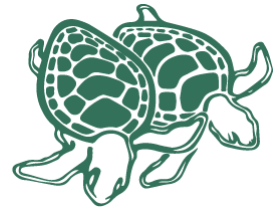


Environment Centre NT

protecting nature | living sustainably | creating a climate for change



Submission on Australia's Critical Minerals Strategy: Discussion Paper

Submitted via email to: CMOconsultation@industry.gov.au

Acknowledgement of Country

We acknowledge the Traditional Owners, the Larrakia people and the Arrernte people, on whose land this submission was written. We pay our respects to their elders past, present, and emerging. We acknowledge Australia's First Nations were self-governing in accordance with their traditional laws and customs, and they never ceded sovereignty of their lands, seas, and waters.

Who we are

The Environment Centre NT (ECNT) is the peak community sector environment organisation in the Northern Territory of Australia, raising awareness amongst the community about environmental issues and supporting community members to participate in decision-making processes and action. Acting as a watchdog on mining has formed the basis of ECNT's work since our formation in 1983 to oppose uranium mining in Kakadu National Park. Fighting for better regulation and management of mining in the Territory is in our DNA.

The Arid Lands Environment Centre (ALEC) is Central Australia's peak community environmental organisation that has been advocating for the protection of nature and growing sustainable communities in the arid lands since 1980. ALEC actively contributes to the development of resources policy through written submissions, community education and advocacy within the community.

1. Introduction

ECNT and ALEC welcome the opportunity to provide comments on *Australia's Critical Minerals Strategy: Discussion Paper*. Our response contains two primary sections. In the first, we address the questions posed by the *Discussion Paper* and put forth some suggestions for alternative decarbonisation pathways that focus on mitigating the environmental and social harms of mineral extraction. The second section discusses some of these harms with reference to the prevailing mining and water regulatory regimes operating in the Northern Territory. Given the direction of the *Discussion Paper* and its emphasis on an increased push for mineral extraction, underlying ECNT and ALEC's response is a deep concern at the inadequacy of the existing regulatory environment at governing this extraction.

2. Pathways to decarbonisation: questioning some assumptions

ECNT and ALEC are supportive of a strategy that responds to the need to identify ways to reach Australia's net zero goal. We take it as a given that Australia must decarbonise its energy system and undertake a just transition away from fossil fuel dependency. However, due to the Northern Territory's history of mining, and current regulatory context, as peak environment bodies we approach the claim that the energy transition will usher in a new area of intensified mineral extraction with some trepidation. Large-scale mining necessarily entails a degree of environmental, social, and cultural harm, and in cases of poor regulation these harms are significant (as outlined in Section Three of this paper). Furthermore, the mining industry contributes an estimated 7% of global greenhouse gas emissions. It is our view that the *Discussion Paper* pays insufficient attention to how both the demand for, and supply of, critical minerals can be managed so as to mitigate the need for a drastic expansion in mining. It is undoubtable that a degree of extraction of critical minerals will be necessary for a successful transition to a decarbonised energy system. But the volume of this extraction is not fixed. The government now has a unique opportunity to set parameters around this extraction and how it is regulated, and to generate policy to shape the demand and supply of these minerals to ensure the smallest possible amount of environmental and social harm occurs.

2.1 Demand regulation - lithium case study

This section primarily responds to Discussion Question 1-3, 19-22

Various decarbonisation pathways, each entailing different amounts of mineral extraction, are available to Australia at this juncture. Not all pathways entail significant increases in the demand for particular minerals. To take the example of lithium used in electrical vehicle (EV) batteries, recent [research](#) has demonstrated that a scenario where car dependency is reduced through greater public investment in public transport, and EV battery sizes are limited, could reduce the demand for lithium by up to 66% compared to other future projection scenarios.

Australia, and in particular the Northern Territory, currently bears the brunt of the global push for lithium extraction to meet demand from electric vehicles. Australia's 2021 production of lithium was 55,000 metric tons, more than twice that of the world's next largest producer, Chile. But mining lithium at a large scale entails a concerning number of environmental risks and impacts. Currently, the Litchfield-Finiss region near Darwin in the Northern Territory is being turned into a sacrifice zone

for the extraction of lithium. Two mines, an underground and an open cut, have been approved for production by the Northern Territory Government. Both are operated by Core Lithium. ECNT has been an outspoken critic of the environmental impacts of the mines, both in [submissions to the regulator](#) as well as in public forums such as [ABC Four Corners](#). Before the mine even commenced production, a [pollution incident was reported](#) whereby runoff was identified in a nearby waterway. Aside from these currently existing mines, over 500km² of lithium exploration tenements are held across the Litchfield-Finiss region, including on land that borders Litchfield National Park, one of the natural icons of the Northern Territory. The region over which these exploration tenements sit is of significant importance ecologically and culturally. A group has formed, Friends of Litchfield-Finiss, to oppose further lithium extraction in the region, and has garnered over 1000 supporters (which, for a region with such low population density, demonstrates a significant level of support). In particular, the [community backlash](#) against lithium mining near Litchfield National Park has been overwhelming. Community members hold concerns surrounding the limited rights of landowners to oppose mining on their land, as well as the environmental risks of mining close to areas of ecological and cultural value.

Given this context of community opposition to the concerted push for greater lithium mining in the region, it is clear why the government has a role to play in creating a regulatory and policy environment that is conducive to managing the demand for lithium rather than facilitating its exponential extraction. A decarbonised transport future does not necessarily look like everyone owning Teslas; it could mean less private vehicle ownership, less dependency on cars for transport, smaller vehicles, mass public transit. These scenarios are realistic and have occurred elsewhere: in Paris, car usage has [declined 30%](#) since 2001, for example.

2.2 Supply regulation

This section mainly responds to discussion question 20-21

Even if demand is accepted to rise to a certain degree, there exist alternative ways to meet this demand for critical minerals that do not entail drastic increases in the volume of extraction. One key method for doing so, that receives no mention in the *Discussion Paper*, is the re-mining of old tailings for key critical minerals. It is [estimated](#) that by 2025 there will be 19 billion solid tonnes of accumulated tailings in the world; Australia alone has thousands of abandoned mines. As a technique to secure supply of critical minerals, re-mining these old tailings for new minerals is receiving an increasing amount of attention and research. [This study](#) is optimistic about the ability for lithium, cobalt, and rare earths elements to be recovered from abandoned mine tailings. There is likewise research available discussing the possibility of extraction of [critical minerals from brines](#), and [porphyry ores and e-wastes](#). The re-mining of old tailing bodies presents a less ecologically and socially destructive way to secure these minerals, for it does not entail the opening of new extractive sites or the destruction of further areas of land and habitat. Such a practice needs a particular regulatory and policy environment in which to become a viable activity; it may be that investment in R&D is needed to assess the viability of upscaling this solution.

