failure to undertake

²⁴ Cuan Petheram et al, *Water Resource Assessment for the Fitzroy catchment* (2018) (Report to the Australian Government from the CSIRO Northern Australia Water Resource Assessment) <<https://publications.csiro.au/rpr/download?pid=csiro:EP186908&dsid=DS2>> p 117. (Petheram Report for CSIRO)

assessment of the potential for remediation should problems be identified.²⁵ In this context, we will make several recommendations about the adaptive management approach proposed in the Fitzroy Paper.

We note the Fitzroy Paper's proposed key components of adaptive management:

- a long-term governance model that allows for community collaboration and participation in setting the direction of water allocation and management policies;
- careful and targeted monitoring to measure development is not adversely affecting values; and
- a process for regular review and evaluation of management approaches.²⁶

With respect to the first point, our next section will make specific comments as to the type of 'collaboration and participation' we recommend. We also submit that the collaboration starts with the co-designing of the long-term governance model.

In relation to the second and third points, we note that adaptive management must specifically include monitoring and evaluating changes to flows from extraction both on natural *and* cultural values and significant cultural places. Following such monitoring and evaluation, there must then be ways to efficiently and effectively respond and make necessary changes. This must also include direct involvement of Traditional Owners to assess the impact on cultural values and significant cultural places.

Recommendation 12: Collaboration must start with the co-designing of the long-term governance model for the Martuwarra-Fitzroy.

Recommendation 13: Adaptive management must include monitoring and evaluating the impact of changes to flows from extraction and the impacts of climate change and changing land use. These impacts must be monitored and evaluated with respect to both natural *and* cultural values and significant cultural places. Following monitoring and evaluation, there must be ways to respond and make necessary changes to water extraction(s) efficiently and effectively. Further, Traditional Owners must be directly involved in this monitoring.

i. Establish a Fitzroy advisory group

We note that the Fitzroy Paper identifies, as one of the 'things to consider', that ongoing feedback from the community is important and can be done in several ways.²⁷ In this context, the Fitzroy Paper notes their selected approach, for discussion and feedback, is to:

²⁵ Thomann, J., Werner, A., Irvine, D. and Currell, M. 'Adaptive management in groundwater planning and development: A review of theory and applications' (2020) *Journal of Hydrology* 586 (124871).

²⁶ Fitzroy Paper, p 4.

²⁷ Fitzroy Paper, p 4.

establish a Fitzroy advisory group. Further, it is noted that the terms of reference of membership of such a group will be developed after further consultation. We propose a different approach that involves collaborative co-design of the long-term governance model.

As noted above, the WA Government must recognise the Martuwarra Council as a key legal and cultural entity in relation to the Martuwarra-Fitzroy by engaging with the Martuwarra Council in co-designing the governance model. In this context, we further submit that one of the overarching aims of this co-design process should be to establish a ‘catchment authority as a statutory body based on principles of co-governance [with Traditional Owners] and giving primacy to Indigenous knowledge, law and practice across the whole of the Martuwarra catchment including the King Sound’ (Position Statement 11, Martuwarra Management Plan).²⁸ As we explain further below, using domestic and international examples, co-designing the governance model will include designing a suite of law and policy measures including this statutory body and legislation that is specific to the Martuwarra-Fitzroy.

We note, in this context, that there are examples of similar approaches, both domestically and internationally. Two prominent examples are the Yarra River (Victoria) and the Whanganui River (Aotearoa/New Zealand). In these submissions, we are providing a very brief overview of these examples. We are not suggesting that any of these models would necessarily be suitable here (as there must be a process of free, prior and informed consent). Rather, we are seeking to open a conversation on alternative governance mechanisms.

The *Yarra River Protection (Wilip-gin Birrarung murrong) Act 2017* (Vic) has been described as an ‘Australian first’ in ‘legally identifying a large river and its corridor, which transverse many boundaries, as a single living and integrated natural entity for protection’.²⁹ The Preamble of the legislation states that: ‘This Act recognises the intrinsic connection of the traditional owners to the Yarra River and its Country and further recognises them as the custodians of the land and waterway which they call Birrarung’.³⁰ An ‘essential element of the [Victorian] Act is the creation of the Birrarung Council, a statutory body to be the ‘independent voice for the river’ which has a mandatory requirement for Traditional Owner representation on the Council.’³¹ The members of the Birrarung Council include ‘Traditional Owners, [represent-

²⁸ Martuwarra Management Plan, p 26 (Position Statement 11).

²⁹ Department of Environment, Land, Water and Planning (Vic), ‘Yarra River Protection (Wilip-gin Birrarung murrong) Act 2017’ <<https://www.water.vic.gov.au/waterways-and-catchments/protecting-the-yarra/yarra-river-protection-act>>.

³⁰ *Yarra River Protection (Wilip-gin Birrarung murrong) Act 2017* (Vic) Preamble.

³¹ Katie O'Bryan, ‘Giving a Voice to the River and the Role of Indigenous People: The Whanganui River Settlement and River Management in Victoria’ (2017) 20 *Australian Indigenous Law Review* 48, 48.

tatives of] environmental and agricultural industry groups [and] Yarra River land local community groups and other members selected for their specific skills'.³²

The *Te Awa Tupua (Whanganui River Claims Settlement) Act 2017* (NZ) (**Te Awa Tupua Act**) confers a legal personality on the Whanganui River.³³ In creating this legal framework, the Te Awa Tupua Act provides that: 'Te Awa Tupua is an indivisible and living whole, comprising the Whanganui River from the mountains to the sea, incorporating all its physical and metaphysical elements'.³⁴ The legal framework behind the legal personality of the river is 'in the form of a statutory river guardian containing Māori representation, to be the 'independent voice' of the river'.³⁵ As explained by Australian legal academic Dr Katie O'Bryan:

Under the Whanganui River model, the guardian of Te Awa Tupua is Te Pou Tupua; 'the human face of Te Awa Tupua'. Te Pou Tupua is comprised of two people, one nominated by the Crown and one nominated by the Whanganui Iwi. Once appointed to Te Pou Tupua, they will act collectively on behalf of Te Awa Tupua, not on behalf of their nominators.³⁶

Further, there is an advisory group established by the Te Awa Tupua Act (Te Karewao) and a strategy group (Te Kopuka na Te Awa Tupua) that will develop a strategy document (Te Heke Ngahuru).³⁷ Academics Dr Erin O'Donnell (Australia) and Dr Julia Talbot-Jones (Aotearoa/New Zealand) note that: 'The strategy group is a ready-made participatory group for collaborative planning required by the statutory process for managing the Whanganui River catchment. The framework intends to be inclusive rather than exclusive, creating a type of nested community governance within the broader legal framework'.³⁸ There is also

³² Department of Environment, Land, Water and Planning (Vic), 'Birrarung Council – the 'voice of the Yarra'' <<https://www.water.vic.gov.au/waterways-and-catchments/protecting-the-yarra/birrarung-council-the-voice-of-the-yarra>>.

³³ *Te Awa Tupua (Whanganui River Claims Settlement) Act 2017* (NZ) s14 (**Te Awa Tupua Act**).

³⁴ *Te Awa Tupua Act* s12.

³⁵ Katie O'Bryan, 'Giving a Voice to the River and the Role of Indigenous People: The Whanganui River Settlement and River Management in Victoria' (2017) 20 *Australian Indigenous Law Review* 48, 48. Also see: Christopher Finlayson, 'Whanganui River Deed of Settlement Signed' (Media Release, 5 August 2014) <<https://www.beehive.govt.nz/release/whanganui-river-deed-settlement-signed>>.

³⁶ Katie O'Bryan, 'Giving a Voice to the River and the Role of Indigenous People: The Whanganui River Settlement and River Management in Victoria' (2017) 20 *Australian Indigenous Law Review* 48, 55. Also see: *Te Awa Tupua Act* ss18(2), 19(2) (a) and 20(1)-(2).

³⁷ See also: *Te Awa Tupua Act* ss27, 35-37.

³⁸ Erin O'Donnell and Julia Talbot-Jones, 'Creating legal rights for rivers: lessons from Australia, New Zealand, and India' (2018) 23(1) *Ecology and Society* 7. (available open access at: [Ecology and Society: Creating legal rights for rivers: lessons from Australia, New Zealand, and India](https://www.ecologyandsociety.org/2018/01/creating-legal-rights-for-rivers-lessons-from-australia-new-zealand-and-india)).

funding for the purposes of giving effect to the legislation (Te Korotete o Te Awa Tupua, Te Awa Tupua Fund).³⁹

In the Martuwarra-Fitzroy context, we note three specific features that we submit should inform the co-design process. First, that the model ensures (catchment-wide) higher order objectives to protect and maintain nationally important values relating to the River's ecological processes and cultural values of Living Water systems and flows that underpin the health of significant cultural places, plants and animals and maintains traditions and stories. These objectives must be legally enforceable. Second, there must be a buffer zone that protects the River and its floodplains together. As noted in the Martuwarra Management Plan (Position Statement 7):

The rationale for the buffer is to ensure that management and any proposed development strengthens cultural or ecological values. There is also a need to ensure any development does not impact on the shared, custodianship, guardianship and authority responsibilities of Traditional Owners to protect the standing of the cultural and natural values of the *Barringtonia acutangula* (Majala/Madjulla Fresh Water Mangrove).⁴⁰

Third, in designing the Martuwarra-Fitzroy governance model, the model must integrate traditional ecological knowledge as Indigenous science into the planning framework. This includes recognising the centrality of Indigenous knowledges in initial planning processes (through incorporating this knowledge to co-manage the Martuwarra-Fitzroy River and its systems) and also its importance during the monitoring and review phases of any governance model. Finally, we emphasise that all the objectives, rights and obligations created in the legislation must be legally enforceable.

