

Our ref: SSD-59235464

Mr Stephen Barry

Planning Director

Independent Planning Commission of NSW

Via email

20/06/2025

Subject: Pottinger Wind Farm – Supplementary Information

Dear Mr Barry

I refer to the assessment of the Pottinger Wind Farm project (the Project). I note that the Applicant has provided supplementary information regarding contamination (see **Attachment A**).

The Department considers that the supplementary information is consistent with the Applicant's EIS and does not change the Department's conclusions in the Assessment Report.

To reinforce the recommendations presented in the supplementary information, the Commission could consider the following addition (underlined) to Condition B20 in the Recommended Instrument of Consent.

B20. The Applicant must:

- (a) minimise erosion and control sediment generation;
- (b) ensure the development is managed to prevent or minimise contamination risk, including through the implementation of an appropriate unexpected finds protocol;
- (c) ensure the wind turbine pads, ancillary infrastructure, access roads and any other land disturbances have appropriate drainage and erosion and sediment controls designed, installed and maintained in accordance with *Best Practice Erosion and Sediment Control* (IECA, 2008) and *Managing Urban Stormwater – Soils and Construction Volume 2C Unsealed Roads* (DECC, 2008), or their latest versions;
- (d) ensure all activities and waterway crossings are constructed in accordance with the *Water Guidelines for Controlled Activities on Waterfront Land* (NRAR, 2018), unless Water Group agrees otherwise, and the *Policy and Guidelines for Fish Habitat Conservation and Management* (Update 2013) and *Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (NSW Fisheries, 2003) unless DPIRD Fisheries agrees otherwise;
- (e) ensure the concrete batching plants and substation are suitably bunded; and
- (f) minimise any spills of hazardous materials or hydrocarbons, and clean up any spills as soon as possible after they occur.

If you wish to discuss the matter further, please contact Nicole Brewer on [REDACTED] or [REDACTED]

Yours sincerely,

[REDACTED]

Nicole Brewer
Director
Energy Assessments

Attachment A – Preliminary Site Investigation Report



POTTINGER WIND FARM PROJECT

PRELIMINARY SITE INVESTIGATION – LAND
CONTAMINATION

Report Number: MS-190_Final
Prepared for: RPS Consulting Pty Ltd
Prepared by: Minesoils Pty Ltd

PREPARED BY

Minesoils Pty Ltd
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DOCUMENT CONTROL

Reference	Date	Prepared by	Approved
MS-190_Draft	10/06/2025	Jake Iskenderian	Matt Hemingway
MS-190_Draft_V2	18/06/2025	Jake Iskenderian	Matt Hemingway
MS-190_Final	19/06/2025	Jake Iskenderian	Matt Hemingway



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1 INTRODUCTION

1.1 OVERVIEW

Minesoils Pty Ltd (Minesoils) was engaged by RPS Consulting Pty Ltd (RPS) to conduct a Preliminary Site Investigation (PSI) of the proposed Pottinger Wind Farm (the Project). The Project is a State Significant Development (SSD) under State Environmental Planning Policy (Planning Systems) 2021 (NSW) (Planning Systems SEPP), SSD-59235464.

The PSI has been prepared in accordance with the *State Environmental Planning Policy (Resilience and Hazards) 2021, Chapter 4 Clause 4.6: Contamination and remediation to be considered in determining development application* and *National Environment Protection Council (NEPC) National Environment Protection (Assessment of Site Contamination) Measure, NEPM Amendment 2013 No. 1* (NEPC, 1999).

This PSI has been completed to assess impacts for the project disturbance of up to 1,066 ha with a focus on the larger Development Corridor/Survey Area (within the Project Area/Site Boundary). It provides insight into potential human and environmental risks based on previous and current land uses.

1.2 PROJECT BACKGROUND

The Project is located within the Riverina Murray region of NSW, within the Hay and Edward River Local Government Areas (LGAs), in the rural locality of Booroorban 60 kilometres south of Hay (**Figure 1**). The Project is also located within the South-West Renewable Energy Zone.

The Project is a development for the purposes of electricity generating works and involves the construction, operation and decommissioning of a wind farm and associated infrastructure with a targeted electricity generation capacity of 1.3 Gigawatts and will comprise of the following:

- Up to 247 wind turbine generators;
- Electrical reticulation infrastructure, including substations, transformers, 500 Megawatt Battery Energy Storage Facility, substation and internal electrical reticulation network and infrastructure connecting to the Project EnergyConnect line;
- On-site Permanent Supporting Infrastructure, including:
 - Site access road and entry;
 - Operations and Maintenance facilities and infrastructure including site office, control room, storage facilities, car parking and fencing;
 - Accommodation facilities;
 - Construction and operational compounds;
 - Hardstands for WTGs and other infrastructure;
 - Internal access tracks and road turning head connecting Project infrastructure;
 - Meteorological masts; and
 - Concrete batching plants, crushing facilities, gravel / borrow pits, construction laydown areas.
- Off-site Supporting Infrastructure, including:
- Waste disposal facilities; and – Existing public roads and communication network.
- Access road upgrades at four locations, as well as emergency access; and
- Transport of wind farm major components transported via Port of Adelaide.

The general Project layout is shown in **Figure 2**. A more detailed description can be found in the EIS.



1.3 OBJECTIVES

The objectives of this PSI are to:

- Identify past and present potentially contaminating activities and contamination types
- Assess potential contamination sources, pathways and receivers within the Disturbance Footprint
- Determine potential areas of concern and contaminants of concern and assess the risks posed by potential contamination for the Project
- Identify areas where further investigation and/or management may be required

1.4 SCOPE OF WORK

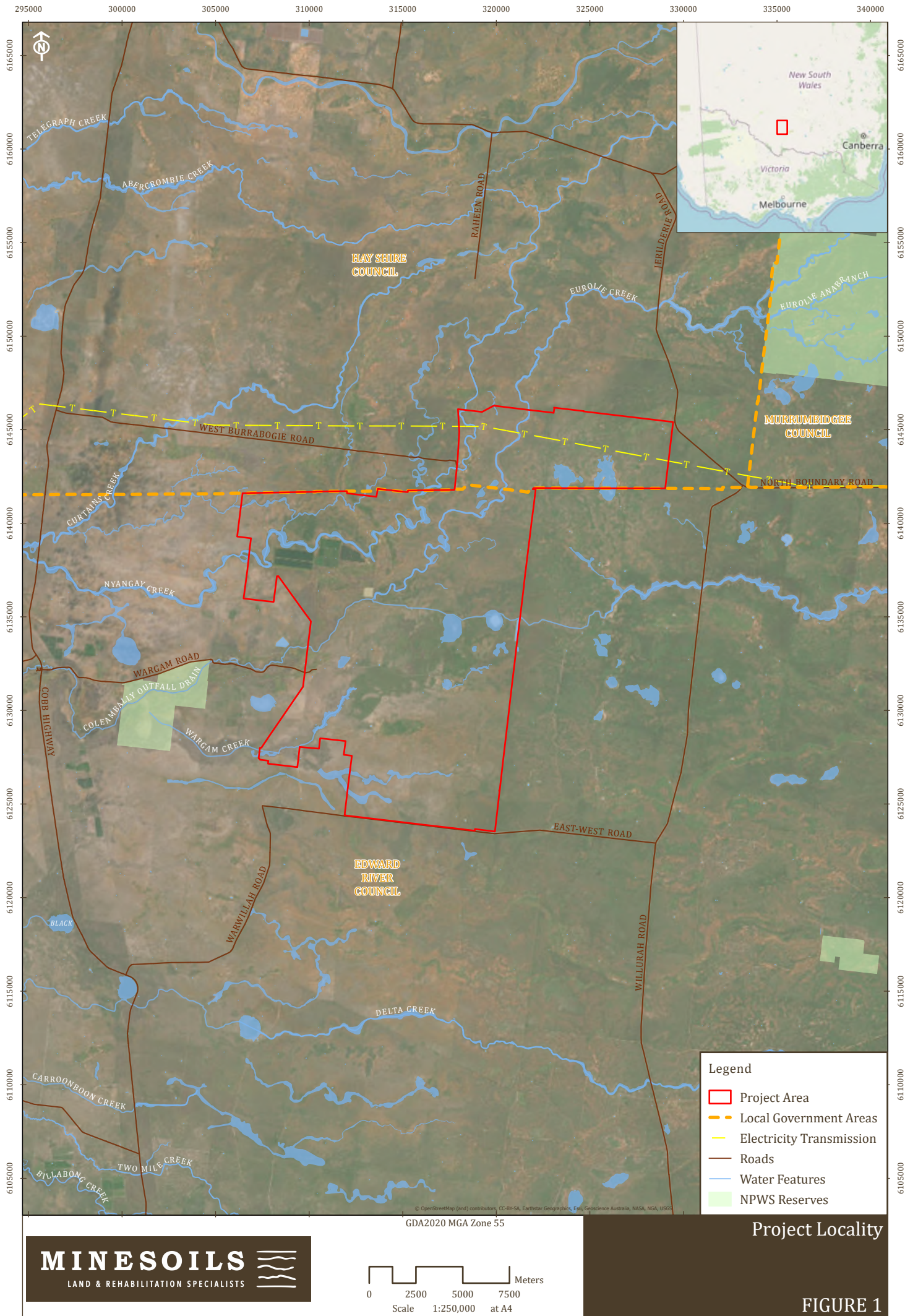
The PSI was carried out with consideration of:

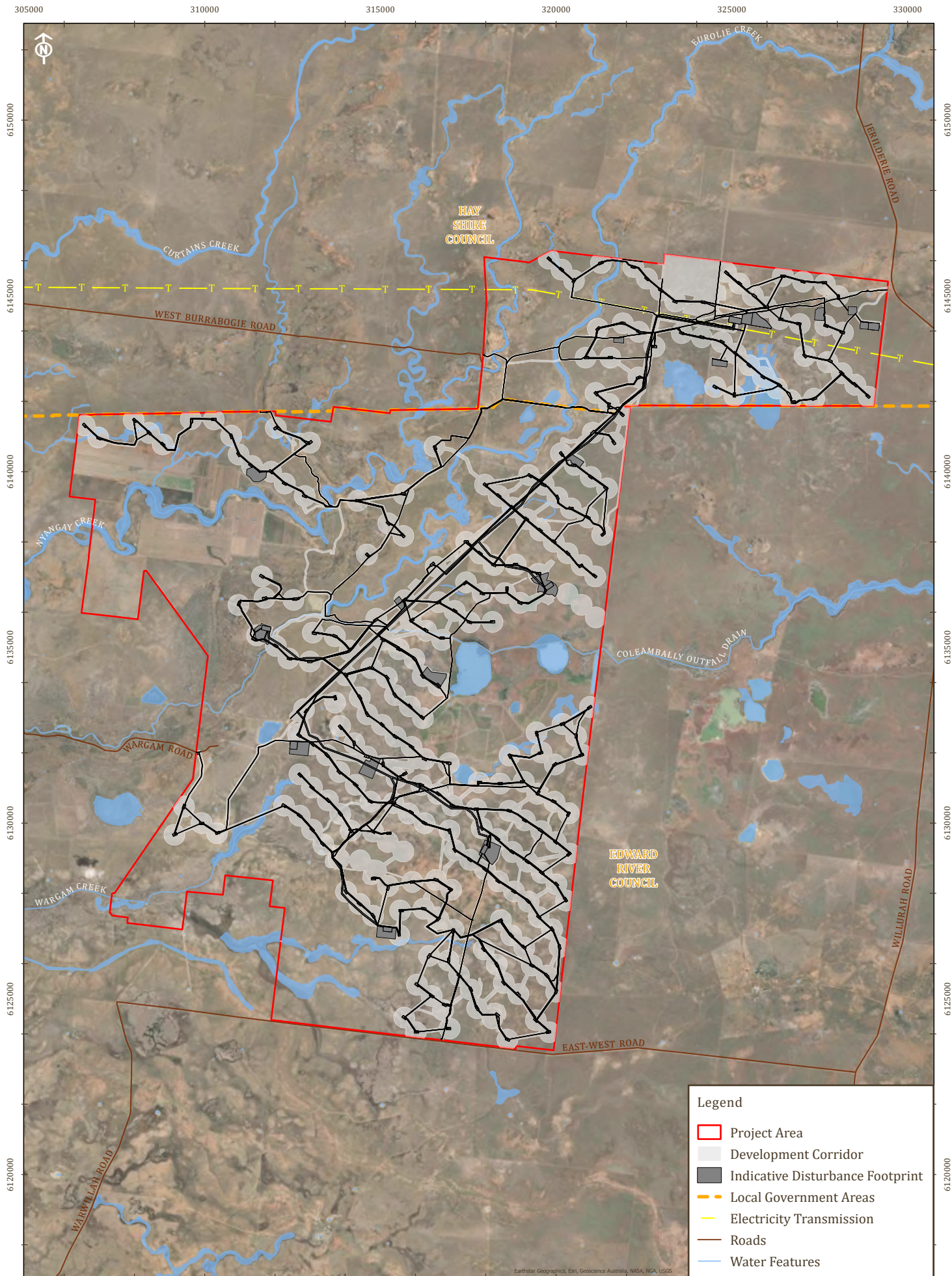
- *Managing Land Contamination Planning Guidelines SEPP 55 – Remediation of Land* (Department of Urban Affairs and Planning, 1998)
- *Consultants Reporting on Contaminated Land: Contaminated Land Guidelines* (NSW Environment Protection Authority [EPA], 2020)

To meet the objectives, the scope of work comprised of the following:

- Review of published data associated with the site to establish the site environmental setting and sensitivity. This included a review of the following documentation reported by Land Insight (2025) including:
 - Groundwater bore databases
 - Hay Shire and Edward River Council LGA planning information
 - Historical business directories
 - Local geological maps
 - Historical business directories
 - Publicly available data bases held by the NSW Environment Protection Authority (NSW EPA), i.e. listed as a Notified Site on NSW EPA website for contaminated sites
- Review of historical aerial imagery
- Reference previous Minesoils site inspection Pottinger Wind Farm Soils, Land and Agricultural Impact Assessment (SLAIA) (Minesoils 2024)
- A visual site inspection
- Development of a conceptual site model (CSM) assessing source, pathway and receptor linkages







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0 1000 2000 3000 Meters
Scale 1:140,000 at A4

Project Layout

FIGURE 2

2 SITE DESCRIPTION

2.1 SITE IDENTIFICATION

The Project is located at West Burrabogie Road, Boooroban NSW and extends across 26,000 hectares (ha) across land owned by two associated host landholders. Site details associated with the Disturbance Footprint are shown below in **Table 1**.

Table 1 Site Identification – Disturbance Footprint

Information	Description
Lot / DP	The Disturbance Footprint is located across 171 cadastral lots owned by 2 associated host landholders. The lots that make up the area are included in Appendix 1 .
Site Area	1,066 ha, making up 4.1% of the Project Area
Local Government	Hay and Edward River LGAs
Zoning	Rural Use (RU1) – Primary Production
Owner	The land pertaining to the investigation is owned by 2 property owners with minor interactions with Crown and Council owned land.
Current Site Use	Predominantly livestock grazing

2.2 LAND USE

Land within the Disturbance Footprint, and larger Project Area, is used for agricultural purposes, predominantly livestock grazing on native pastures. Areas subject to cropping activity are also present, with these generally occurring outside the Disturbance Footprint.

2.3 SITE BOUNDARIES

Land use surrounding the Disturbance Footprint, and larger Project Area, is for agriculture (broadacre farming, including cropping and livestock). 98% of land in the Hay LGA, and 74% of Edward River LGA used for grazing of livestock. Cropping (i.e. wheat, rice, barley, canola, vegetables, citrus and orchard fruit) and forestry account for the remaining surrounding land uses.

2.4 SENSITIVE ECOLOGICAL RECEPTORS

Several lakes and associated wetland ecosystems occur within the Disturbance Footprint, and larger Project Area, with the largest up to 100 ha in size. Land Insight reports several water courses within the Disturbance Footprint as sensitive receptors, these include:

- Werkenbergal Swamp
- Eurolie Creek
- Canal Line
- Coleambally Outfall Drain
- Nyangay Creek
- Unnamed Lake
- Wargam Creek
- Werkenbergal Swamp



- Farm Dam Area

The Disturbance Footprint is located south of the Murrumbidgee River and north of an irrigation channel (Coleambally Outfall Drain). The watercourses within the Disturbance Footprint, and larger Project Area, are within the Murrumbidgee Catchment. In addition, irrigation channels run through the Disturbance Footprint transporting water for irrigation purposes.

Generally, water channels remain dry most of the time and exhibit vegetation characteristics that are unique to the Riverina region.

2.5 TOPOGRAPHY

The Disturbance Footprint is located on the Riverine Plain, the eastern geomorphic subdivision of the Murray Basin that encompasses an area of 77,000 square kilometres. The Riverine Plain is characterised by almost flat topography with extremely low gradients dominated by the open plains of native grasslands and semi-arid shrublands, which is traversed by several major rivers and their tributaries that flow from the east and south. The Murray Basin is a large low lying intracratonic basin containing Cainozoic unconsolidated sediments and sedimentary rocks (Minesoils 2024).

2.6 SITE INVESTIGATION

A summary of observations and findings during the initial site investigation, undertaken in May 2025, is described **Section 6**. No other site investigations regarding contamination were undertaken in preparation of this PSI report.



3 SITE HISTORY

The following sections include a summary of the site history as recorded by the third-party database report (Land Insight, 2025) and other relevant publicly available licences, registers, records, databases or mapping pertinent to the site. The complete Land Insight (2025) report is provided as **Appendix 2**.

3.1 NSW EPA LICENCES, REGISTERS AND RECORDS

The review of environmental registers, licences and incidents from the contaminated land public register undertaken by Land Insight (2025) (**Appendix 2**) confirms that there are no identified contaminated sites across the site. The results of NSW EPA Contaminated Land registers relevant to the site is summarised in Table 3-1 of **Appendix 2**.

Table 2 Summary of NSW EPA, Licences, Registers and Records

Information	Description
Licences	The following licences are recorded within, or near, the Project Area: Licence No. 13419 (no longer in use) held by the Forestry Corporation of NSW for logging operations (State Forests and Other Crown-Timber Lands Within the South-Western Area, Dubbo, NSW 2830).
Clean Up, Penalty Notices and Orders	No properties within or near the Project Area have received clean up or penalty notices.
EPA Records	No properties within or near the Project Area are included on: 'List of NSW contaminated sites notified to EPA' 'Contaminated Land: Record of Notices'

3.2 SITES REGULATED BY OTHER JURISDICTIONAL BODIES

No contaminated sites of the following type have been identified within or near the Disturbance Footprint (Land Insight, 2025):

- Contaminated legacy areas
- Former Gasworks sites
- Landfills
- National Pollutant Inventory (NPI) sites
- PFAS sites

One site was identified under Defence, Military sites and UXO Areas, listed in **Table 3** below.

Table 3 Defence, Military Sites and UXO Areas

Site Name	Type*	Description	Status	Location
Conargo	Unexploded Ordnance (UXO)	Potential presence of UXO: Other - This site was a RAAF Air to Air Range during WWII. (Source: Defence's National Unexploded Ordnance Program (NUXOP))	0.0	Onsite



*RCIP (Regional Contamination Investigation Program). UXO (Unexploded Ordnance Areas). Source: Defence, Military Sites, and UXO Areas

No current or historical mines or quarries were reported in the Land Insight report. However, one mine pit was observed on site during the site investigation, summarised in **Table 4** below.

Table 4 Summary of Mines and Quarries

Site Name	Mine ID	Mine Operator	Status	Location
West Burrabogie Pit	45238	Operated by Conargo Shire Council	Unknown	Onsite

3.3 HISTORICAL AERIAL IMAGERY

A search of historical aerial imagery was undertaken of the site and surrounding areas. This involved accessing imagery through NSW Government Spatial Services and Historical Imagery, Geoscience Australia and Google Earth. Available imagery accessed included 1968, 1980, 1985, 2006, 2015 and 2023. The imagery showed that the site and surrounding land have predominantly been cleared agricultural land since the first available image from 1968. The imagery is summarised in **Table 5** and presented in **Appendix 3**.

Table 5 Historical Aerial Imagery

Year	Image ID	Comments
1968	1968 – 1 to 1968 – 8	Within this image set, waterways are visible, traversing through the site. The area is largely cleared of vegetation with small patches scattered throughout. Remaining denser areas of vegetation are evident, particularly adjacent waterways.
1980	1980 – 1	The site appears to remain largely unchanged.
1985	1985 – 1 to 1985 – 7	The site appears to remain largely unchanged. Evidence of agricultural infrastructure is clearly visible, including farm dams and segregation of areas. Area of cropping are also evident.
2006	2006 – 1 to 2006 – 6	The site appears to remain largely unchanged with the exception of additional cropping areas.
2015	2015 – 1 to 2015 – 6	The site appears to remain largely unchanged.
2023	2023 – 1 to 2023 – 6	The site appears to remain largely unchanged.

3.4 POTENTIALLY CONTAMINATING BUSINESSES

The third-party database search undertaken by Land Insight (2025) considers a wide range of potentially contaminating activities undertaken by businesses or industries that have occurred within the site or within close proximity to the site. No potentially contaminating business activities were identified.



3.5 DANGEROUS GOODS SEARCH

Based on the predominant current and historical agricultural use of the site and surrounding area, a dangerous goods search was not deemed necessary.

3.6 SITE HISTORY SUMMARY

The site history review identified that the site and surrounding area has, historically, been cleared agricultural land, most likely used for livestock grazing (primarily sheep) and consequently the site was not identified as containing potentially contaminating land uses.



4 PREVIOUS INVESTIGATIONS

An Environmental Impact Statement (EIS) was prepared by RPS in May 2024. Key issues assessed within the EIS included:

- Noise
- Landscape Visual
- Biodiversity
- Aboriginal Heritage
- Historic heritage
- Soils
- Agriculture
- Hydrology and Flooding
- Water Resources
- Traffic
- Telecommunications
- Aviation
- Hazards (risk to public)
- Blade Throw
- Bushfire
- Air Quality
- Waste
- Socioeconomics
- Cumulative

The EIS concluded that with consideration of the management and mitigation measures, the outcomes of technical specialist reports, and stakeholder consultation; the Project will not have significant or permanent impacts on the environment.

There are no known contamination or geotechnical investigations carried out at the site as part of the EIS or otherwise.



5 GEOLOGY AND HYDROGEOLOGY

5.1 GEOLOGY

Land Insight 2025 reports that the surface geology of the Project Area is represented by the Hay 1:250 000 Geology Map and Murray Basin 1:1,000,000 Geology Map.

The underlying geology of the Project Area consists of Shepparton Formation which formed in a fluvio-lacustrine environment between the Pleistocene and Holocene with the dominant lithology consisting of alluvial floodplain deposits (refer **Figure 3**). The Shepparton Formation consists of unconsolidated to poorly consolidated variegated and mottled clay, silt, silty clay, with intercalated lenses of fine to coarse sand and gravel. The formation has been partially modified by pedogenesis and groundwater table fluctuation (Minesoils 2024).

A soil survey undertaken by Minesoils (2024) found the Disturbance Footprint to cover three dominant soil mapping units, shown on **Figure 4**, and presented below.

