

Statement of Reasons

DEPARTMENT OF INFRASTRUCTURE, PLANNING AND LOGISTICS (DIPL) – KATHERINE LOGISTICS AND AGRIBUSINESS HUB

PROPOSAL

The Department of Infrastructure, Planning and Logistics (the Proponent), submitted a Notice of Intent (NOI) for the Katherine Logistics and Agribusiness Hub (the Proposal) to the Northern Territory Environment Protection Authority (NT EPA) on 5 July 2019 for consideration under the Environmental Assessment Act 1982 (EA Act).

The Proposal is to facilitate the development a 300 hectare (ha) industrial subdivision to establish a commodity freight and logistics hub adjacent to rail and road transport. The logistics hub is proposed for large and small industry processing, storage and transport needs across northern Australia to support horticulture, agriculture, mining, oil and gas industries. The Proposal is for subdivision infrastructure works only and not the operational aspects of individual industry tenants.

The Proposal would be developed in four stages to provide industrial land supply of approximately 70 lots, 1 to 15ha each (Figure 1). Land release for each stage would be: Stage 1 (2021); Stage 2 (2029-2048); Stage 3 (2057) and Stage 4 (2073).

Site selection of Proposal components has avoided significant values of riparian vegetation (marked as drainage lines in Figure 1) and two sacred sites (adjacent to the Proposal area).