We also note, in line with Position Statement 11 of the Martuwarra Management Plan, that the co-designed governance model should be complemented by gazettal of the catchment as an Indigenous Protected Area.⁴¹ We understand that Indigenous Protected Areas are a separate form of governance mechanism that involve different negotiations with different parties (and our associated recommendation reflects this).

The joint authors of this submission seek to engage further with the WA Government in relation to exploring such mechanisms and how they might be modified in the WA context for the Martuwarra-Fitzroy. We would strongly welcome an opportunity to present to relevant WA Government officials, and any interested stakeholders, to provide information about these other mechanisms and how they are operating in Victoria and Aotearoa/NZ. As we noted above, this is an exciting opportunity for the WA Government to work with the

³⁹ *Te Awa Tupua Act* ss57-59.

⁴⁰ Martuwarra Management Plan, p 24.

⁴¹ Martuwarra Management Plan, p 26.

Martuwarra Council to create a unique statutory body and legislation for the Martuwarra-Fitzroy.

Recommendation 14: The WA Government must collaborate with the Martuwarra Council to co-design the water planning and governance model in the Martuwarra-Fitzroy catchment. This governance model must include legislation specific to the Martuwarra-Fitzroy catchment.

Recommendation 15: The Martuwarra-Fitzroy should have a specific statutory body, similar to a catchment authority, that brings together the Martuwarra Council, the WA Government and all relevant stakeholders. This is one part of the co-design process.

Recommendation 16: As an initial step, to progress recommendations 13 and 14, the WA Government should meet with the authors of this submission to discuss other Australian/overseas examples and begin the conversation about the co-design process in the Martuwarra-Fitzroy River context.

Recommendation 17: In designing the Martuwarra-Fitzroy governance model, the model must ensure (catchment-wide) higher order objectives and these objectives must be legally enforceable.

Recommendation 18: In designing the Martuwarra-Fitzroy governance model, the model must have a buffer zone to protect the River and its floodplains and this buffer must be legally enforceable.

Recommendation 19: In designing the Martuwarra-Fitzroy governance model, the model must integrate First Law and traditional ecological knowledge as Indigenous science into the planning framework and these features must be legally enforceable.

Recommendation 20: The co-designed governance model could be complemented by gazettal of the catchment as an Indigenous Protected Area.

ii. Monitoring of water resources, environmental and cultural values will be required

We concur that there needs to be robust monitoring. We also note that monitoring is a broad term that covers monitoring of ecological/cultural responses at a particular scale (for example) as well as metering.

Further, we submit that any monitoring system must be consistent with the following sections of the Intergovernmental Agreement on a National Water Initiative (**NWI**):

- section 87 (metering and measuring);
- section 89 (reporting of water metering); and
- sections 82-85 (in relation to consolidated accounts and environmental water accounting).

We note that the Fitzroy Paper states that: ‘Water users are required to meter abstraction and undertake water and environmental monitoring.’ However, this is not transparent as even basic licence conditions are not made available publicly in WA. Further, it is not clear that monitoring is linked to any legally binding obligation to adapt water use if a problem is detected.

Further, we also note that the Productivity Commission’s National Water Reform 2020 Draft Report (**NWI Draft Report**) (released 11 February 2021) stated that: ‘in Western Australia approved meters do not have to comply with Australian Standard 4747...so it is unclear if metering standards are being enforced.’⁴² The NWI Draft Report identifies that ‘[u]nder the Rights in Water and Irrigation (Approved Meters) Order 2009, s.3, the [WA] Department of Water does not advise on selection of a preferred type, make, model or water meter manufacturer. Selection of a water meter is based on a ‘fit for purpose’ rule considering the local water and environmental considerations, cost effectiveness, maintenance and system operating requirements.’⁴³ Further, we note that the NWI Draft Report identified that ‘states and territories have not fully implemented the requirements of the Non-Urban Metering Framework’.⁴⁴

It is clear that for metering (and related enforcement) to be effective, there must be specific requirements in relation to the quality of meters. Metering must be compliant with the Non-Urban Water Metering Framework and metering of this standard must be a condition of licences. Further, the WA Government must introduce telemetry, and in the meantime, ensure that self-reading meters is not permissible for reporting purposes. Without these measures, water accounting for individual licences is subject to error which in turn means that take is potentially underestimated.

Recommendation 21: There must be robust monitoring for environmental and cultural impacts.

Recommendation 22: There must be robust metering of water extractions, and this includes ensuring the quality of all meters in the Martuwarra-Fitzroy region.

Recommendation 23: The WA Government must ensure that the metering system is compliant with the Non-Urban Water Metering Framework and metering of this standard must be a condition of licences. The WA Government must introduce telemetry, and in the meantime, ensure that self-reading meters is not permissible for reporting purposes.

iii. Future investigations and work will be identified

⁴² Productivity Commission, *Draft Report on National Water Reform 2020* (Australian Government Productivity Commission, 2021). p Productivity Commission (Supporting Paper D), p 126.

⁴³ Productivity Commission, *Draft Report on National Water Reform 2020*, p 126.

⁴⁴ Productivity Commission, *Draft Report on National Water Reform 2020*, p 125.

We note that the Fitzroy Paper states that: ‘Water allocation plans are evaluated annually and reviewed every seven to 10 years to ensure the catchment’s water resource management objectives are being met’.⁴⁵ Further, that: ‘The [Martuwarra-Fitzroy?] water allocation plan will outline the State Government’s support for future investigations that help build our shared knowledge and understanding of the Fitzroy River’.⁴⁶ We support the notion of review (though at more frequent intervals), future investigations and building shared knowledge, however, we wish to raise three concerns.

First, we submit that prior to any water allocation plan being prepared the WA Government will need to undertake extensive consultations with the Martuwarra Council as to what additional research and investigations are necessary.

Second, and related, we note that WA’s water allocation plans are not statutory and are therefore not legally secure. Although the *Rights in Water and Irrigation Act 1914* (WA) (**RiWI Act**) provides for the Minister to make statutory water plans, and those statutory provisions commenced in 2001, ‘no statutory plan has ever been made’.⁴⁷ This supports our previous recommendation that consideration must be given to a statutory catchment authority and legislation that is specific to the Martuwarra-Fitzroy. Further, a catchment authority would provide more flexibility to be able to use adaptive management principles to continually, and transparently, review management of the Martuwarra-Fitzroy.

We do note that we would, generally, be supportive of statutory water plans and this must be taken into account more broadly when the RiWI Act is reformed. However, in the context of the Martuwarra-Fitzroy, we submit that the approach of a statutory catchment authority is more appropriate.

Recommendation 24: Due to the limitations of current WA water legislation, consideration must be given to a statutory catchment authority in the context of the Martuwarra-Fitzroy and legislation that is specific to the Martuwarra-Fitzroy.

Recommendation 25: *At a minimum*, if a water allocation plan is going to be prepared, the WA Government will need to undertake extensive consultations with the Martuwarra Council as to what additional research and investigations are necessary.

9. Not allowing the Martuwarra-Fitzroy River or its tributaries to be dammed (and/or diverted)

We agree that the Martuwarra-Fitzroy River and its tributaries should not be dammed. However, we wish to raise concerns about other forms of infrastructure that may alter the

⁴⁵ Fitzroy Paper, p 5.

⁴⁶ Fitzroy Paper, p 5.

⁴⁷ Alex Gardner et al, *Water Resources Law* (LexisNexis Butterworths, 2nd ed, 2018) p. 310 (**Water Resources Law**).

direction and speed of water flows for the purposes of water extraction or cause overflows to be extracted (sometimes known as floodplain harvesting).

- i. Infrastructure that spans the width of the Martuwarra-Fitzroy River and its tributaries will not be allowed

The Fitzroy Paper states that: ‘New dams, weirs, barrages and other infrastructure that spans the width of the waterway would have a significant impact on the flow of the river and will not be supported’.⁴⁸ We agree with this goal but observe that this would not prevent infrastructure construction that would alter the direction and speed of water flows for the purposes of water extraction. In other words, levees and flood protection structures could be used to redirect and impede stream flows. We submit that the construction of any such infrastructure should require formal consent by Traditional Owners and be subject to public review and scrutiny. Further, we submit that an audit must be done of all current private infrastructure (including storages) to understand the current situation so all decision-making about future infrastructure applications can be evidence based. We also understand that there is some current infrastructure that is of concern to Traditional Owners that must be investigated.

One issue that is particularly mentioned in the Petheram et al (CSIRO) report is the need for flood protection levees in many areas in order to enable wet-season cropping.⁴⁹ The Petheram et al report notes that: ‘Without flood protection, sowing before April is a risky proposition’.⁵⁰ It is likely that the construction of infrastructure in the form of levees and bunds to protect cropping will pose ecological and hydrological risks that will impact on the exchange between streams, wetlands and billabongs. This infrastructure may also result in additional, unlicensed diversions which have not been properly accounted for in water planning processes. These risks require further investigation, including in the form of environmental impact assessment.