- Soil Unit 1: Dermosol/ Vertosol Complex – covering 815 ha
- Soil Unit 2: Sodosols – covering 234 ha
- Soil Unit 3: Arenosols – covering 17 ha

5.2 HYDROGEOLOGY

The EIS (RPS, 2024) identified that the Project Area is located within the Lower Murrumbidgee Shallow and Deep Alluvium water sources. and groundwater within the Project Area is managed under Water Sharing Plan for the Murrumbidgee Alluvial Groundwater Sources 2020.

Porous, extensive aquifers of low to moderate productivity and Porous, extensive highly productive aquifers are reported at the site (Land Insight, 2025).

5.3 GROUNDWATER BORES

Review of existing registered groundwater bores (Land Insight, 2025) identifies 12 registered bores within the Project Area and 5 bores within a 2 km radius. Total bore depths ranged from approximately 9 to 242 m with groundwater at the site is anticipated to be present in the bedrock between approximately 17.2 to 22.9 m depth. Generally, wells installed in the area are listed for livestock supply, irrigation use, household use, stock and domestic use and monitoring. From the limited salinity information available, groundwater is reported as fresh to slightly brackish with salinity ranging from <500 to 1500 parts per million (ppm).

5.4 GROUNDWATER DEPENDENT ECOSYSTEMS

A review of regional scale mapping of groundwater dependent ecosystems (GDEs) (Land Insight, 2025), within the Project Area, indicates the potential for GDEs ranges from low to high. Further information is provided within the Biodiversity Development Assessment Report prepared for the Project (Biosis 2024).

5.5 PREFERENTIAL WATER COURSES

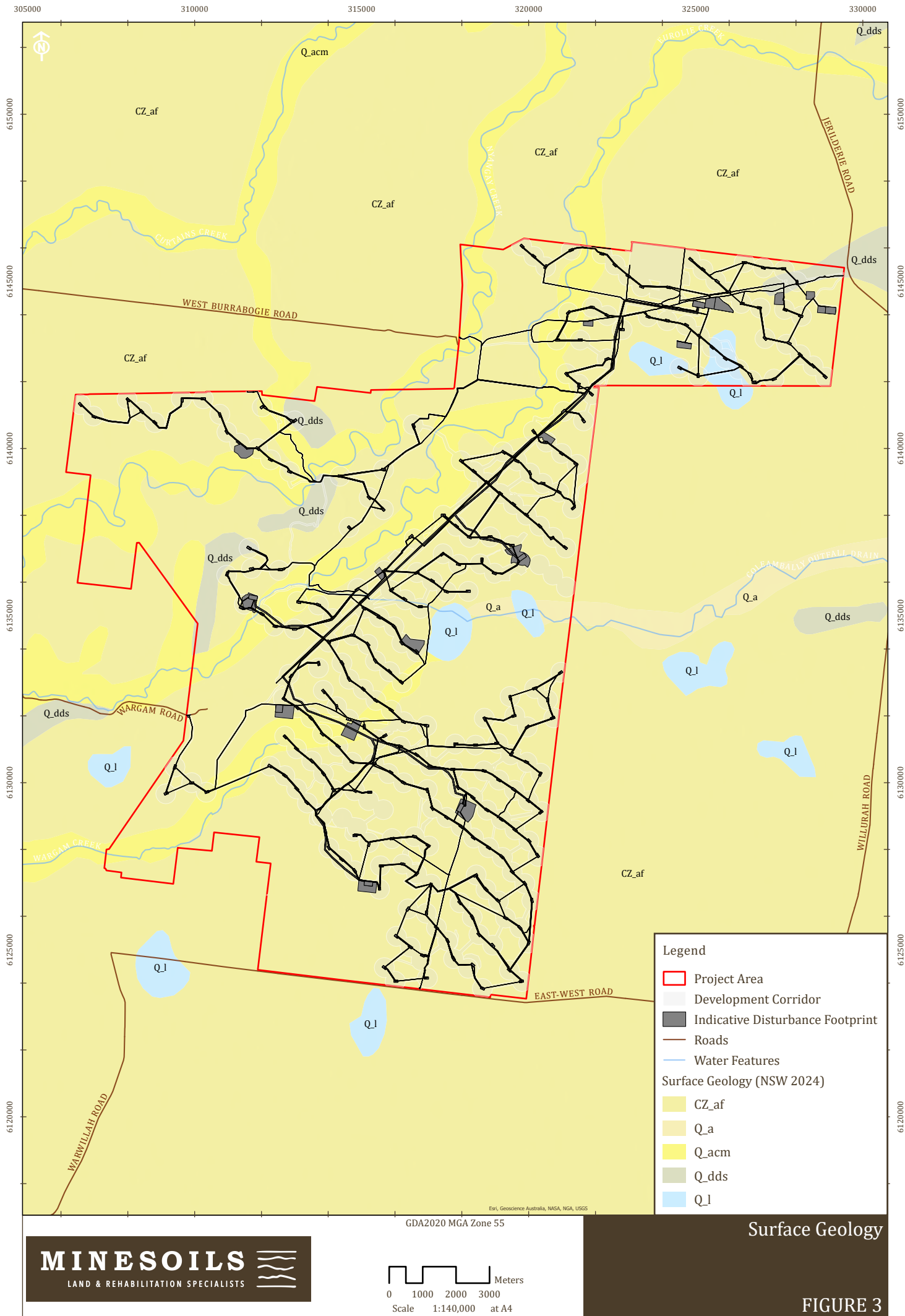
The Project Area is located south of the Murrumbidgee River and north of an irrigation channel (Coleambally Outfall Drain). There are several water courses within the Project Area with the main watercourses including Nyangay Creek, Coleambally Outfall Drain and Eurolie Creek, which flows into Coleambally Outfall Drain. The watercourses within the Project Area are within the Murrumbidgee Catchment. All water channels remain dry most of the time and exhibit vegetation characteristics that are unique to the Riverina region (Minesoils 2024).

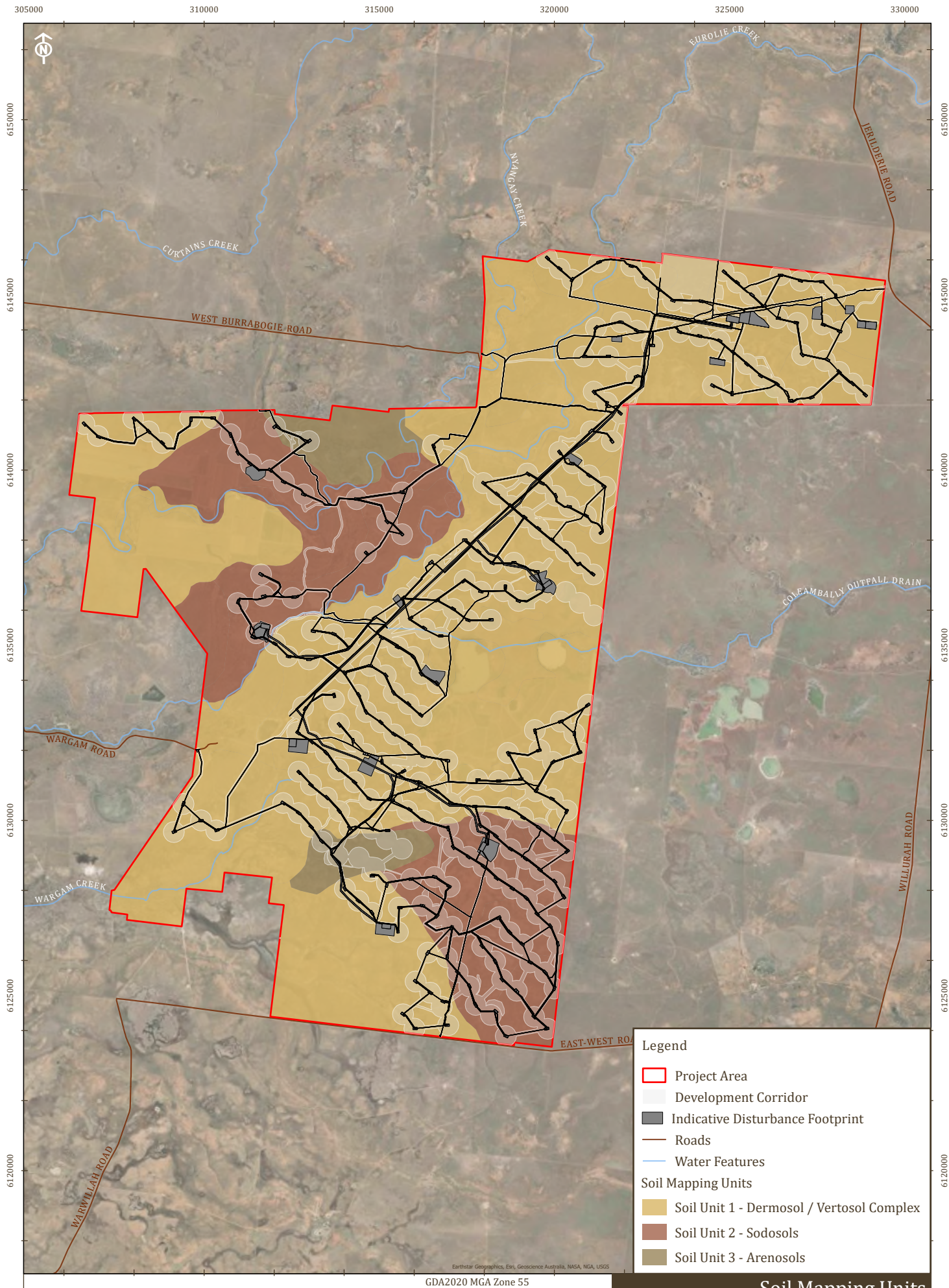


5.6 DIRECTION OF SURFACE WATER RUNN-OFF

Based on topography mapping from SLAIA (Minesoils 2024) it is expected that the surface water run-off would travel from northeast to southwest across the Project Area. However, as majority of the site is unsealed and flat, it is expected the majority of rainfall would infiltrate the soil.







Soil Mapping Units

FIGURE 4

6 SITE CONDITION

6.1 SITE CONDITION

Minesoils attended the site on 28 and 29 May 2025 to conduct a visual inspection of the Project Area to identify any potential sources of contamination.

As previously observed during the SLAIA, the Project Area was determined to be a generally stable, largely treeless, open plain landform with 90 - 100% surface cover predominantly in the form of low shrubs and native pasture for grazing (**Plate 1**). Areas subject to cropping activity are also present, covering an area of approximately 1,000 ha (**Plate 2**), with these generally occurring outside the Disturbance Footprint.

The flat nature of the plains within which the Project Area lies shows minimal elevation change (approximately 87 m Australian height Datum (AHD) at the southwestern border to 100 m AHD in the north, over a distance of approximately 25 km). The Project Area landscape is generally level, although contains a minor presence low rises and depressions, such as low sand dunes and drainage lines. Sand dunes are result of aeolian geomorphological processes known to be active within the locality (Butler et al 1973),

6.2 VISIBLE SIGNS OF CONTAMINATION

The following observations were made during the site investigation:

- No evidence of widespread contamination was observed within the Project Area
- Minor areas of localised identified and suspected contamination were observed across the Project Area, which included oil/lubricants, fuel and suspect asbestos containing material, and are shown on **Figure 5**.
- Two (2) areas of localised contamination were observed within the Development Corridor, which included oil/lubricants and fuel. These areas are labelled as *Identified Contamination 1* and *Identified Contamination 3* on **Figure 5**.
- No evidence of contamination was observed within the Disturbance Footprint.

The contamination observed is minor in nature and generally typical of remote agricultural properties storing fuels, oils and other chemicals. For the purpose of this assessment, despite the identified and suspected potential contamination observed during site investigation, no visible signs of contamination were observed within the Disturbance Footprint. Therefore, the identified and potential contamination areas observed will not likely be disturbed by the Project during construction activities.

Plates 3 to 11 illustrate the typical landscape and land use characteristics of the Project Area and observations made during the site investigation.

6.3 VISIBLE SIGNS OF PLANT STRESS

No visible signs of plant stress from contaminants were noted within the Project Area during the general site investigation.

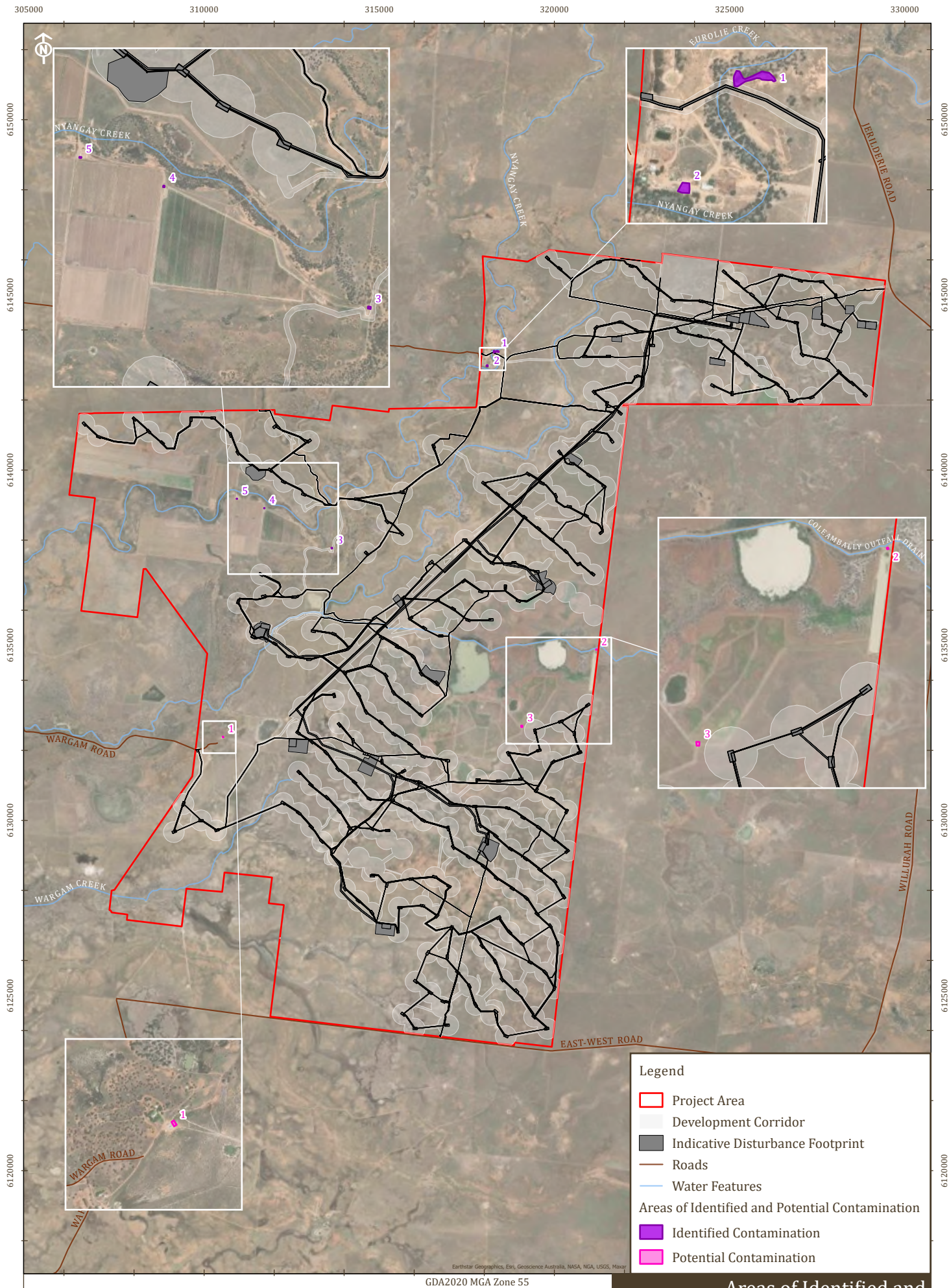
6.4 PRESCENCE WASTES

Waste stockpiles were observed across the Project Area during the site investigation. This included, but is not limited to, general waste associated with agriculture and building material, metal, concrete, tyres, and batteries. These were generally minor in nature and were not observed within the Disturbance Footprint.

6.5 ODOURS

No noticeable odours were observed during the site investigation.





Areas of Identified and
Potential Contamination

FIGURE 5

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Plate 1: The Project Area generally consists of open plains with native pastures for livestock grazing.



Plate 2: Cropping activities observed within the Project Area, outside of the Disturbance Footprint.





Plate 3: Lakes and water bodies observed within the Project Area, outside of the Disturbance Footprint



Plate 4: Mine pit (West Burrabogie Pit) observed within the Project Area, outside of the Disturbance Footprint.





Plate 5: Construction areas associated with the transmission line upgrade were observed within the Project Area, outside of the Disturbance Footprint.



Plate 6: Built structures within the Disturbance Footprint are generally limited to gates and livestock fencing.



Plate 7: Built structures within the Project Area but outside of the Disturbance Footprint include farm sheds.



Plate 8: Built structures within the Project Area but outside of the Disturbance Footprint include shearing sheds.



Plate 9: Built structures within the Project Area but outside of the Disturbance Footprint include silos.



Plate 10: Built structures within the Project Area but outside of the Disturbance Footprint include holding yards.





Plate 11: Built structures within the Project Area but outside of the Disturbance Footprint include stock yards.

7 INTEGRITY ASSESSMENT

The desktop review was completed by accessing publicly available information from the following sources:

- Land Insight Report (Land Insight 2025)
- SLAIA (Minesoils, 2024)
- NSW Government Spatial Services Historical Imagery
- Australian Government Geoscience Australia
- Google Earth Imagery

All information pertaining to the contamination status of the Project has been obtained through public record searches and the inspection carried out on site. All documents and information in relation to the Project, which were obtained from public records, are accepted to be correct, and have not been independently verified or checked. With the large area of the site, it is possible that the site visit resulted in the omission of identifying areas of potential contamination concern, however this is not considered significant when considered in context of the findings of the historical review. Based on the available information regarding the current and former use of the site and surrounds, Minesoils considers there is a low risk of not accurately identifying Areas of Potential Concern and COPCs within the site boundaries.



8 PRELIMINARY CONCEPTUAL SITE MODEL

This CSM has been developed based on the information obtained from the desktop review, along with the site inspection and studies prepared in support of the EIS. The purpose of the CSM is to identify potential contamination sources, contaminants of concern, transport mechanisms, exposure pathways and sensitive receivers within the investigation area and assess the need for further investigation.

It is important to note that this CSM is preliminary and constrained due to the following limitations:

- Intrusive investigations at the site have not been undertaken and therefore there is potential for unidentified soil, surface water and/or groundwater contamination to exist on site.
- Other receptors may be present at the site that have lower exposure than the most sensitive environmental receptor potentially exposed and considered in this CSM.
- This preliminary CSM should be updated/reviewed where site conditions materially change or if further information pertaining to the contamination status of the site is identified.

8.1 POTENTIAL AREAS AND CONTAMINANTS OF CONCERN

Potential sources of contamination and contaminants of concern identified within the Disturbance Footprint, and adjacent areas, are described below and presented in **Table 6**.

8.1.1 AGRICULTURAL USE (PREDOMINANTLY LIVESTOCK GRAZING, LIMITED CROPPING)

Agricultural infrastructure, e.g. farm sheds, and chemical/fertiliser storage, are present on site and have historically been used for agricultural activities, including livestock farming and grazing. Potential contaminants associated with this infrastructure include asbestos, pesticides, herbicides, hydrocarbons, heavy metals, fertilisers and animal waste. These contaminants have the potential to contribute to localised contamination of surface soils and water bodies.

Cropping activities, e.g. fodder cropping, are likely to have required the use of chemicals such as fertilisers and pesticides in the maintenance of the crops. Potential contaminants associated with these chemicals include heavy metals, organochlorine and organophosphate pesticides. Intensive use of fertiliser can also lead to the build-up of heavy metals in surface soil particularly zinc and cadmium, depending on the type and source of the fertiliser.

8.1.2 PLANT, VEHICLES AND EQUIPMENT

The operation of plant, vehicles and equipment is generally required for agricultural activities including applications such as transportation, earth moving, fertiliser application and pumping water. Potential contaminants include hydrocarbons and heavy metals. The use, storage, maintenance and refuelling of plant and equipment (including consumable materials) has the potential to contribute to localised contamination of surface soils.

8.1.3 UNCLASSIFIED FILL OR UNCONTROLLED DISPOSAL OF WASTE

The importation of unclassified fill and the uncontrolled disposal of waste at the site is a potential source of contamination. Potential contaminants include heavy metals, hydrocarbons and asbestos. Based on the desktop review, there is no evidence to suggest that significant quantities of fill material have historically been imported to the site for levelling or construction purposes. There is also no evidence to suggest that large quantities of domestic or demolition waste have been illegally disposed of at the site, therefore, contamination from unclassified fill and the uncontrolled disposal of waste are considered minor as a potential source of contamination.



Table 6 Potential Sources and Contaminants of Concern

Potential Contamination Source	Contaminants of Potential Concern (COPC)	Affected Media
Within Disturbance Footprint		
Agricultural use (predominantly livestock grazing, limited cropping)	- Pesticides (organochlorine pesticides (OCP)/organophosphorus pesticides (OPP)), including herbicides and fungicides - Calcium phosphate, calcium sulfate, copper chloride, potassium - Sulfur, sulfuric acid, nitrates and ammonia - Carbamates - Heavy metals, including arsenic (As), boron (B), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), magnesium (Mg), mercury (Hg), molybdenum (Mo), nickel (Ni) and zinc (Zn) - Asbestos	Soil and surface water
Unclassified fill or uncontrolled disposal of waste	- Total recoverable hydrocarbons (TRH) - Benzene, toluene, ethylbenzene, xylenes, and naphthalene (BTEXN) - Polycyclic aromatic hydrocarbons (PAHs) - Heavy metals - Asbestos	Soil
Outside of Disturbance Footprint		
Agricultural use (predominantly livestock grazing, limited cropping)	- Pesticides (organochlorine pesticides (OCP)/organophosphorus pesticides (OPP)), including herbicides and fungicides - Calcium phosphate, calcium sulfate, copper chloride, potassium - Sulfur, sulfuric acid, nitrates and ammonia - Carbamates - Heavy metals - Asbestos	Soil and surface water
Plant, vehicles and equipment	- Total recoverable hydrocarbons (TRH) - Heavy metals	Soil and surface water



Potential Contamination Source	Contaminants of Potential Concern (COPC)	Affected Media
Unclassified fill or uncontrolled disposal of waste	• Total recoverable hydrocarbons (TRH) • Benzene, toluene, ethylbenzene, xylenes, and naphthalene (BTEXN) • Polycyclic aromatic hydrocarbons (PAHs) • Heavy metals • Asbestos	Soil
Public Roads	• Asbestos • Polychlorinated biphenyls (PCBs) • Heavy metals	Soil, groundwater and surface water

8.2 POTENTIAL TRANSPORT MECHANISMS

Identified potential transport mechanisms for the COPCs include:

- Presence of contamination in soil near surface or at depth
- Migration of contaminants in groundwater to surface water receiving bodies
- Leaching of soil contaminants to groundwater
- Migration of groundwater and/or surface water (as overland flow) from the site
- Volatilisation and lateral and/or vertical vapour migration of volatile organic compounds and subsequent inhalation

8.3 EXPOSURE PATHWAYS

Identified potential exposure pathways by which receivers could be exposed to the COPCs include:

- Inhalation of dust or vapours
- Ingestion of contaminated soils
- Dermal contact with contaminated soil or surface water
- Sedimentation and discharge to surface waters
- Vertical and horizontal migration of contamination through the soils into the underlying groundwater.