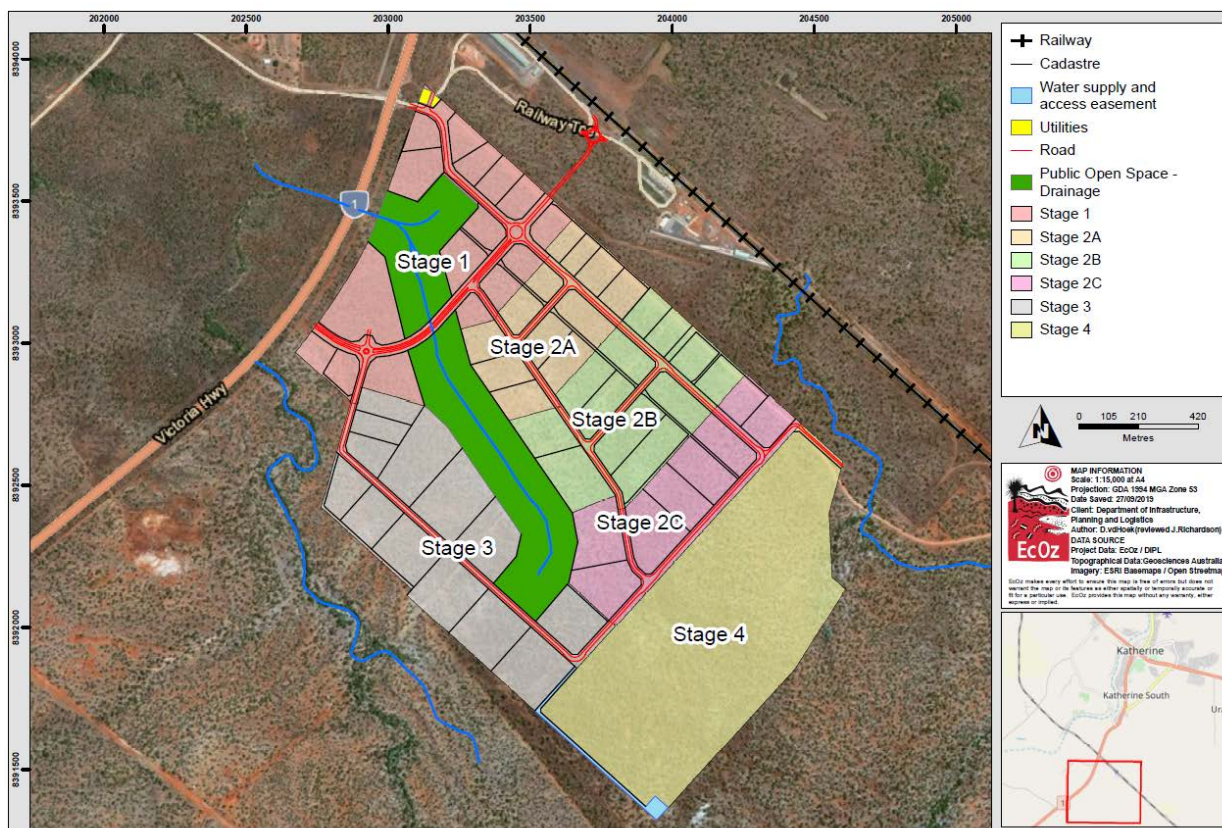


Figure 1: Location and conceptual site layout of the Katherine logistics and agribusiness hub (Source: NOI)

Proposal components include:

- infrastructure works (roads, power, potable water, sewerage, stormwater drainage and telecommunications)
- public open spaces (stormwater infrastructure and naturally vegetated drainage lines)
- buffers between certain land uses
- off-site water sourcing for construction and operation.

The Proposal area is located approximately 6km southwest of Katherine, on Manbulloo Station (NT Portion 1604), and is currently under acquisition by the Territory Government as a subdivision of the remaining privately owned Perpetual Pastoral Lease.

CONSULTATION

The NOI has been reviewed as a notification under the EA Act in consultation with Northern Territory Government (NTG) advisory bodies (see Attachment A) and the responsible Minister, in accordance with clause 8(1) of the Environmental Assessment Administrative Procedures 1984.

JUSTIFICATION

The NOI was assessed against the NT EPA’s environmental factors and objectives. The NT EPA identified five environmental factors (Table 1) that could potentially be significantly impacted by the Proposal.

The NT EPA considered the importance of other environmental factors during the course of its assessment; however, the impact on those factors was not identified as potentially significant.

Table 1: Key NT EPA environmental factors

Theme	Key Environmental Factor	Objective
Land	1. Terrestrial flora and fauna	Protect the NT’s flora and fauna so that biological diversity and ecological integrity are maintained.
	2. Terrestrial environmental quality	Maintain the quality of land and soils so that environmental values are protected.
Water	3. Hydrological processes	Maintain the hydrological regimes of groundwater and surface water so that environmental values are protected.
	4. Inland water environmental quality	Maintain the quality of groundwater and surface water so that environmental values including ecological health, land uses, and the welfare and amenity of people are protected.
People and Communities	5. Social, economic and cultural surroundings	Protect the rich social, economic, cultural and heritage values of the Northern Territory.

1. Terrestrial flora and fauna

Objective: Protect the NT's flora and fauna so that biological diversity and ecological integrity are maintained.

Vegetation of the Proposal area comprises eucalypt woodland and *Lophostemon / Melaleuca* dominated vegetation associated with ephemeral creeks adjacent to and within the Proposal area. There are no threatened ecological communities within the Proposal area and no threatened flora species have been identified.

One vegetation type is identified as sensitive or significant under the NT Planning Scheme: the areas with *Lophostemon* and *Melaleuca* are considered riparian vegetation and are associated with first order streams (ephemeral creeks) and drainage depressions as defined by the Land Clearing Guidelines¹.

Nine threatened fauna species (one mammal, five bird and three reptile species) are highly to moderately likely to occur within the Proposal area based on a desktop assessment and dry season field survey.

Potential impacts from the Proposal to flora and fauna values include:

- removal or disturbance of vegetation including sensitive and significant types
- removal or reduction of habitat quality for threatened fauna
- introduction and/or spread of weeds during clearing and operation
- introduction and/or attraction of pest animals during clearing and operations.

Total land clearing for the Proposal would be up to 265ha, but staged land clearing would be generally limited to the area of the infrastructure works for each sub-stage. No riparian vegetation will be cleared and creeks and drainage depressions are buffered through siting of perimeter boundaries (off-site riparian areas) and creating public open areas (on-site riparian areas).

For five of the threatened fauna species, suitable habitat is widespread and extensive throughout Manbulloo Station and the broader region. The potential impact and risks from the proposal on regional (sub) populations of those species is considered to be low. For one species, the risk to regional populations from the proposed scale of clearing is likely to be low. For three species, the proposal area is not considered suitable habitat and the future use of the site as an agricultural and industrial hub poses a low risk to these species.

