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ENVIRONMENT

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Our Ref: YWAMIL02
Date: 27 October 2025

Department of Water and Environmental Regulation
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Via email: info@dwer.wa.gov.au

To Whom it May Concern

Application for Clearing Referral: Millstream Spread the Load Groundwater Investigations

Please find below the supporting information required to assist the Department of Water and Environmental Regulation's (DWER's) assessment of Yindjibarndi Water's application to clear 0.11 hectares (ha) of native vegetation, located across five discrete areas in Millstream, Western Australia (the proposed clearing areas; Figure 1).

1 Background

Yindjibarndi Water on behalf of Water Corporation is proposing to undertake a groundwater exploration program in Millstream, Western Australia. Five locations have been identified along the existing Bungaroo pipeline, where exploratory wells will be drilled with the objective of identifying new sources of drinking water.

The proposed drilling locations have been strategically selected based on:

- Proximity to the existing Water Corporation water pipeline (Bungaroo pipeline)
- Ease of accessibility from the pipeline across road
- Appropriate distancing from sensitive riverine cultural heritage sites and natural pools along the Fortescue River.

At each location of the five locations, the creation of a drill pad will necessitate clearing and ground disturbing works within a demarcated 15 meter (m) by 15 m area (225 m^2). These disturbance footprints will be strategically located within a broader 30 m by 30 m development envelope (900 m^2).

The proposal will serve to replace up to six existing production bores located in a cluster to the north east of the proposed clearing areas, which are in proximity to sensitive environmental and cultural receptors.

2 Existing Environment

Topography, Soils and Land Systems

Topographic mapping available via Landgate (2025) indicates a general elevation across the proposed clearing areas of between 300 and 320 m Australian Height Datum (m AHD).

At a landscape scale, land systems of the Pilbara were classified and mapped by Van Vreeswyk et al. (2004) according to similarities in landform, soil, vegetation, geology and geomorphology. The proposed clearing areas are located exclusively within the Calcrete System, which is described as 'Low calcrete platforms and plains supporting shrubby had spinifex grasslands' (DPIRD, 2025).

Flora and Vegetation

Pre-European vegetation within Western Australia has been mapped at a broad level by Beard (1975) as vegetation system associations. Across the proposed clearing areas, one vegetation system association has been mapped. This vegetation, the description and the extent remaining within Western Australia is presented below in Table 1.

Table 1: Vegetation System Association intersecting the proposed clearing areas

Vegetation System Association	Description	Extent remaining within Western Australia*
Fortescue Valley_646	Hummock grassland with scattered scrubs or mallee Triodia spp. Acacia spp. Grevillea spp. Eucalyptus spp.	100%

**Government of Western Australia (2019)*

To determine the potential presence of any conservation significant matter within any of the proposed clearing areas, three searches were conducted of the DBCA flora, fauna and ecological communities databases. Based on a review of this data (Figure 2), no such flora, fauna or ecological communities have been historically recorded within or in proximity to any of the clearing areas.

Yindjibarndi Water has proactively identified each of the five sites based on their highly degraded condition as a result of historical disturbance, primarily associated with the construction and operation of the existing Bungaroo pipeline and associated access road. To confirm the degraded condition of each site and to ensure that the proposal would result in negligible environmental impacts, a joint site inspection was undertaken by Yindjibarndi Water and Water Corporation on 6 August 2025. Drone photography of each site taken during this site inspection is provided in Plate 1 to Plate 5 overleaf. Based on this site inspection, each clearing area appears to be almost completely devoid of native vegetation. Native flora where present appear to be limited to isolated spinifex hummocks.

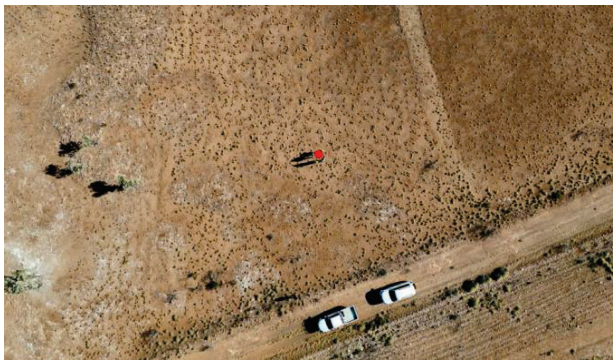

Plate 1: Drill target P1

Plate 2: Drill target P2

Plate 3: Drill target P3

Plate 4: Drill target P4

Plate 5: Drill target P5

Source: Yindjibarndi Water (2025)

Hydrology

The proposed clearing is located within a Priority 1 Public Drinking Water Source Area (PDWSA), being the Millstream Groundwater Reserve. As a groundwater exploration program with the purpose of identifying a source of drinking water, the proposal is considered to be in accordance with the purpose of the PDWSA. It is noted that where successful, production bores established as a part of this proposal will serve to replace up to six existing production bores to the north east, and which are in proximity to sensitive environmental and cultural receptors.