The International Resource Panel, part of the United Nations Environment Programme, published a report in 2010 highlighting the lack of data and investigation into the distribution of different metals and their possibility for above-ground recovery through recycling. In Europe, there exists an initiative called “Prospecting Secondary raw materials in the Urban mine and Mining wastes” (ProSUM), that

seeks to address the supply of critical minerals through non-extractive means. These kinds of initiatives could be supported by the Commonwealth's Critical Minerals Strategy.

The *Discussion Paper* addresses the need for an “increased focus on circular economy and recycling practices” and ECNT and ALEC welcome this focus. This focus should be supported through funding and research. Section 2.3 illustrates some of the ways that funding can be recuperated from current mining activity, and some of the projected spending on mining projects could be redirected to support recycling and circular economy pathways.

2.3. Public funding of decarbonisation pathways

This question mainly responds to discussion question 7

The *Discussion Paper* contains emphases on both Australia being an attractive investment location, as well as the dire need to attract investment to Australia through public subsidy. ECNT and ALEC submit that these are inconsistent emphases and recognise that the former is likely to be more accurate; mining companies consistently look to Australia, and the Territory in particular, as an attractive investment location for a range of reasons that the discussion paper mentions. Significant amounts of public funds have already been earmarked for the mining industry, as the *Discussion Paper* notes. It may be that a more cost-effective and socially valuable way to spend the billions currently allocated subsidising the for-profit activities of mining companies is investment in public infrastructure and services. More specifically, these public funds could be directed towards decarbonisation pathways that are less mining-intensive, as the [aforementioned US research](#) has discussed.

A [report](#) into the economics of the McArthur River Mine (MRM) found that the mine imposes significant costs on the Territory and, in every year of its operation bar one, pays no royalties. The report finds that “at best, the mine would contribute just one third of one percent of NT Government revenue”. If this mine, one of the largest zinc-lead mines in the world, can bring such negligible economic benefit to the Territory, but impose such significant risk (Glencore, the mine operator, has admitted that the mine will take over 1000 years to properly rehabilitate), one is left sceptical at the public benefit that will come from an accelerated exploitation of Australia's mineral resources. More stringent royalty regimes, higher rates of income tax of the megaprofits of mineral companies, more accurate calculations of environmental security bonds, and more severe penalties for environmental damage, are all measures that could generate income that would allow states and the Commonwealth to better address the socially harmful consequences of mineral extraction, and investigate circular economy and recycling alternatives.

3. Background: Northern Territory mineral development

3.1. Legacy

Mineral resource extraction, and First Nations and community opposition to this extraction, has been a fundamental part of the Northern Territory's history. The Yolngu people's struggle against Nabalco was a watershed moment in the development of land rights in the Northern Territory. The Mirrar people's victory at Jabiluka celebrates its 25th anniversary this year, and remains an example of Traditional Owners uniting with the broader community to oppose unwanted mining on their land.

Mining disasters have taken place at sites such as Redbank, Rum Jungle, McArthur River, and Bootu Creek. These examples of egregious misregulation are not only historical; just last year Nathan River Resources was found guilty of discharging arsenic into the Towns River.

The extractivist agenda of the Territory and Commonwealth governments persists until this day. Currently, the Northern Territory has one of the world's largest zinc-lead deposits, at McArthur River; has the world's largest manganese mine, on Groote Eyelandt; has one of the largest lithium mines in Australia, operated by Core Lithium; and is home to one of Australia's largest ilmenite mines, in the Roper region.

3.2. Future mining development

As the Commonwealth would be aware, the Northern Territory Government has an ambitious agenda for mineral development - including critical minerals - and additional value-add activities.