Further, we note that, capture of run-off, drainage or overland flood is likely to diminish both surface water flows (within the Martuwarra-Fitzroy and some of its tributaries), as well as groundwater recharge. This in turn impacts downstream ecosystems, cultural heritage and water users. As we explain below, the licensing requirements in these contexts are not straightforward in WA and, therefore, it is unclear whether such take is reflected in water accounting and hydrological modelling for the catchment. This is problematic as it undermines the accuracy of estimates of catchment-wide water diversions and in turn any assessment of environmental and cultural heritage impacts.

⁴⁸ Fitzroy Paper, p 7. We also note that this should include ‘upside down weirs’: ABC News, [‘Andrew Forrest explores underground water reserves in bid to drought-proof Australia - ABC News’](#) (24 July 2015).

⁴⁹ CSIRO Report, p vi.

⁵⁰ CSIRO Report, p vi.

We accordingly note that all diversions (including floodplain harvesting) must be accounted for and integrated into water management processes for the catchment, including through appropriate measurement, licensing, and incorporation into water accounting and hydrological modelling. Further, immediate embargoes on the capture of water from floodplains must be imposed where impacts on the environment and cultural heritage are deemed unacceptable due to the timing or volumes involved,⁵¹ or both (with the Martuwarra Council to play a key role in the assessment of such matters). Such embargoes should not be dependant on taking civil action under the RiWI Act (such as s5E(1)(b)). These measures are vital to protect and maintain the productive processes of Martuwarra-Fitzroy River pools and floodplains for culturally significant plant and animal species. They are also required to maintain surface water flows and recharge of groundwater-fed dry season water stores (jila).

We will discuss floodplain harvesting further in the next two sub-sections.

Recommendation 26: We support the WA Government’s stance that new dams, weirs, barges and other infrastructure that span the width of the waterway would have a significant impact on the flow of the river and should not be supported.

Recommendation 27: In line with principles of FPIC, the construction of *any* infrastructure (for example, infrastructure that does not ‘span the width’ of the Martuwarra-Fitzroy) should require formal consent by Traditional Owners and be subject to public review and scrutiny.

Recommendation 28: All diversions (including floodplain harvesting) must be accounted for and integrated into water management processes for the catchment, including through appropriate measurement, licensing, and incorporation into water accounting, and hydrological and climate modelling.

ii. Off-stream water storage infrastructure

The Fitzroy Paper states in the points for discussion that: ‘An off-stream dam storing water harvested from a waterway and/or capturing some rainfall run-off, drainage or overland flood waters could be allowed provided it meets all regulatory requirements for protecting cultural and environmental values’.⁵² Given the highly variable stream flows of the Martuwarra-Fitzroy River and its catchments, off-stream levees and infrastructure to redirect stream flows and for storage purposes will be required for any substantial levels of extraction of surface water. Such infrastructure as we noted above, should require formal consent by Traditional Owners and be subject to public review and scrutiny. In addition, as noted above, an audit should be undertaken of all private storage to understand current

⁵¹ It is important to note that flood events vary in magnitude. This in turn means that the environmental and cultural impacts associated with extractions can vary depending on the percentage of the flood that is extracted.

⁵² Fitzroy Paper, p 7.

storage capacity so all decision-making about future storage infrastructure applications can be evidence based. Further, as discussed in the next section, we are of the view that floodplain harvesting needs to be specifically regulated (including related storages).

iii. Floodplain harvesting – scientific and regulatory uncertainty

We are of the view that the discussion on floodplain harvesting/use or diversion of over-land flood waters must be more in depth – both in a scientific and regulatory sense. We particularly raise this issue as floodplain harvesting has caused recent controversy in the Murray-Darling Basin in the context of the NSW Government Floodplain Harvesting Policy.⁵³

There is no explicit reference in the Fitzroy Paper to floodplain harvesting happening in the Martuwarra-Fitzroy, but it is likely to be occurring due to the existence of flooding events (as documented in the next paragraph). We submit that currently little is known about the amount of floodplain harvesting that is occurring in the Martuwarra-Fitzroy. In this context, the WA Government needs to undertake an urgent audit to assess all private structures (including storages) and estimate likely current volumes being diverted from floodplains. This audit must then be made publicly available and be incorporated into all water management processes (ie. modelling, water accounting, sustainable diversion limits for the catchment and licencing).

One of the uncertainties we noted in Section 7 is that although 6 GL of surface water extraction is licenced for the Lower Martuwarra-Fitzroy River, the: ‘Actual water use is unknown’.⁵⁴ This uncertainty is only heightened in the context of floodplain harvesting. There is no reference to ‘floodplain harvesting’ in the Petheram et al (CSIRO) report and only brief reference to ‘overland flows’ in the context of rainfall.⁵⁵ Petheram et al state that ‘floods are relatively common, large and persistent’ in the Martuwarra-Fitzroy and Margaret rivers.⁵⁶ Further:

- ‘Floods with a probability of occurring in 6% of years will inundate 85% of the alluvial clay soil. Even for floods with a probability of occurring in 20% of years, 70% of these areas will be inundated’.⁵⁷

⁵³ EDO, ‘Floodplain Harvesting: Without The Necessary Protections, Legal Action Is A Risk - Environmental Defenders Office’ (2020) <[Floodplain harvesting: without the necessary protections, legal action is a risk - Environmental Defenders Office \(edo.org.au\)](https://www.edo.org.au/floodplain-harvesting-without-the-necessary-protections-legal-action-is-a-risk)>. See also, ‘NSW Floodplain Harvesting Policy’, NSW Department of Industry (Webpage, 2018) <[NSW Floodplain Harvesting Policy - Water in New South Wales](https://www.industry.nsw.gov.au/floodplain-harvesting-policy)>.

⁵⁴ Petheram Report for CSIRO <<https://publications.csiro.au/rpr/download?pid=csiro:EP186908&dsid=DS2>> p 117.

⁵⁵ Petheram Report for CSIRO, p 49.

⁵⁶ Petheram Report for CSIRO, p vi.

⁵⁷ Petheram Report for CSIRO, p vi.

- ‘Flooding is ecologically critical because it connects off-stream wetlands to the main river channel, allowing the exchange of animals, plants and nutrients, and also supports a boost of productivity in the lower estuary.’⁵⁸

The Taylor et al (CSIRO) report notes that: ‘The floodplain that extends downstream of Fitzroy Crossing to Willare is regularly flooded and maximum flow rates in this part of the catchment are very high.’⁵⁹ It is clear flooding is regular and vital to the health of the Martuwarra-Fitzroy catchment. Therefore, any infrastructure or practices that are going to impact such flooding must be regulated.

The regulatory requirements for floodplain harvesting are not straightforward in WA. The relevant floodplains fall within the Fitzroy River and Tributaries Surface Water Proclamation Areas (March 2020).⁶⁰ This means that water cannot be taken from a watercourse without a licence other than statutory riparian rights exceptions.⁶¹ However, a question arises as to whether floodplain harvesting comes within the definition of ‘watercourse’ or ‘wetland’, so as to require licensing pursuant to s5C RiWI Act for commercial purposes. The answer to this is not clear. For example, *Knezovic v Shire of Swan Guildford* (1968) 118 CLR 468 held that the then RiWI Act definition of watercourse required a channel or bed and banks.⁶² It seems that a floodplain would not come within this meaning (however, we note there has been an amendment to the definition since that case). It may be the case that if the landholder’s tenure permits the construction of works then there would be no requirement of a s5C licence to divert flood flows, as long as it did not impact a flood channel. Storing water, however, may require relevant permits for construction depending on the land tenure.

We also note the application of s5B RiWi Act, which would mean that an owner/occupier can drain the land/make a dam (not on a watercourse or wetland) so that the flow of water into a watercourse/amount of water in a wetland is not diminished or there is ‘no significant adverse effect on the quality of water, or any ecosystem, in a watercourse, or a wetland’. Such water can be used for watering cattle or other stock (though not for intensive stock watering).⁶³ However, we submit that given how little is known about how much wa-

⁵⁸ Petheram Report for CSIRO, p vi.

⁵⁹ Andrew R Taylor et al, *Hydrogeological assessment of the Grant Group and Poole Sandstone – Fitzroy catchment, Western Australia* (2018) (Report to the Australian Government from the CSIRO Northern Australia Water Resource Assessment) <<https://publications.csiro.au/rpr/download?dsid=DS5&pid=csiro:EP183648>> p 20.

⁶⁰ Surface water proclamation areas 2009 Rights in Water and Irrigation Act 1914, *Department of Water and Environmental Regulation* (Webpage, 2021) <https://www.water.wa.gov.au/__data/assets/pdf_file/0004/1669/86306.pdf>.

⁶¹ *Rights In Water And Irrigation Act 1914* (WA) ss9 and 10. Also see Water Resources Law, p 237

⁶² At p 475. Also see discussion in Water Resources Law at pp 27 - 28.