There are no major water courses which intersect the proposed clearing areas (Landgate, 2025). Where successful, the proposal will serve to increase the distance between groundwater extraction bores and the Fortescue River, located to the north-east.

Cultural Heritage

Each of the proposed clearing areas is located within the Ngarluma / Yindjibarndi Native Title Determination Area.

A search of the Aboriginal Cultural Heritage Inquiry system did not identify any lodged or registered Aboriginal Heritage Sites within or adjacent to the proposed clearing areas. The nearest registered site is Mungala Dalu (Place ID 11,894) which is located approximately 630 m east of the closest proposed clearing area (DPLH 2025).

The above notwithstanding, Yindjibarndi Water will directly engage with and seek advice from the Registered Native Title Body Corporate on measures to mitigate potential impacts on unregistered or unlodged cultural heritage values. It is anticipated that this may include the undertaking of dedicated Aboriginal Archaeological Site Avoidance surveys, and having Yindjibarndi representatives present as monitors during the clearing and ground disturbance phases of the proposed works.

It is noted that Yindjibarndi Water (the proponent) is majority owned by Yindjibarndi Wealth Pty Ltd on behalf of the Yindjibarndi people.

3 Assessment Criteria

An assessment of the proposed clearing against the criteria described in the DWER's *Guideline: Native Vegetation Clearing Referrals* (DWER 2021) is provided in Table 2 below.

Table 2: Native Vegetation Clearing Referral Assessment Criteria

DWER Considerations	Assessment of Proposed Clearing
Criterion 1: The area proposed to be cleared is small relative to the total remaining vegetation	
If more than 10 ha is proposed to be cleared, a permit is required.	No more than 0.11 ha of native vegetation is proposed to be cleared.
If less than 30% of that native vegetation association or complex is remaining within the relevant IBRA bioregion, a permit is required.	The extents remaining of the relevant vegetation association is 100% (GoWA, 2019).
If less than 30% native vegetation is remaining within a 10 km buffer of the proposed clearing, a permit is required.	Regional mapping indicates that existing Water Corporation infrastructure (including pipeline and access road), and which is associated with the proposal, is the only location in proximity where native vegetation has previously been cleared.
Criterion 2: There are no known or likely significant environmental values within the area	
The quality of the existing remnant vegetation within and nearby the area to be cleared, based on the Keighery (1994) and/or Trudgen (1988) vegetation condition scales	All five sites have been strategically located adjacent to the existing Water Corporation pipeline and associated access road, the construction and operation of which has resulted in extensive disturbance and degradation of the native vegetation. The poor condition of native vegetation was confirmed as part of a site inspection undertaken by Yindjibarndi Water and Water Corporation. Representative photography from this inspection is provided at Plate 1 to Plate 5.