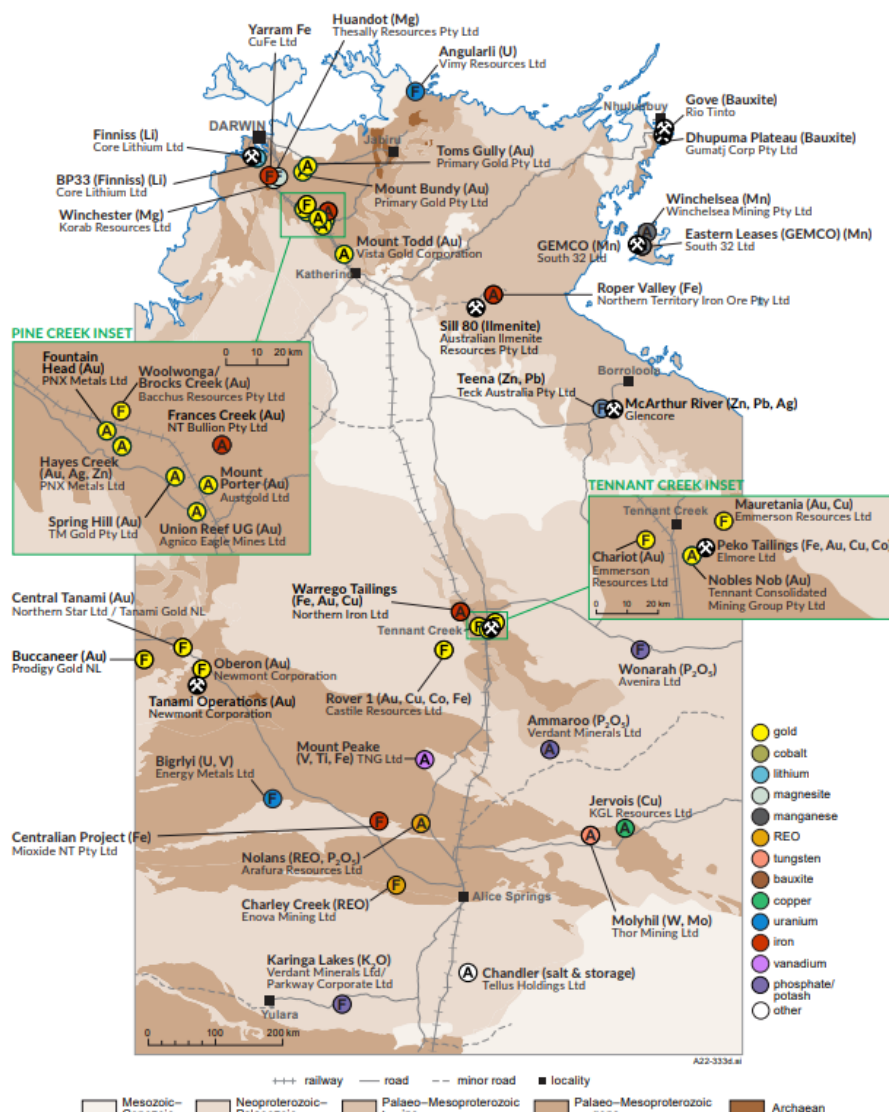


Figure 1 illustrates the wave of mineral extraction that the Northern Territory is facing.

4. The regulation of mining activities in the Northern Territory

This section responds to Section 6 of the Discussion Paper

We recognise that under the constitution, states and territories maintain powers to regulate mining activities. However, it is apparent that the strategy outlined in the *Discussion Paper* will seek to turbocharge critical mineral development and on-site processing nation-wide. As a result the Commonwealth will play a key role in coordination and strategic direction, as well as in providing up-front capital.

It is also clear that the Commonwealth also has responsibilities to advocate for fit-for-purpose regulatory environments nation-wide so as to align with the Sustainable Critical Minerals Alliance and their ESG standards. This includes commitments that mining is nature-positive, supports local and Indigenous communities, fights climate change, restores ecosystems, builds a circular economy and fosters ethical corporate practices.¹

Therefore, the Commonwealth must be cognisant of the regulatory environments of each state and territory and the subsequent risks that are involved. As the peak-environmental bodies that are based and operate within the Northern Territory, we provide here an overview of the regulation of mining activities in this jurisdiction.

We are of the firm position that the Northern Territory Government's regulation of mining activities is unfit for purpose and in urgent need of overhaul. This was acknowledged by the Northern Territory Government where in December 2020 for the first time in 20 years they committed to reform their mining legislation and put out a consultation paper [Regulation of mining activities: environmental regulatory reform](#). However, there has been no progress on this reform in two years. Instead, the Northern Territory Government has stepped away from some reform areas, such as their backflip on the [chain of responsibility legislation](#).

Aligning with the Strategy's purpose reflecting 'Australia's ongoing commitment to the highest ESG [standards]' and SCMA commitments, we assess two key areas of regulation in the Northern Territory, namely the regulation of mining activities, in addition to the regulation of water resources in the Northern Territory. The focus on these two areas is obvious. The development of a Commonwealth critical minerals strategy will support the expansion of some mining activities, and mining activities and subsequent processing requires a lot of water. We provide our analysis of the regulation of water in Appendix A.

Whilst there are major issues with the regulation of biodiversity and climate in the Northern Territory we do not expand on those areas in this submission.

4.1. Mining

Firstly, we make it clear why urgent reform is needed in the Northern Territory. Then we go through a non-exhaustive list of key areas where mining regulation in the NT is unfit for purpose and in urgent need of overhaul.

The urgent need for reform

¹ King, M, 2022. 'Australia joins global commitment to ESG for critical minerals'

It is well known throughout Australia that the NT's mining regulatory regime falls far short of best practice. Management of mines in the tropics is complex and difficult, and legacy mines such as Mount Todd, Rum Jungle, and Redbank tarnish the Territory's landscape, leaching heavy metals and acids into waterways, with apparently little consequence or accountability for the mining companies who were responsible for the damage.

There have been issues with respect to the transparency of mining regulation during the entirety of the approval, operation, closure and rehabilitation phases of mines in the NT due to the secrecy of Mining Management Plans (MMPs), as well as the absence of any public reporting on compliance with conditions for mining approvals or enforcement activities undertaken by the regulator.

Apart from the approval phase for mines (due to environmental impact assessment processes), there is little to no public engagement by government about the ongoing impacts of mining projects, including with Indigenous peoples with significant property interests and who are most affected by these projects.

The dual role performed by the Department of Industry, Trade and Tourism (DITT) as both promoter and environmental regulator has led to the perception of regulatory or sectoral capture. The weak environmental provisions of the Mining Management Act 2001 (NT) (MMA) have given DITT a discretionary jurisdiction that largely operates behind closed doors and away from public scrutiny.

Compliance, monitoring and enforcement functions appear to be either weak, or completely absent (for example, see the recent NT Supreme Court case in relation to the Frances Creek Mine, where it was revealed that no site inspections were carried out by DITT for the entirety of the mine's operations, despite significant issues with acid mine drainage²). This substandard regulation has frequently resulted in adverse impacts for the Northern Territory's environment, and the Northern Territory's reputation as a regulator.

Case Study - McArthur River Mine

The most egregious example of regulatory failure with respect to mining in the Northern Territory is the McArthur River Mine. A report co-authored by the UNSW Global Water Institute and ECNT (UNSW Report, attached) shows that DITT's regulatory action has lagged many years behind the identification of significant environmental issues at the mine site, with environmentally catastrophic impacts.³

One of the key environmental problems plaguing the mine was the incorrect classification of waste rock in the northern waste rock dump. Following the spontaneous combustion of the waste rock dump (publicly reported in 2013), it was revealed that instead of approximately 25% of the mine's waste rock being potentially acid-forming (PAF), the figure was closer to 90%.

The UNSW Report demonstrated that as early as 2008, the Independent Monitor for McArthur River Mine had identified the potential misclassification of the waste rock as an "extreme risk". The Independent Monitor identified that tailings were oxidising rapidly and producing acid, and that the assessment of tailings as non-acid forming was likely to be incorrect. Despite every subsequent

² *Territory Resources Ltd v Secretary for Mineral Royalties (NT)* [2018] NTSC 12.

³ UNSW Global Water Institute and the Environment Centre of the NT, *Monitoring the monitor: a temporal synthesis of the McArthur River Mine Independent Monitor reports* (February 2021).

