

Our Ref: DWERT4935
Enquiries: Melissa Lamb
Email: melissa.lamb@dwer.wa.gov.au

Planning Unit
Aboriginal Engagement, Planning and Lands Branch
Department of Biodiversity, Conservation and Attractions
KENSINGTON WA

To the Planning Unit: Aboriginal Engagement, Planning and Lands Branch

**ENVIRONMENTAL PROTECTION AUTHORITY SUBMISSION ON THE
FORTESCUE MARSH NATURE RESERVE (NYIYAPARLI COUNTRY) DRAFT
JOINT MANAGEMENT PLAN 2024**

Thank you for the opportunity to make a submission on the *Fortescue Marsh Nature Reserve (Niyiyaparli Country) draft joint management plan 2024* ([draft Management Plan 2024](#)). The Western Australian (WA) Environmental Protection Authority (EPA) welcomes the opportunity to comment.

The EPA is an independent statutory Authority established under the *Environmental Protection Act 1986* (EP Act). It has statutory objectives to protect the WA environment and prevent, control and abate pollution and environmental harm and has a range of functions that include conducting environmental impact assessment (EIA) of significant proposals under Part IV of the EP Act. The EPA has also provided strategic advice on Pilbara issues, such as [cumulative environmental impacts of development in the Pilbara region](#), [environmental and water assessments relating to mining in the Fortescue Marsh management area](#), and evaluation of [Weeli Wolli Creek environmental condition](#).

While the EPA supports the draft Management Plan 2024 and its objectives and management strategies, it would like to raise the following issues as part of its submission, which are further elaborated on below:

- *Niyiyaparli People & Country Plan Fortescue Marsh 2023-2032*
- Key value - Water
- Management plan planning area
- Cumulative impacts
- Research
- Restoration
- Emerging pressures
- Wetland buffers

Niyaparli People & Country Plan Fortescue Marsh 2023-2032

The EPA recommends that the draft Management Plan 2024 incorporate more management strategies identified by the Karlka Niyapaaarli Aboriginal Corporation (KNAC) [People and Country Plan Fortescue Marsh 2023-2032](#). As a joint management plan with KNAC, the draft Management Plan 2024 should reference this document to continue to foster strong relationships and collaboration.

Key value – Water

The EPA recommends that the DBCA sets the strategic direction for Water as a key environmental and cultural value in Fortescue Marsh. The draft Management Plan 2024 should include performance measures and monitoring for upstream and downstream impacts, cumulative impacts, and episodic flooding. The management strategies for Water or *Papa* (page 17) need to include Key Performance Indicators, triggers or thresholds for water protection. To achieve good management of water, a collaborative effort between all key stakeholders is required to effect better environmental outcomes. Collaboration between the Weeli Wolli Catchment Industry Collaboration Group (part of Chamber of Minerals and Energy WA), DBCA, the Department of Water and Environmental Regulation, and the EPA is imperative to achieve “*conservation, preservation, protection, enhancement and management of the environment*” (EP Act).

Management plan planning area

The EPA supports the addition of the proposed Eastern Extension area. However, the advice of the EPA to the Minister for Environment under Section 16(e) of the EP Act: [Environmental and water assessments relating to mining and mining-related activities in the Fortescue Marsh management area](#) (FMMA) identifies six zones according to their environmental significance. Zones Northern Flank (1a) and Marsh (1b) are afforded the highest significance and would benefit from the highest conservation status and management. The current planning area only covers 1a and some of Calcrete Flats (2a). EPA notes challenges with securing land for reserve systems, particularly for class A, but given the high significance of the area, exploring additional tenure options and working arrangements with industry will get improved outcomes. This will better maintain the hydrological function of the area, protect the natural springs and pools, and manage groundwater drawdown to reduce impacts on riparian vegetation in the Northern zones of the Fortescue Marsh.

Cumulative impacts

As a part of the EIA process, the EPA expects proponents to complete a Cumulative Impact Assessment (CIA) of their project proposal, where cumulative impacts are defined as the total impacts of a proposal on an environmental value, combined with one or more past, present or reasonably foreseeable future activities and pressures. The requirement to undertake CIA is ever increasing as parts of WA’s unique environment come under increasing pressure from development, as well as other impacts such as climate change. The EPA plans to publish guidance on CIA in 2025 for use by proponents and other interested parties to guide the information required to be able to accurately assess significant cumulative impacts.