DWER Considerations	Assessment of Proposed Clearing
Whether the proposed clearing area provides habitat for any threatened, priority, or specially protected fauna	There are no records maintained by DBCA of any threatened, priority or specially protected fauna within or in proximity to any of the proposed clearing areas (Figure 2). The highly degraded nature of each clearing area suggests that there is minimal utilisation of each site by native fauna.
Whether the proposed clearing area provides critical habitat for fauna	
Whether the proposed clearing area is part of a significant ecological linkage	Given the expansive nature of remnant vegetation in the immediate vicinity of each site, ecological linkages are not considered to be applicable to the proposed clearing.
The proximity of the proposed clearing to any threatened ecological communities (TEC) or priority ecological communities (PEC)	No TECS or PECs have been recorded in proximity to the proposed clearing areas (Figure 2).
The proximity of the proposed clearing to any records of threatened or priority flora	No threatened or priority flora have been recorded within or in proximity to any of the propose clearing areas (Figure 2).
The proximity of the proposed clearing to any wetlands listed under the Convention on Wetlands of International Importance (Ramsar convention) or in the Directory of Important Wetlands in Australia, or wetlands classified as 'Conservation category' or 'Resource Enhancement'	There are no wetlands or water courses mapped in proximity to any of the proposed clearing areas. It is anticipated that where successful, the proposal will serve to increase the buffer distance between extraction bores and sensitive environmental and cultural values located to the northeast, associated with the Fortescue River.
Whether the proposed clearing may impact on a watercourse (e.g., the structural stability of a watercourse or deterioration of water quality)	
Whether the clearing is in an area with high risk of decreasing water quality, rising groundwater levels or increasing salinity.	The proposal is being undertaken for the purpose of securing a viable source of drinking water. As a groundwater exploration program within a proclaimed groundwater area, the proposal is subject to separate assessment by DWER under the *Rights in Water and Irrigation Act 1914*. It is noted that the proposal will serve to replace currently operational groundwater extraction bores to the north-east.
Whether the proposed clearing is within a 'conservation reserve' (e.g., Bush Forever, Environmental Protection Policy areas, land managed by the Department of Biodiversity, Conservation and Attractions; Regional Open Spaces; crown reserves vested for conservation purposes.	Authorisation to access the land and undertake the clearing has been provided with this clearing referral. The proposed clearing areas are located approximately at minimum, approximately 1 km south west from the boundary of the Millstream Chichester National Park.
Whether the clearing is in an area with high risk of land and/or soil degradation. Factors to determine this may include (among other matters) contaminated sites records, risk of dieback disease or acid sulfate soils (ASS), and susceptibility to erosion.	The proposed clearing areas do not intersect any contaminated sites, or areas at risk of acid sulfate soils or erosion (Landgate, 2025).
Proximity to heritage-related values, including sites of Aboriginal significance, and native title matters.	The proposed clearing areas do not intersect nor are in proximity to any lodged or registered Aboriginal Heritage Sites (DPLH 2025). Yindjiabrndi Water will directly engage with and seek advice from the Registered Native Title Body Corporate on measures to mitigated potential impacts on unregistered or unlodged cultural heritage values.

DWER Considerations	Assessment of Proposed Clearing
Criterion 3: The state of scientific knowledge of native vegetation within the region is adequate	
DWER will use the information included in the referral along with scientific data from various databases, spatial datasets, and other relevant and readily available information to determine the adequacy of the level of scientific knowledge about native vegetation within the region in which the area is situated. If the available information is not adequate, and additional information is required, a permit is highly likely to be required. Referrals will be assessed using the information available at the time. However, this information does change over time; for example, as the conservation status of certain species are revised, or new cumulative impacts become evident. Accordingly, if the proposed clearing cannot be completed within two years, a permit will be required for that clearing. If the clearing authorised under the referral is not undertaken within two years, a new referral may be submitted.	The proposed clearing areas are located within the Eremaean botanical province of Western Australia (Beard 1975. Flora and vegetation information of the Pilbara region is available at a regional scale through several databases (Figure 2). The highly degraded nature of each proposed clearing area suggests that there are negligible floristic values that could potentially be impacted by the proposal.
Criterion 4: Conditions will not be required to manage environmental impacts	
Applicants and referrers should, as much as practicable, avoid and minimise environmental impacts to the area while planning their clearing activity. Clearing activities that are likely to require conditions to minimise, mitigate, offset, or otherwise manage effects on the environment are highly likely to need a permit.	The total clearing proposed is no more than 0.11 ha, spread across five separate targets (Figure 1). Potential environmental impacts associated with the proposal are considered to be negligible, owing to the highly degraded nature of each target. Where native vegetation will be cleared, this is anticipated to be limited to isolated spinifex hummocks, only. Potential impacts to groundwater values are anticipated to be appropriately managed through the application of conditions pursuant to the necessary RIWI Act approvals. Based on the above, there are not considered to be any aspects of the proposal that could warrant the application of conditions to further minimise, mitigate, offset or otherwise mange effects on the environment.

Source: DWER (2021)

4 Conclusion

Yindjibarndi Water is proposing to undertake minor clearing of native vegetation to facilitate the establishment of five drill pads for a groundwater exploration program. The proposed clearing is anticipated to have a very low environmental impact, and is therefore considered appropriate for the Native Vegetation Clearing Referral process provided for under section 51DA of the *Environmental Protection Act 1986*. An assessment of the proposed clearing against the four criteria described in the Vegetation Clearing Referrals Guideline (DWER, 2021) determined that the proposed clearing satisfies all of these criteria.