⁶³ *Rights In Water And Irrigation Act 1914* (WA) s5B(1)(b).

ter is taken through floodplain harvesting, it would be hard to determine if there was any such diminishment. Further, there might be a diminishing impact on a cultural element which would potentially not be covered by this definition. Finally, the only way to enforce s5B RiWI would be a civil action (pursuant to s5E) which is difficult (especially in the context where it may be hard, scientifically, to prove diminishment as there is inadequate existing research).

This short analysis reveals several uncertainties, not only with respect to the regulatory system but also as to how much water might be being taken through floodplain harvesting and what sort of diminishing impact it might have. We submit that more scientific and cultural research needs to be done into the use of floodplain harvesting in the Martuwarra-Fitzroy to establish a baseline understanding, and then develop sustainable diversion limits based on best available evidence and cultural knowledge. There also needs to be a conversation about the regulatory aspects. This latter conversation is likely to be broader than the Martuwarra-Fitzroy catchment, but it could start there. We also submit that the WA Government, in line with the principle of FPIC, must consult Traditional Owners about regulatory issues relating to floodplain harvesting.

Recommendation 29: The WA Government needs to undertake an urgent audit to assess all private structures (including storages) and estimate likely current volumes being diverted from floodplains. This audit must then be made publicly available and incorporated into all water management processes (ie. modelling, water accounting, sustainable diversion limits for the catchment and licencing).

Recommendation 30: In the context of FPIC, Traditional Owners must be consulted about regulatory issues relating to floodplain harvesting.

10. Licensing, review and monitoring in relation to both groundwater and surface water

Before moving to consider the discussion points on groundwater and surface water specifically, this section will outline some general recommendations on licensing, review and monitoring. We also reiterate our comments (and recommendations) above in Section 8(ii) about compliance with the National Water Initiative. Further, we emphasise that underlying all our comments about licencing, review and monitoring is the urgent need for a full overhaul of the RiWI Act. This creates some difficulty as in many respects, we would suggest that this process be postponed until after these major reforms are undertaken. However, the urgent need for water planning in the Martuwarra-Fitzroy, which is understood and accepted by the WA Government, the Martuwarra Council and all stakeholders, requires action to be taken now.

In this context, and given the importance of the Martuwarra-Fitzroy, extreme caution must be taken in the meantime while this planning process is taking place. We submit that a moratorium should be placed on all new extractive water licences in the Martuwarra-

Fitzroy until after the planning process is completed. We understand that, as yet, it is not clear what the planning process will be (so as to determine when it will be completed) but that part of this initial Fitzroy Paper process is to determine what the planning (and co-design) process will involve. We suggest that in further discussions about the co-design process, the Martuwarra Council, WA Government and other stakeholders could agree on a timeline for when the moratorium could be responsibly lifted.

Further, we submit that, in general, in relation to water allocations going forward, a precautionary approach must be adopted. Part of the reason for this is the lack of data that is available, meaning that, to ensure sustainable allocations, we must have conservative baselines and immediately start ongoing monitoring. In adopting the precautionary principle, all extractions must be managed to prevent adverse impacts on flows, particularly in seasons of low in-flows in the catchment. To reduce the risks of such adverse impacts, there should be strict pumping rules, annual licence reviews, accurate meters and compliance measures (such as licensees' penalties and spot checks). In this context, there should also be greater public transparency about adaptive management monitoring (and review) of water plans and about licence conditions, monitoring and compliance.

Finally, and importantly, Traditional Owners should be actively involved in monitoring compliance activity and the WA Government should commit to building local Indigenous community capacity (e.g. through community researcher and ranger groups) to do this kind of work.

Recommendation 31: Adopt a moratorium on all new extractive water licences until the Martuwarra-Fitzroy (co-design) planning process is completed.

Recommendation 32: Adopt a precautionary principle approach to all water allocations, recognising a sustainable allocation will not be able to be determined on a system-wide basis in the absence of longitudinal ecological data and groundwater and surface water connections, and to address the need for conservative baselines and ongoing monitoring.

Recommendation 33: All extractions must be managed to minimise adverse impacts, within clearly agreed and transparent limits, on flows, particularly in seasons of low in-flows in the catchment. To reduce the risks of such adverse impacts, there should be strict pumping rules, annual licence reviews, accurate meters and effective compliance measures (such as licensees' penalties and spot checks).

Recommendation 34: There should be greater public transparency about adaptive management monitoring (and review) of water plans and about licence conditions, monitoring and compliance.

Recommendation 35: Build the capacity of Traditional Owners as a workforce to monitor compliance activity. The WA Government must commit to invest in building local Indigenous community capacity (e.g. through community researcher and ranger groups) to do this kind of compliance work).

11. The two options for consideration in the Fitzroy Paper

We note that the Fitzroy Paper proposes two options ‘for consideration’ in relation to how much water could be allocated and whether it is surface water and groundwater (Option 2) or just groundwater (Option 1).⁶⁴ We have summarised both options in the table below.

Table 1 Summary of options for managing water in the Martuwarra-Fitzroy River (GL per year)

	TOTAL allocations (GL)	Groundwater		Additional Surface Water (Martuwarra-Fitzroy River) ¹		
		General	AWR	General Access Pool	Conditional AWR	Reserve for General Access Pool
Option 1	108.5	76.5	Up to 32	0	0	0
Option 2	408.5	76.5	Up to 32	100	Up to 90	110

Notes:

1: Current surface water extractions in the Martuwarra-Fitzroy River are estimated at *no more* than 6 GL per year which is current licenced volume in the Lower Martuwarra-Fitzroy River and groundwater extraction at 6.4GL/year (see Petheram et al. (2018, pp. 116-17)).

2: AWR = Aboriginal Water Reserve and is proposed in the Paper to be 30% of annual groundwater allocations and up to 90 GL/year of surface water extractions under Option 2.

3: 1 GL = 1 billion litres.

We will address Option 1 more specifically in Section 12 and Option 2 more specifically in Section 13. However, we note that the proposed groundwater allocation in Option 1 could represent, in time, an 18-fold increase in current groundwater extractions, and that Option 2 proposes to increase surface water extraction by 16-fold and, in time, possibly as much as 50-fold. Yet, as we note again below, in the Fitzroy Paper there is no explanation of the connection between the proposed allocation and the estimated sustainable levels of either groundwater or surface water extractions.

Further, as noted in Section 7, there is related uncertainty about whether climate change has been adequately taken into account in the Fitzroy Paper. We reiterate that the precautionary principle should be adopted in this context given that, although projections show either an increase or a decrease in the future, ‘the driest case shows a 4 per cent reduction’ and this must be the scenario that is the basis for preparation.⁶⁵ We also note that it is not only the total annual rainfall that matters for recharge, but the sequencing of rainfall events, and also their variability, that have substantial effects on recharge mechanisms. With respect to variability, we note that:

⁶⁴ Fitzroy Paper, p 22.

⁶⁵ Government of Western Australia, Department of Water and Environmental Regulations, Climate Trends – Kimberley <<https://www.water.wa.gov.au/planning-for-the-future/allocation-plans/managing-water-in-a-changing-climate/climate-trends-kimberley>>.

Year-to-year rainfall in the Kimberley is highly variable with distinct periods of wet and dry years. While there was observed increases in rainfall over the last decade, it is also common to have extended periods of limited rainfall as observed in the 1930s and 1950s.⁶⁶

Climate processes and drivers of change for the region, and how they are influencing climate variability, particularly changes in rainfall in the Martuwarra-Fitzroy catchment, must be described in detail. Further, these kinds of variations are particularly relevant to ensuring all-year round access to water resources so as to enable Traditional Owners to carry on their traditions, management practices and ceremony for the Martuwarra-Fitzroy and its related jila sites. Any water planning and governance model must take account variability in rainfall frequency and intensity, and how these changing patterns of rainfall will impact aquifer recharge.

In a more overarching context, we note that Position Statement 6 of the Martuwarra Management Plan states that: ‘All the water that makes up these flow regimes is already allocated to traditional and environmental uses and values, sustaining people and places, plant, animal and fish populations and customary harvestable production as well as community and spiritual connections’.⁶⁷ Therefore, the proposed allocation limits for both options, that both involve increasing the volume of water taken from the Martuwarra-Fitzroy surface and groundwater, are too high.

Recommendation 36: Rainfall variation, in the context of climate change, must be taken into account in relation to both proposed options (groundwater only (Option 1); surface water and groundwater (Option 2)).

Recommendation 37: The proposed allocation limit, in both options, is too high given the uncertainty as to rainfall variation and the Martuwarra Council’s submission that the flow regimes are already allocated to traditional and environmental uses and values, sustaining people and places, plant, animal and fish populations and customary harvestable production as well as community and spiritual connections.

12. Taking groundwater

The Fitzroy Paper notes that: ‘While there are prospective groundwater aquifers present in the catchment, several of these play a particularly important role in supporting significant cultural and environmental values (including the [Martuwarra] Fitzroy River).’⁶⁸ We agree

⁶⁶ Government of Western Australia, Department of Water and Environmental Regulations, Climate Trends – Kimberley <<https://www.water.wa.gov.au/planning-for-the-future/allocation-plans/managing-water-in-a-changing-climate/climate-trends-kimberley>>.

⁶⁷ Martuwarra Management Plan, p 24.

⁶⁸ Fitzroy Paper, p 8.

that groundwater has important cultural and environmental significance and that, therefore, we must take a particularly precautionary approach to groundwater use.