Independent Monitor report identifying misclassification of waste rock as a significant risk, DITT (and the NT Environment Protection Authority (NTEPA)) took no regulatory action that ECNT is aware of until 2014 (when the issue was referred for environmental impact assessment), allowing, in the interim, an expansion of the mine that doubled the size of the open pit and the waste rock dump itself, increasing the risk of acid mine drainage significantly.

The mine concedes that monitoring will need to occur for some 1000 years after decommissioning of the site. It has now been over 12 years since the issue was first identified, and the “solution” (the Overburden Management Project) was only conditionally approved in late 2020, with sacred sites approvals still outstanding.

Moreover, the disastrous decision to reduce McArthur River Mine’s security bond against the advice of both the Independent Monitor and NTEPA has left the Northern Territory in an untenable position: closing the mine with such inadequate security would leave the Northern Territory Government (and taxpayers) with an unfunded environmental disaster to remediate.

ECNT is concerned that the problems identified by the Independent Monitor at McArthur River Mine are worsening in scale and severity, enabled by an ineffective regulatory regime. In 2018, the Independent Monitor characterised as “extreme”, the risk that the McArthur River would divert along its old course, causing the collapse of the mine wall and irreversible damage to the McArthur River and other water systems.⁴ The risk is defined in the report as requiring “immediate intervention to eliminate or reduce risk at a Senior Management/Government level”⁵. However, this risk does not appear to be addressed in the latest mining documents approved by the Minister, again indicating that regulatory action is lagging years behind the identification of significant environmental problems. This has created unacceptable multi-generational impacts on communities and landscapes.

On/ off tenement regulatory approach

Currently, the environmental management of mining sites occurs under an on/off tenement approach. This sees the Department of Industry, Tourism and Trade having jurisdiction of the mine side (under the Mining Management Act 2001 (MMA)) and the Northern Territory Environment Protection Authority and the Department of Environment, Parks and Water Security have jurisdiction off the mine site (under the Waste Management and Pollution Control Act 1998).

The on/off tenement approach is a major flaw in the NT’s current mining regulatory system. The MMA essentially permits pollution on NT mine sites, as long as it is done in accordance with an approved MMP. The environmental protection obligations in the MMA are qualified. MMPs must only “as far as practicable” operate effectively in protecting the environment (s36(5)(a)(ii)). Compliance with them protects mining operators against polluting activities that might otherwise constitute offences under the legislation. For example, the general offence in the MMA against releasing waste or contaminants on or off site is neutralised as long as the operator complies with its MMP (s33 of the MMA). Further, offences for causing other forms of environmental harm (ss26 and 26A, 27 and 27A and 28 and 28A) are only established if offenders also breach one of a list of weak environmental obligations. On the mine site operators have wide parameters as long as MMPs are complied with. This makes mining regulation a jurisdiction of discretion, where whatever DITT decides is acceptable,

⁴ ERIAS Group, McArthur River Mine Independent Monitor: Environmental Performance Annual

⁵ Ibid.

becomes what is enforceable (or not). And historically this has also been a secret jurisdiction - the confidentiality of MMPs (as the key regulatory tool governing mining operations on the mine site) has meant that it has not been possible for the public to ascertain how mining impacts on site are being managed.

Given the temporal and spatial nature of many mining impacts, this is an enormously risky and illogical regulatory system. Offsite impacts may be hidden or delayed. For example, acid mine drainage from tailings dams, open pits and waste rock dumps moves slowly and incrementally, infiltrating and contaminating waterways over millennia. By the time these impacts are felt off-site, there is little the NTEPA or DEPWS can do under any legislation.

Regulatory Separation

In order to address issues relating to the perception of sectoral capture and conflict of interest, it is necessary to have regulatory separation between the Department that is responsible for environmental approvals and regulation (in the Territory that is the Department of Environment, Parks and Water Security) and the Department promoting and advocating for the mining industry (in the Territory that is the Department of Industry, Tourism and Trade). This is an arrangement that already applies to the onshore gas industry in the Northern Territory as a result of recommendations of the *Scientific Inquiry into Hydraulic Fracturing in the Northern Territory*.⁶

Resourcing, expertise and capacity

ECNT and ALEC have serious concerns about the resourcing of DEPWS and the NTEPA in comparison with DITT. The most recent NT Budget Papers indicate that the NTEPA receives only \$754,000 in funding annually. The DPEWS annual budget for its regulatory functions with respect to the Environment Protection Act 2019, Waste Management and Pollution Control Act 1998 and the Petroleum Act 1984 (“Environment management and policy”) is \$11.5m. Despite no longer having regulatory responsibility for petroleum (ie onshore gas), DITT’s budget for Mines and Energy is \$28.3m (split into resource industry development, mines services and energy services). ECNT and ALEC are concerned that despite the significant increase in regulatory functions being performed by DPEWS (through its new jurisdiction with respect to onshore gas, and the new Environment Protection Act), this has not translated to sufficiently increased resourcing. Indeed, the Northern Territory Government appears to be funding the promotion of the resources industry to the detriment of its environmental regulation.

Regulatory resourcing is not just an issue in the Northern Territory. Lack of capacity and technical expertise at regulatory agencies has been raised as a problem a number of times in a national context, most recently in the Productivity Commission’s report on regulation in the resources sector, where the Commission found that:⁷

⁶ The Pepper Inquiry recommended a “clear separation between the agency with responsibility for environmental impacts and risks associated with any onshore shale gas industry and the agency responsible for promoting that industry” (p 431). All environmental approvals and regulatory functions for the onshore gas industry in the NT thus sit with the Minister for the Environment/NTEPA/DEPWS. DITT retains responsibility for promoting the onshore industry, and the management of petroleum titles and the resource more broadly. .

⁷ Productivity Commission, Resources Sector Regulation - Study Report (November 2020), Canberra. At p351

Regulators face capability challenges and can lack transparency, which diminishes the quality of their decisions, imposes unnecessary costs and risks undermining public confidence in regulatory efforts.

As the Productivity Commission states, “[e]lected governments have ultimate responsibility for establishing the pre-conditions for robust regulatory systems”⁶ and as such, “[g]overnments should assess whether their regulators are appropriately funded, and the potential for greater cost recovery”.⁸

The Northern Territory Government should demonstrate that it will ensure that staffing levels, including staff with the necessary expertise, are sufficient to implement the proposed regulatory framework, including a robust and transparent system of compliance, monitoring, and enforcement. In particular, it will be necessary to ensure that DEPWS is appropriately staffed to take on the responsibility of regulating the environmental impacts of mining activities. It may be appropriate for a full cost recovery model for the resources industry (such as that proposed for the onshore gas industry) to be implemented with respect to mining.