8.4 POTENTIAL RECIIEVERS

Identified potential receivers of the COPCs include both human and environmental receivers. These include:

- Construction workers
- Visitors to the site (e.g. workers conducting maintenance, contractors, members of the public)
- Workers conducting agricultural activities on the Project Area
- Offsite residents or workers adjacent to the site
- Plants, animals and insects for which the site provides habitat
- Receiving surface water bodies, including local drainage channels
- Soil and groundwater resources beneath the site



9 CONCLUSIONS AND RECOMMENDATIONS

9.1 CONCLUSIONS

Following the desktop review of available information, and observations from the site inspection, the following conclusions have been made:

- As a result of historical and current land use activities, contamination has the potential to exist within the Disturbance Footprint, in surface soils, surface water and ground water.
- Visible signs of minor, localised contamination were observed across the Project Area and within the Development Corridor. However, no signs of visible contamination were observed within the Disturbance Footprint.
- The potential COPCs that could occur within the Disturbance Footprint include:
 - Pesticides (organochlorine pesticides (OCP)/organophosphorus pesticides (OPP)), including herbicides and fungicides
 - Calcium phosphate, calcium sulfate, copper chloride, potassium
 - Sulfur, sulfuric acid, nitrates and ammonia
 - Carbamates
 - Heavy metals, including arsenic (As), boron (B), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), magnesium (Mg), mercury (Hg), molybdenum (Mo), nickel (Ni) and zinc (Zn)
 - Total recoverable hydrocarbons (TRH)
 - Benzene, toluene, ethylbenzene, xylenes, and naphthalene (BTEXN)
 - Polycyclic aromatic hydrocarbons (PAHs)
 - Polychlorinated biphenyls (PCBs)
 - Asbestos

Although historical and current land use at the site have the potential for contaminating surface soils, surface water and groundwater, the quantity of contaminants associated with these activities is not considered to have resulted in significant contamination. Further, as the Disturbance Footprint, and larger Project Area, is not listed in any of the contaminated land databases, the overall likelihood for significant contamination to be present within the site is considered very low.

9.2 RECOMMENDATIONS

Despite the identified and suspected potential contamination observed during site inspection, these areas were noted to be outside of the Disturbance Footprint, localised and inert in nature. Therefore, the identified and potential contaminations areas are not anticipated to be disturbed by the Project and have been assessed as not posing a risk to the Project. Any changes to the placement of the Disturbance Footprint within the Development Corridor should be informed by the location of two (2) areas of localised contamination (Identified Contamination 1 and Identified Contamination 3 on **Figure 5**), which should be avoided, or if avoidance is not possible, suitably addressed. Further assessment of contamination within the Disturbance Footprint is not considered necessary and, as no contamination has been identified, remediation is not required.

Although available information accessed for the purpose of this PSI did not identify any contamination within the Disturbance Footprint, it is possible that unidentified contamination exists. Therefore, Minesoils recommends that an Unexpected Finds Procedure (UFP) should be developed for managing potential contamination encountered during construction works. The UFP would include handling and disposal procedures in accordance with NSW EPA guidelines, Australian Standards, and relevant industry codes of practice. In addition, during construction of the Project, should excavated material be required to be removed offsite, it must appropriately characterised in accordance with NSW EPA (2014) *Waste Classification Guidelines* prior to being removed.



10 REFERENCES

- Australian Government Geoscience Australia (2024) Historical Aerial Photography, accessed June 2025
- Biosis (2024) Pottinger Wind Farm, Biodiversity Development Assessment Report, 13 May 2024
- RPS (2024) Pottinger Wind Farm Environmental Impact Statement. Prepared by RPS, a Tetra Tech Company (RPS) for Someva Renewables
- Land Insight (2025) Due Diligence Insight Report, Pottinger Wind Farm, Willurah NSW. Report No. : LI-4808 DDR, 21 May 2025
- Managing Land Contamination Planning Guidelines SEPP 55 – Remediation of Land (Department of Urban Affairs and Planning, 1998).
- Minesoils (2024) Pottinger Wind Farm Soils, Land and Agricultural Impact Assessment
- National Environment Protection Council (NEPC) (1999) National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended in 2013.NSW Environmental Protection Agency (2020) Contaminated Land Guidelines: Guidelines for Consultants Reporting on Contaminated Land
- NSW EPA (2020) Contaminated Land Guidelines: Consultants reporting on contaminated land. NSW Environment Protection Authority
- NSW Spatial Services (2025) Historical Imagery Viewer, accessed June 2025



Appendix 1

Schedule of Lands



**Lot / DPs to which applies to Host
Landowner 1**

(* Indicates lots shared between wind and solar
projects)

1 DP1081067

2 DP1081067

2 DP116080

3 DP116080

4 DP116080

5 DP116080

1 DP134988

2 DP134988

3 DP134988

4 DP134988

5 DP134988

6 DP134988

7 DP134988

1 DP134991

42 DP591554*

1 DP756282

10 DP756282

11 DP756282

12 DP756282

13 DP756282

14 DP756282

15 DP756282

16 DP756282

17 DP756282

2 DP756282

20 DP756282

24 DP756282

25 DP756282

26 DP756282

3 DP756282

32 DP756282

33 DP756282

34 DP756282

35 DP756282

36 DP756282

37 DP756282

38 DP756282

4 DP756282

44 DP756282

45 DP756282

46 DP756282

47 DP756282

48 DP756282

49 DP756282

5 DP756282

50 DP756282

54 DP756282

6 DP756282

7 DP756282

8 DP756282

9 DP756282

10 DP756315

11 DP756315

12 DP756315

13 DP756315

16 DP756315

17 DP756315

18 DP756315

19 DP756315

20 DP756315

21 DP756315

22 DP756315	109 DP756809
23 DP756315	51 DP756809
24 DP756315	52 DP756809
25 DP756315	53 DP756809
27 DP756315	60 DP756809
28 DP756315	61 DP756809
29 DP756315	62 DP756809
30 DP756315	84 DP756809
31 DP756315	88 DP756809
32 DP756315	90 DP756809
33 DP756315	91 DP756809
35 DP756315	
36 DP756315	
37 DP756315	
40 DP756315	
41 DP756315	
42 DP756315	
44 DP756315	
47 DP756315	
48 DP756315	
5 DP756315	
51 DP756315	
52 DP756315	
53 DP756315	
54 DP756315	
55 DP756315	
6 DP756315	
7 DP756315	
8 DP756315	
9 DP756315	
107 DP756809*	
108 DP756809*	

**Lot / DPs which applies to the Host
Landowner 2**

1 DP133866

1 DP133901

2 DP133901

221 DP133992

222 DP133992

151 DP133993

152 DP133993

18 DP756282

19 DP756282

23 DP756282

27 DP756282

28 DP756282

29 DP756282

30 DP756282

31 DP756282

39 DP756282

40 DP756282

41 DP756282

42 DP756282

43 DP756282

53 DP756282

1 DP756338

12 DP756338

17 DP756338

18 DP756338

19 DP756338

2 DP756338

21 DP756338

3 DP756338

34 DP756338

35 DP756338

36 DP756338

42 DP756338

45 DP756338

48 DP756338

51 DP756338

52 DP756338

1 DP756343

10 DP756343

11 DP756343

12 DP756343

13 DP756343

14 DP756343

15 DP756343

16 DP756343

17 DP756343

18 DP756343

19 DP756343

2 DP756343

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55 DP756343

6 DP756343

7 DP756343

8 DP756343

9 DP756343

Lot / DPs to which apply to the BESS

(*Note this land is also listed within Landowner
1)

42 DP591554*

**Lot / DPs to which the Application applies
(Transport Route)**

12 DP1041961

4 DP1091853

2 DP1137659

7301 DP1149704

7304 DP1149704

7313 DP1157457

7307 DP1179131

7400 DP1179151

7401 DP1179151

7301 DP1181196

7313 DP1185108

7320 DP1185108

301 DP1242250

302 DP1242250

100 DP1283323

1 DP456901

2 DP456901

2 DP510038

41 DP591554

7 (10) DP758138

5 DP756338

15 DP756745

4 DP756745

8 DP756745

5652 DP757298

5653 DP757298

5654 DP757298

5655 DP757298

5656 DP757298

5657 DP757298

5658 DP757298

5834 DP757298

6667 DP822054

4 (10) DP758138

7303 DP1149704

31 DP756343

42 DP591554

**Parcel/Plans to which the Application
applies (Transport Route)**

A1 D117947

Q3 D117947

Q4 D117947

A1 D25905

A501 D59781

A101 D69560

A3 D73873

A78 D82497

A75 D89521

A601 D94164

A602 D94164

Q98 F199946

A100 F206504

A101 F206504

A98 F206504

A99 F206504

Appendix 2

Land Insight Report



Due Diligence Insight Report

Pottinger Windfarm
Willurah, NSW

21 May 2025

Report n°:
LI-4808 DDR

Understanding your report

Thank you for ordering your report from Land Insight. If you have any feedback, questions or queries, please get in touch with us at [REDACTED]

Your Report has been produced by Land Insight and contains information related to current and historical land use information, environmental risks and hazards.

The information presented in this report includes Land Insights' comprehensive research into current and historical land use derived from Land Insight's proprietary National Land Use Atlas (NLUA), environmental risk information and data available from public databases, third party providers, local and state authorities. The report also includes detailed property and soil setting information, hydrogeology, identification of potential pollution and contamination along with ground and natural hazards. The records identified are presented within a 200 to 2000m radius (buffer zone) from the boundaries of the Property searched, depending on the screened constraint. The report is separated and grouped into easy to navigate sections as per Summary below:

	Section 1	PROPERTY SETTING	Sensitive Receptors, Planning Controls, Zoning, Heritage, Soil and Land Information, Geology and Topography
	Section 2	HYDROGEOLOGY AND GEOTECHNICAL	Groundwater Bores and Other Borehole investigations, Groundwater Dependent Ecosystems (GDE), Aquifer and Wetland, Other Hydrogeology information.
	Section 3	ENVIRONMENTAL REGISTERS, LICENCES AND INCIDENTS	Contaminated Land Public Register, Licences, Audits and Orders, Sites Regulated by Other Jurisdictional Body (Former Gaswork sites / PFAS sites, UXO Areas), Historical Landfills, Derelict Mines and National Pollutant Inventory (NPI).
	Section 4	POTENTIALLY CONTAMINATED AREAS	Potentially Contaminating activities (Industries, businesses and activities that may cause contamination), Historical Potentially Contaminating activities and Historical Land Use.
	Section 5	NATURAL HAZARDS	Erosion hazard, Flood hazards, Bushfire prone land and Bushfire history.

This report includes data listed on page 4 (table of contents). All sources of data and definitions are provided in the Product Guide (Attached). For a full list of references, metadata, publications or additional information not provided in this report, please contact orders@landinsight.co.

This report does not include information derived from a physical inspection. It is important to note that a site inspection can present information relevant to other risks and hazards that may not be identified by this Report.

Due to the ongoing nature of database development and frequency of updates provided by various state government regulators and data sources, the data displayed within this report is only current from date of production. While every effort is made to ensure the details in your Report are correct, Land Insight cannot guarantee the accuracy or completeness of the information and/or data provided.

This Report, and your use of it, is regulated by Land Insight's Terms and Conditions. For more information, see Land Insight's Product Guide.

Report Summary

Dataset name		Onsite	On Buffer	Buffer Distance
Section 1 - Property Setting				
1.1	Sensitive Receptors	✓	✓	200m
1.2a	Planning Controls (<i>Zoning</i>)	✓	✓	500m
1.2b	Planning Overlays (<i>Environmental Planning Instruments</i>)	✓	✓	500m
	Planning Overlays (<i>Other Planning Information</i>)			500m
1.3	Heritage (<i>State and Local Heritage</i>)			200m
	Heritage (<i>Australian and World Heritage Database Register</i>)			200m
1.4a	Soil and Land Use Information (<i>Soil Landscape</i>)	✓	✓	500m
	Soil and Land Use Information (<i>Soil Salinity</i>)			500m
	Soil and Land Use Information (<i>Radon</i>)	✓	✓	500m
1.4b	Acid Sulfate Soil (<i>State and Local Acid Sulfate Soil Registers</i>)			500m
	Acid Sulfate Soil (<i>National Acid Sulfate Soil Registers</i>)	✓	✓	500m
1.5	Geology and Topography (<i>Geology</i>)	✓	✓	500m
	Geology and Topography (<i>Naturally Occurring Asbestos Potential NOA</i>)			500m
Section 2 - Hydrogeology and Geotechnical				
2.1	GDE & Hydrogeology Constraints (<i>Aquifer Type</i>)	✓	✓	2000m
	GDE & Hydrogeology Constraints (<i>Groundwater Protection Areas</i>)			2000m
	GDE & Hydrogeology Constraints (<i>Wetlands</i>)	✓	✓	2000m
	GDE & Hydrogeology Constraints (<i>GDE Surface</i>)	✓	✓	2000m
	GDE & Hydrogeology Constraints (<i>GDE Subsurface</i>)	✓	✓	2000m
	GDE & Hydrogeology Constraints (<i>Groundwater Licences</i>)			2000m
	GDE & Hydrogeology Constraints (<i>Groundwater Bores</i>)	✓	✓	2000m
2.2	Groundwater and Other Bores (<i>Groundwater Restricted Use Zones</i>)			2000m
	Groundwater and Other Bores (<i>Groundwater Salinity</i>)	✓	✓	2000m
	Groundwater and Other Bores (<i>Other Known Boreholes Investigations</i>)	✓	✓	2000m
Section 3 - Environmental Registers, Licences and Incidents				
3.1	Contaminated Land Public Register (<i>Contaminated Sites</i>)			1000m
3.2	Licences, Approvals & Assessments (<i>Licences</i>)		✓	1000m
	Licences, Approvals & Assessments (<i>Audits</i>)		✓	1000m
	Licences, Approvals & Assessments (<i>Clean up Notices, Penalty Notices and Orders</i>)			1000m
3.3a	Sites Regulated by other Jurisdictional Body (<i>Contaminated Legacy Areas</i>)			2000m
	Sites Regulated by other Jurisdictional Body (<i>Defence, Military Sites and UXO Areas</i>)	✓	✓	2000m
	Sites Regulated by other Jurisdictional Body (<i>Former Gasworks Sites</i>)			2000m
	Sites Regulated by other Jurisdictional Body (<i>PFAS Sites</i>)			2000m
3.3b	Other Potential Hazard Sources (<i>Mines and Quarries</i>)			500m
	Other Potential Hazard Sources (<i>Landfills</i>)			500m
	Other Potential Hazard Sources (<i>National Pollutant Inventory NPI</i>)			500m
Section 4 - Potentially Contaminated Areas				
4.1	Potentially Contaminating Activities (<i>Liquid Fuel Facilities</i>)			200m
4.2	Historical Business Directories			200m
Section 5 - Natural Hazards				
5.1	Fire Hazard (<i>Bushfire Prone Areas</i>)	✓	✓	500m
	Fire Hazard (<i>Bushfire History</i>)			500m
5.2	Flood Hazard (<i>Flood Planning Area</i>)			500m
	Flood Hazard (<i>Other Flood Studies</i>)			500m
	Flood Hazard (<i>Flood History</i>)			500m
5.3	Erosion Hazard	✓	✓	500m

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ATTACHMENTS

- Appendix A - Report Maps
- Appendix B - Historical Imagery



Section 1 Property Setting

1.1 Sensitive Receptors and Features of Interest

Map 1.1 (200m)

Sensitive receptor	Type	Distance (m)	Direction
Werkenbergal Swamp	Other Features	0.0	Onsite
Eurolie Creek	Watercourse	0.0	Onsite
Canal Line	Canal Line	0.0	Onsite
Coleambally Outfall Drain	Canal Line	0.0	Onsite
Nyangay Creek	Watercourse	0.0	Onsite
Lake	Lake	0.0	Onsite
Wargam Creek	Watercourse	0.0	Onsite
Werkenbergal Swamp	Lake	0.0	Onsite
Farm Dam Area	Farm Dam Area	0.0	Onsite

Source: [Sensitive Receptors](#)

1.2a Planning Controls

Map 1.2a (500m)

Zoning

Zoning	Type	Details	Distance (m)	Direction
RU1	Primary Production	Conargo Local Environmental Plan 2013	0.0	Onsite
RU1	Primary Production	Hay Local Environmental Plan 2011	0.0	Onsite

Source: [Zoning, Planning Overlays and Other Planning Information](#)

1.2b Planning Overlays

Map 1.2b (500m)

Environmental Planning Instruments

Name	Type	Details	Distance (m)	Direction
Watercourse	Watercourses	Conargo Local Environmental Plan 2013	0.0	Onsite
Biodiversity	Biodiversity	Conargo Local Environmental Plan 2013	0.0	Onsite
600-799.9	Minimum Lot Size (sq m)	Hay Local Environmental Plan 2011	0.0	Onsite
Refer to Clause 4.2B	Refer to Clause 4.2B	Conargo Local Environmental Plan 2013	0.0	Onsite
Included	Land Application	Conargo Local Environmental Plan 2013	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Biodiversity and Conservation) 2021	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Sustainable Buildings) 2022	0.0	Onsite
Allowable Clearing Area	Allowable Clearing	State Environmental Planning Policy (Biodiversity and Conservation) 2021	0.0	Onsite
Excluded	Allowable Clearing	State Environmental Planning Policy (Biodiversity and Conservation) 2021	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Housing) 2021	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Transport and Infrastructure) 2021	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Planning Systems) 2021	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Primary Production) 2021	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Industry and Employment) 2021	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Resilience and Hazards) 2021	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Resources and Energy) 2021	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development	0.0	Onsite
Included	Land Application	Hay Local Environmental Plan 2011	0.0	Onsite
Land Application	SEPP Land Application	State Environmental Planning Policy (Exempt and Complying Development Codes) 2008	0.0	Onsite
Sensitive Area	Sensitive Area	Hay Local Environmental Plan 2011	0.0	Onsite
10%	Minimum Water Use Standard (%)	State Environmental Planning Policy (Sustainable Buildings) 2022	0.0	Onsite
Wetland	Wetlands	Conargo Local Environmental Plan 2013	0.0	Onsite
200-399.9	Minimum Lot Size (sq m)	Conargo Local Environmental Plan 2013	0.0	Onsite

Other Planning Information

Name	Type	Details	Distance (m)	Direction
Not identified	-	-	-	-

Including Mining Subsidence Areas.

Source: [Zoning, Planning Overlays and Other Planning Information](#)

1.3 Heritage

Map 1.3 (500m)

State and Local Heritage Registers

Site ID	Site Name	Type	Details	Distance (m)	Direction
Not identified	-	-	-	-	-

Source: [State and Local Heritage Registers](#)

Australian Heritage Database Register

Site ID	Site Name	Type	Details	Distance (m)	Direction
Not identified	-	-	-	-	-

Source: [Commonwealth Heritage List, National Heritage List and World Heritage Area](#)

1.4a Soil and Land Use Information

Map 1.4a (500m)

Soil Landscape

Code	Name	Soil Group	Description	Distance (m)	Direction
CG, BC_RC	Vertosols	Grey, Brown and Red Clays	GSG classification - Black, heavy clay, alkaline to neutral soil with wide, deep cracks when dry.	0.0	Onsite
RBE	Chromosols	Red Brown Earths	GSG classification - Very similar to Red-brown Earths but without an A2 horizon. They have a carbonate-free solum and a neutral to slightly alkaline (with lower base saturation) B horizon; and are also generally thinner soils, varying from about 40-80 cm deep.	0.0	Onsite
SS	Rudosols	Siliceous Sands	ASC Soil Order classification - Soils with negligible pedologic organisation. They are usually young soils in the sense that the soil forming factors have had little time to pedologically modify parent rocks or sediments. The component soils can vary widely in terms of texture and depth; many are stratified and some are highly saline. sand- Soil particles in the size range 2.0 - 0.02 mm.	0.0	Onsite

Source: [Soil Landscape](#)

Salinity

Salinity Hazard	Type	Details	Distance (m)	Direction
Not identified	-	-	-	-

Source: [Soil Salinity](#)

Radon

Radon Level (Bq/m ³)	Distance (m)	Direction
12	0.0	Onsite
14	0.0	Onsite

Typical radon levels in Australia are low and the values shown are the average values for each census district. For specific location, factors such as the local geology and house type could lead to different values. (ARPANSA).

1.4b Acid Sulfate Soil

Map 1.4b (500m)

State and Local Acid Sulfate Soil Registers

Name	Classification	Description	Distance (m)	Direction
Not identified	-	-	-	-

To ensure that development does not disturb, expose, or drain acid sulfate soils and cause environmental damage, development consent may be required for conducting works within areas and land shown on the Acid Sulfate Soils Map.

Source: [National, State and Local Acid Sulfate Soils Registers](#)

National Acid Sulfate Soil Register

Name	Classification	Description	Distance (m)	Direction
Atlas of Australian Acid Sulfate Soils	High Probability of occurrence	Acid sulfate soil generally within upper 1m in wet / riparian areas.	0.0	Onsite
Atlas of Australian Acid Sulfate Soils	Low Probability of occurrence	Acid sulfate soil generally within upper 1m in wet / riparian areas.	0.0	Onsite
Atlas of Australian Acid Sulfate Soils	Extremely low probability of occurrence	Acid sulfate soil generally within upper 1m in wet / riparian areas.	0.0	Onsite

Acid Sulfate Soils (ASS) are all those soils in which sulfuric acid may be produced, is being produced, or has been produced in amounts that have a lasting effect on main soil characteristics.