- i. Option 1 of the Fitzroy Paper: Up to 108.5 GL/year of groundwater could be available for allocation

The Fitzroy Paper proposes that: ‘Up to a total of 108.5 GL/year could be released for allocation, a portion of which could be available through a Fitzroy Aboriginal Water Reserve. The volume available in other less prospective groundwater resources would be determined by a local assessment of sustainability’.⁶⁹ As discussed in the previous section, this represents a very large increase in groundwater extraction from 6.4GL/year currently to 108.5 GL/ year. The 6.4GL/year of current extractions in total are derived from:

- 2.1 GL/year from Erskine Sandstone primarily for Derby (town water supply and other various purposes);
- 1.8 GL/year from Devonian Reef (mainly for irrigation, but also construction, mining and Indigenous community water);
- 1.8 GL/year from Wallal Sandstone (irrigation and supplementing town water supplies);
- 0.7 GL/year from Liveringa Group (road construction, mining and Indigenous community water supplies); and
- 0.7 GL/year from Grant Group (town water supply for Fitzroy Crossing and other various purposes).⁷⁰

In the Fitzroy Paper there is no explanation of the connection between the proposed allocation and the estimated sustainable levels of either groundwater or surface water extractions. As we noted in Section 7, current hydrological understanding of the recharge mechanisms to the aquifers and the subsequent estimation of recharge volumes and through-flow rates to the confined and unconfined aquifers, are, at best, rudimentary. Yet it is upon these highly uncertain estimates of recharge volumes that future water availability is calculated. Taylor et al state: ‘Therefore, the key features of an aquifer must be carefully conceptualised before simply deriving a recharge volume based on the surface area of an aquifer outcrop and an estimated recharge rate.’⁷¹ Such assessment and detailed measurements of the actual recharge mechanism and the surface contact area between regolith and aquifer geology has not been done. Further, the focus of the recharge assess-

⁶⁹ Fitzroy Paper, p 9.

⁷⁰ Petheram Report for CSIRO, pp 117-118.

⁷¹ Andrew R Taylor et al, *Hydrogeological assessment of the Grant Group and Poole Sandstone – Fitzroy catchment, Western Australia* (2018) (Report to the Australian Government from the CSIRO Northern Australia Water Resource Assessment) <<https://publications.csiro.au/rpr/download?dsid=DS5&pid=csiro:EP183648>> p 128.

ments by various water balance modelling (e.g. ‘WAVES’)⁷² has been to estimate the depth of rainfall that could possibly enter the aquifer intake beds while the measurement of actual area of intake beds has not been undertaken.

We submit that the existing and preliminary methods of recharge estimation undermine the scientific merit of the allocations in the Fitzroy Paper and are inadequate for the task of supporting decision-making about future allocations. We highlight, for instance, that there are no measurements or observations reported in the Fitzroy Paper establishing the hydrological mechanism of recharge. Thus, we strongly recommend that measurement, documentation and modelling of the recharge mechanisms be undertaken before Option 1 (at a minimum) is pursued. Further, this principle applies more generally to any options put forward. We also observe that the proposed groundwater allocation limits are based on historical data. Climate change is, thus, not taken into account.

It is also our view that proposed groundwater extractions should *only* occur with metering of *all* bores (including those excluded by the Department of Water and Environmental Regulation’s current policy),⁷³ telemetering of the extraction from each bore to a central data point, outlier analysis and monitoring of extractions, and a system with adequate compliance and enforcement mechanisms (reasonable likelihood of being identified of not being in compliance with extraction rules and sufficiently large consequences associated with failures to comply with the rules). Further, modelling must be rigorous, peer reviewed and the assumptions underpinning it must be transparent to the public.

Recommendation 38: Measurement, documentation and modelling of the recharge mechanisms must be undertaken before Option 1 (*at a minimum*) is pursued.

Recommendation 39: Proposed groundwater extractions should only occur with metering of all bores, telemetering of the extraction from each bore to a central data point, outlier analysis and monitoring of extractions, and a system with adequate compliance and enforcement mechanisms.

Recommendation 40: Climate change must inform any groundwater allocation limits.

ii. Restrict abstraction from the Alluvial Aquifer

We concur that such abstractions should be restricted given that ‘abstracting water from particular aquifers in certain areas may impact flows in the [Martuwarra] Fitzroy River’.⁷⁴

⁷² Taylor et al, pp 63-69.

⁷³ Government of Western Australia, Department of Water and Environmental Regulation, ‘Policy: Measuring the Taking of Water’ (October 2019) < https://water.wa.gov.au/__data/assets/pdf_file/0004/9841/115748.pdf>. We note there is an equity issue here with small users (particularly stock and domestic and small Aboriginal communities that self-supply drinking water) to cover the burden of installing (and maintaining a meter) and reporting data. Assistance should be made available to such small users by the Department of Water and Environmental Regulation.

⁷⁴ Fitzroy Paper, p 8.

The Fitzroy Paper, however, does not specify what should be the total levels of abstraction for this aquifer. We submit that *when* the water is abstracted (such as in the dry season) should also be part of the restrictions.

Recommendation 41: We agree that abstraction should be restricted from the Alluvial Aquifer, however, *when* the water is abstracted (such as in the dry season) should also be part of the restrictions.

iii.Restrict abstraction from the Devonian Reef Aquifer

We concur that such abstractions should be restricted given the Fitzroy Paper's identified number of 'significant cultural, environmental, geological and heritage values' in the Devonian Reef Aquifer.⁷⁵ Similarly to the Alluvial Aquifer, we also submit that when the water is abstracted (such as in the dry season) should be part of the restrictions.

Recommendation 42: We agree that abstraction should be restricted from the Devonian Reef Aquifer, however, *when* the water is abstracted (such as in the dry season) should also be part of the restrictions.

13. Taking surface water from the Martuwarra-Fitzroy River

Option 2 in the Fitzroy Paper involves both groundwater and surface water.⁷⁶ In this context, Option 2 provides that: 'An allocation limit of up to 300 GL could be set for surface water, with 100 GL initially released for general licensing and 90 GL released in a Fitzroy Aboriginal Water Reserve'.⁷⁷ As we emphasised in Section 10, this is a huge increase in extraction of surface water. Further, we will discuss our concerns about the proposed Aboriginal Water Reserve in Section 14.

i. Stage the allocation of surface water resources

The Fitzroy Paper suggests staging the allocation of surface water resources. While we agree broadly with this premise in the context of adaptive management, we submit that more work needs to be done before any decisions are made on surface water extractions.

As we noted above, Petheram et al state that 6 GL of surface water extraction is licenced for the Lower Martuwarra-Fitzroy River, but that: 'Actual water use is unknown'.⁷⁸ Evidence has not been provided in the Fitzroy Paper to justify an increase in surface water allocations. We find it hard to understand how a proposal for an increase in surface water extractions can be made when the present level of surface water extractions is not currently known. If there were to be an increase in surface water extractions, these should be sequenced (in

⁷⁵ Fitzroy Paper, p 9.

⁷⁶ Fitzroy Paper, p 22.

⁷⁷ Fitzroy Paper, p 22.

⁷⁸ Petheram Report for CSIRO, p 117.

stages), but the sequencing should not be simply in terms of granting individual water licences; such sequencing must also be in relation to the total surface (and groundwater) extractions.

The impact of the proposed volumes of extraction in Option 2 from streams, and the likely storage in on-farm ring-tanks or other infrastructure, will have significant impact on river flooding and, thus, stream connections to the floodplain wetlands and estuaries. The extent of these impacts has not been adequately explored in Petheram et al. Further, Petheram et al did not examine the effects of water extractions on the King Sound Estuary or the many wetland systems in the catchment. Yet the Revill et al (Western Australian Marine Science Institution) report examines the terrestrial-ocean linkages in the Martuwarra-Fitzroy and shows how even small changes to the flow regime could impact on the ecological function of King Sound Estuary.⁷⁹ Revill et al note:

River mouths and estuaries can be highly productive habitats that support biodiversity and potentially targeted species for commercial, recreational, and cultural purposes. Productivity in the inshore environment is sensitive to terrestrial runoff that generates turbidity, deposits sediments, and subsidizes marine carbon and nutrient pools.⁸⁰

Thus, in addition to flow regime impacts of surface water extraction, the issue of nutrient and agricultural pollutant loading on the coastal wetlands, and on the King Sound Estuary, needs to be properly studied before determinations can be made about the suitability, or otherwise, of Option 2.

Recommendation 43: Significantly more research is required before extraction decisions about surface water are made. This includes research into nutrient and agricultural pollutant loading on the coastal wetlands, and on the King Sound Estuary.

ii. Individual projects could be required to stage water development

The Fitzroy Paper suggests that up to 20 GL/year could be available from the general access pool for projects to stage development.⁸¹ We concur that there should be a maximum limit per water licence and any associated project. However, as noted in the sub-section immediately above, this should be related to current levels of extraction. As yet, there is not enough information to be making these decisions.

⁷⁹ Andrew Revill et al, *Terrestrial-Ocean Linkages: The Role Of Rivers And Estuaries In Sustaining Marine Productivity In The Kimberley* (Western Australian Marine Science Institution, 2017). <https://www.researchgate.net/publication/333639569_Terrestrial-ocean_linkages_The_role_of_rivers_and_estuaries_in_sustaining_marine_productivity_in_the_Kimberley/link/5cf873f14585153c3db73997/download>.