Yours sincerely

William Oversby
Principal Scientist

References

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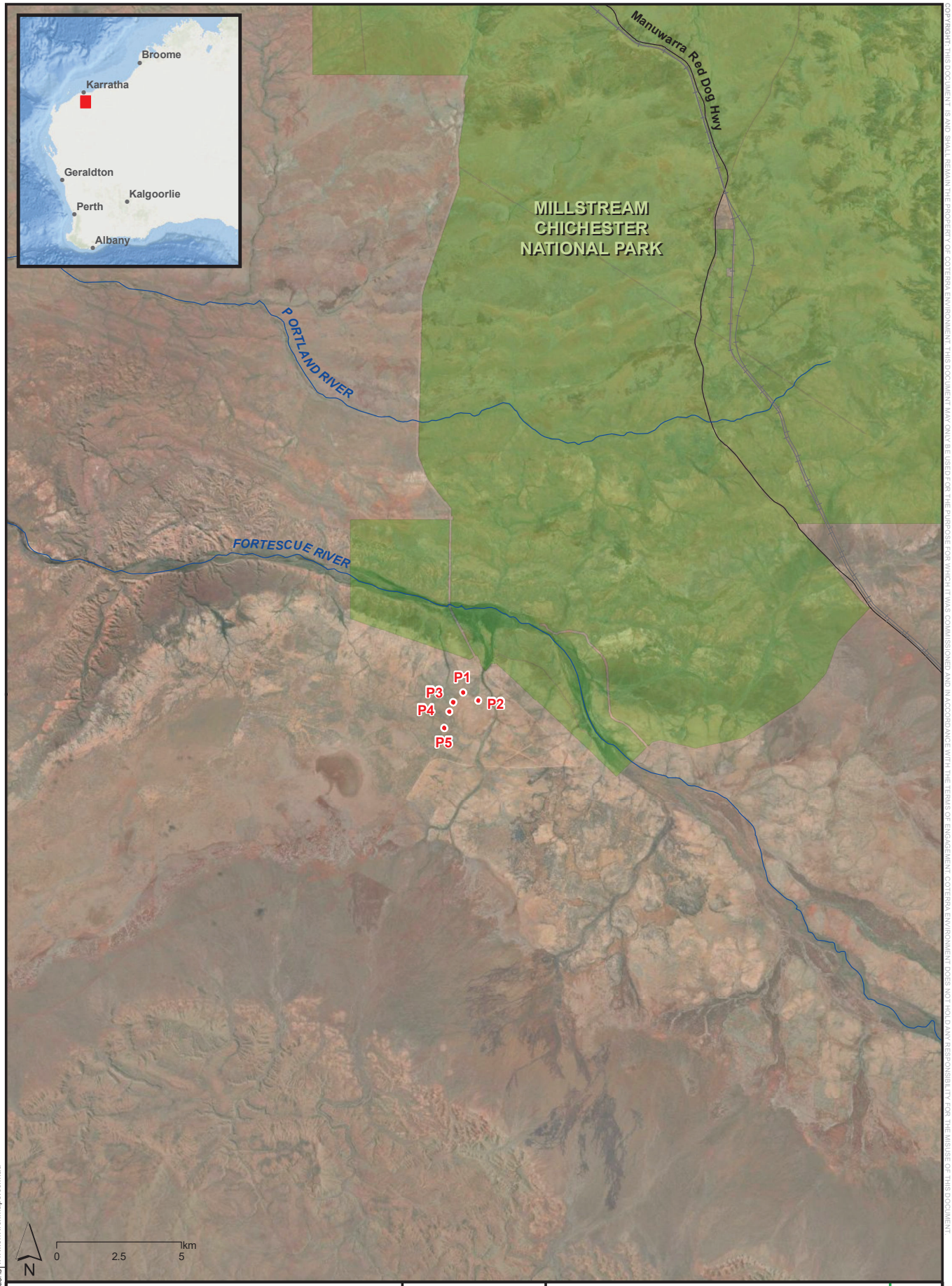