Source: [National, State and Local Acid Sulfate Soils Registers](#)

1.5 Geology and Topography

Map 1.5 (500m)

Geology

Map Sheet	Code	Formation	Age	Group	Dominant Lithology	Description	Distance (m)	Direction
Hay 1:250 000 geophysical-geological interpretation	Q _l	Null	Quaternary (base) to Now (top)	Claypan and lacustrine deposits	Clay	Friable to plastic, finely laminated grey clay, silty clay, humic clay, grey paleosols; locally includes medium- to fine-grained sand.	0.0	Onsite
NSW Seamless Geology v. 2.1 - Murray Basin geology upgrade.	Q _a	Null	Quaternary (base) to Now (top)	Alluvium	Clastic sediment	Unconsolidated grey to brown to beige humic (±)micaceous silty clay, quartz-(±)lithic silt, fine- to medium-grained quartz-rich to quartz-lithic sand, polymictic pebble to cobble gravel (as sporadic lenses); sporadic palaeosol horizons.	0.0	Onsite
Hay 1:250 000 geophysical-geological interpretation	Q _{dds}	Aeolian dune	Quaternary (base) to Now (top)	Aeolian deposits	Sand	Red-brown to light-brown, poorly sorted to bi-modal, very fine- to medium-grained	0.0	Onsite

Map Sheet	Code	Formation	Age	Group	Dominant Lithology	Description	Distance (m)	Direction
						feldspathic quartz sand.		
Murray Basin 1:1,000,000 Surface Geology Map	Q_dds	Aeolian dune	Quaternary (base) to Now (top)	Aeolian deposits	Sand	Red-brown to light-brown, poorly sorted to bi-modal, very fine- to medium-grained feldspathic quartz sand.	0.0	Onsite
NSW Seamless Geology v. 2.1 - Murray Basin geology upgrade.	Q_dds	Aeolian dune	Quaternary (base) to Now (top)	Aeolian deposits	Sand	Red-brown to light-brown, poorly sorted to bi-modal, very fine- to medium-grained feldspathic quartz sand.	0.0	Onsite
Murray Basin 1:1,000,000 Surface Geology Map	Q_l	Null	Quaternary (base) to Now (top)	Claypan and lacustrine deposits	Clay	Friable to plastic, finely laminated grey clay, silty clay, humic clay, grey paleosols; locally includes medium- to fine-grained sand.	0.0	Onsite
NSW Seamless Geology v. 2.1 - Murray Basin geology upgrade.	Q_l	Null	Quaternary (base) to Now (top)	Claypan and lacustrine deposits	Clay	Friable to plastic, finely laminated grey clay, silty clay, humic clay, grey paleosols; locally includes medium- to fine-grained sand.	0.0	Onsite
Murray Basin 1:1,000,000 Surface Geology Map	Q_a	Null	Quaternary (base) to Now (top)	Alluvium	Clastic sediment	Unconsolidated grey to brown to beige humic (±)micaceous silty clay, quartz-(±)lithic silt, fine- to medium-grained quartz-rich to quartz-lithic sand, polymictic pebble to cobble gravel (as sporadic lenses); sporadic palaeosol horizons.	0.0	Onsite
Hay 1:250 000 geophysical-geological interpretation	CZ_af	Alluvial floodplain deposits	Cenozoic (base) to Now (top)	Alluvium	Silt	Silt, very fine- to medium-grained lithic to quartz-rich sand, clay.	0.0	Onsite
Murray Basin 1:1,000,000 Surface Geology Map	CZ_af	Alluvial floodplain deposits	Cenozoic (base) to Now (top)	Alluvium	Silt	Silt, very fine- to medium-grained lithic to quartz-rich sand, clay.	0.0	Onsite

Map Sheet	Code	Formation	Age	Group	Dominant Lithology	Description	Distance (m)	Direction
NSW Seamless Geology v. 2.1 - Murray Basin geology upgrade.	CZ_af	Alluvial floodplain deposits	Cenozoic (base) to Now (top)	Alluvium	Silt	Silt, very fine- to medium-grained lithic to quartz-rich sand, clay.	0.0	Onsite
Hay 1:250 000 geophysical-geological interpretation	Q_a	Null	Quaternary (base) to Now (top)	Alluvium	Clastic sediment	Unconsolidated grey to brown to beige humic (±)micaceous silty clay, quartz-(±)lithic silt, fine- to medium-grained quartz-rich to quartz-lithic sand, polymictic pebble to cobble gravel (as sporadic lenses); sporadic palaeosol horizons.	0.0	Onsite
Hay 1:250 000 geophysical-geological interpretation	Q_acm	Alluvial channel deposits	Quaternary (base) to Now (top)	Alluvium	Clastic sediment	Unconsolidated grey humic, clayey very fine-grained sand, typically overlying light brown clayey silt.	0.0	Onsite
Murray Basin 1:1,000,000 Surface Geology Map	Q_acm	Alluvial channel deposits	Quaternary (base) to Now (top)	Alluvium	Clastic sediment	Unconsolidated grey humic, clayey very fine-grained sand, typically overlying light brown clayey silt.	0.0	Onsite
NSW Seamless Geology v. 2.1 - Murray Basin geology upgrade.	Q_acm	Alluvial channel deposits	Quaternary (base) to Now (top)	Alluvium	Clastic sediment	Unconsolidated grey humic, clayey very fine-grained sand, typically overlying light brown clayey silt.	0.0	Onsite
NSW Western Division - Basement Interpretation dataset	CZ_af	Alluvial floodplain deposits	Cenozoic (base) to Now (top)	Alluvium	Silt	Silt, very fine- to medium-grained lithic to quartz-rich sand, clay.	0.0	Onsite
NSW Western Division - Basement Interpretation dataset	Q_l	Null	Quaternary (base) to Now (top)	Claypan and lacustrine deposits	Clay	Friable to plastic, finely laminated grey clay, silty clay, humic clay, grey paleosols; locally includes medium- to fine-grained sand.	124.3	South

Source: [Geology](#)

Naturally Occurring Asbestos Potential (NOA)

Category	On the Property?	Within Buffer?
Not identified	-	-

Source: [Naturally Occurring Asbestos NOA](#)

Topography

Topography (Onsite)	100 mAHD
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Source: [National, State and Local Acid Sulfate Soils Registers](#)



Section 2 Hydrogeology and Geotechnical



2.1 GDE & Hydrogeology Constraints

Map 2.1 (2000m)

Aquifer Type

Type	Distance (m)	Direction
Porous, extensive aquifers of low to moderate productivity	0.0	Onsite
Porous, extensive highly productive aquifers	0.0	Onsite

Source: [Groundwater Aquifers](#)

Groundwater Protection Areas

Name	Water Plan Area	Distance (m)	Direction
Not identified	-	-	-

Source: [Groundwater Protection Areas and Groundwater Restricted Use Zones](#)

Wetlands

Name	Description	Distance (m)	Direction
Floodplain water body	Floodplain water body	0.0	Onsite
Unnamed freshwater lake	Unnamed freshwater lake	0.0	Onsite
Werkenbergal Swamp	Named freshwater lake	0.0	Onsite

Source: [Wetlands](#)

Groundwater Dependent Ecosystems (GDE) - Aquatic (Surface)

Potential	Distance (m)	Direction
Low potential GDE - from national assessment	0.0	Onsite

Aquatic - Ecosystems that rely on the Surface expression of groundwater.

Source: [Groundwater Dependent Ecosystems](#)

Groundwater Dependent Ecosystems (GDE) - Terrestrial (Subsurface)

Potential	Distance (m)	Direction
Low potential GDE - from regional studies	0.0	Onsite
High potential GDE - from regional studies	0.0	Onsite

Terrestrial - Ecosystems that rely on the Subsurface expression of groundwater.

Source: [Groundwater Dependent Ecosystems](#)

Groundwater Licences (Western Australia)

Map ID	WRI number	Allocation (KL)	Address	All Parties	Distance (m)	Direction
Not identified	-	-	-	-	-	-

Source: [Groundwater Protection Areas and Groundwater Restricted Use Zones](#)

Groundwater Bores

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity/ TDS (mg/l)	Yield (L/s)	Distance (m)	Direction
19	GW416916	Null	Null	Null	145.0	Null	Null	3.0	0.0	Onsite
2	GW500022	Irrigated agriculture	01/03/1995	201.0	201.0	Null	Null	Null	0.0	Onsite
3	GW059776	Water supply for livestock	01/07/1984	45.0	45.0	19.0	Fresh	Null	0.0	Onsite
4	GW401016	Unknown	01/09/1998	210.0	210.0	Null	Null	Null	0.0	Onsite
5	GW500965	Irrigated agriculture	01/06/2001	245.0	242.0	17.2	Null	295.0	0.0	Onsite
17	GW084017	Monitoring	Null	9.0	9.0	Null	Null	Null	0.0	Onsite
7	41010220	Unknown	Null	Null	Null	Null	Null	Null	0.0	Onsite
8	41010219	Unknown	Null	Null	Null	Null	Null	Null	0.0	Onsite
16	GW045653	Water supply for livestock	Null	Null	39.6	Null	S.Brackish	Null	0.0	Onsite
11	41010223	Unknown	Null	Null	Null	Null	Null	Null	0.0	Onsite
13	GW504026	Household	15/10/2009	109.0	107.0	Null	Null	2.5	0.0	Onsite
14	GW048869	Water supply for livestock	Null	Null	42.4	Null	Null	Null	0.0	Onsite
9	GW500808	Household	06/06/2001	Null	Null	Null	Null	5.0	307.7	South
15	GW068947	Water supply for livestock	15/10/1991	Null	154.0	Null	Null	Null	505.9	South
1	GW415957	Stock	03/06/2011	114.0	111.5	17.5	Null	5.0	612.9	North-west

Map ID	Groundwater Bore ID	Authorised Purpose	Completion Date	Drilled Depth (m)	Final Depth (m)	SWL (m)	Salinity/ TDS (mg/l)	Yield (L/s)	Distance (m)	Direction
10	GW500807	Water supply for livestock	06/06/2001	Null	Null	Null	Null	7.0	1418.9	South
12	GW050414	Water supply for livestock	01/01/2020	Null	Null	Null	Null	Null	1475.9	North
6	GW019088	Water supply for livestock	01/03/1961	39.0	39.0	22.9	Fair	0.6	1480.2	North
18	GW415943	Domestic, stock	01/01/2005	128.0	128.0	Null	Good	Null	1728.7	East

Note: The use of the symbol "-" or "Null" indicates that no records were found.

SWL: Standing Water Level (the latest record is displayed). RWL: Rest Water Level (the latest record is displayed). TSS: Total Soluble Salts.

Source: [Groundwater Bores & Lithology](#)

Groundwater Bores Driller Lithology Details

Groundwater Bore ID	From Depth – To Depth (m)	Lithology	Distance (m)	Direction
GW416916	Null		0.0	Onsite
GW500022	0m-11m Clay-brown/grey 11m-14m Sand-brown 14m-26m Clay-brown/grey 26m-31.3m Sand-brown/grey 31.3m-45m Clay-brown/grey 45m-46m Sand-brown 46m-48m Clay-soft brown/grey 48m-51.5m Sand-med. brown 51.5m-61m Clay-brown/grey 61m-68.5m Sand-brown 68.5m-94m Clay-gritty grey/yell. 94m-94.7m Sand-med. grey 94.7m-100m Clay- silty grey 100m-101.5m Sand-fine/med. grey 101.5m-105m Clay-soft grey 105m-107m Sand-fine grey 107m-108m Clay-soft silty grey 108m-126.8m Sand-grey 126.8m-127.5m Clay-grey 127.5m-129.5m Sand-fine med grey 129.5m-137m Clay-dark grey 137m-138m Sand-fine 138m-142m Clay-grey 142m-145.5m Sand-fine 145.5m-146m Coal 146m-170m Clay-grey silty 170m-178.7m Sand-fine 178.7m-194m Clay-ligneous 194m-195m Sand-fine 195m-198m Clay-ligneous 198m-200m Sand-fine/med. 200m-201m Clay-tight black	0.0	Onsite	
GW059776	0m-0.3m Topsoil 0.3m-19m Clay grey 19m-19.5m Sand fine water bearing 19.5m-28m Clay 28m-45m Clay sandy		0.0	Onsite
GW401016	0m-4m Hard brown clay 4m-28m Sandy clays 28m-46m Hard grey clay 46m-48m Brown sand 48m-61m Hard brown clay 61m-65m Brown sand 65m-91m Hard grey clay 91m-106m Fine grey clay 106m-125m Black coal 106m-106m Fine grey sand		0.0	Onsite

Groundwater Bore ID	From Depth – To Depth (m)	Lithology	Distance (m)	Direction
	125m-139m Grey sand 139m-210m Black coal			
GW500965	0m-2m Clay grey 2m-6m Clay brown grey 6m-13m Clay grey 13m-15m Sand grey medium 15m-35m Clay grey brown 35m-37m Sand brown medium coarse 37m-39m Clay grey 39m-43m Sand mainly grey 43m-59.5m Clay brown grey 59.5m-72m Sand dirty brown grey 72m-84m Clay grey soft 84m-92m Clay grey pink 92m-97m Clay dark grey 97m-101m Clay grey 101m-114m Clay ligneous 114m-126m Sand grey medium fine 126m-128m Clay ligneous 128m-130m Sand silty fine dirty 130m-174m Clay ligneous 174m-188m Sand medium fine 188m-193m Silt grey 193m-206m Clay ligneous 206m-210m Silty grey 210m-217m Sand grey average 217m-245m Sand medium	0.0	Onsite	
GW084017	Null		0.0	Onsite
41010220	Null		0.0	Onsite
41010219	Null		0.0	Onsite
GW045653	Null		0.0	Onsite
41010223	Null		0.0	Onsite
GW504026	0m-1m Topsoil, grey 1m-5m Clay, grey 5m-10m Clay, grey brown 10m-13m Sand 13m-18m Clay grey brown 18m-21m Sand 21m-23m Clay, grey brown 23m-24m Sand 24m-45m Clay, grey brown 45m-49m Sand 49m-67m Clay, grey mustard 67m-68m Clay, white 68m-71m Clay, grey red 71m-76m Clay, grey yellow 76m-79m Clay, grey red 79m-97m Clay, grey yellow 97m-99m Sand, clay 99m-103m Sand, fine 103m-109m Sand, fine 109m-109m Clay, gritty	0.0	Onsite	
GW048869	Null		0.0	Onsite
GW500808	Null		307.7	South
GW068947	Null		505.9	South
GW415957	Null		612.9	North-west
GW500807	Null		1418.9	South
GW050414	Null		1475.9	North
GW019088	0m-12.19m Clay 12.19m-14.63m Sand fine dry 14.63m-18.29m Clay grey hard 18.29m-22.86m Sand coarse dry 22.86m-39.01m Clay sandy		1480.2	North

Groundwater Bore ID	From Depth – To Depth (m)	Lithology	Distance (m)	Direction
GW415943	Null		1728.7	East

Note: The use of the symbol "-" or "Null" indicates that no records were found.

Source: [Groundwater Bores & Lithology](#)

2.2 Groundwater and other Bores

Map 2.2 (2000m)

Groundwater Restricted Use Zones

Name / Number	Address	Site History	Description	Distance (m)	Direction
Not identified	-	-	-	-	-

Source: [Groundwater Protection Areas and Groundwater Restricted Use Zones](#)

Groundwater Salinity

Class	Salinity Value	Source	Distance (m)	Direction
Non-Saline (<3000mg/L)	< 500	Office of Water, New South Wales	0.0	Onsite
Non-Saline (<3000mg/L)	500 - 1500	Office of Water, New South Wales	616.1	West

Source: [Groundwater Salinity](#)

Other Known Borehole Investigations (Coal Seam Gas (CSG), Petroleum Wells and Other Boreholes)

Borehole ID	Purpose	Project	Client/ License	Date Drilled	Depth (m)	Distance (m)	Direction
028863	Mineral Exploration	WARGAM	Department Of Mineral Resources	01/01/1980	158.3	0.0	Onsite
COAL_DMWARG1	Mineral Exploration	DPI Minerals Borehole Register - Department Of Mineral Resources,	Department Of Mineral Resources,	01/01/1980	158.3	0.0	Onsite

Note: The use of the symbol "-" or "Null" indicates that no records were found.

Source: [Other Known Borehole Investigations \(Coal Seam Gas \(CSG\), Petroleum Wells and Other Boreholes\)](#)



Section 3 Environmental Registers, Licences and Incidents



3.1 Contaminated Land Public Register

Map 3.1 (1000m)

Contaminated Sites

Register Type	Site Name	Address	Description	Details	Distance (m)	Direction
Not identified	-	-	-	-	-	-

If the record does not contain a complete street address and/or cannot be located, the records' geographic location will be approximated and reported as being within the surrounding area.

Source: [Contaminated Land Public Register](#)

Table 3.1.1 Contaminated Land Public Register		
State	Regulatory Body	Information included in this search (by state)
ACT	EPA (Environment Protection Authority)	Contaminated Land Search Register of Contaminated Sites* (on request)
NSW	EPA (Environment Protection Authority)	Sites Notified as Contaminated Records of Notices
NT	EPA (Environment Protection Authority)	Contaminated Land Audit Pollution Abatement Notice
QLD	DES (Department of Environment and Science)	Contaminated Land Search (Environmental Management and Contaminated Land Registers)* (per lot)
SA	EPA (Environment Protection Authority)	Site Contamination Index Assessment Areas
TAS	EPA (Environment Protection Authority)	Regulated Sites and Premises Lutana and Parts of Hobarts Eastern Shore
VIC	EPA (Environment Protection Authority)	Priority Sites Register Pollution Abatement Notice
WA	DWER (Department of Water and Environmental Regulation)	Contaminated Sites Database

This search contains information retrieved from the relevant state authority, agency/department, or government authority that notifies and identifies contaminated land. The list only contains contaminated sites that the regulatory body is aware of or that have been notified by owners or occupiers as contaminated land. The sites are recorded on the register at various stages of the assessment and/or remediation process. If a site is not on the list, it does not necessarily mean the site is not contaminated.

3.2 Licences, Approvals & Assessments

Map 3.2 (1000m)

Licences

Licence N°	Type	Licence holder	Location Name	Premise Address	Activity	Dist. (m)*	Direct
13419	No longer in force	FORESTRY CORPORATION OF NEW SOUTH WALES	FORESTRY CORPORATION OF NEW SOUTH WALES	STATE FORESTS AND OTHER CROWN-TIMBER LANDS WITHIN THE SOUTH-WESTERN AREA , DUBBO, NSW 2830	Logging operations	Not mapped	Not mapped
13419	No longer in force	FORESTRY CORPORATION OF NEW SOUTH WALES	FORESTRY CORPORATION OF NEW SOUTH WALES	STATE FORESTS AND OTHER CROWN-TIMBER LANDS WITHIN THE SOUTH-WESTERN AREA , DUBBO, NSW 2830	Logging operations	Not mapped	Not mapped

If the record does not contain a complete street address and/or cannot be located, the records' geographic location will be approximated and reported as being within the surrounding area.

*Results that appear as "not mapped" refer to licences that are applied to larger areas and/or without specific definition, such as waterways, forests etc. These are still identified in the search results but will not be shown within the map.

Source: [Licences, Approvals & Assessments](#)

Audits, PRSA

N°	Type	Licence holder	Location Name	Premise Address	Activity	Dist. (m)*	Direction
1539521	Compliance Audit	FORESTRY CORPORATION OF NEW SOUTH WALES	IFOA AREA "SOUTH-WESTERN CYPRESS REGION"	STATE FORESTS AND OTHER CROWN-TIMBER LANDS WITHIN THE SOUTH-WESTERN AREA , NSW 2830	Logging operations	Not mapped	Not mapped
1539520	Compliance Audit	FORESTRY CORPORATION OF NEW SOUTH WALES	IFOA AREA "SOUTH-WESTERN CYPRESS REGION"	STATE FORESTS AND OTHER CROWN-TIMBER LANDS WITHIN THE SOUTH-WESTERN AREA , NSW 2830	Logging operations	Not mapped	Not mapped

*If the record does not contain a complete street address and/or cannot be located, the records' geographic location will be approximated and reported as being within the surrounding area.

Source: [Licences, Approvals & Assessments](#)

Clean Up, Penalty Notices and Orders

N°	Type	Licence holder	Location Name	Premise Address	Details	Dist. (m)*	Direction
Not identified	-	-	-	-	-	-	-

*If the record does not contain a complete street address and/or cannot be located, the records' geographic location will be approximated and reported as being within the surrounding area.

Source: [Licences, Approvals & Assessments](#)

Table 3.2.1 Licences, Approvals & Assessments		
State	Regulatory Body	Information included in this search (by state)

Table 3.2.1 Licences, Approvals & Assessments		
ACT	EPA (Environment Protection Authority)	Environment Protection Authorisation Search Environment Protection Agreement Search
NSW	EPA (Environment Protection Authority)	POEO Public Register (Environment Protection licences, Applications, Notices, Audits or Pollution studies and Reduction Programs)
NT	EPA (Environment Protection Authority)	Environment Protection Licences and Approvals
QLD	DES (Department of Environment and Science)	Environmental Authorities
SA	EPA (Environment Protection Authority)	Licences or Authorisations (Licences, Exemptions and Works Approvals) Environment Protection Orders (EPO) and Clean Up Orders (CUO)
TAS	EPA (Environment Protection Authority)	Regulated Sites and Premises
VIC	EPA (Environment Protection Authority)	Permissions Register (Operating Licence, Permit and Registration) Audit Reports
WA	DWER (Department of Water and Environmental Regulation)	Licences and Works Approvals

3.3a Sites Regulated by other Jurisdictional Body

Map 3.3a (2000m)

Contaminated Legacy Areas

Site Name	Description	Distance (m)	Direction
Not identified	-	-	-

Includes known contaminated areas such as James Hardies Asbestos waste legacy areas, Pasminco Smelter and Uranium processing site.

Source: [Contaminated Legacy Areas](#)

Defence, Military Sites and UXO Areas

Site name	Type*	Details	Distance (m)	Direction
Conargo	Unexploded Ordnance (UXO)	Potential presence of UXO: Other - This site was a RAAF Air to Air Range during WWII. (Source: Defence's National Unexploded Ordnance Program (NUXOP))	0.0	Onsite

*RCIP (Regional Contamination Investigation Program). UXO (Unexploded Ordnance Areas).

Source: [Defence, Military Sites, and UXO Areas](#)

Former Gasworks Sites

Site name	Description	Distance (m)	Direction
Not identified	-	-	-

Source: [Former Gasworks Sites](#)

PFAS Sites

Site name	Type	Details	Distance (m)	Direction
Not identified	-	-	-	-

Source: [PFAS Sites](#)

3.3b Other Potential Hazard Sources

Map 3.3b (500m)

Mines and Quarries (current and historical)

Site name	Description	Status	Distance (m)	Direction
Not identified	-	-	-	-

Source: [Mines and Quarries](#)

Landfills (current and historical)

Site name	Description	Status	Distance (m)	Direction
Not identified	-	-	-	-

National Pollutant Inventory (NPI)

Facility name	Address	Primary ANZSIC Class	Latest report	Distance (m)	Direction
Not identified	-	-	-	-	-

Source: [Contaminated Legacy Areas](#)



Section 4 Potentially Contaminated Areas



4.1 Potentially Contaminating Activities

Map 4.1 (200m)

Industries, businesses and activities that may cause contamination

Map ID	Site name	Category	Description	Address	Status*	Dist. (m)	Direction
Not identified	-	-	-	-	-	-	-

*Status: Information is current as when this report was created.

The operational status of the business is determined using the available data sources and does not indicate real-time conditions at the site.

Current: business is operating on the day this report was issued.

Former: business that have been closed or discontinued within 2 years from the date of this report.

Source: [Potentially Contaminated Areas, Activities \(PCA\)](#)

Categories included in this search. (Notifiable activities)

Abattoirs	Explosives and Dangerous Goods	Paint Industries
Abrasive Blasting	Extractive Industries	Petrol Stations
Agriculture / Horticulture	Fire and Rescue	Pharmaceuticals
Airports	Food Manufacturing	Port and Marina Operations
Asbestos	Foundry, Smelting or Refining	Power Plants
Asphalt or Bitumen	Fuel Terminals & Depots	Printing and Photography
Batteries	Glass, Ceramics and Plastic	Rail Industry and Associated Activities
Breweries / Distilleries	Gun, Pistol or Rifle Ranges	Rubber and Tyre
Cement, Concrete or Lime	Hospitals and Research Facilities	Storage Tanks
Cemeteries	Landfill Sites	Substations and Switching Stations
Chemicals	Livestock Dips	Textiles and Tannery
Coal Yards	Mechanical and Automotive	Timber, Pulp and Paper Works
Depots and Storage Yards	Metal Fabrication and Treatments	Waste and Recycling Facilities
Dry Cleaners	Oil and Gas	Wastewater Treatment Facilities
Electrical or Electrical Components	Other Infrastructure Facilities	-

Industries, businesses, and activities identified as having an increased likelihood of causing contamination.