The Proposal area is likely to contain weeds associated with pastoral use including hyptis (*Hyptis suaveolens*) which is widespread across the Proposal area. There is potential for construction works to introduce and spread declared weeds that could affect surrounding areas. To mitigate this impact, the Proponent committed to the development and implementation of a Weed Management Plan for construction works that includes weed free certification of machinery and control of scheduled weeds on-site. DENR's Weed Management Branch advises that reference to the Katherine Regional Weed Management Plan would enhance the Proponent's ability to prioritise weed management for the planning and construction of the Proposal.

Machinery and equipment inspections will target yellow crazy ants which may be introduced on-site via machinery and soil. Feral animals may be attracted on-site if waste is not managed appropriately during construction works. Weed and pest animal management during

¹ DENR 2019. Land Clearing Guidelines https://nt.gov.au/_data/assets/pdf_file/0007/236815/land-clearing-guidelines-2019.pdf

construction will be conducted by contractors in accordance with DIPL's Standard Specifications for Environmental Management.

The NT EPA is satisfied that the potential impacts and risks to terrestrial flora and fauna can be mitigated through implementation of the management measures presented in the NOI. The NT EPA considers that its objective for Terrestrial flora and fauna is likely to be met.

2. Terrestrial environmental quality

Objective: Maintain the quality of land and soils so that environmental values are protected.

The Proposal area is largely uncleared, flat to gently sloping terrain with some active erosion around the ephemeral creeks and drainage lines within and adjacent to the Proposal area.

Potential impacts from the Proposal on terrestrial environmental quality include:

- impacts associated with causing or intersecting contaminated land
- erosion, particularly around creeks and drainage depressions.

The Proponent's preliminary site investigation identified no previous contaminating activities or land use for the Proposal area. Soil testing across the Proposal area confirmed no soil contamination, including no per- and poly-fluoroalkyl substances (PFAS). Earthworks do not include sourcing of potentially contaminating fill from off-site sources.

Land clearing would be staged to minimise dust and sediment dispersal to creeks and drainage lines. The Proponent has committed to implementing management measures to maintain the quality of land and soils of the Proposal in accordance with its Standard Specifications for Environmental Management, which include, but are not limited to: a DIPL endorsed, Erosion and Sediment Control Plan (ESCP) in accordance with the International Erosion Control Association guidelines; stockpile management and the Contractors' Environmental Management Plan (CEMP).

The NT EPA is satisfied that the potential impacts and risks to terrestrial environmental quality can be mitigated through implementation of the management measures presented in the NOI. The NT EPA considers that its objective for Terrestrial environmental quality is likely to be met.

3. Hydrological processes

Objective: Maintain the hydrological regimes of groundwater and surface water so that environmental values are protected.

The Proposal area is located in the proximity of the Tindall Limestone Aquifer and within the Daly Roper Beetaloo Water Control District. The hydrology of the Proposal area is influenced by three ephemeral creeks and associated drainage depressions (marked as drainage lines in Figure 1) which feed into the Katherine River. The Proposal area is approximately 2km southeast of the Katherine River and directly adjacent to, but not located within the 1 in 50 and 1 in 100 year flood extent. No sinkholes have been recorded within or near the Proposal area.

Potential impacts on hydrological processes arise from an increase in impervious surfaces (roads and sealed industrial lots) over the Proposal and include:

- altered and increased surface water flows
- increased groundwater recharge
- increased scouring of creeks and drainage depressions.

The Proposal is not expected to impact groundwater drawdown given no on-site bore water will be used.

The Proponent has committed to conducting a storm water drainage assessment and implementing management measures to reduce the velocity of surface water flows both within the Proposal area and off-site. These management measures would be in accordance with the Proponent's Standard Specifications for Environmental Management.

The NT EPA is satisfied that the potential impacts and risks on hydrological processes can be mitigated through implementation of the management measures presented in the NOI. The NT EPA considers that its objective for hydrological processes is likely to be met.

4. Inland water environmental quality

Objective: Maintain the quality of groundwater and surface water so that environmental values including ecological health, land uses, and the welfare and amenity of people are protected.