Compliance, monitoring and enforcement

One of the key characteristics of the current regulatory system is a lack of transparency regarding compliance and monitoring of, and enforcement against, mining operations. The Supreme Court case about Frances Creek mine shows that there are real questions about whether any rigorous compliance, monitoring and enforcement activities are undertaken at all by DITT. It is crucial that rigorous requirements are established for public reporting against licence conditions and standards, as well as DEPWS’ enforcement activities. These functions must be adequately resourced by the Northern Territory Government.

ECNT and ALEC supports the tightening of definitions for reportable incidents, and public reporting by both mining companies and government regarding responses to these incidents. In the 2018 Independent Monitor report for McArthur River Mine, the Independent Monitor noted that 106 of the mine’s groundwater monitoring bores showed exceedances greater than the trigger value, which were not reported, apparently due to a distinction informally accepted by the mine and the regulator between an “incident” requiring reporting under s29 of the MMA, and an “exceedance” which did not require reporting.¹³

Indigenous engagement, and Indigenous cultural heritage

Over 50% of land in the NT is owned by Traditional Owners under the Aboriginal Land Rights (Northern Territory) Act 1976 (Cth), and much of the remainder of land is subject to native title rights and interests under the Native Title Act 1993 (Cth).

ECNT and ALEC acknowledge that many, if not most, mines in the Northern Territory (McArthur River Mine is a notable outlier) have native title or land rights agreements, which give Traditional Owners some ability to be informed about mining operations on their country depending on the (confidential) terms and conditions of those agreements. Additional protection for sacred sites is provided through the Aboriginal Land Rights (Northern Territory) Act 1976 (Cth) (ALRA) and the Northern Territory Aboriginal Sacred Sites Act 1989 (NT) (NTASS Act). ECNT notes that there are

⁸ Ibid.

many more Indigenous people and communities affected by mines in the NT who may not fall within the definitions of these pieces of legislation.

In the wake of the destruction of Juukan Gorge in Western Australia, it is clear that legislation to protect Indigenous cultural heritage (and land and waters) from mining operations is inadequate. Existing protections are not sufficient to protect sacred sites, nor to ensure meaningful engagement with Indigenous peoples about mines proposed on their country or near their communities. There have been many instances in the Northern Territory of unauthorised damage to Indigenous cultural heritage, and country more broadly, by mines, including:

- the damage to a significant sacred site at Bootu Creek manganese mine notwithstanding the mine's knowledge of that site and the existence of mining agreements and authority certificates;
- the potential damage to sacred sites, and to the McArthur River and Borroloola more generally, from McArthur River Mine;
- leaching copper sulphate into Hanrahan Creek at the old Redbank copper mine; and
- acid mine drainage into the Edith River at Mount Todd gold mine.

Key regulatory decisions, such as the relatively recent approval of Nathan River Resources mine after a 7-year care-and-maintenance period, and the decision to reduce the security bond at McArthur River Mine, have not been communicated by government to the Indigenous communities which will be most affected.

Part of the problem is structural – while certain information is available to Traditional Owners and custodians (primarily through their representative bodies) and the public during the authorisation of mining projects (including through the environmental impact assessment process), very little information is publicly released post-approval. MMPs, the key regulatory tool governing mining operations, have (until very recently) been deemed confidential documents. There is no requirement for public reporting by mining companies on compliance with mining conditions, nor by DITT. After mines are authorised, their management and regulations are “black-boxed” and accessible only to mining companies and DITT.

ECNT and ALEC acknowledge commitments by the Commonwealth to provide greater protections for Indigenous heritage through the Samuel's Review of the EPBC Act.

Care and maintenance

Mines that are in “care and maintenance” pose a risk to the NT's environment, and indeed have been the cause of significant environmental contamination in the NT (for example, Mount Todd and Redbank mines). Care and maintenance arrangements have been used as a shield to avoid environmental accountability, and are a significant liability for the Northern Territory Government.

5. Recommendations

5.1 from Section 2: pathways to decarbonisation

- Further investigation into, and funding of, alternatives to decarbonisation pathways that assume drastic critical mineral demand increases
- Further investigation into, and funding of, alternatives ways to increase supply of critical minerals through non-extractive means, including;
 - Viability of re-mining tailings in the Australian context
 - Urban mining and mineral recovery from anthropogenic environments
 - Circular economy and critical mineral recycling
- Funding of the aforementioned through curtailing of public spending on for-profit mining activity, and stricter royalty and tax regimes

5.2 Consultation and engagement

ECNT and ALEC commend the *Discussion Paper*'s commitment to an inclusive and broad consultation process. In particular, we look forward to seeing how

- *[t]he Government will bring together stakeholders across a range of sectors to ensure we hear views on challenges and solutions that can inform Government policies. We are committed to ensuring First Nations Peoples have a seat at the table as a valued partner throughout these consultations.*

By way of recommendation, ECNT and ALEC would encourage the Department to travel to regions and seek input from frontline communities in their Strategy. Genuine consultation entails that the Department does not approach the communities in question with a preconceived position on the issue about which they are consulting; it may be the case that communities in extractive zones do not wish to see more mining on their lands, but have alternative ideas about how Australia can reach net zero.

5.3 Water Trigger Expansion

It is clear that critical mineral developments will require significant water resources. In addition, these activities will extract a wide array of minerals with different levels of toxicity.

In the advent of a renewed wave of extraction it is important to consider whether existing Commonwealth regulations are fit for purpose. ECNT and ALEC call for an expansion of the 'water trigger' under the Environment Protection and Biodiversity Conservation Act 1999 to include all large-scale mining activities.

5.4 Conditional capital funding based on regulatory reform

ALEC and ECNT support the Commonwealth to advocate for the strengthening of regulation of mining activities across all states and territories. For jurisdictions like the Northern Territory which have unfit for purpose regulatory arrangements, capital provided by the Commonwealth to support critical mineral development should be conditional upon updated regulations that align with ESG standards.