The industries and business activities listed above have been identified as having an increased likelihood of causing contamination and have been identified through published state and national guidelines and regulations. These industries are noted due to their potential to store or use substances that could cause contamination to the surrounding environment if not managed appropriately. The identification of these activities does not imply the presence of contamination at the site.

The records identified are based on the reported business activity and have not been assessed based on any current or previous site inspection. Please note that records not identified within this section (due to error or unforeseen omission) does not necessarily mean that the screened area is not potentially contaminated or free of any risks.

4.2 Historical Business Directories

Not mapped

YEAR	Activity	Name	Address	Positional accuracy	Distance (m)	Direction
Not identified	-	-	-	-	-	-

Land Insight uses a number of address geocoding techniques and has characterised them based on completeness (match rates) and positional accuracy. When a historical street address is incomplete or a match is not found, a record identified as being in the surrounding area will be included for reference and the accuracy of the data is approximate only. An explanation of the positional accuracy records is defined in the table below.

Source: [Historical Business Directories](#)

Historical data positional accuracy and georeferencing results explanation		
Positional accuracy	Georeferenced	Description
Address	Located to the address level	<i>When street address and names fully match.</i>
Street	Located to the street centroid	<i>When street names match but no exact address was found. Location is approximate.</i>
Place	Located to the structure, building or complex	<i>When building, residential complex or structure name match but no exact address was found. Location is approximate.</i>
Suburb	Located to the suburb area	<i>When suburb name match but no exact address was found. Location is approximate.</i>

The data used in this section was extracted from range of historical commercial trade directories and business listings. The business addresses were geocoded using historical information and the accuracy of the data may vary due to changes to the physical address at a given locality over time or the quality of the original records. From 2005, the historical business records in this section are considered more accurate as information was extracted from digital directories with geographic coordinate location information available. On this basis, reliance on the historic listing data should be considered when assessing the risk of contamination from an activity at the site. The presence of a business listing does not definitively confirm the actual activity that has occurred at the site. For more information on how these records were geocoded and the methodology used by Land Insight, contact us at info@landinsight.co.

Historical business directory listings have been filtered to match activities and industries identified as PCAs in Section 4.1. Please note that any record not identified within this section (due to error or unforeseen omission) does not necessarily mean that the screened area is not potentially contaminated or free of any risks.



Section 5 Natural Hazards



5.1 Fire Hazard

Map 5.1 (500m)

Bushfire Prone Areas

Category	Type	Details	Distance (m)	Direction
Bushfire Prone Area	Vegetation Category 3	This vegetation category indicates medium bushfire risk vegetation (higher than category 2, and the excluded areas, but lower than Category 1). Vegetation category consists of grasslands, freshwater wetlands, semi-arid woodlands, alpine complex and arid shrublands.	0.0	Onsite
Bushfire Prone Area	Vegetation Buffer	Bushfire prone vegetation buffers are created based on vegetation categories, with buffering distance being 100 metres for vegetation category 1 and 30 metres for vegetation category 2 and 3.	0.0	Onsite

Source: [Fire Hazards](#)

Bushfire History

Type	Season	Details	Distance (m)	Direction
Not identified	-	-	-	-

Source: [Fire Hazards](#)

5.2 Flood Hazard

Map 5.2 (500m)

Flood Planning Area

Type	Name	Details	Distance (m)	Direction
Not identified	-	-	-	-

Source: [Flood Hazard](#)

Other Flood Studies

Type	Name	Details	Distance (m)	Direction
Not identified	-	-	-	-

Source: [Flood Hazard](#)

Flood History

Type	Season	Details	Distance (m)	Direction
Not identified	-	-	-	-

The list provided is not comprehensive and does not consider all flood history. It only includes the information that is currently available.

Source: [Flood Hazard](#)

5.3 Erosion Hazard

Map 5.3 (500m)

Erosion Hazard

Category	Type	Details	Distance (m)	Direction
Landslip Erosion Risk	Very slight to negligible limitations	Very Low	0.0	Onsite
Water Erosion Risk	Moderate to severe limitations	Moderate	0.0	Onsite
	Moderate limitations	Moderate	0.0	Onsite
	Slight but significant limitations	Low	0.0	Onsite
	Very slight to negligible limitations	Very Low	0.0	Onsite
Wind Erosion Risk	Slight but significant limitations	Low	0.0	Onsite
	Very severe limitations	Very High	0.0	Onsite
	Severe limitations	High	0.0	Onsite
	Moderate to severe limitations	Moderate	0.0	Onsite

Source: [Erosion Hazard](#)

An aerial photograph of a rugged coastline. The water is a vibrant turquoise, transitioning to a deeper blue further out. The shoreline is composed of large, light-colored, craggy rocks. In the foreground, there's a dense area of low-lying, reddish-brown vegetation. A bright yellow rectangular box is overlaid on the right side of the image, containing the title and subtitle.

Product Guide

Due Diligence Insight Report

21 May 2025

Data Sources

NLUA - The Land Insight National Land Use Atlas (NLUA)

Land Insights' NLUA is a unique, proprietary database, meticulously curated from over a decade's worth of research and hundreds of thousands of diverse information sources. NLUA provides a comprehensive overview of land usage and potential hazards, drawing from a wide array of reliable sources. These include verified Council Records, Historic Zoning Maps, Topographic and Parish Maps, and technically published reports.

NLUA integrates thoroughly researched information extracted from published reports, publications, and technical studies. It also incorporates Land Insight's proprietary machine learning process, which identifies land anomalies, patterns, and changes through aerial imagery interpretations.

Leveraging advanced technologies, NLUA verifies the provenance, authenticity, and precision of its data. This database undergoes rigorous validation procedures carried out by scientists, quality assurance teams, and technical experts. This ensures its accuracy and reliability before publication. For more information on methodologies and further inquiries, please contact the Land Insight teams at support@landinsight.co.

Section 1 - Property Setting

Sensitive Receptors

National – Google. Nearmap. @ Land Insight National Land Use Atlas (NLUA). Points of Interest - @ OpenStreetMap. Australian Business Datalist, Australian Schools Database - @ Australian Business Datalist ABDL (with permission). Cadastre. National - The digital cadastral boundaries and their legal identifiers have been derived from the relevant bodies from each Australian State and Territory jurisdiction combined by Land Insight & Resources.

Topographic data and Contours. National - The digital contours data and elevation information have been derived from the relevant bodies from each Australian State and Territory jurisdiction combined by Land Insight & Resources. National - Catchments, Streams, Aquifers, Storages, Wetlands and Man-made Structures that make up the hydrological system - @ Geoscience Australia. Parks and National and State Forest Data @ Department of Agriculture, Fisheries and Forestry.

Planning Controls and Overlays

Zoning, Planning Overlays and Other Planning Information

The digital planning information have been derived from the relevant bodies from each Australian State and Territory jurisdiction combined by Land Insight & Resources.

Mine subsidence districts - @ DFSI Subsidence Advisory NSW. ACT - ACT Territory Plan and Land Use Zones and overlays @ ACT Government Environment, Planning and Sustainable Development Directorate – Environment. NSW – NSW Environmental Planning Instruments, Land Use Zoning, Local Environmental Plan - @ State Government of NSW and NSW Department of Planning, Housing, and Infrastructure. NT - NT Planning Scheme, Land Use Zones @ NT Government Department of Infrastructure, Planning and Logistics. QLD - Land use mapping series, Land Use in QLD @ QLD Environment, Science, and Innovation. QLD zoning information, various LGA Councils. SA - Land Development Zones, Planning and Design Code Zones and Overlays – @ SA Government Department for Trade and Investment. TAS - Tasmania Planning Scheme, Zoning and Overlays, theLIST @State of Tasmania. @ Department of Natural Resources and Environment Tasmania. VIC - Tasmania Planning Scheme, Zoning and Overlays, theLIST @State of Tasmania. @ Department of Natural Resources and Environment Tasmania. WA - Local Planning Scheme and Region Scheme, Zones, and Reserves, @ WA Government Department of Planning, Lands and Heritage.

Heritage

Commonwealth Heritage List, National Heritage List and World Heritage Area

AUS - World, Commonwealth, and National Heritage Areas – World Heritage List, UNESCO. Australia's World Heritage List, @ Australian Government Department of Sustainability, Environment, Water, Population and Communities. @ Department of Climate Change, Energy, the Environment and Water.

State and Local Heritage Registers

ACT - ACT Heritage Sites @ ACT Government Environment, Planning and Sustainable Development Directorate – Environment. NSW - NSW EPI Heritage, NSW Heritage State Curtilage @ NSW Department of Premier and Cabinet, Heritage Council of NSW. NT - Heritage Register in NT, NT Town Planning Zones Heritage - @ NT Government of Australia through Department of Tourism, Sport, and Culture. QLD - Queensland Heritage register boundaries, Queensland Local Heritage. @ QLD Government Department of Environment and Science. Data from various local councils compiled by Land Insight Research Team (LIRT). SA - SA Heritage Places, SA Conservation State Heritage Areas, SA Conservation State Heritage Areas, Aboriginal Heritage in SA @Government of South Australia @ SA Government Department for Trade and Investment, Department for Environment and Water. TAS - Heritage Tasmania Features theLIST @State of Tasmania. VIC - VIC Heritage Inventory, VIC Sensitivity Public, VIC Heritage Register @ VIC Government Department of Energy, Environment and Climate Action; Department of Premier and Cabinet. WA - WA Heritage Areas, WA Heritage Council Local Heritage Survey, WA Heritage Council State Heritage Survey, WA Aboriginal Heritage Places @ WA Government Department of Planning, Lands and Heritage.

Soil and Land Use Information

Soil landscape

Soil Mapping, Information & Landscape - Digital Atlas of Australian Soils, Bureau of Rural Sciences (BRS); Commonwealth Scientific and Industrial Research Organisation (CSIRO) Australian Soil Resource Information System (ASRIS). CSIRO (2024): Australian Soil Resource Information System Website. v1. CSIRO. Data Collection. <https://doi.org/10.25919/pdct-9a97>

Australian Soil Resource Information System - Australian Soil Classification @ Geoscience Australia, ASRIS Australian Soil Classification @ CSIRO Soil and Landscape Information of Australia @ CSIRO. Australian national map layers, Atlas of Australian Soils - @ ABARES Australian Bureau of Agricultural and Resource Economics and Sciences.

ACT Soil Landscapes, Soil Landscapes of the Canberra 1:100,000 © Australian Capital Territory Government, @ State Government of NSW and NSW Department of Climate Change, Energy, the Environment and Water. NSW Great Soil Group (GSG) Soil Type, Australian Soil Classification (ASC) soil type, Strategic Regional Land Use and Soil Profiles, 1:100 000 Soil Landscape Series, 1:250 000 Soil Landscape Series © State Government of NSW and NSW Department of Climate Change, Energy, the Environment and Water. NT Northern Territory Land Systems compilation 1:1 000 000, 1:250 000 @ Environment, Parks, and Water Security. QLD Land systems series, Soil Series and Soil and land resource information © The State of Queensland. SA Land Systems & Soil Types, Soils of South Australia @ Department for Environment and Water. TAS Soil Maps of Tasmania 1:100 000 various regions. Dominant Soil Order TAS @ Department of Natural Resources and Environment Tasmania. VIC Victorian Soil type mapping, VIC Land units (various regions), Victorian Land Use Information System, Land Systems of Victoria at 1:100 000 and 1:250 000 @ Department of Energy, Environment and Climate Action. WA Soil Landscape Mapping - Best Available, Soil Landscape Mapping - Systems, WA Soil Group @ Department of Primary Industries and Regional Development.

Soil salinity

ACT - Hydrogeological Landscapes, Soil Landscapes of the Australian Capital Territory @ actmap ACT gov. NSW - Hydrogeological landscapes mapping, Sydney Metropolitan Western Study Area Hydrogeological Landscapes; New South Wales - Dryland Salinity Assessment 2000 - Assessment of Dryland salinity extent 2020 - © State Government of NSW and NSW Department of Climate Change, Energy, the Environment and Water; Australian Bureau of Agricultural and Resource Economics and Sciences. NT - Land Suitability Guidelines @ Department of Infrastructure, Planning and Logistics NT. QLD - Salinity in Queensland @ Environment, land, and water QLD. SA - Land salinity, Dryland salinity, Watertable and non-watertable @ Department for Environment and water SA. TAS - Vulnerable Soils: Salinity Hazard @ thelist Land Tasmania. VIC - Victorian Dryland Salinity Assessment 2000 - Australian Bureau of Agricultural and Resource Economics and Sciences. WA - Dryland salinity in Western Australia - © Department of Primary Industries and Regional Development's Agriculture and Food.

Acid Sulfate Soils

National, State and Local Acid Sulfate Soils Registers

AUS - Acid sulfate Soils - Atlas of Australian Acid Sulphate Soils @ CSIRO (2024): Australian Soil Resource Information System Website. v1. CSIRO. ACT - Environmental Planning Instrument (Acid Sulfate Soils) - © State Government of NSW and NSW Department of Planning, Housing, and Infrastructure. NSW - Environmental Planning Instrument (Acid Sulfate Soils); Land and Soil Capability Mapping for NSW - © State Government of NSW and NSW Department of Planning, Housing, and Infrastructure; © State Government of NSW and NSW Department of Climate Change, Energy, the Environment and Water. NT - Acid Sulfate Soils of the Darwin Region; Northern Territory Land Systems (compilation of north_250 and south_1M) - © Northern Territory Government of Australia Environment, Parks, and Water Security. QLD - Acid sulfate soils series - © The State of Queensland Environment and Science. SA - Acid Sulfate Soil Potential - @ Government of South Australia Department for Environment and Water. TAS - Marine Acid Sulfate Soils; Inland Acid Sulfate Soils; Coastal Acid Sulfate Soils; Acid Sulfate Soils - Resource Management and Conservation. VIC - Coastal Acid Sulphate Soils - Department of Jobs, Skills, Industry and Regions. WA - Acid Sulfate Soil Risk Map 100K; Soil landscape land quality - Subsurface Acidification Risk - @ Department of Water and Environmental Regulation; Department of Primary Industries and Regional Development.

Geology and Topography

Naturally Occurring Asbestos NOA

Naturally Occurring Asbestos in NSW © State of New South Wales and Department of Planning and Environment; WA Management of Asbestos In Mining Operations Department of Industry and Resources; SA Carbonate-hosted asbestos occurrences in South Australia: review of geology and implications for mesothelioma [Hendrickx, M.]; Mapping of naturally occurring asbestos in NSW [NSW Trade & Investment, Division of Resources & Energy]

Geology

ACT - New South Wales Seamless Geology dataset (latest version 2.3), various geology data sources 1:25K to 1:100K - © Department of Regional NSW. NSW - New South Wales Seamless Geology dataset (latest version 2.3) - © Department of Regional NSW. NT - Geological digital data 1:100 000 sheet - © Commonwealth of Australia (Geoscience Australia). QLD - Queensland geology detailed surface geology 1:100K and Queensland geology state surface geology 1:2M - © State of Queensland (Department of Resources). SA - 1:100K Geology (surface geology) - © SA Government Department of Energy and Mining, Customer Services. TAS - 1:25K and 1:250K Geology Data and Maps - © TAS Government Department of Infrastructure, Energy, and Resources (Mineral Resources Tasmania). VIC - Geological units represented as two dimensional polygons (1:50,000), and Geological units represented as two dimensional polygons (1:250,000) - © VIC Government Department of Jobs, Skills, Industry and Regions. WA - 1:50K Geological series map, 1:100K Geological series map, and 1:500K State interpreted bedrock geology - © WA Government Department of Mines, Industry Regulation and Safety.

GDE & Hydrogeology Constraints

Groundwater Aquifers

Groundwater Aquifers - The National Hydrogeological Inventory, Commonwealth of Australia (Geoscience Australia). Australian Hydrological Geospatial Fabric @ Department of Climate Change, Energy, the Environment and Water, National Aquifer Network © Commonwealth of Australia (Bureau of Meteorology)

Groundwater Protection Areas and Groundwater Restricted Use Zones

Groundwater Protection Areas – © State of New South Wales and Department of Planning and Environment, NT Environment, Parks and Water Security, QLD Department of Resources, SA Environment Protection Authority (EPA), TAS TasWater, VIC Department of Environment, Land, Water & Planning; WA Department of Water and Environmental Regulation. Groundwater Licences - The Perth Groundwater Atlas and Department of Water (DoW) database © State of Western Australia. NSW - Groundwater Restricted Use Zones: EPI Groundwater Vulnerability, Botany Groundwater Management Zone, Williamstown Management Area, UPSS Environmentally Sensitive Zone, EPI Drinking Water Catchments – EPA NSW; NSW Department of Planning, Industry and Environment. NSW Temporary Water Restrictions Order Botany Sands groundwater - @ The NSW Department of Industry—Lands & Water. NT - Groundwater Restricted Use Zones: NT Water Protection Areas - Department of Environment, Parks, and Water Security. QLD - Groundwater Restricted Use Zones: Water Licences, Groundwater Management Areas, Surface Water Management Areas, Water Plan Catchments - Department of Resources. SA - Groundwater Restricted Use Zones: EPA Groundwater Prohibition Area – EPA SA. TAS - Groundwater Restricted Use Zones: Drinking Catchments, Water Management Plan Areas, Water Districts. VIC - Groundwater Restricted Use Zones: GMA, Groundwater Resources, Water Supply Protection Areas, Water Asset Database, Groundwater Catchments – © EPA Victoria. WA -Groundwater Restricted Use Zones: Ghangara Groundwater Protection, Jandakot Groundwater Protection, Groundwater Areas, PDWSA, Water Licences – Department of Water and Environmental Regulation.

Wetlands

Ramsar Wetlands of Australia - Directory of Important Wetlands in Australia (DIWA) – DCCEE Department of Climate Change, Energy, the Environment and Water. ACT - Wetland Mapping - © State of New South Wales and Department of Planning and Environment. Important Wetlands - © Australian Capital Territory. NSW - Wetlands, Ramsar Sites, and various sources – © State of New South Wales and Department of Planning and Environment. NSW Environmental Planning Instruments (Wetlands, Coastal Wetlands), © State Government of NSW and NSW Department of Planning, Housing, and Infrastructure. NT - Wetlands and Ramsar Sites - @ Department of Environment, Parks, and Water Security. QLD - Local Significant Wetlands and Ramsar Sites - @ Department of Environment and Science. SA - Ramsar Wetlands - @ Department for Environment and Water. TAS - Ramsar Wetlands - @ Land Tasmania. VIC - Victoria Wetlands and Ramsar Sites, @ Department of Energy, Environment and Climate Action. WA - Geomorphic Wetlands (various), Consanguineous Wetlands Suites, Ramsar Sites, @ Department of Biodiversity, Conservation and Attractions.

Groundwater Dependent Ecosystems

Groundwater Dependent Ecosystems (GDE) – Terrestrial (subsurface) and Aquatic (surface) - © Commonwealth of Australia (Bureau of Meteorology).

Groundwater Bores & Lithology details

Groundwater bores and lithology - National Groundwater Information System (NGIS) Dataset. - © Australian Government Bureau of Meteorology. © Water NSW. Groundwater Bores – © Australian Capital Territory. VIC Groundwater Sites, Domestic and stock groundwater bores @ DELWP. WA GW Bores, @ Department of Agriculture Resource Management. SA WaterConnect @ State of South Australia.

Groundwater Salinity

AUS - Groundwater Salinity © Commonwealth of Australia, Bureau of Meteorology. Groundwater Salinity - ACT - Canberra Hydrogeological Landscape, Hydrogeological Landscape Reports, Salinity, ACTmapi @ ACT gov. NSW – Salinity locations and mapping, Hydrogeological landscapes, @ NSW Environment and Heritage. NT - Dryland Salinity Hazard of the Northern Territory, @ Environment, Parks, and Water Security NT. QLD - Salinity in Queensland, @ QLD gov. SA - Annual ground water salinity sampling, @ Landscape South Australia. TAS - Groundwater Salinity - © Department of Natural Resources and Environment Tasmania. VIC - Groundwater Salinity - © State Government of Victoria. Groundwater Salinity - Department of Water and Environmental Regulation. WA – Salinity & Dryland salinity in Western Australia, @ Department of Agriculture and Food WA.

Other Known Borehole Investigations (Coal Seam Gas (CSG), Petroleum Wells and Other Boreholes)

Other Known Borehole Investigations (Coal Seam Gas (CSG), Petroleum Wells and Other Boreholes) – NSW Planning & Environment (Resources & Energy); Department of Energy, Environment and Climate Action. Other Known Borehole Investigations (Coal Seam Gas (CSG), Petroleum Wells and Other Boreholes) – © The State of Queensland, © Commonwealth of Australia (Geoscience Australia), Other Known Borehole Investigations (Coal Seam Gas (CSG), Petroleum Wells and Other Boreholes, Drillholes within South Australia, Mineral Drillholes) - @ SA Government Department for Environment and Water; Department for Energy and Mining. Other Known Borehole Investigations (Coal Seam Gas (CSG), Petroleum Wells and Other Boreholes) - Department of Water and Environmental Regulation, © Government of Western Australia Department of Mines, Industry Regulation and Safety. Other Known Borehole Investigations (Coal Seam Gas (CSG), Petroleum Wells and Other Boreholes), various sources @ Land Insight National Land Use Atlas (NLUA).

Section 3 - Environmental Registers, Licences and Incidents

Contaminated Land Public Register

ACT - Register of Contaminated Sites, Contaminated Land Search (per request) - © Australian Capital Territory, Environment Protection Authority. NSW - Sites Notified as Contaminated, Records of Notices - © State of NSW and the NSW Environment Protection Authority. NT - Contaminated Land Audit, Pollution Abatement Notice - Northern Territory Environment Protection Authority. QLD - Contaminated Land Search (Environmental Management and Contaminated Land Registers – per lot) - © The State of Queensland (Department of Environment, Science, and Innovation). SA - Site Contamination Index, Assessment Areas - © Government of South Australia Environment Protection Authority. TAS - Regulated Sites and Premises, Lutana, and Parts of Hobarts Eastern Shore - © The Crown of Tasmania, Environment Protection Authority. VIC - Priority Sites Register, Pollution Abatement Notice - © EPA Victoria. WA - Contaminated Sites Database - © Government of Western Australia, Department of Water and Environmental Regulation.

Licences, Approvals, & Assessments

ACT - Environment Protection Authorisation Search, Environment Protection Agreement Search - © Australian Capital Territory, Environment Protection Authority. NSW - POEO Public Register - © 2023 State of NSW and the NSW Environment Protection Authority. NT - Environment Protection Licences - © Northern Territory Environment Protection Authority. QLD - Environmental Authorities - © The State of Queensland (Department of Environment, Science, and Innovation). SA - Licences or Authorisations, Environment Protection Orders (EPO), Clean-Up Orders (CUO), Assessment Areas - © Government of South Australia Environment Protection Authority. TAS - Regulated Premises - © The Crown of Tasmania, Environment Protection Authority. VIC - Permissions Register, Audit Reports - © EPA Victoria. WA - Licences and Works Approvals - © Government of Western Australia, Department of Water and Environmental Regulation.