Only one creek, southwest of the Proposal area, maintains dry season flow. In the wet season all creeks within and surrounding the Proposal area flow into the Katherine River.

The Proposal area has no dry season surface water and no on-site bores are proposed to be used. A single capped bore occurring within the Proposal area will not be opened and all water for construction and operation will be sourced off-site.

A reticulated sewer network is proposed for lots closest to the Victoria Highway and the Katherine River and septic sewer systems for lots on higher ground (Stages 2, 3, and 4) with potential for these to be connected to the reticulated system based on future industry demands.

Potential impacts from the Proposal on inland water environmental quality include:

- increased turbidity through the disturbance of soils and altered surface water flows
- decrease of surface and groundwater quality from release of bacteria (septic systems)
- contamination of off-site and downstream waterways through chemical spills.

Erosion and increased turbidity in surface water run-off from land clearing and cut and fill earthworks would be managed through commitments made by the Proponent in its ESCP and as a result of its stormwater drainage assessment. Land clearing would be staged to minimise dust and the dispersal of sediment through creeks and drainage lines.

The build-up of bacteria from septic systems would be avoided through the Proponent's commitment to engage a suitably qualified plumber or hydraulic engineer to undertake site specific design to determine suitability for septic systems and comply with the Department of Health Code of Practice for on-site wastewater management².

The Proponent's preliminary site investigations identified no previous water contaminating activities for the Proposal area. A surface water sample (off-site creek west of the Proposal area) and a groundwater sample (off-site bore southeast of the Proposal area), confirmed no contamination above guideline values³⁴⁵⁶. Analysis of the groundwater sample indicated PFAS

² DoH 2014 Code of Practice for small on-site sewage and sullage treatment systems and the disposal or reuse of sewage effluent https://nt.gov.au/_data/assets/pdf_file/0008/228833/code-of-practice-onsite-wastewater-management.pdf

³ ANZECC (2000) Australian and New Zealand Guidelines for Fresh and Marine Water Quality – superseded by the revised Water Quality Guidelines ANZG (2019) <https://www.waterquality.gov.au/anz-guidelines>

⁴ National Environmental Protection (NEPC, as amended 2013) Assessment of Site contamination <http://www.nepc.gov.au/nepms/assessment-site-contamination>

⁵ NHMRC (2011) Australian Drinking Water Guidelines <https://www.nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines>

⁶ PFAS National Environmental Management Plan (HEPA 2018) health based guidelines for drinking water and recreational water <https://www.epa.vic.gov.au/your-environment/land-and-groundwater/pfas-in-victoria/pfas-national-environmental-management-plan>

was present within guideline values⁶. Given that groundwater is not to be used on-site and the Proponent has committed to water quality and contamination management in accordance with its Standard Specifications for Environmental Management, the NT EPA is satisfied that PFAS poses a low risk to development of the Proposal

The Proponent has committed to ensuring all fuels are stored and handled appropriately, spill kits are kept on site and weekly inspection of fuel storage and refuelling areas and spill kit contents. Contamination management of other chemicals would be in accordance with DIPL's Standard Specification for Environmental Management.

The NT EPA is satisfied that the potential impacts and risks on inland water environmental quality can be mitigated through implementation of the management measures presented in the NOI. The NT EPA considers that its objective for hydrological processes is likely to be met.

5. Social, economic and cultural surroundings

Objective: Protect the rich social, economic, cultural and heritage values of the Northern Territory.

The Proponent has obtained Authority Certificates from the Aboriginal Areas Protection Authority. No sacred sites are located within the Proposal area. Two known sacred sites are located off-site, adjacent to the boundary.

An archaeological survey in consultation with Traditional Owners was undertaken in August 2018. Three archaeological background scatters of low archaeological and Aboriginal significance are within the Proposal area. No significant archaeological artefacts are known from the Proposal area.

No heritage sites are known from the Proposal area and the NT EPA is satisfied that all heritage and archaeological matters have been adequately addressed for the Proposal.

The nearest sensitive receptor is an area of rural residential blocks, approximately 1.8km west of the Proposal area. The site has been selected for industrial purposes that require isolation from other urban land uses. The location of the Proposal area is consistent with the NT EPA Guideline for Recommended Land Use Separation Distances⁷.