Kind regards,



Naish Gawen

ECNT Gas and Mining Strategist



Alex Vaughan

ALEC Policy Officer

Appendix A - Water

This section highlights the unfit for purpose and broken nature of water law and governance in the Northern Territory. It has been stated by environmental law experts that ‘water law and governance in the NT to be amongst the poorest in the country’.⁹

Water Allocation Planning Framework

The Northern Territory Water Allocation Planning Framework (WAPF) is outdated and not fit for purpose. The document hasn’t been updated since its creation in 2000. It is only two pages, yet it provides thresholds for extraction in the Top-End and Arid Zone. The WAPF applies to areas not covered by water allocation plans (WAPS) - this amounts to 72% of licences in the Northern Territory.¹⁰ This is the policy which will cover many mining developments which usually sit out of water allocation planning areas.

The WAPF permits that in the arid zone for groundwater ‘total extraction over a period at least 100 years will not exceed 80% of the total aquifer storage at the start of extraction’¹¹. This threshold is not supported by any scientific basis and constitutes water mining.

The WAPF in its current form is dangerous. It sets arbitrary but extraordinarily high limits to support the large-scale extraction of water with no scientific justification. The WAPF sets the tone of a governance regime that is currently not fit for purpose.

Water Allocation Planning

ALEC strongly supports the briefing note developed by the Environmental Defenders Office which highlights seven areas that water allocation planning is deficient in the Northern Territory.¹² They include actions to:

1. **Legally require water allocations plans to be created.** There is no requirement to create WAPs in the NT, which means that 72% of water allocations are based upon the NT’s ‘water allocation planning framework’ which has not been updated since its creation in 2000.
2. **Create an overarching framework for how WAPs are developed.** The *Water Act* has few requirements for what must be included in a WAP. This failure ensures that WAPs vary widely, are inconsistent and weak (see 3.)
3. **Legislate binding provisions for WAPs.** WAPs in the Northern Territory are largely descriptive, with limited presence of legally enforceable binding provisions. While S. 22B(4) gives some strength to WAPs, it is not supported by binding provisions. It is commonplace for water plans in other jurisdictions to contain binding rules for how water can be used.
4. **Strengthen requirements around the estimated sustainable yield.** The ESY governs the amount of water that is allocated for beneficial uses. As stated by the EDO, ‘one of the most important features of any water legislation is a requirement to set limits on extractions for

⁹ Environmental Defenders Office, 2022. ‘October 2022 Update: Deficiencies in the existing water law and governance framework in the Northern Territory’

¹⁰ Environmental Defenders Office. 2021, p.1. ‘Deficiencies in the existing water law and governance framework in the Northern Territory’.

¹¹ Department of Environment, Parks and Water Security, 2020,p.2. ‘Northern Territory Water Allocation Planning Framework’. Northern Territory Government.

¹² Environmental Defenders Office. 2021. Deficiencies in the existing water law and governance framework in the Northern Territory.

each water resource, and that this limit be based on the best-available science and evidence regarding environmental and cultural requirements within the catchment'.¹³ In ensuring the *Water Act* is contemporary and coordinated, it is key that the ESY is defined (see figure 1); a methodology is established; the ESY is legally enforceable; make clear the ESY 'must be based on best available scientific and cultural knowledge'; and, climate change impacts are considered.¹⁴ These amendments will ensure that there is consistency in water planning, which is also supported by best scientific research and cultural knowledge.

For example, compare the definition of 'estimated sustainable yield' in the Ti Tree WAP 2020-2030:

"To meet the requirements of section 22B of Water Act 1992, the ESY is the amount of water that can be taken from the water resource to support beneficial uses without compromising key cultural and environmental values, or ecosystem functions or the productive base of the resource or declared water quality standards, criteria or objectives."

With the definition of 'sustainable yield' defined in the Berry Springs WAP 2016-2026:

"the amount of groundwater that can be extracted from an aquifer on a sustained basis without impairing water quality or causing environmental damage"

And the definition of 'sustainable yield' in the Western Davenport WAP 2021-2022:

"The level of water extraction from a particular system which, if exceeded would compromise key environmental assets, or ecosystem functions and the productive base of the resource."

There is great variation between these definitions, with some emphasising cultural values, some water quality and others focused solely on ecological considerations.

Figure 1. Definitions of 'sustainable yield' vary widely in three recent Northern Territory Government WAPs.¹⁵¹⁶¹⁷ The lack of consistency reflects the vagueness of the *Water Act* which fails to define key terms and create key legally binding provisions.

5. **Adaptive management is linked to the *Water Act*.** Adaptive management is not included in the *Water Act*. Subsequently, there are no legally binding adaptive management triggers included in WAPs. Adaptive management is an important natural resource management tool, but its use is entirely discretionary and up to the Water Controller. There is a failure of process that water resource management relies on a single decision maker to impose certain conditions, rather than a legal obligation to do so. This is contrasted to the *Water Act* 2007 (Cth) and *Water Management Act* 2000 (NSW), which under certain conditions have triggers for adaptive management responses.

6. **WAPs are declared within a statutory timeframe.** The EDO articulates this succinctly:

'Despite their pressing need, the development of new WAPs across the NT is occurring at a glacial pace. For example, the Tindall Limestone Aquifer, Mataranka to Daly Waters (Mataranka WAP) has been in development since at least 2009. By 2012, a draft plan had been prepared, followed by consultation with stakeholders and the community, as well as research project investigations. By 2017 the plan was still not

¹³ Ibid, p.2

¹⁴ Ibid

¹⁵ Department of Environment and Natural Resources. 2020, p.72. 'Ti Tree Water Allocation Plan 2020-2030, p.72. Northern Territory Government.

¹⁶ Department of Environment and Natural Resources. 2016, p.45. 'Berry Springs Water Allocation Plan 2016-2026. Northern Territory Government.

¹⁷ Department of Environment, Parks and Water Security. 2020, p.84. 'Western Davenport Water Allocation Plan 2021-2022'. Northern Territory Government.

in force, but Mataranka was described by the NT Government as ‘a priority area for water allocation planning’ due to the social, cultural, environmental, and economic significance of the region. The Mataranka WAP is yet to be implemented.