There is considerable need for the application of CIA in the Fortescue Marsh region given the high level of development in the region and associated impacts on significant flora, fauna and hydrological function of the catchment area. The data collected in the management objective for *Research* (page 42) will support quantitative CIA. The EPA recommends contributing to publicly available data (attributed/non-attributed) and the WA Biodiversity Science Institute's (WABSI) [Shared Environmental Analytics Facility \(SEAF\) project](#). The draft Management Plan 2024 will be a valuable resource to support EIA and CIA in the region. The EPA commends DBCA on its management strategies as this will effectively inform [outcomes-based conditions](#).

Research

Based on the values, objectives and strategies in the FMMA, the EPA recommends targeted, holistic and interconnected research of the fauna and habitats of:

- Northern Quoll (*Dasyurus hallucatus*)
- aquatic invertebrates
- subterranean fauna
- Bilby (*Macrotis lagotis*)
- Night Parrot https://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=59350 (*Pezoporus occidentalis*)

Research targeted on qualitative analysis of the current approaches and addressing knowledge gaps for species of high conservation status will enhance the EIA process and affect better environmental protection.

Restoration

The EPA is soon to release a modernised version of [GS6 Rehabilitation of Terrestrial Ecosystems \(2006\)](#). The newly updated Guideline will provide proponents and other interested parties with contemporary information to progressively restore disturbed areas within Fortescue Marsh. The EPA recommends a further research opportunity from the FMMA, into Samphire vegetation communities and Freshwater claypans of the Fortescue Valley. This compliments the acknowledgement of these areas as [Priority Ecological Communities for WA \(2023\)](#).

The draft Management Plan 2024 currently references the Pilbara Environmental Offsets Fund (PEOF) (in '*Section 18. Mineral exploration and development: Christmas Creek iron ore mine*', page 35). Following the recent evaluation of the PEOF, the Department of Water and Environmental Regulation (DWER) is coordinating policy and program design reform. The EPA encourages DBCA to actively engage in this reform to ensure PEOF effectively contributes to positive outcomes for Fortescue Marsh and surrounding regions.

Section 18 Management objectives (page 36) also reference the mitigation hierarchy, which is essential to the EIA process the EPA undertakes. The preference for environmental protection is to avoid adverse environmental impact altogether, followed by minimising the magnitude of an adverse impacts. The offsetting of impacts

through mechanisms such as the PEOF is an option of last resort that should only be applied where significant environmental impacts cannot be mitigated using strategies further up the hierarchy. The EPA will be looking to DBCA for advice on what is needed to counterbalance significant impacts and recommendations on what offset strategies will work best.

The EPA also recommends that a link to the [EPA Public Advice: Considering environmental offsets at a regional scale](#) be included in the draft Management Plan 2024, as this document aligns with the management objective to '*minimise the impact of mineral exploration and development on the reserve's key values*'.

Emerging pressures

As a wetland of National Importance, the EPA would like DBCA to consider revising Section 14 '*Weed and pest animals*' (pages 26-30) to better emphasise the need to prepare for and respond to emerging biosecurity risks, to support prevention and or eradication of biosecurity pests before they become established in the region. For example, Western Australia is taking a whole of Government approach to future proofing against the emerging avian Influenza threat as well as the potential for large-scale cane toad (*Rhinella marina*) incursions. As a wetland of National Importance, the waterbirds and migratory birds of Fortescue Marsh are at high risk of disease and other threatening processes.

Wetland Buffers

The EPA is of the view that buffers are an important mechanism for protecting the environmental values of all wetlands including the Fortescue Marsh, as they can minimise the risks of impacts from nearby land uses. The FMMA defines buffers around Zones 1a, 2a, 2b and 3a to allow for edge effects. In these high priority areas buffers should be set to account for surface and groundwater catchment areas, vegetation and fauna habitat, and to support ecological and hydrological integrity. The EPA encourages the DBCA to maintain and protect ecological buffers as a management strategy under the '*To protect and conserve hydrological values and processes*' (page 17) objective within the draft Management Plan 2024.

The EPA appreciates this opportunity to provide input into the draft Management Plan 2024 and would welcome further opportunities for engagement.

Yours sincerely



Darren Walsh

CHAIR, ENVIRONMENTAL PROTECTION AUTHORITY

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