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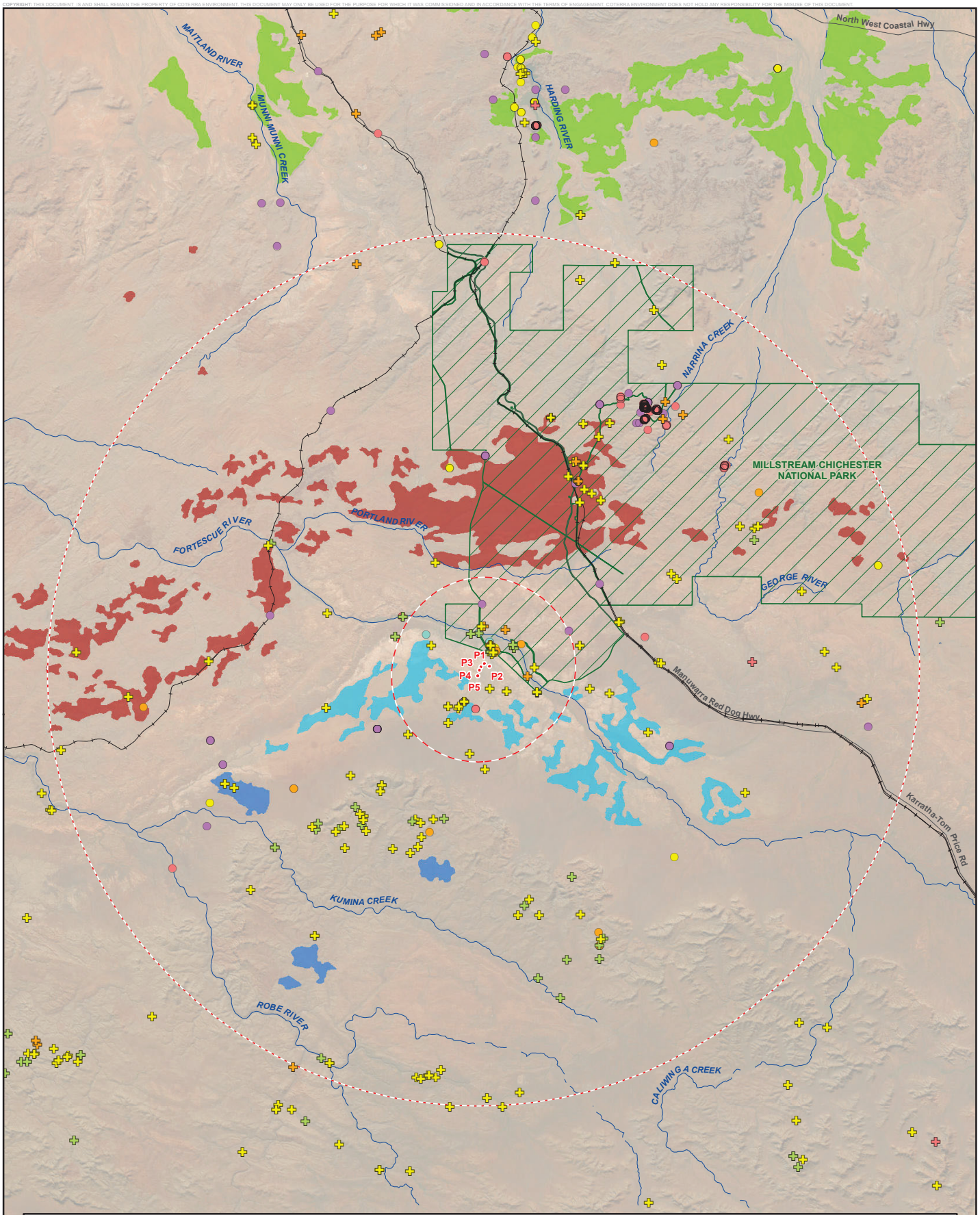
Yindjibarndi Water
NATIVE VEGETATION CLEARING REFERAL
MILLSTREAM, SHIRE OF ASHBURTON

SITE LOCATION

Figure 1



LEGEND

- Development Envelope
- 10 km Development Envelope Buffer
- 50 km Development Envelope Buffer
- Millstream Chichester National Park
- Railway
- Major Road
- Major Watercourse

DBCA Ecological Communities
- Wona Land System - Priority 1
- Horseflat Land System - Priority 3
- Kanjenjie LS - Priority 3
- Kumina LS - Priority 3

DBCA Recorded Flora
- Priority 1
- Priority 2
- Priority 3
- Priority 4

DBCA Recorded Fauna
- Threatened - Endangered
- Threatened - Vulnerable
- Specially Protected - Migratory