The extraordinary delay in the introduction of WAPs means that water may already be allocated in excess of the sustainable limits within specific water sources. This was illustrated by the recent introduction of the Ooloo Dolostone Aquifer Water Allocation Plan 2019-2029 (Ooloo WAP). The estimated sustainable yield of the northern groundwater management zone of the Ooloo Dolostone aquifer calculated for the WAP was found to be less than the existing entitlements already granted for use.’¹⁸

7. **Limiting the weaknesses in WAPs will strengthen the Strategic Aboriginal Water Reserve.** The slow pace at which some WAPs are developed, whilst continuing to allocate water licences can result in overallocation before a ESY is determined and a WAP declared. As stated in the Ooloo WAP ‘The Northern [groundwater management zone] is overallocated. As a consequence the Strategic Aboriginal Water Reserve is notional and cannot be provisioned’¹⁹. Similarly, limited baseline research can also threaten the SAWR. In the Western Davenport WAP 2018-2021, there is an ‘extreme risk’ that the SAWR may be reduced because there is ‘already significant demand for groundwater in the District from non-Aboriginal stakeholders’ and the ESY is later found to be wrong and the quantity of supply downgraded²⁰.

Case Study: Georgina Wiso (Beetaloo) Water Allocation Plan

The Draft Georgina Wiso WAP and the proposed Draft Western Davenport WAP adopt a new structure that trashes water allocation planning in the Northern Territory. ALEC understands that all new WAPs will adopt this format.

Many of the concerns ALEC raises about the structure of the WAP were also recognised by the Western Davenport Ti Tree Water Advisory Committee in the minutes of its meeting of date October 3.²¹ This is the only opportunity members of the public have had to consider this new template and approach. It is important to note that the Western Davenport Water Advisory Committee could not endorse the Draft Western Davenport Water Allocation Plan due to the major issues it contained, including the new structure²². This WAP has still not been released due to the significant concerns raised by the WAC and other stakeholders.

What has the Draft Georgina Wiso Water Allocation Plan proposed?

The plan proposes to split the Draft Georgina Wiso Water Allocation Plan into three documents, the:

1. Draft Georgina Wiso Water Allocation Plan 2022-2030 (Statutory WAP);
2. Draft Georgina Wiso 2022-2030 Background Report (Report);

¹⁸ Environmental Defenders Office. 2021, p.3. ‘Deficiencies in the existing water law and governance framework in the Northern Territory’.

¹⁹ Department of Environment and Natural Resources. 2019, p.73. ‘Ooloo Dolostone Aquifer Water Allocation Plan 2019-2029’.

²⁰ Department of Environment and Natural Resources. 2018, p.58. ‘Western Davenport Water Allocation Plan 2018-2021’..

²¹

https://depws.nt.gov.au/_data/assets/pdf_file/0020/1165142/western-davenport-ti-tree-wac-meeting-out-of-session-1-12october2022.pdf (refer p.2 and p.3)

²² Jonscher, S, 2022. ‘NT government at odds with water planning committee overseeing Fortune Agribusiness licence, leaker letter show’. ABC.

3. Draft Georgina Wiso 2022-2030 Implementation Actions (Actions).

The structural problem is that *Water Act* 1992 only applies to the Statutory WAP which is the only plan to be gazetter. However, this has been gutted of any meaningful content that gives assurance or guidance as to how water is to be taken safely.

The Controller of Water Resources in making water licensing decisions does not need to consider the Report or Actions, and these may be varied.

The Draft WAP attempts to avoid accountability clauses established under the *Water Act* 1992

The Draft WAP erodes the rigour of WAPs where it deliberately sidesteps accountability mechanisms established under the *Water Act* 1992 through s. 22B(1), s. 22B(4) and s. 90(1)(ab).

This is done by drastically minimising the content within the Statutory WAP. Key examples of this are the failure to include objectives for protection of cultural and ecological values, or guidance around how water should be taken so as to avoid risks along with performance targets. The Statutory WAP is silent on these, which puts it vastly out of step with Australian practice and the National Water Initiative. (We expand on this in the following section.)

The Department has a number of times referred to the litigious environment verbally as reason for the plan restructure. This has also been captured in the minutes of the Western Davenport Water Advisory Committee Meeting 6 on October 3, where it is states that ‘the current format majority of committee do not endorse and do not want their name against it saying they endorse it as a committee, although noting structure is not for endorsement as **it is a result of legislative responsibilities and to prevent future opportunity for litigation**’ and goes on further stating that due in part to the ‘litigation environment’ the Department is constrained in changing the structure²³.

Muzzling scrutiny is a very serious escalation by the Northern Territory Government. It is ever more astounding in contexts where no consultation has even occurred such as for the Georgina Wiso WAP. It is remarkable that this is being communicated so openly and honestly by the Department. ALEC emphasises that the attempt to silence scrutiny in the Draft Plan is absolutely unacceptable.

ALEC sees these plans under the new structure as abrogating the responsibility for water resources management via water allocation planning.

The WAP undermines the National Water Initiative and weakens NT water management

The Draft Plan sets a dire precedent across the Northern Territory where it breaks away from key components of the National Water Initiative (NWI). This includes the decision to:

- Not consult e.g. with a Water Advisory Committee;
- Remove an objective for ecological values out of the statutory WAP;
- Remove an objective for cultural values out of the statutory WAP;
- Remove considerations of risk and uncertainty out of the statutory WAP;
- Remove the implementation and monitoring plans (including performance monitoring) from the statutory WAP;
- Remove the adaptive management framework out of the statutory WAP.

It is important to note that the current National Water Initiative and a renewed National Water Initiative which has been confirmed by Water Minister Tanya Plibersek provide useful frameworks for stakeholders across Australia to scrutinise the Territory’s water practices.

²³https://depws.nt.gov.au/_data/assets/pdf_file/0020/1165124/western-davenport-ti-tree-wac-meeting6-3october2022-.pdf (bullet point 5, p6)

The Draft GWWAP provides no spatial guidance as to where groundwater is extracted across a 155,000 km² area

The management zones are extraordinarily large. It appears the NTG is indifferent as to where water within the largest WAP volume in Northern Territory history is taken across a 600 km stretch of land.

The draft GWWAP also removes any limits whatsoever as to the circumstances across this 155,000 km² area under which groundwater can be taken. As the plan gives no guidance on where and how water can be taken, it cannot meaningfully predict the consequences of taking this amount of water on receiving environments.