⁸⁰ Andrew Revill et al, p i.

⁸¹ Fitzroy Paper, p 13.

Recommendation 44: More research into current levels of extraction is required before decisions can be made about surface water allocation to individual projects.

iii. Rules could control when surface water harvesting could occur

The Fitzroy Paper proposes that there could be ‘strict rules controlling when and how water harvesting could occur’ and that these may include: no water harvesting in the dry season (or poor wet seasons); allowing the first flush of the river and pools to reconnect after the dry season; and, no water harvesting during the late wet season.⁸²

We concur that controls should be instituted to ensure minimum flows before any surface water extractions. Further, other components of the flow regime must be afforded sufficient protection to ensure sustenance of cultural and environmental values. We also submit that water extractions (with the exception of town water supplies and for stock and domestic use) should be treated as a residual. That is to say, only after defined cultural, environmental and sustainable outcomes (with associated values) are achieved would water extractions for irrigation and other forms of development be permitted. It should be noted that Aboriginal cultural values include not only culture and heritage, but multiple aspects of well-being associated with water, such as social cohesion, kinship, spirituality, physical and mental health.

Best practice water allocation should also limit abstractions on an annual basis depending on recharge, surface flows and other factors. Thus, water licences should be expressed in nominal volumes with the possibility that permitted annual extractions fall between 0 and 100% of that nominal volume depending on water availability (and other relevant factors). This sort of seasonal management is necessary to ensure extractions reflect climatic conditions and, in turn, that Aboriginal values and public good values are achieved first. Allocation at less than the nominal water allocations should not require compensation to be paid to water licence holders (as per legislation in other Australian jurisdictions). Further, the methodology for setting annual allocations must be transparent, evidence based and take into account cultural heritage as this provides confidence in the system.

We note the ‘possible management approach and rules’ in the Fitzroy Paper (Table 1, p. 16) and support the idea of such rules in principle. However, in this context, we emphasise again that significant research is required before extraction decisions about surface water are made. We concur that this sort of modelling and management approach will be useful once the research is done and if Aboriginal and environmental interests are prioritised.

Recommendation 45: We agree that controls should be instituted to ensure minimum flows before any surface water extractions can occur. They should also be instituted with respect to sufficient cumulative flows over a preceding period of time, to ensure to sustain cultural and environmental values.

⁸² Fitzroy Paper, p 13.

Recommendation 46: All water extractions, with the exception of town water supplies and for stock and domestic use, should be treated as a residual. Then, only after defined cultural, environmental and sustainable outcomes are achieved should water extractions be permitted.

Recommendation 47: Annual individual water allocations of between 0 and 100 percent are required to take into account seasonal variability in water availability. The method for determining annual allocations must be codified, documented and completely transparent.

14. Providing opportunities for Aboriginal economic development

We strongly agree that provision must be made for opportunity for Aboriginal economic development. However, we propose a co-design process for the overarching governance model. In this context, we wish to raise some questions and concerns about the proposed Aboriginal Water Reserve (**AWR**) and query if it is the best (or only) option in the circumstances. We note that AWRs may provide a good opportunity for Traditional Owners but there are still many questions to be answered. There has also not been any form of FPIC in relation to this proposal.

On the basis of historical ownership and sovereignty, we contend that the entire consumptive pool should be treated as the ‘Fitzroy Aboriginal Water Reserve’, and any water allocations for extractive purposes should require the permission of Traditional Owners and compensation to Traditional Owners for access to their water. We also wish to raise several legal and policy concerns about the use of the AWR model that seems to have been primarily adopted from the Northern Territory.

- i. Fitzroy Paper Proposal: Establish a Fitzroy Aboriginal Water Reserve for native title holders to use for economic development on their native title lands

In the context of preparing these submissions, we have undertaken in depth research into Aboriginal (Strategic) Water Reserves. We note that the AWR model appears to have been adopted from the Northern Territory.⁸³ An AWR was then first implemented in WA through the Yamatji Nation Indigenous Land Use Agreement (**ILUA**).⁸⁴ The Fitzroy Paper, and simultaneously, the Derby Plan, are the first time that such a model has been proposed outside an ILUA process. The use of an AWR in these two contexts would, if adopted, therefore, set an important policy precedent in WA.

⁸³ *Water Further Amendment Act 2019* (NT); Northern Territory Government, *Strategic Aboriginal Water Reserve* (Northern Territory Government, 2017) <https://denr.nt.gov.au/data/assets/pdf_file/0011/457553/SWRC-Policy-Framework_A4_V1.pdf> (**NT Policy Framework**).

⁸⁴ Yamatji Nation Indigenous Land Use Agreement, *Department of Premier and Cabinet* (Webpage, 2021) <<https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/yamatji-nation-indigenous-land-use-agreement>> (**Yamatji Nation ILUA**).

We commend the State Government for moving towards recognising Aboriginal economic interests in water. However, we wish to raise some concerns about the choice that has been made to broadly adopt the AWR model without sufficient consultation. In particular, we have two concerns:

- the 30% of available water model⁸⁵ does not seem to have a particular basis or explanation for the choice of 30% in either the NT or WA;
- there is nothing in WA legislation or policy that provides for AWRs (which is different to the NT which has relevant legislation and policy). This means that there has not been any debate about these issues or consultation with Traditional Owners about the potential state-wide adoption of such a model.

We note in this context that there has been recent academic critique, by prominent Australian academics, of the AWR model in the NT and wish to draw this to the attention of the WA Government.⁸⁶ We further note that we have written to both the WA Ministers for Aboriginal Affairs and Water to seek a meeting about the AWR model but have, as yet, not received a response.

We emphasise that the AWR model may lead to positive opportunities and potential for Traditional Owners, but sufficient consultation is needed to understand the model before it becomes a policy fixture (almost by default). In the medium term, we suggest the WA Government has a Kimberley roundtable on these issues to discuss AWRs with Traditional Owners (in the context of the Derby Plan and Fitzroy Paper) and principles of FPIC are followed in the context of adoption of AWRs.

The Northern Territory model – case study

The *Water Further Amendment Act 2019* (NT) added ‘Aboriginal Water Reserves’ to the *Water Act 1992* (NT). Pursuant to s22B(7), an allocation (in a Water Allocation Plan (**WAP**)) is to include an AWR if any of the land in the water control district to which the WAP relates is ‘eligible land’. Section 22C then provides that a WAP may designate eligible land as land in respect of which an AWR applies if the land is more than 1 hectare and there are water resources on or adjacent to the land. WA has no equivalent statutory provisions.

Who is an eligible Aboriginal rights holder in the NT?

Pursuant to the NT Policy Framework, eligible Aboriginal rights holders can include: holders of Aboriginal Land (under the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth))

⁸⁵ NT Policy Framework, p 4; Derby Plan, p 49; Fitzroy Paper, p 17; Yamatji National Indigenous Land Use Agreement, *Department of Premier and Cabinet* (Webpage, 2021) <<https://www.wa.gov.au/organisation/departments-and-cabinet/yamatji-nation-indigenous-land-use-agreement>>, Sch 10.

⁸⁶ Lee Godden, Sue Jackson and Katie O’Byrne, ‘Indigenous Rights and Water Law Reform in Australia’ (2020) 37 EPLJ 655 (**Indigenous Rights and Water Law**); William Nikolakis and R. Quentin Grafton ‘Law versus justice: the Strategic Aboriginal Water Reserve in the Northern Territory’ (2021) *International Journal of Water Resources Development*, p 9 (**SAWR in NT**).

and exclusive possession native title determination areas.⁸⁷ We note that one major difference between the NT and WA is that WA does not have Aboriginal land rights legislation, whereas large parts of the NT are Aboriginal land (and that equates to inalienable fee simple (full) ownership).⁸⁸ Though, we also note that, as yet, the WA AWRs have not been limited to exclusive native title.

Pursuant to the NT Policy Framework, AWRs will be included in WAPs unless it can be demonstrated that Aboriginal rights holders do not hold rights that enable access to water or hold all land and therefore have exclusive access.⁸⁹ Academics Dr William Nikolakis (University of British Columbia) and Professor Quentin Grafton (Australian National University) note in a recent article that Aboriginal land councils in the NT want a more expansive definition of eligible Aboriginal peoples, and for it to include all native titleholders and residents of Community Living Areas.⁹⁰

What happens when all water is already allocated in the NT?

The NT Policy Framework provides that where existing allocations result in insufficient unallocated water, a ‘notional’ AWR will be identified. Then, water entitlements that are surrendered, amended or cancelled would be re-allocated according to the following priority: 1. environmental and cultural uses; 2. public water supply; 3. AWR; 4. general consumptive pool.⁹¹ Existing licence entitlements will not be cancelled, refused for renewal or reduced for the purpose of provisioning of an AWR.⁹² WA has not articulated any such policy. However, the reality of this situation is that it appears that some areas may end up with ‘notional’ holdings into the foreseeable future.⁹³ Although this may not be an immediate problem in the Martuwarra-Fitzroy, given the precedent this model will set in WA it must be considered now.