The Proposal has the potential to increase traffic incidents and congestion and pose a noise and dust nuisance to nearby residents.

Construction of the Proposal is not expected to impact significantly on the amenity of existing land uses through visual, traffic, dust or noise impacts. The Proponent has undertaken a traffic study and consulted with the Transport Civil Services Division of DIPL to appropriately minimise traffic impacts.

Noise impact assessment was carried out for the Proposal and subsequent industry use of the Katherine Logistic and Agribusiness Hub. The results indicate acceptable noise emissions due to the large separation distance from sensitive receptors, noting that operational aspects of individual industry tenants does not form part of this Proposal.

Dust suppression would be conducted in accordance with the Proponent's Standard Specifications for Environmental Management and sourced from uncontaminated sources to avoid the introduction of potential contaminants.

⁷ NT EPA 2017. Guideline: Recommended Land Use Separation Distances
https://ntepa.nt.gov.au/_data/assets/pdf_file/0006/453192/guideline_recommended_land_separation_distances_oct.pdf

The Proposal would potentially have beneficial social and economic impacts through creation of local jobs, support to local businesses, regional investment and development, capital and operational expenditure contributing to the local and regional economy.

The NT EPA is satisfied that the potential impacts and risks on social, economic and cultural surroundings can be mitigated through implementation of the management measures presented in the NOI. The NT EPA considers that its objective for Social, economic and cultural surroundings is likely to be met.

CONCLUSION

The NT EPA considers that the potential environmental impacts and risks associated with the Proposal are not significant and that the Proposal does not require assessment under the EA Act.

Comments from NTG advisory bodies have been provided to the Proponent to further minimise potential impacts on the environment.

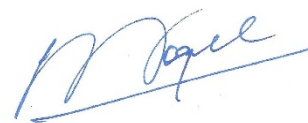
While the Proposal is to establish the early infrastructure requirements for an industrial subdivision for a logistics and agribusiness hub, potential impacts of future development proposals have not been assessed. Future tenants of the hub may need to refer individual proposals to the NT EPA for a decision on whether environmental impact assessment is required. Therefore, in no way should this decision be perceived to pre-judge the outcome of future referral processes.

DECISION

The proposed action, which was referred to the NT EPA by DIPL, has been examined by the NT EPA and preliminary investigations and inquiries conducted. The NT EPA has decided that the potential environmental impacts and risks of the proposed action are not so significant as to warrant environmental impact assessment by the NT EPA, and that a Public Environmental Report or Environmental Impact Statement is not necessary under provisions of the Environmental Assessment Act 1982.

Environmental management of the potential environmental impacts is the responsibility of DIPL through preparation and implementation of procedures and management plans specified in the NOI.

This decision is made in accordance with clause 8(2) of Environmental Assessment Administrative Procedures 1984, and subject to clause 14A the administrative procedures are at an end with respect to the proposed action.



DR PAUL VOGEL AM MAICD
CHAIRMAN

NORTHERN TERRITORY ENVIRONMENT PROTECTION AUTHORITY

1 NOVEMBER 2019

Attachment A: Northern Territory Government Advisory bodies consulted on the Notice of Intent

Department	Division
Department of Environment and Natural Resources	Flora and Fauna Water Resources Weeds Environment Bushfires NT Rangelands
Department of Infrastructure, Planning and Logistics	Planning Transport and Civil Services Infrastructure
Department of Primary Industry and Resources	Mining Compliance Petroleum Primary Industry Fisheries
Department of Tourism, Sport and Culture	Parks and Wildlife Heritage Tourism NT Arts and Museums
NT Police, Fire and Emergency Services	Business Improvement and Planning
Department of Health	Environmental Health Medical Entomology
Department of Trade, Business and Innovation	Economics and Policy Strategic Policy and Research
Department of Local Government, Housing and Community Development	Maintenance Planning Housing supply
Power and Water Corporation	
Aboriginal Areas Protection Authority	Technical
Department of the Attorney-General and Justice	Commercial Division NT Worksafe
Department of the Chief Minister	Economic and Environmental Policy Social Policy