ALEC is also concerned that two important reports that would help understand this plan and were used in its development are not publicly available and in one case incomplete²⁴. Furthermore we understand modelling of the impacts of this proposed ESY has not occurred.

The risks are serious and need to be treated as such

We emphasise that the Georgina and Wiso groundwater feeds into and sustains some of the Territory's most important iconic all-season rivers including the Flora River, the Roper River and Elsey Creek. Failure to demonstrate that the proposed ESY and plan management arrangements will not risk serious or irreversible harm to these is incompatible with the precautionary approach established as a principle of ecologically sustainable development as described under the Northern Territory *Environment Protection Act* 2019 and is fundamentally unacceptable.

No Water Advisory Committee for Georgina Wiso WAP:

There was no Water Advisory Committee or Aboriginal Reference Group appointed for the Georgina Wiso WAP. This is an area approximately 155,000 km² in size where the plan proposes a more than tenfold increase in water extraction. A failure to consult in this region is damning as it is already contested and has had significant input from affected communities and the wider public. It raises the perception that only the interests of industry are being considered in the development of the WAP.

No regulatory separation

In the Northern Territory, water service delivery, policy-making and regulation are all fulfilled by the one Department. The Northern Territory Water Controller is also the CEO of the Department of Environment, Parks and Water Security, and they report to the Environment Minister.

Regulatory separation is critical in ensuring independent oversight in decision making around the governance of water resources and limiting real or perceived conflicts of interest. The Northern Territory Government acknowledged the need to mitigate against this perceived conflict of interest in their 2018 Water Regulatory Reform Directions Paper, stating:

‘The challenge associated with the CEO holding the appointment of Controller is that the person responsible for approving policy advice is also the person responsible for considering that advice in their decision-making. While this current arrangement is functional due to

²⁴ Maggu, J., Waugh, P. and Schult, J. (2022, in progress). *Water resources of the Wiso Basin Water Allocation Plan area, Technical Report 6/2022*. Department of Environment, Parks and Water Security (Water Resources Division). Northern Territory Government. Palmerston, Northern Territory.

Maggu, J., Waugh, P., Smith, I. and Schult, J. (2022). *Water resources of the Georgina Basin Water Allocation Plan area, Technical Report 10/2022*. Department of Environment, Parks and Water Security (Water Resources Division). Northern Territory Government. Palmerston, Northern Territory.

careful adherence to the principles of administrative law, other relevant Government decision-making functions, such as liquor licensing and environment assessment, are undertaken with a clearer separation of powers.

An option for ensuring separation between the Minister and the CEO and/or the agency advising the Controller is for the Minister to appoint a Controller as an independent statutory officer... as the Controller of Water Resources. These approaches may mitigate any perception of a conflict of interest in decision-making'²⁵.

This was reiterated again in the Direction's Paper for this Strategic Water Plan²⁶. One of two basic rules of procedural fairness is that: 'decision makers neither be, *nor appear to be*, biased'²⁷.

There are further issues with the current governance arrangement, where the Water Controller currently is also on the board of the Northern Territory Land Corporation, one of the Territory's major landholders and developers. The Northern Territory Auditor General captured this recently in their report on water licencing in the Northern Territory, stating:

'there is one recognised and recorded instance where an Agency executive officer holds an external position that may result, or be perceived as resulting in, a conflict of interest if not effectively managed. The Agency has embedded processes designed to manage and mitigate the risk that the conflict of interest could materialise'²⁸.

Note: the NT Government has stated that they will hire a new independent water controller that is not the CEO of DEPWS.

Investor-led policy development e.g *Guideline: Limits of acceptable change to groundwater dependent vegetation in the Western Davenport Water Control District*

The *Guideline: Limits of acceptable change to groundwater dependent vegetation in the Western Davenport Water Control District* was developed in 2020 without consultation. It establishes a major shift in protections for groundwater dependent vegetation. Under the Western Davenport WAP 2018-2021 it stated that 'detrimental impacts to water dependent ecosystems as a consequence of consumptive water use will be avoided as far as possible' and clear triggers were established limiting groundwater depletion, degrees lower than what has been proposed at Singleton Station. It proposes up to 30% destruction rate for GDEs across the station and management zone scale. It is crude and rides roughshod over what are complex and layered value systems attached to GDVs, providing a prescriptive rate of destruction.

Through Freedom of Information, it appears to be investor led policy development, to enable the project to overcome barriers around Terrestrial GDE destruction. This includes the fact that:

- The Guideline appears to be largely developed in one week in February 2020;
- No draft was developed;
- Department deliberately did not consult the Water Advisory Committee that had developed the previous WAP;
- No public consultation or participation;
- The major proponent to benefit from the policy was the only stakeholder consulted;

²⁵ Department of Environment and Natural Resources. 2018, p.17. 'Northern Territory Water Regulatory Reform Directions Paper October 2018'.

²⁶ Department of Environment, Parks and Water Security. 2021, p. 6. 'Northern Territory Strategic Water Plan: Directions Paper'. Northern Territory Government.

²⁷ Arid Lands Environment Centre and Environment Centre Northern Territory. 2021, p.13. 'Submission to the Water Resources Review Panel, September 2021.

²⁸ Northern Territory Auditor-General's Office. 2021, p.124. November 2021: Report to the Legislative Assembly.

- The proponent received a finalised version of the Guideline on the 13 February 2020, five months before the document was made publicly available and posted on the Department's website;
- Appears to be little to no research basis to support this policy, in regards to research that is relevant to the semi-arid/ arid zone and GDEs, and provide a prescriptive rate of destruction;
- Leans on adaptive management, despite there being no policies or guidelines for what adaptive management is and means in the Territory context, or how adaptive management can be implemented when the issue is surrounded by uncertainty.

Other issues

There have been many other issues and areas of controversy around water including in relation to:

- The granting of one of Australia's largest water licences at Singleton Station;
- The revelation that all Territorians do not have safe drinking water, where water can be contaminated with uranium, heavy metals or high-levels of salts;
- NT Land Corporation and its groundwater licence at Larrimah which was granted, then refused;
- Floodplain harvesting policy;
- The scrapping of the Parliamentary Policy Scrutiny Committees;
- The Western Davenport Water Advisory Committee refusing to endorse the draft Western Davenport Water Allocation Plan;
- Water pricing. Water is free for industry in the NT and there is no system for cost recovery;
- The granting of water licences to a political candidate.