The 30% allocation in the NT

It seems that one of the key details of AWRs in WA that has come from the NT Policy Framework is the maximum percentage of 30% of available consumptive water for AWRs. This is set out in the NT Policy Framework (so is not statutory). Below is the table from the NT Policy Framework that sets out how the percentage of available consumptive pool will

⁸⁷ NT Policy Framework, cl 3.2.3.

⁸⁸ See the definition of ‘Aboriginal land’ in *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth) s 3 and *Northern Territory v Arnhem Land Aboriginal Land Trust* (2008) 236 CLR 24, 63 [50].

⁸⁹ NT Policy Framework, cl 3.7.1.

⁹⁰ SAWR in NT, p 9.

⁹¹ NT Policy Framework, cl 3.7.3

⁹² NT Policy Framework cl 3.7.5.

⁹³ Indigenous Rights and Water Law, p 678.

be determined. There is no reason given for the 30% cap in the NT Policy Framework (or any of the WA documents) and our extensive research for this submission did not reveal any reason.

Area of eligible Aboriginal land with direct access to water resource as a percentage of all land with access to the water resource in WAP area (or applicable zone)	Percentage of available consumptive pool reserved in SWR
0%	No Strategic Aboriginal Water Reserve
More than 0% less than 10%	10%
Between 10% and 30%	Corresponding with actual percentage of eligible land
30% or greater	Capped at 30%
100%	No Strategic Aboriginal Water Reserve

Nikolakis and Grafton state that Aboriginal ‘land councils called for a minimum of 50% based on land tenure, as well as population, disadvantage and other factors’.⁹⁴ The proposed Fitzroy Aboriginal Water Reserve at 30% of the total groundwater allocation is not consistent with the fact that Aboriginal people accounted for 65% of the population in the Fitzroy Catchment in 2016,⁹⁵ and hold native title to over 90% of the Kimberley.⁹⁶

Following this case study, it is useful to undertake a general analysis of NT AWR model. Nikolakis and Grafton concluded that the NT AWRs codify, but restrict, Aboriginal water rights. The AWRs contextualize rights within the state government’s conception of what Indigenous water rights should be - commercial water rights,⁹⁷ and this is not what Indigenous communities have communicated for in relation to water rights and their Country.⁹⁸ Further, they note: ‘Through actively listening to Indigenous communities and providing adequate resources to govern Country (including surface and groundwater), in their own ways to meet their own needs, will the critical impediments towards water justice in Australia, and globally, be overcome.’⁹⁹

Academics Professor Lee Godden (University of Melbourne), Professor Sue Jackson (Griffith University) and Dr Katie O’Bryan (Monash University) undertook a review of different mechanisms relating to Aboriginal rights in water including AWRs in the NT. These scholars noted that NT AWRs:

⁹⁴ SAWR in NT, p 9.

⁹⁵ Petheram report for CSIRO p 101.

⁹⁶ Kimberley Land Council, Native Title Overview (2021) <<https://www.klc.org.au/native-title-overview>>.

⁹⁷ SAWR in NT, p 13.

⁹⁸ Preamble, Garma International Indigenous Water Declaration (2008) p 1; Martuwarra Management Plan, p 8.

⁹⁹ SAWR in NT, p 15.

- had a narrow definition of land that will exclude areas with large pastoral holdings (ie. non-exclusive native title);
- there was a lack of access of Indigenous groups to capital and infrastructure; and
- AWRs were not implemented through a meaningful process of consultation and there was little room for exploration of alternatives.¹⁰⁰

As noted above, as yet, the WA AWRs have not been limited to exclusive native title. However, this has not been clearly stated in the Fitzroy Paper. With respect to point two, we wish to emphasise that this is a major difference between the Yamatji ILUA which did include far more than just water – it included \$20 million to a charitable trust over 10 years to carry out groundwater investigation to develop and manage the AWR;¹⁰¹ funds to develop a training program and establish a monitoring business for Yamatji Nation members;¹⁰² and, funding for a full-time contract position of Aboriginal Liaison Officer for 5 years.¹⁰³ These are all significant and are required for Traditional Owners to be able to benefit from water.

Finally, with respect to the third point, it seems WA has chosen AWRs without consultation or opportunity for engagement with Indigenous communities. This clearly does not comply with principles of FPIC. Further, as EDO noted in its recent Submission on Productivity Commission Draft Report: National Water Reform 2020, it is not acceptable to suddenly insert a Strategic Aboriginal Water Reserve into a discussion paper without any sense of the reasoning, background or analysis for such a model and then request consultation with Traditional Owners ‘amongst’ other stakeholders. It is important, when governments determine to use a new framework that they consult with Traditional Owners first, and specifically, in line with FPIC. As noted by the NWI Draft Report, the ‘chances of success will be maximised if programs providing water for economic purposes are co-designed with Traditional Owners using good policy design principles’.¹⁰⁴

Recommendation 48: The WA Government must engage with Traditional Owners around WA, but in this case the Martuwarra Council, with respect to the concepts of Aboriginal Water Reserves. In the context of FPIC, there needs to be more discussion, and consent from Traditional Owners, about this model.

¹⁰⁰ Indigenous Rights and Water Law, p 678.

¹⁰¹ ILUA available at: [Yamatji Nation ILUA Executed Agreement.pdf \(www.wa.gov.au\)](https://www.wa.gov.au/government/publications/yamatji-nation-ilua-executed-agreement), Sch 5 and cl 17.2.

¹⁰² Yamatji Nation ILUA, cl 17.3.

¹⁰³ Yamatji Nation ILUA, cl 17.3(f).

¹⁰⁴ Productivity Commission, Draft Report on National Water Reform 2020 (Supporting Paper D), p. 27.

ii. Fitzroy Paper Proposal: A water licence would be required to access the Fitzroy Aboriginal Water Reserve

We submit that Traditional Owners should not be required to apply for a ‘regular’ (RiWI Act) water licence to access water on their Country in the same way as other water users. However, there must be a process through which there is a record of where the water is being used, particularly as future projects may be large. We suggest this needs to be discussed directly with Traditional Owners and an alternative specific process set up. We submit that, similarly to the NT, AWRs should have specific requirements in the legislation (separate to other licences), and this would include requirements relating to where non-Indigenous people wish to negotiate with Traditional Owners to take water with their consent.

Recommendation 49: To access the Aboriginal Water Reserve, Traditional Owners should not have to apply for a ‘regular’ licence (under the RiWI Act), rather an alternative and specific system should be negotiated with Traditional Owners.

15. Regulatory requirements for protecting cultural and environmental values

We strongly agree that: ‘The [Martuwarra] Fitzroy River Catchment has outstanding Aboriginal, historic, aesthetic, cultural and natural heritage values’.¹⁰⁵ However, we wish to raise concerns about the statement that: ‘There are many existing State and Australian Government legislative protections already in place to protect these areas.’¹⁰⁶ This statement is quite stark given the intense criticism that the WA cultural heritage legislation has come under since the destruction of Juukan Gorge. This is in addition to the recent criticism of the EPBC Act in the Independent Review of the EPBC Act.¹⁰⁷

In this section, we will raise questions about how much protection is actually being provided by these other regulatory requirements. These questions and concerns must be taken into account in water planning as Country needs to be viewed as a whole.

- i. Best practice engagement with Traditional Owners will be required as part of the regulatory approvals processes

We reiterate our submissions in section 4 above with respect to FPIC.

¹⁰⁵ Fitzroy Paper, p 19.

¹⁰⁶ Fitzroy Paper, p 19.

¹⁰⁷ Review of EPBC Act p 57.

We also emphasise that the ‘Engage Early’¹⁰⁸ and ‘Ask First’¹⁰⁹ guidelines that are referenced in the Fitzroy Paper are only guidelines (not law). We disagree that they are suitable for facilitating ‘effective and enduring relationships’ as the Fitzroy Paper suggests. Similar sentiments were voiced by Professor Graeme Samuel AC in the Independent Review of the EPBC Act.¹¹⁰ Professor Samuel particularly noted with respect to the Engage Early guidelines that they are ‘not required or enforceable’.¹¹¹

Recommendation 50: Best practice engagement must equate to Free, Prior and Informed Consent.

- ii. Development should avoid areas with environmental and cultural values including those already listed under existing legislation.

We agree that development proponents should design projects that avoid where possible and protect areas with significant heritage, cultural and environmental values. However, we emphasise that the determination as to what are the areas with environmental and cultural values should be determined by the Martuwarra Council and its constituent Traditional Owners in equal partnership with the WA Government.

We also note in this context that in accordance with Position Statements 13 – 15 of the Martuwarra Management Plan, the Martuwarra Council ‘advocates a development discourse that supports or strengthens culture and ecosystem values and provides livelihood outcomes for Aboriginal people’; ‘will develop a compendium of research needs that will assist its vision of sustainable, restorative and regenerative development’; and, is developing a ‘prospectus of commercial opportunities on ecological conservation and cultural economies’.¹¹²

Recommendation 51: The Martuwarra Council must have a role in determining areas which have environmental and cultural values that must be protected.

- iii. Fitzroy National Park

¹⁰⁸ Australian Government, Department of Environment, ‘Engage Early’ (2016) <[Engage Early—Guidance for proponents on best practice Indigenous engagement for environmental assessments under the EPBC Act](#)>.