Sites Regulated by Other Jurisdictional Body

Contaminated Legacy Areas

Contaminated Legacy Areas mapped by Land Insight Research team @ Land Insight National Land Use Atlas (NLUA). James Hardie Asbestos Waste Contamination Legacy @ The Australian Asbestos Network, Loose-fill Asbestos register @NSW Department of Climate Change & Water. Loose Fill Asbestos @ ACT Government. Asbestos Register @NT Government. Asbestos Register @ QLD Government. Asbestos Safework @ Government of South Australia. Asbestos Safety WorkSafe @Tasmania Government. Asbestos in Victoria @State Government of Victoria. Asbestos – contaminated sites @ Government of Western Australia Department of Health. National Pollutant Inventory - © Commonwealth of Australia, Department of Agriculture, Water, and the Environment. Parramatta River Catchment Land Use Areas - Compiled by Land Insight derived from Parramatta River Estuary Processes Study (2010); and @ Land Insight National Land Use Atlas (NLUA).

Mines and Quarries (current locations, derelict and abandoned mines and quarries, mine shaft)

Current and Historical location of mines and quarries, derelict mine locations mapped by Land Insight Research team @ Land Insight National Land Use Atlas (NLUA). Australia's abandoned mines: rehabilitated @Australian Geographic. List of mines, List of open-pit mines @ Wikipedia. Goldfields places & Maps- National Library of Australia and State Libraries. A Geospatial Database for Effective Mine Rehabilitation in Australia – Monash University, various authors. Inventory of abandoned mines in Australia @ Australian Government AusIndustry. National Heritage Places - Coal Mines Historic Site @Department of Climate Change, Energy, the Environment and Water. Legacy Mines Program @ State of New South Wales through Regional NSW. Map of NSW Mines @NSW Minerals Council. Legacy Mines @ Northern Territory Government. Abandoned mine remediation projects - @ The State of Queensland Government. Map of abandoned mines in Queensland. Queensland's quarry operations @ QLD Government Department of Resources. South Australian Mining History @ Mining Heritage, Former Mines, SARIG @ Government of South Australia @ EPA SA. Mineral Resources Tasmania @ Department of State Growth Mineral Resources Tasmania, Abandoned Mines Rehabilitation in Tasmania @ Department of Infrastructure, Energy and Resources. Tasmania Goldfields dataset. Mineral Occurrences Data @ Tasmania Government. Rehabilitating Mines @ Copyright Victorian Auditor-General's Office, @ Mining Legacies. Historical Mining Activities @ VIC Department of Jobs, Skills, Industry and Regions. Heritage Victoria. Mineral Assessment @ VIC Department of Natural Resources and Environment. Abandoned Mines, Inactive And Abandoned Mine Land Reports - @ WA Department of Mines, Industry Regulation and Safety. Abandoned Mines Program @ WA Department of Energy, Mines, Industry Regulation and Safety. Mines and Mineral Deposits (MINEDEX) - @ WA Department of Energy, Mines, Industry Regulation and Safety

Defence, Military Sites, and UXO Areas

Current and Historical Defence and Military sites mapped by Land Insight Research team @ Land Insight National Land Use Atlas (NLUA). Department of Defence 3 Year Regional Contamination Investigation Program (RCIP) © Commonwealth of Australia, Department of Defence. Defence Sites © Australian Government - Various sources and Department of Defence © Commonwealth of Australia. @ Land Insight National Land Use Atlas (NLUA). National Unexploded Ordnance Program (UXO) @ Australian Government Defence.

Former Gasworks Sites

AUS – Gasworks sites (Various), @ National Trust of Australia, @ National Library of Australia, @ Pocket Oz Sydney Guide, @ wikipedia. Former gasworks site locations mapped by Land Insight Research team @ Land Insight National Land Use Atlas (NLUA). Archaeological database and records @ New England Archaeology. Images, Wikipedia, @Flickr images. The historical marker database. ACT – Gaswork sites @ ACT gov. NSW – Former gasworks sites @ EPA NSW, @ NSW Department of Environment and Conservation, Heritage NSW. NT - Gaswork sites @ EPA NT. QLD - Gaswork sites @ DES QLD. SA - Gaswork sites @ EPA SA, @ SA Heritage Places Database Search (maps SA). TAS - Gaswork sites @ EPA TAS, @ Lighscape Tasmania. VIC – Gasworks sites,

@EPA VIC, @ Development Victoria. WA - Gasworks sites, @EPA WA, @ Department of Water and Environmental Regulation WA.

PFAS sites

AUS – National PFAS Investigation Program – State-wide PFAS Investigation Program @Australian Government, Department of Infrastructure, Transport, Regional Development, Communications and The Arts. PFAS research @ Land Insight National Land Use Atlas (NLUA).

PFAS Investigation and Management Program - PFAS contamination at Department of Defence sites, @ Defence Government. @ Australian Government Defence. Metropolitan Fire Brigade stations. Potential historical use of PFAS @ Australian Government.

PFAS Taskforce. Airservices Australia National & PFAS Management Program, Airservices Australia.

ACT - Potential PFAS contaminated sites in the ACT - @ ACT Environment Protection Authority. NSW - The NSW Government PFAS Investigation Program, @ State of NSW and the NSW Environment Protection Authority. NT – PFAS National Environmental Management Plan (NEMP) @ NT EPA. QLD - PFAS site investigations, PFAS in QLD, @ QLD government. SA - Per- and poly-fluoroalkyl substances (PFAS), @SA EPA. TAS - PFAS Contamination, @ TAS EPA. VIC - PFAS management sites, PFAS contamination at Department of Defence sites @ VIC EPA. WA - PFAS Investigations in Western Australia, @ WA government, @ WA DWER.

Section 4 - Potentially Contaminated Areas

Potentially Contaminated Areas, Activities (PCA) – Notifiable Activities Locations and Description

The research database includes Potentially Contaminating Activities or businesses, industries, and activities that have been identified as having an increased likelihood of causing contamination. Many of these are considered notifiable activities, or activities that require regulation to operate. This database is meticulously curated from a variety of information sources and undergoes rigorous validation procedures carried out by our team of scientists, quality assurance professionals, and technical experts, ensuring its accuracy and reliability. The PCA database systematically identifies and classifies site locations into fifty differing categories, including:

Abattoirs, Abrasive Blasting, Agriculture/Horticulture, Airports, Asbestos, Asphalt or Bitumen, Batteries, Breweries/Distilleries, Cement, Concrete or Lime, Cemeteries, Chemicals, Coal Yards, Depots and Storage Yards, Dry Cleaners, Electrical or Electrical Components, Explosives and Dangerous Goods, Extractive Industries, Fire and Rescue, Food Manufacturing, Foundry, Smelting or Refining, Fuel Terminals & Depots, Glass, Ceramics and Plastic, Gun, Pistol or Rifle Ranges, Hospitals and Research Facilities, Landfill Sites, Livestock Dips, Mechanical and Automotive, Metal Fabrication and Treatments, Oil and Gas, Other Infrastructure Facilities, Paint Industries, Petrol Stations, Pharmaceuticals, Port and Marina Operations, Power Plants, Printing and Photography, Rail Industry and Associated Activities, Rubber and Tyre, Storage Tanks, Substations and Switching Stations, Textiles and Tannery, Timber, Pulp and Paper Works, Waste and Recycling Facilities, Wastewater Treatment Facilities.

Potentially Contaminating Activities and Locations (PCA) - © Google; Nearmap data; @ Datajet Australia Pty Ltd – with permission and @ Land Insight National Land Use Atlas (NLUA).

The Potentially Contaminating Activities (PCA) is a unique database proprietary to Land Insights. Please note that not all sources are included; only the most significant or larger databases are referenced for brevity. Individual research on each of these sources has not been included due to the comprehensive nature of the list.

Airports – Designated international airports in Australia @ Department of Infrastructure, Transport, Regional Development, Communities, and the Arts Australian Gov. List of airports Australia @ Wikipedia. Australia Airports Map @ Sydney-australia biz

Cattle Dips: Cattle Dip Site Locator Northern Rivers Region - © State of New South Wales through NSW Department of Industry; and @ Land Insight National Land Use Atlas (NLUA).

Dry cleaners: Dry cleaners @ Drycleaning Institute of Australia; Lawrence Dry Cleaners Locations @ Lawrence Dry Cleaners, and @ Land Insight National Land Use Atlas (NLUA).

Landfill Sites: NSW – Landfill sites @ EPA NSW. QLD - Location of waste sites | Environment, land and water, Closed landfill sites @ QLD gov. SA - Landfill map, EPA SA. TAS – Landfills @ EPA TAS. VIC – Victorian Landfill Register - © EPA Victoria. Waste and Recycling Facilities: National Waste Management Facilities - © Commonwealth of Australia (Geoscience Australia), Australia's waste and resource recovery infrastructure @ DCCEEW @ Land Insight National Land Use Atlas (NLUA).

Petrol Stations: National Liquid Fuel Refineries and Facilities, Liquid Fuel & Aviation Fuel Depots/Terminals, National Liquid Fuel Refineries - © Commonwealth of Australia (Geoscience Australia), Petrol Stations @ Digital Atlas of Australia. Fuelcheck @ Fair Trading NSW gov. @ Land Insight National Land Use Atlas (NLUA).

Power Plants: AUS @ Powerplants Australia. QLD Power Plants map of Queensland @Department of Energy and Climate. Various sources. @ Land Insight National Land Use Atlas (NLUA).

Waste and Recycling Facilities: National Waste Management Facilities - © Commonwealth of Australia (Geoscience Australia), Australia's waste and resource recovery infrastructure @ DCCEEW. @ Land Insight National Land Use Atlas (NLUA). NSW – Waste facilities @ NSW EPA. NT - Waste & Recycling NT, City of Darwin. QLD - Public waste and recycling facilities in Queensland @ Queensland Government Open Data Portal. SA - Waste disposal, Waste depots @ EPA SA. TAS – Waste Centres, Waste Disposal Facilities @ EPA TAS. VIC - Victoria's waste and resource recovery infrastructure, Waste Facility Locations Victoria's Waste and Recycling Infrastructure Map @ Recycling Victoria. WA @ VIC Gov. WA – Waste locations and recycling centres @ DEW WA. @ Land Insight National Land Use Atlas (NLUA).

Historical Business Directories

AUS - AUS Historical Commercial & Trade Directory Data – various sources, see below. UBD business & street directory, Sands & McDougall directories, @ Australian Business Datalist ABDL (with permission)
ACT - 1971, 1981 & 1991 Telecom Australia Yellow Pages Country NSW Directories – Permission for use Sensis 2017.
2005 - 2022 - @ Australian Business Datalist ABDL – with permission
NSW – Sydney Metropolitan Area: 1932-1933 John Sands Sydney Trades Directory
1940 & 1950 Commonwealth of Australia Telephone Directory Sydney
1960-1961 Telecom Australia Pink Pages Sydney – Permission for use Sensis
1970-1971 United Business Directories Sydney – Licenced under Hardie Grant
1974-1975 NSW Post Office Yellow Pages Sydney Buying Guide and Commercial/Industrial Directories – Permission for use Sensis
1980-1981 & 1990-1991 Telecom Australia Yellow Pages Sydney – Permission for use Sensis. 2005 – 2022 @ Australian Business Datalist ABDL
NT - 2005 - 2022 @ Australian Business Datalist ABDL – with permission
QLD - 1865, 1890, 1900, 1906, 1916, 1919, 1924, 1925, 1970 – Pugh's Almanac (copyright expired)
1970-1971 - Brisbane Telephone Directory (copyright expired)
2005 - 2022 - @ Australian Business Datalist ABDL – with permission
SA - 1930, 1935, 1944-45, 1950, 1955, 1960, 1965, 1970, 1973 - Sands & McDougall Melbourne Trade Directory (copyright expired)
2005 - 2022 @ Australian Business Datalist ABDL – with permission
TAS - 1896-1897, 1900, 1905, 1910, 1915, 1920, 1925, 1930, 1935, 1940-41, 1945-46, 1948 - Wises Post Office Directory (copyright expired)
2005 - 2022 @ Australian Business Datalist ABDL – with permission
VIC - 1900, 1905, 1915, 1925, 1935, 1945, 1955, 1965, 1975 - Sands & McDougall Melbourne Trade Directory (copyright expired)
1960-1961, 1970-1971 - Post Office Pink Pages Melbourne – Permission for use Sensis 2017
1981-1982, 1990-1991 - Telstra Yellow Pages Melbourne - Permission for use Sensis 2017
Telstra Yellow Pages Melbourne - Permission for use Sensis 2017
2005 - 2022 @ Australian Business Datalist ABDL – with permission
WA - 2005 - 2022 @ Australian Business Datalist ABDL – with permission

Section 5 – Natural Hazards

Fire Hazards

AUS - Bushfire Prone Areas – © Australian Government Department of Climate Change, Energy, the Environment and Water. Bushfire History - © Commonwealth of Australia (Geoscience Australia). ACT - Bushfire Prone Areas – © ACT Government Environment, Planning and Sustainable Development Directorate. Bushfire History - NPWS Fire History - Wildfires and Prescribed Burns © State Government of NSW and Department of Planning, Industry and Environment. NSW - Bushfire Prone Areas – © State of New South Wales (NSW Rural Fire Service). Bushfire History - © State Government of NSW and NSW Department of Climate Change, Energy, the Environment and Water, Wildfires and Prescribed Burns - © State of New South Wales, National Parks, and Wildlife Management Unit. NT - Bushfire Prone Areas – © NT Government of Australia through Department of Environment and Natural Resources. Bushfire History - © The Commonwealth of Australia through the Department of the Environment and Energy. QLD - Bushfire Prone Areas – © Commonwealth Scientific and Industrial Research Organisation (CSIRO) in conjunction with the State of Queensland (Queensland Fire and Emergency Services). Bushfire History - © State of Queensland (Department of Environment and Science). SA - Bushfire Prone Areas – © SA Government Country Fire Service (CFS), Department of Planning, Transport, and Infrastructure. Bushfire History - © SA Government Department for Environment and Water. TAS - Bushfire Prone Areas – © Tasmania Fire Service. Bushfire History - © Department of Environment, Parks, and Water Security. VIC - Bushfire Prone Areas – © VIC Government Department of Environment, Land, Water and Planning; Department of Transport, Planning and Local Infrastructure. Bushfire History - © VIC Government Department of Transport, Planning and Local Infrastructure. WA - Bushfire Prone Areas – © WA Government Department of Fire and Emergency Services. Bushfire History - © WA Government Department of Fire and Emergency Services.

Flood Hazard

AUS - Flood Planning Area, Other Flood Studies, and Flood History - @ Commonwealth of Australia, @ Bureau of Meteorology. This dataset is digitised and/or aggregated from various verified Council Records, Aerial Photography Interpretation, Flood Imagery Maps, Topographic Maps, Historic Parish Maps, publicly available technical reports, and information digitised by the Land Insight Research team. @Land Insight Research. ACT - Flood Risk and Flood map information © ACT Government Environment, Planning and Sustainable Development Directorate – Environment. NSW - NSW Flood Data Portal @NSW State Emergency Service, © State Government of NSW, NSW Department of Climate Change, Energy, the Environment and Water; and NSW Department of Planning, Housing, and Infrastructure; @ NSW Government Spatial Services. NT - Floodplain maps, Flood monitoring © NT Government of Australia through Department of Environment and Natural Resources, Department of Lands, Planning, and the Environment. QLD - QLD Flood mapping, Historical flood mapping © The State of Queensland, Department of Resources, Queensland Reconstruction Authority. Flood data series and Flood data overlays (various) Queensland Open Data portal. SA - Flood Awareness map, Flood Risk © Crown in right of the State of South Australia, @ Government of South Australia, Department for Environment and Water. Flood mapping (various) SA Data Directory portal. TAS - Tasmania Flood Mapping Projects Reports @ Tasmania State Emergency Services. Floodplain Mapping in Tasmania, Flood Inundation Extent models. © Department of Natural Resources and Environment Tasmania. TAS TheList dataset portal. VIC - Victoria Flood mapping and overlays. © Copyright State Government of Victoria various datasets, Victoria State Emergency Service; Department of Energy, Environment and Climate Action, Department of Environment, Land, Water & Planning. Flood data (various) VIC data portal (data.vic). WA - Floodplain mapping tool, Landgate Flood Map. © Government of Western Australia, @ Department of Water and Environmental Regulation. Flood data (various) WA data portal.

Erosion Hazard

AUS - Soil Erosion Hazards, © Commonwealth of Australia (Geoscience Australia), @ Agriculture DAFF @Australian Government. ACT - Soil and Land Resources of the Australian Capital Territory, © State of New South Wales and Department of Planning and Environment. NSW - Land Soil Capability, Vulnerable lands, © State of New South Wales and Department of Planning and Environment NT - Land System, Soil Conservation, © Department of Environment, Parks, and Water Security. QLD - QLD Erosion prone areas, Coastal and Inland erosion areas, © The State of Queensland. SA - Landscape salad, Mass movement and soil Attributes, Water and Wind Erosion, © Department for Environment and Water. TAS - Coastal Erosion Hazard, Landslide Planning Map, Water and Wind Erosion Statewide map, © Department of Natural Resources and Environment Tasmania. VIC - Geomorphology of Victoria, © VIC Government Department of Jobs, Skills, Industry and Regions. WA - Soil Landscape Land Quality, Land capability assessment, Land instability Risk, Water Erosion Riks, Wind Erosion Risk, © WA Government Department of Primary Industries and Regional Development.

For more information visit www.landinsight.co or contact orders@landinsight.co.

Terms and Conditions

Terms and Conditions

1. Land Insight & Resources (Land Insight) will perform the Services in accordance with these terms and conditions
2. By submitting the Application Form, the User acknowledges that it has read and understood these terms and conditions and agrees to be bound by them.
3. Land Insight reserves the right to change these terms and conditions. Any change shall be effective upon notice, which may be given by Land Insight posting such change on the Website, or by direct communication with the User.

Services

4. Land Insight agrees to undertake the Services using due skill, care, and diligence.
5. The User assumes the sole risk of making use of, and/or relying on, the report and the Services. Land Insight makes no representations about the suitability, completeness, timeliness, reliability, legality, or accuracy of the Services.
6. Unless Land Insight agrees expressly otherwise:
 - (A) The Services are solely for the use and benefit of the User; and
 - (B) Land Insight does not accept any liability, whether directly or indirectly, for any liability or loss suffered or incurred by any third party placing any reliance on the performance of the Services or any Documents or material arising from or in connection with the Services.
7. The User warrants to Land Insight that it will not use the Services for any purpose that is unlawful or is otherwise inconsistent with these terms and conditions.
8. The User will not alter in any way or provide a copy of the report, or any Document prepared by Land Insight to any other person without Land Insight's prior written consent.

Payment Terms

9. The Fee will be payable at the time of submitting the Application Form unless invoicing payment terms have been negotiated prior to purchase with Land Insight.
10. The User and Land Insight may agree in writing to vary the Services. The fee for each variation shall be agreed between Land Insight and the User.
11. The User agrees to pay Land Insight the Fee, including the fee for any variation requested in accordance with clause 12.
12. If the User's rights are terminated and the User has made an advance payment, Land Insight will refund the User a reasonable proportion of the balance as determined by Land Insight in relation to the value of Services already provided.
13. GST at the prevailing rate is payable in addition to the Fee. The User agrees to pay any other applicable taxes, duties or government-imposed fees related to the User's use of the Services.

Intellectual Property

14. Land Insight owns all intellectual property in the Report and arising from or in connection with the Services.
15. Land Insight grants the User a royalty free licence to use Land Insight's intellectual property for that User's personal assessment of its Property(s) only.

Privacy Policy

16. Upon submitting the Application Form the User consents to Land Insight's use of the personal data provided by the User for the purposes of providing the Services.
17. The Reliance on the report, the use of the Services and the use of Land Insight's Website is at the User's own risk. The User accepts that Land Insight does not guarantee the confidentiality of any communication or information transmitted through the use of the Website.
18. Land Insight will not provide to any third party any personal data provided by a User without the User's permission.
19. The User acknowledges that any feedback provided to Land Insight over the Website is not confidential and that Land Insight has the right to publish, reproduce, disseminate, transmit, distribute and copy (in whole or in part) any such feedback without the approval of the User.
20. Land Insight assumes no responsibility or liability for any content, communications or feedback submitted by a User over the Website. If a User has submitted objectionable content, communications or Feedback, Land Insight may, in its sole discretion, terminate that User's account, take legal action, or notify the appropriate authorities or parties, without prior notice.

Third Party Services

21. The User accepts that, although the Website may contain or provide information regarding applications, products and/or services provided or offered by third parties, Land Insight does not recommend or endorse any such third party applications, products, and/or services.
22. The report contains content provided to Land Insight by other parties (Third Party Content). Land Insight is not responsible for, does not endorse and makes no representations either expressly or impliedly concerning the accuracy or completeness of any Third Party Content. You rely on the Third Party Content completely at your own risk.

Limit and Extent of Liability

23. Land Insight's liability is limited to the amount of the Fee. Liability arising in the provision of the Services is reduced to the extent that it arises out of or in connection with any negligent act or omission by the User.
24. Neither party is liable to the other for loss of actual or anticipated revenue or profits, increased capital, or financing costs, increased operational or borrowing costs, pure economic loss, exemplary or punitive damages or indirect or consequential damages or loss.
25. In no event shall Land Insight or any directors, officers, employees or agents be liable for any indirect, punitive, incidental, special, or consequential damages arising out of or in any way connected with the use of the Website, any delay or inability to use the Website, any information available on the Website, or otherwise arising out of the utilisation of the Website, whether based in contract, tort, strict liability, or otherwise, even if Land Insight has been advised of the possibility of such damages. The negation of damages set forth herein is a fundamental element of the basis of the bargain between Land Insight and the User. The Services would not be provided without such limitations.

Property Verification

26. The User accepts that the Services provided do not take into account any information relating to the actual state or condition of the Property.

27. The User acknowledges that the Services are not to be interpreted as commenting on the physical characteristics or condition of the Property, any particular purpose or use of that Property or the saleability or value of the Property.

Termination and Modification

28. Land Insight reserves the right in its sole discretion to terminate, block or restrict the User's use of the Services or any portion thereof, for any reason, and without notice. In addition, Land Insight reserves the right in its sole discretion to terminate or modify any part of the Website without notice, for any reason.

Anti-Hacking

29. The User agrees not to directly or indirectly, attempt to or disrupt, impair, interfere with, alter, or modify the Website or any of its content.

30. The User agrees not to allow, aid or abet third parties to directly or indirectly, attempt to or disrupt, impair, interfere with, alter or modify the Website or any of its content, or obtain access to any information regarding any User or any other report issued to a User.

Complaints

31. Any complaints in relation to the Services should, in the first instance, be in writing and addressed to Land Insight Customer Service at: info@landinsight.co. Land Insight will respond to any such complaints in writing as soon as practicably possible.