- Priority 1
- Priority 2
- Priority 3
- Priority 4

N

0 2.5 5 10 15 20 km

Scale: 1:400,000 @ A3
GDA 1994 MGA Zone 50

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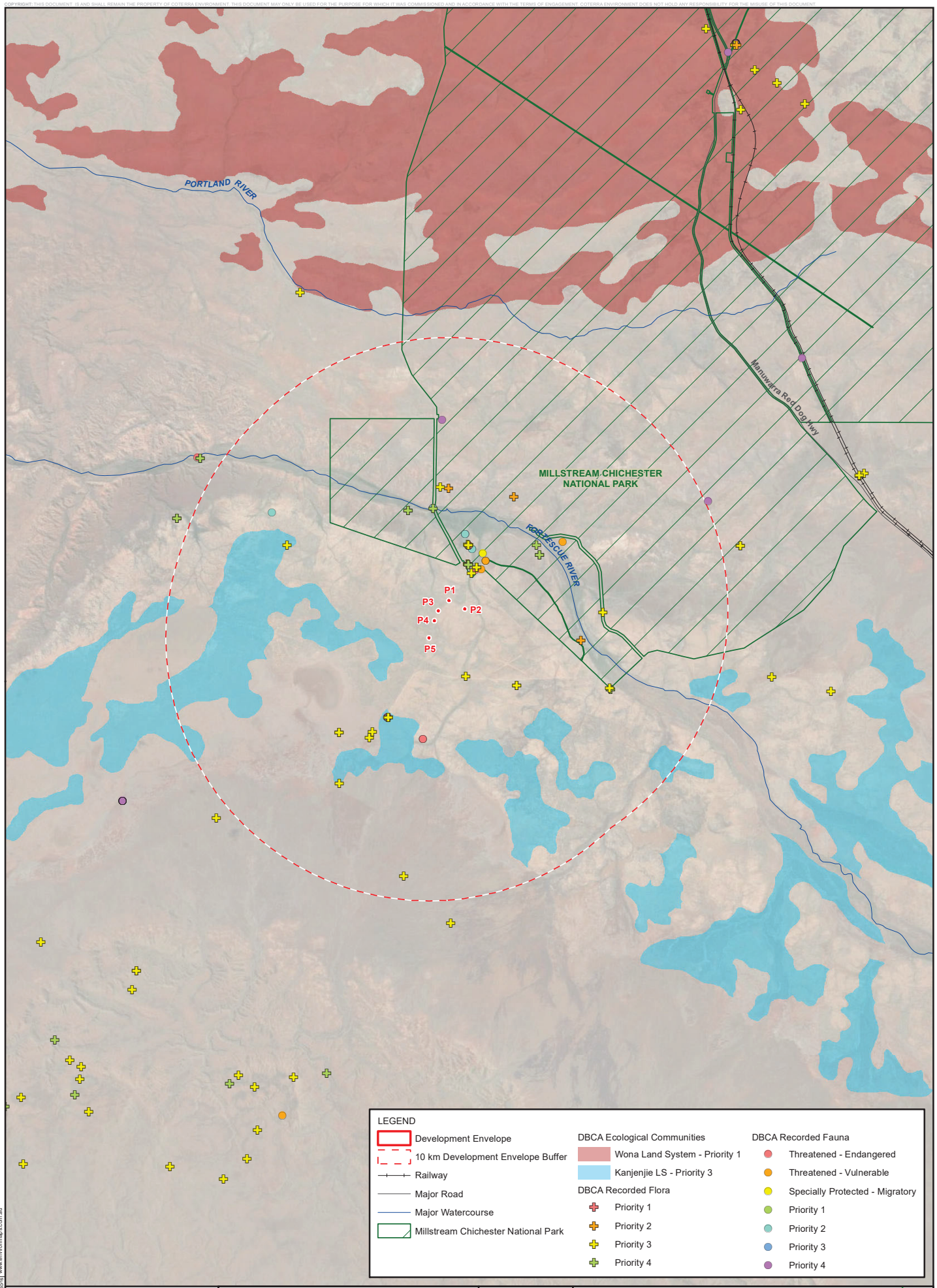
NATIVE VEGETATION CLEARING REFERAL
MILLSTREAM, SHIRE OF ASHBURTON

FLORA, FAUNA AND ECOLOGICAL COMMUNITIES

Figure 2a



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Scale: 1:125,000 @ A3
GDA 1994 MGA Zone 50

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FLORA, FAUNA AND ECOLOGICAL COMMUNITIES

Figure 2b