¹⁰⁹ These guidelines are now available through Trove: Australian Heritage Commission, ‘Ask First: A guide to respecting Indigenous heritage places and values’ (2002) <[16 Jun 2003 - Ask First: a guide to respecting Indigenous heritage places and values - Trove \(nla.gov.au\)](#)>.

¹¹⁰ Review of EPBC Act, p 57.

¹¹¹ Review of EPBC Act, pp 6 and 60.

¹¹² Martuwarra Management Plan, pp 26-27.

We note the proposed Fitzroy National Park that will be jointly managed by the Bunuba Dawangarri Aboriginal Corporation and WA Government.¹¹³ It is anticipated that this park will extend the Geikie Gorge National Park along the Fitzroy River to the north and along the Margaret River. The park will be created once the relevant ILUA is registered.¹¹⁴

We note that the Fitzroy Paper states that: ‘Abstraction of groundwater and harvesting of surface water is generally not compatible with the management objectives for national parks and other conservation areas’. We strongly agree with this and note the only exception should be water for cultural purposes used by Traditional Owners.

We also submit that there should be an environmental assessment of any upstream extractions that may impact the environmental and cultural values of the National Park.

Recommendation 52: There should be no abstraction of groundwater or harvesting of surface water within the new Fitzroy National Park. The only exception to this should be water for cultural purposes used by Traditional Owners.

Recommendation 53: An environmental assessment of any upstream extractions that may impact the environmental and cultural values of the National Park should be undertaken.

iv. Water licensing requirements will be aligned with requirements of other Commonwealth and State environmental and heritage regulatory approvals.

The EDO provided comprehensive submissions outlining the lack of coherence with respect to cultural heritage, environmental, planning and water legislation that is evident on a national scale in their *Submission to the Inquiry into the destruction of 46,000 year old caves at the Juukan Gorge in the Pilbara region of Western Australia (EDO’s Juukan Gorge Submission)*.¹¹⁵ We again highlight the negative impact of this lack of coherence, however, we also emphasise any alignment must come with a sense of bringing all of those approval processes in line with FPIC. Therefore, while we welcome an aim of alignment, simply aiming for alignment in, and of, itself is not enough. The reform of WA’s outdated cultural heritage legislation, and the related conversation in WA about FPIC, could be a springboard for such an alignment project.

In the context of a new governance model in the Martuwarra-Fitzroy we note that, the Martuwarra Council stated in their submission to the Juukan Gorge Inquiry that heritage legislation could: ‘Reimagine the way ‘heritage’ is understood and represented in legislation as

¹¹³ Government of Western Australia, Media Statements - Milestone for Fitzroy River (17 December 2020) <<https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/12/Milestone-for-Fitzroy-River.aspx>>.

¹¹⁴ Government of Western Australia, Media Statements - Milestone for Fitzroy River (17 December 2020) <<https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/12/Milestone-for-Fitzroy-River.aspx>>.

¹¹⁵ Environmental Defenders Office, Submission 107: Submission to the Inquiry into the destruction of 46,000 year old caves at the Juukan Gorge in the Pilbara region of Western Australia <[200814-EDO-Submission-Inquiry-into-Juukan-Gorge-destruction.pdf](#)> pp 30 – 36.

a property of living cultural landscapes and healthy Living Waters'.¹¹⁶ Further, the Martuwarra Council's submission details:

The CMNHP's [the Martuwarra Council's Conservation Management Plan for the National Heritage Listed Fitzroy River Estate] first position statement is that 'the concept of living water is central to sustaining heritage values.' 'Living Water' is an Aboriginal English term. Living Water is alive and often associated with a spiritual ancestor. For example, the Martuwarra has four different manifestations of the Rainbow Serpent from source to sea, which are recognised by the national heritage [EPBC] listing (Commonwealth Government 2011).

It is important to note that Living Waters are part of interconnected systems: of society, ecology, First Law, song lines and trading routes etc. Living waters are connected underground and throughout the cultural landscape i.e. physically/materially and metaphysically/spiritually connected. The Mary River Statement declares, 'Land, water and peoples and inextricably connected'(Delegates of the Mary River Water Forum 2009).

People must follow the correct protocols to maintain relationships with Living Waters. Consequently:

- Natural and cultural care are interlinked (CMNHP position statement 2)
- Human and environmental wellbeing are linked to heritage
- Heritage around Living Waters requires active management to maintain reciprocal relationships
- Martuwarra flows are intrinsic to traditional and environmental uses and values (CMNHP position statement 6) therefore changes to flow may impact heritage.

This section highlights how heritage is intrinsically linked to water (and water regulation). The reverse is therefore also true, that water regulation is intrinsically linked to heritage (and heritage regulation).

We also note that the Fitzroy Paper makes several mentions of the importance of the EPBC Act National Heritage listing as well as the WA heritage legislation. We agree that the National Heritage Listing and the site listing under the WA legislation is an indication of how important the heritage is. However, the reality is that currently, neither of these statutes (nor the related *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth)) adequately protect that heritage. We can see this from the foreward to the Interim Report of the Juukan Gorge Inquiry:

¹¹⁶ Can be accessed at: [Submissions – Parliament of Australia \(aph.gov.au\)](https://aph.gov.au/submissions) (Submission 108).

‘The Aboriginal Heritage Act 1972 has failed to protect Aboriginal Heritage, making the destruction of Indigenous heritage not only legal but almost inevitable.’¹¹⁷

‘The destruction of Juukan Gorge also highlighted the shortcomings of federal law. The Environment Protection and Biodiversity Conservation Act 1999 has proved of limited value in Indigenous heritage protection. The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 is virtually moribund.’¹¹⁸

Similar sentiments were identified in the Independent Review of the EPBC Act.¹¹⁹ Professor Samuel particularly noted that there ‘is a lack of transparency about how the Environment Minister factors Indigenous matters into decision-making for EPBC Act assessments’.¹²⁰

With respect to the EPBC Act, in particular, the Martuwarra Council also noted in their submission to the Juukan Gorge Inquiry:

Under the EPBC Act, if an action will cause a significant impact to the West Kimberley National Heritage Place then it will be deemed a controlled action and will have to go through an assessment process.

- However, it remains unclear to us which potential impacts will be deemed ‘significant’, and whether or not the Act will effectively protect heritage in practice.
- Furthermore, there is insufficient guidance for proponents on how to work constructively with Traditional Owners on heritage protection, and on what stage to engage. ...

The effectiveness of heritage protection under the EPBC Act is still largely untested in relation to the Martuwarra’s water. To the best of our knowledge, the West Kimberley national heritage listing has not prevented any potentially destructive activity from going ahead. So far, no proponents have asked the Council for advice.

We, of course, acknowledge that the EPBC Act is Commonwealth legislation, and outside the jurisdiction of the WA Government. However, this does change the way that the WA Government should engage with this legislation in its water planning. It is not enough to just note the National Heritage Listing and assume that this has a specific legal outcome. Further, it is also clear that the WA legislation is inadequate in the heritage space. Given

¹¹⁷ Interim Report, Juukan Gorge Inquiry, [Never Again \(aph.gov.au\)](https://aph.gov.au), p vi.

¹¹⁸ Interim Report, Juukan Gorge Inquiry, p vii.

¹¹⁹ Review of EPBC Act, p 57.

¹²⁰ Review of EPBC Act, pp 6 and 60.

the current status of surrounding regulation, in the immediate term the WA Government should prioritise how it can better recognise the Martuwarra-Fitzroy as a heritage place through a new co-designed water governance model. The Martuwarra Council should be proactively involved in managing the State and National Heritage listing and one major element of this is through water governance.

More broadly, in the EPBC Act context we note that water licensing rarely invokes the EPBC Act unless it is associated with other activities like mining. This means that the cumulative impact of water licensing is not considered in the EPBC Act context more generally. We submit that the WA Government consider use of the strategic assessment process under the EPBC Act to manage cumulative impacts of water licensing in the Martuwarra-Fitzroy.¹²¹

Recommendation 54: Water licensing requirements should be aligned with the requirements of other Commonwealth and State environment and heritage regulatory approvals. However, the focus should be on bringing all approval processes in line with principles of FPIC.

Recommendation 55: Given the current status of surrounding Commonwealth and State regulatory approval processes, in the immediate term, the WA Government should prioritise how it can better recognise the Martuwarra-Fitzroy as a heritage place through the co-designed water governance model.

Recommendation 56: The WA Government should consider use of the strategic assessment process under the EPBC Act to manage cumulative impacts of water licensing in the Martuwarra-Fitzroy.

Recommendation 57: All of the recommendations cited to ensure the protection and wellbeing of the Traditional Owners' sacred ancestral serpent being's right to life [*Yoon-goorookoo, Galbardu, Kurrpurrngu, Mangunampi, Paliyarra and Kurunga*] to live and flow. This will ensure the natural, environmental and cultural values of the Martuwarra-Fitzroy River National heritage listing and WA Aboriginal Cultural Heritage values are respected, and protected for current and future generations, nationally and globally.

16. Conclusion

We look forward to our continuing conversation with respect to the Martuwarra-Fitzroy and co-design of the governance model. We would welcome the opportunity to meet with the WA Government on any of the issues raised in these submissions.

¹²¹ EPBC Act, Part 10.