General Matters

32. These terms and conditions are governed by and will be construed and enforced in accordance with the laws of the State of New South Wales, Australia. If any dispute, controversy, or claim arises out of or relating to these terms and conditions, whether sounding in contract, tort or otherwise, it shall be resolved by use of an alternative dispute resolution procedure acceptable to both parties with the assistance of a mediator. If the dispute has not been resolved to the satisfaction of either party within 60 days of initiation of the procedure or if either party fails or refuses to participate in or withdraws from participating in the procedure, then either party may refer the dispute to the court.

33. These terms and conditions apply to all Services provided by Land Insight.

34. If there is any inconsistency between these terms and conditions and any other document or agreement between the parties, these terms and conditions will prevail.

35. These terms and conditions represent the entire agreement between the parties.

36. The User authorises Land Insight to destroy Documents which Land Insight has prepared or holds in connection with the Services 7 years after the last date on which the Services were provided.

37. If any of the terms of the Application Form or the terms and conditions are invalid, unenforceable, or void, the relevant term must be read down to the maximum extent possible or severed from the rest of the Application Form or these terms and conditions.

38. These terms and conditions can only be amended or varied by a written document signed by both parties.

39. Neither party may assign or transfer any rights or obligations arising in the provision of the Services or these terms and conditions without the other party's written consent.

Defined Terms

Application Form	Means the form and accompanying information provided on the Website, completed, and submitted by the User to request the Services.
Document	Includes a report, and any other written or electronic document.
Fee	Means the amount set out in the Application Form or confirmed via an invoice.
Property	Means the property to which the Services and the report relate.
Report	Means the Document prepared by Land Insight and provided to the User which contains the environmental and development data which is relevant to the Property.
Services	Means the review of data and information on which the report is based, and the preparation and provision to the User of the report.
Website	Means Land Insight's online site, which is: www.landinsight.co
User	Means the person(s) set out in the Application Form including that person's permitted successors.

A low-angle photograph of a bridge structure, likely the Sydney Harbour Bridge, against a clear blue sky. The bridge's steel lattice and cables are visible, creating a strong geometric pattern. In the background, a tall building is partially visible. A bright yellow rectangular box is overlaid on the right side of the image, containing the title and subtitle text.

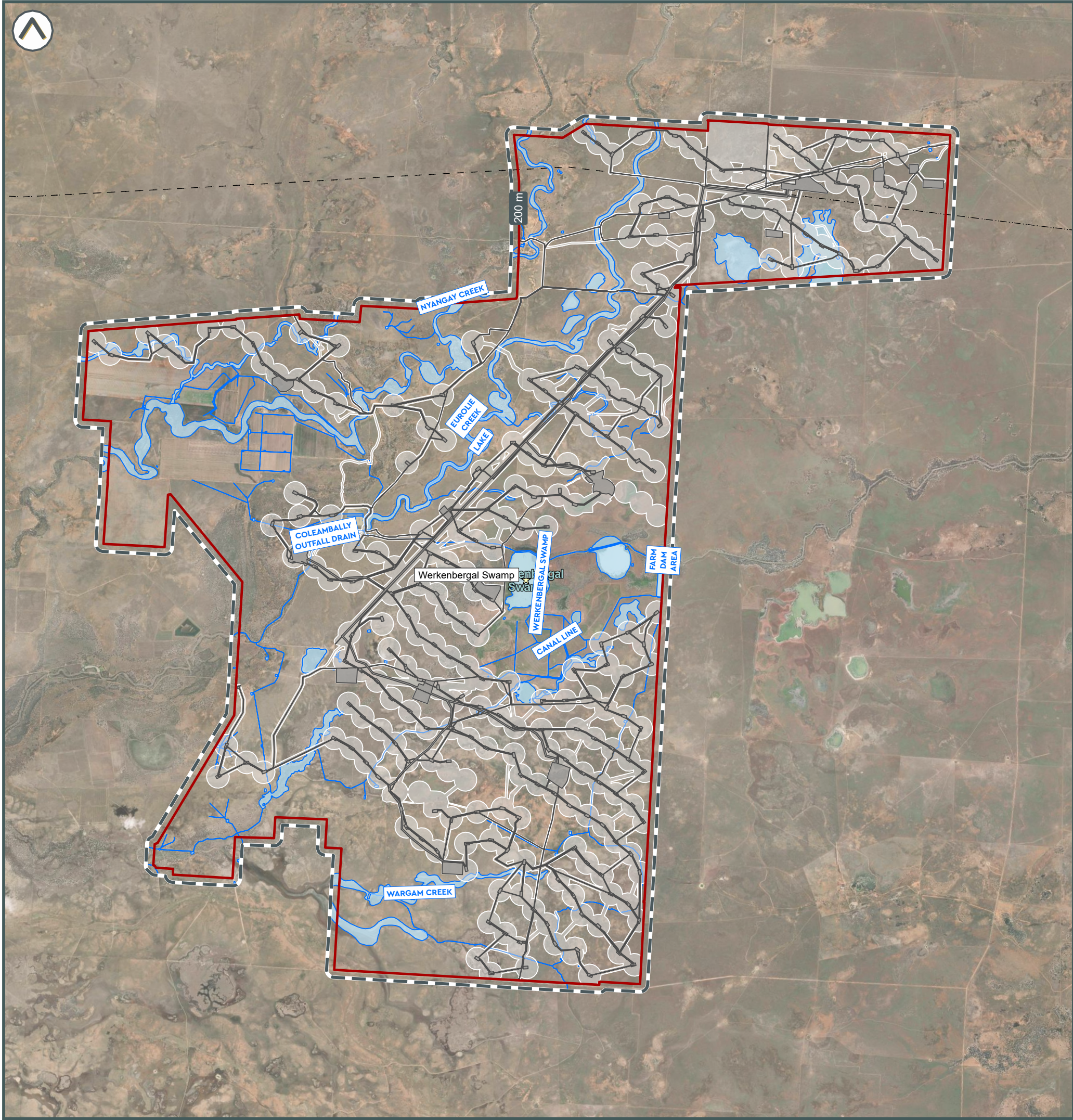
Appendix A

REPORT MAPS

Pottinger Windfarm
Willurah, NSW

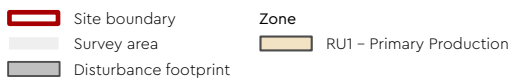
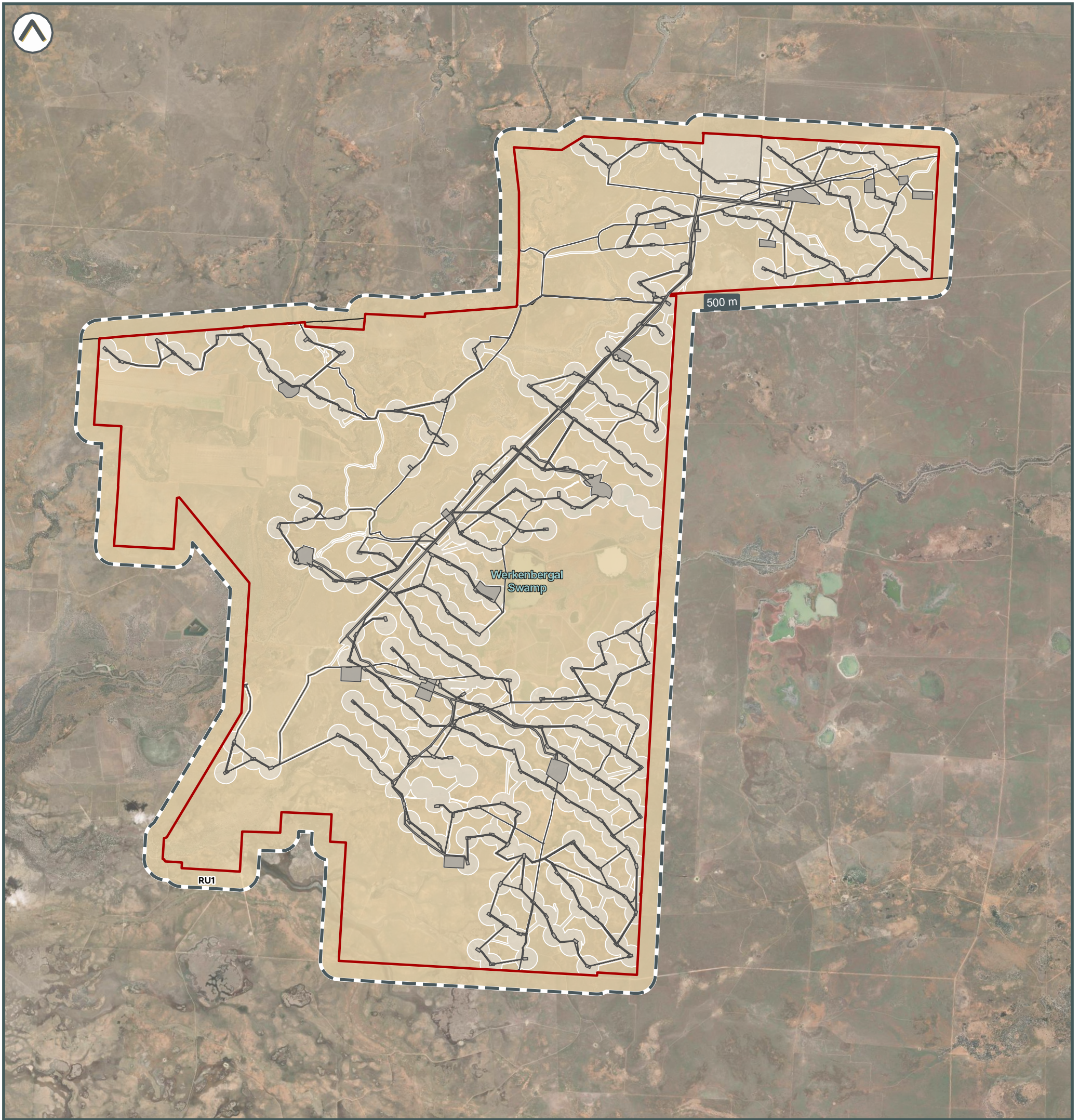


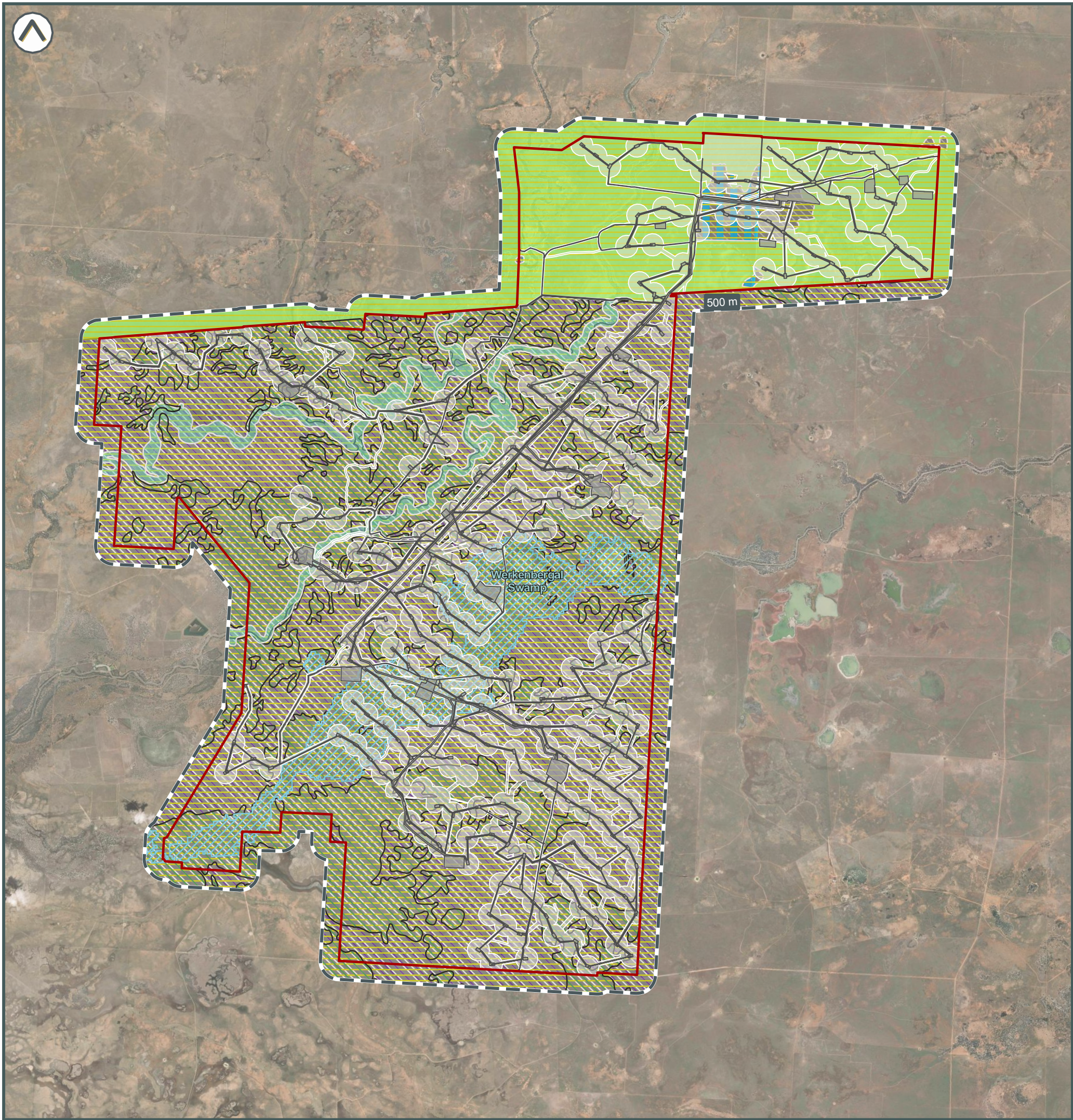
Sensitive Receptors and Features of Interest



- siteboundary
- Site boundary
 - Survey area
 - Disturbance footprint
 - Other Feature
 - Water Bodies
 - Power transmission

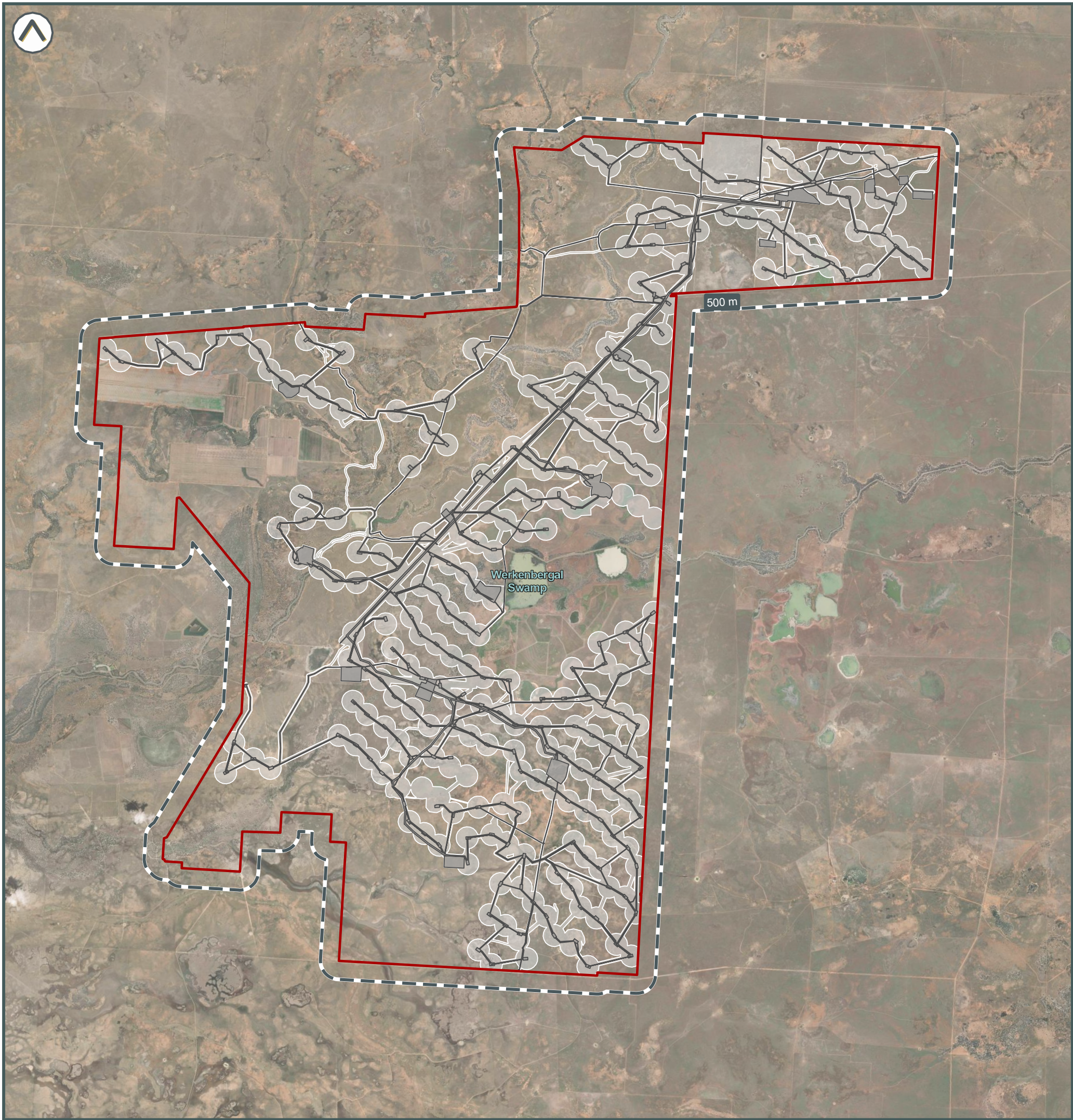
0 990 1,980 2,970 3,960 4,950m





- | | | | |
|-----------------------|-------------------------|--------------------------------|----------|
| Site boundary | Overlays | Minimum Water Use Standard (%) | Wetlands |
| Survey area | Allowable Clearing | Refer to Clause 4.2B | |
| Disturbance footprint | Biodiversity | Sensitive Area | |
| | Land Application | SEPP Land Application | |
| | Minimum Lot Size (sq m) | Watercourses | |

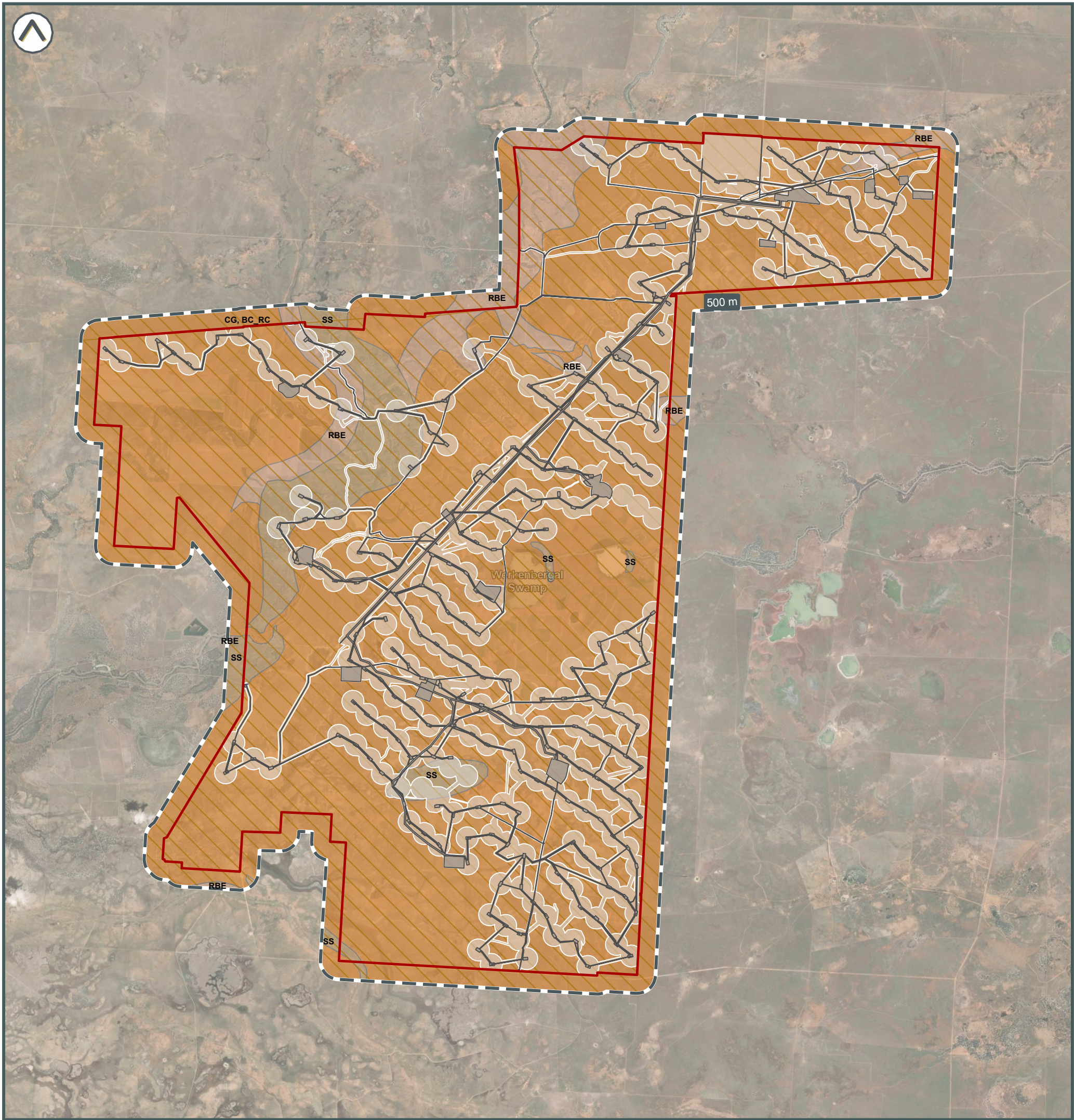
0 1,000 2,000 3,000 4,000 5,000m



- Site boundary
- Survey area
- Disturbance footprint

0 1,000 2,000 3,000 4,000 5,000m

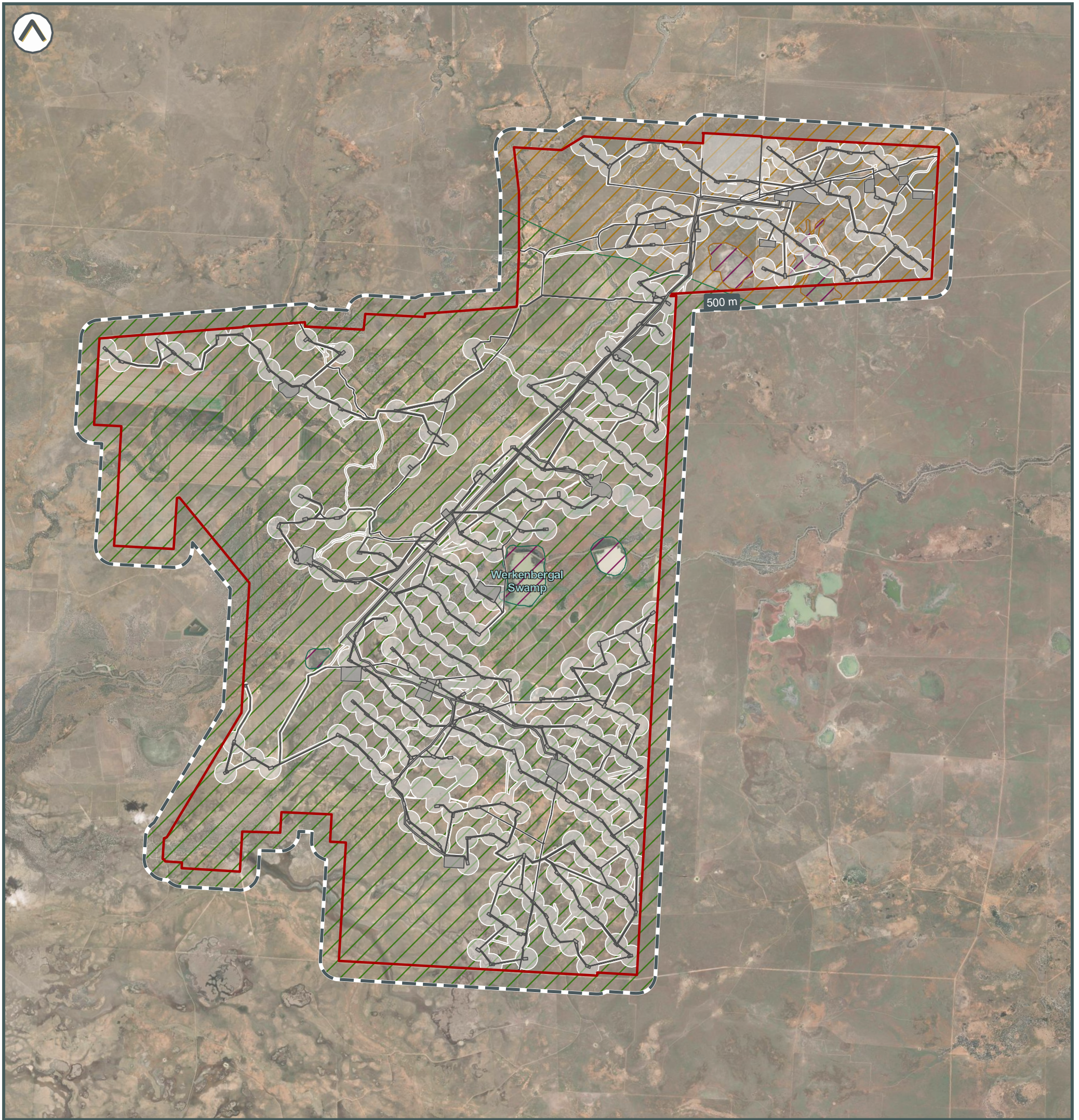




	Site boundary		Radon Level (Bq/m3)		SS
	Survey area		5-19		CG, BC_RC
	Disturbance footprint				RBE

0 1,000 2,000 3,000 4,000 5,000m



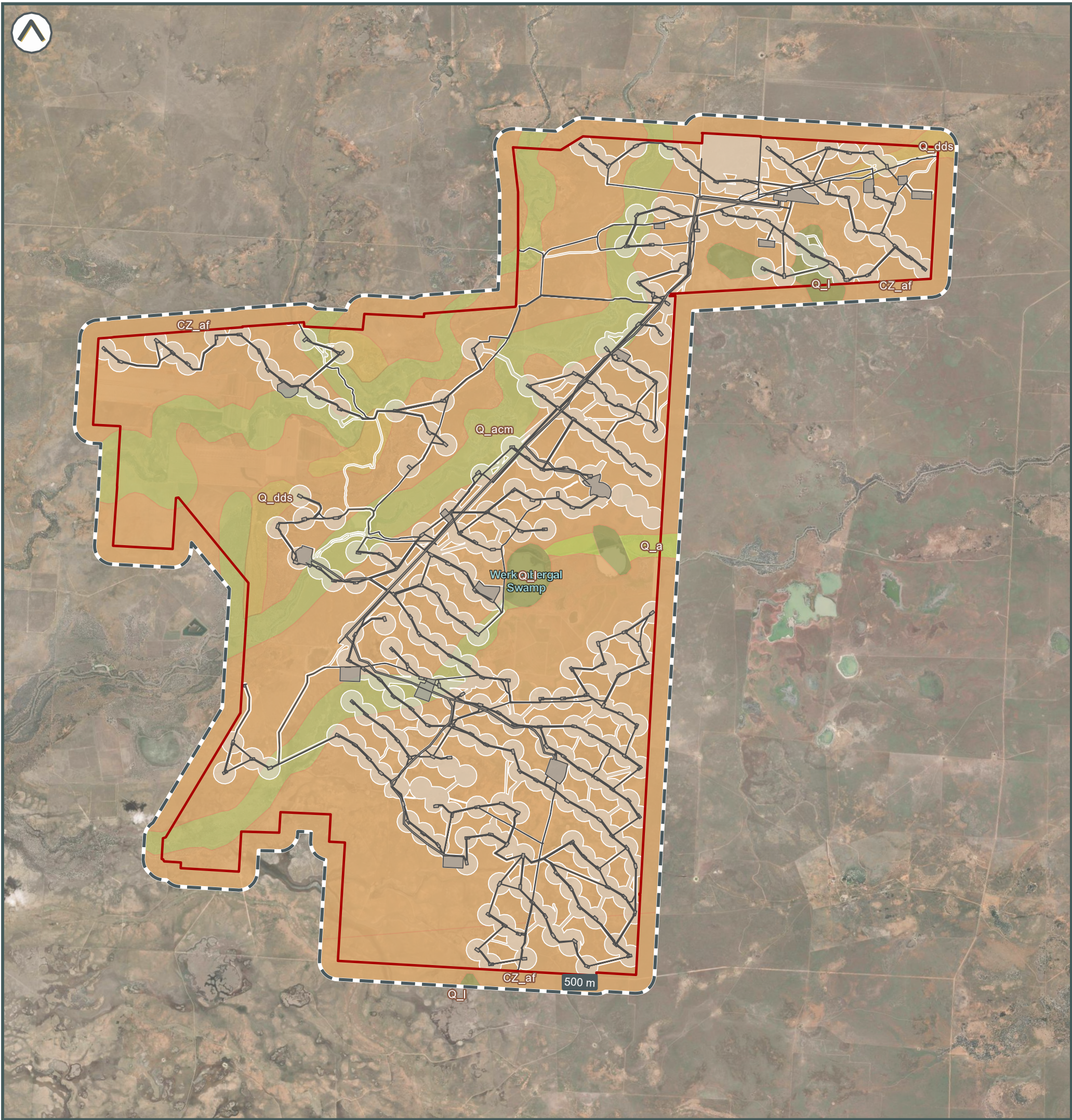


- | | | |
|-----------------------|---|---|
| Site boundary | Atlas of Australian Acid Sulfate Soils | Extremely low probability of occurrence |
| Survey area | High Probability of occurrence | |
| Disturbance footprint | Low Probability of occurrence | |

0 1,000 2,000 3,000 4,000 5,000m



Geology and Topography



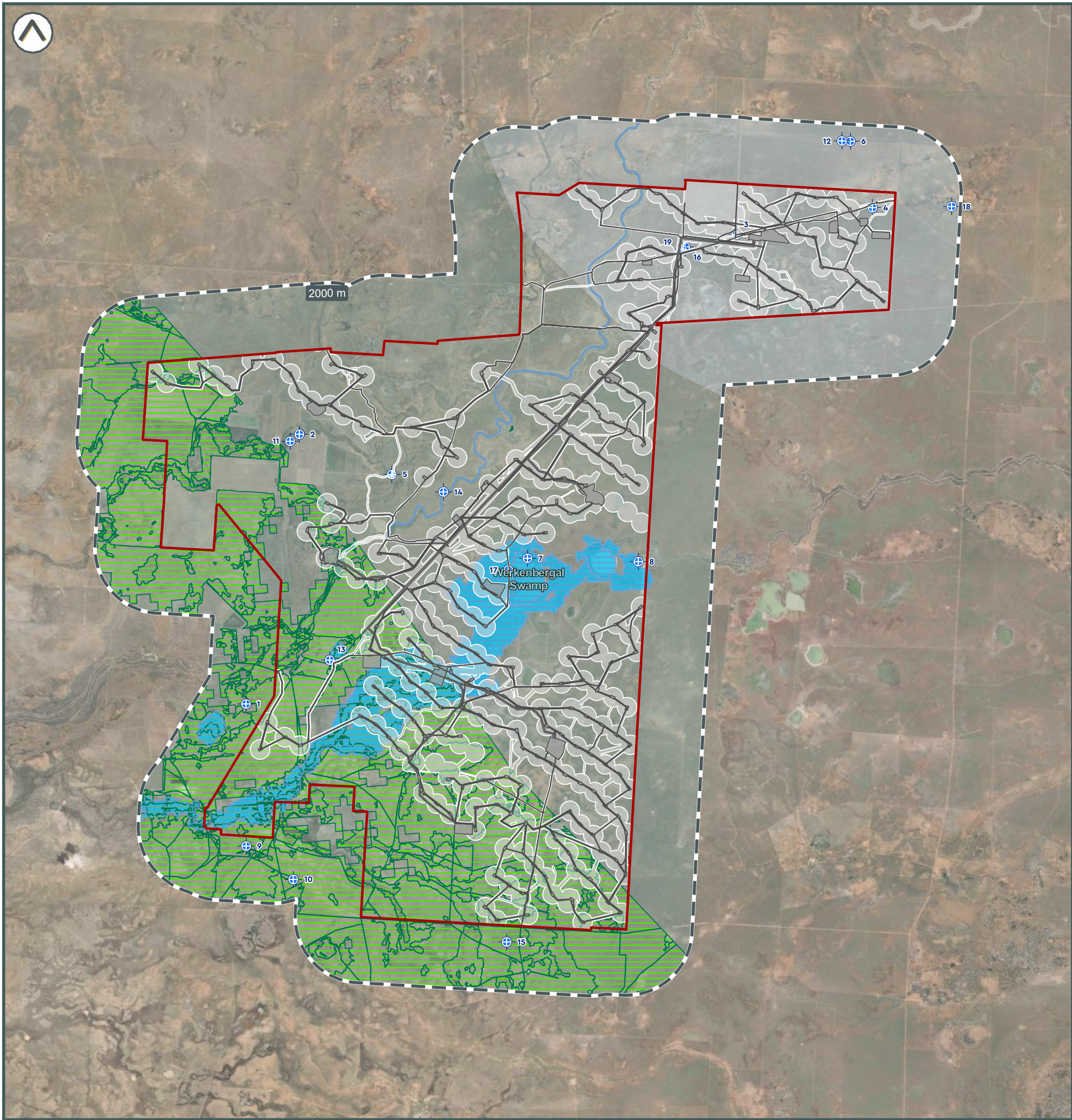
Site boundary	Topographic Contour (m)	Geology Code	Q_acm
Survey area		CZ_af	Q_dds
Disturbance footprint		Q_a	Q_l

0 1,000 2,000 3,000 4,000 5,000m





Groundwater Dependent Ecosystems & Hydrogeology Constraints



- Site boundary

Survey area

Disturbance footprint
- Groundwater bores

Ecosystems that rely on the Surface expression of Groundwater

Low potential GDE - from national assessment

Ecosystems that rely on Subsurface presence of Groundwater

High potential GDE - from regional studies

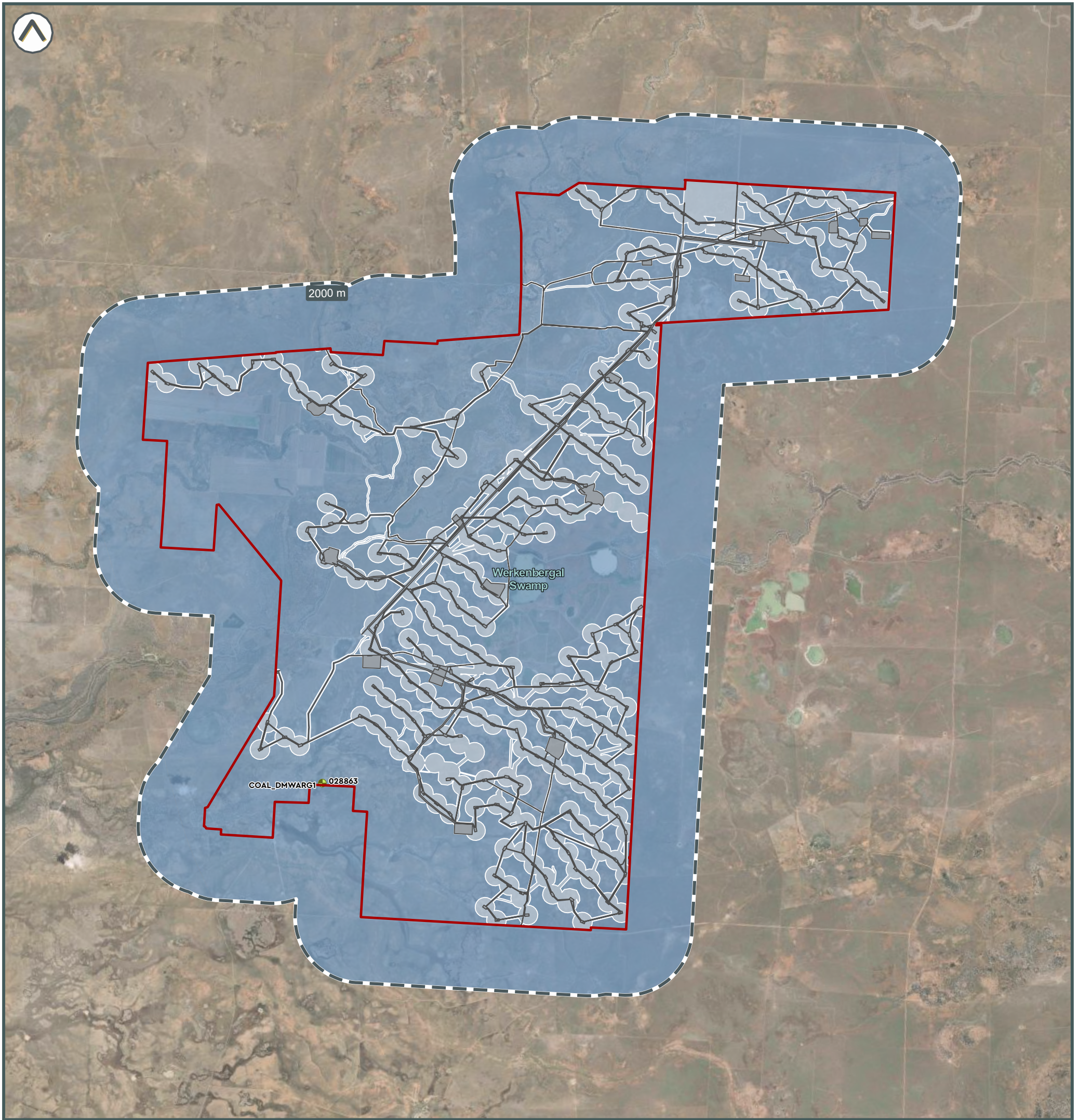
Low potential GDE - from regional studies
- Wetlands

Aquifer type

Porous, extensive aquifers of low to moderate productivity

Porous, extensive highly productive aquifers

0 1,000 2,000 3,000 4,000 5,000m

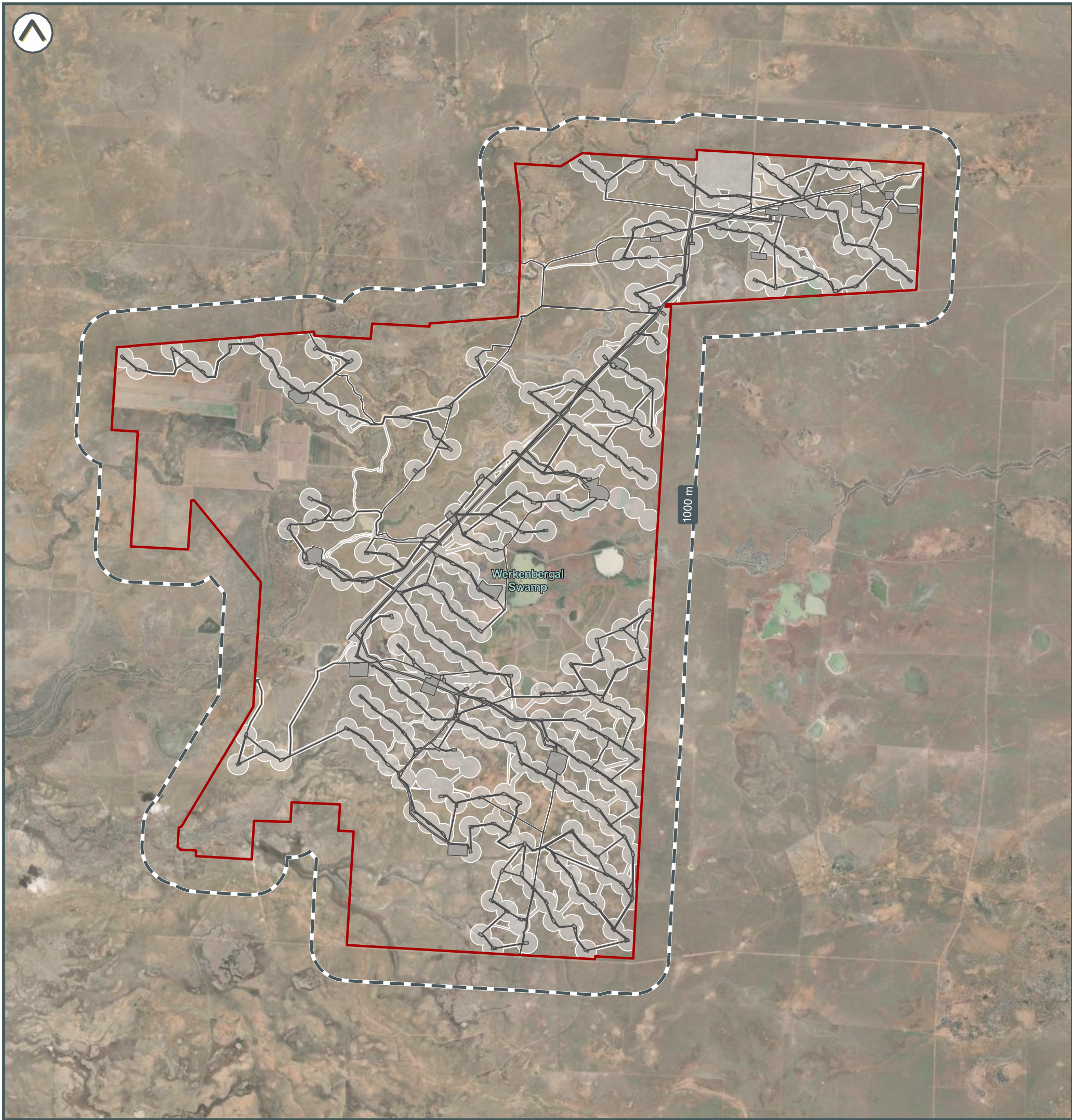


- Site boundary
- Survey area
- Disturbance footprint
- Other borehole/monitoring well location
- Salinity Class
- Non-Saline (<3000mg/L)

0 1,000 2,000 3,000 4,000 5,000m



Contaminated Land Public Register



siteboundary

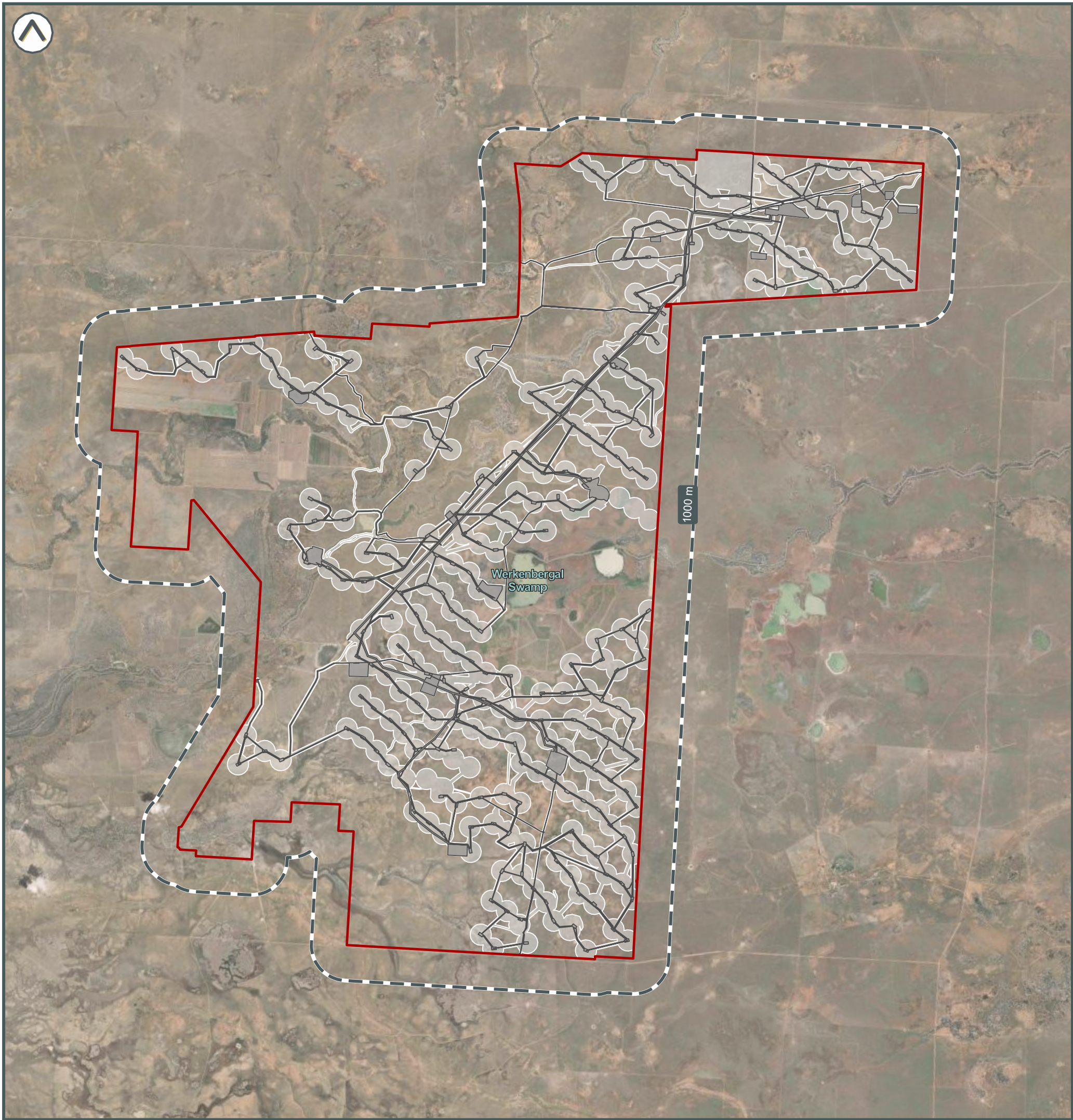
- Site boundary
- Survey area
- Disturbance footprint

0 1,000 2,000 3,000 4,000 5,000m





Licences, Approvals & Assessments



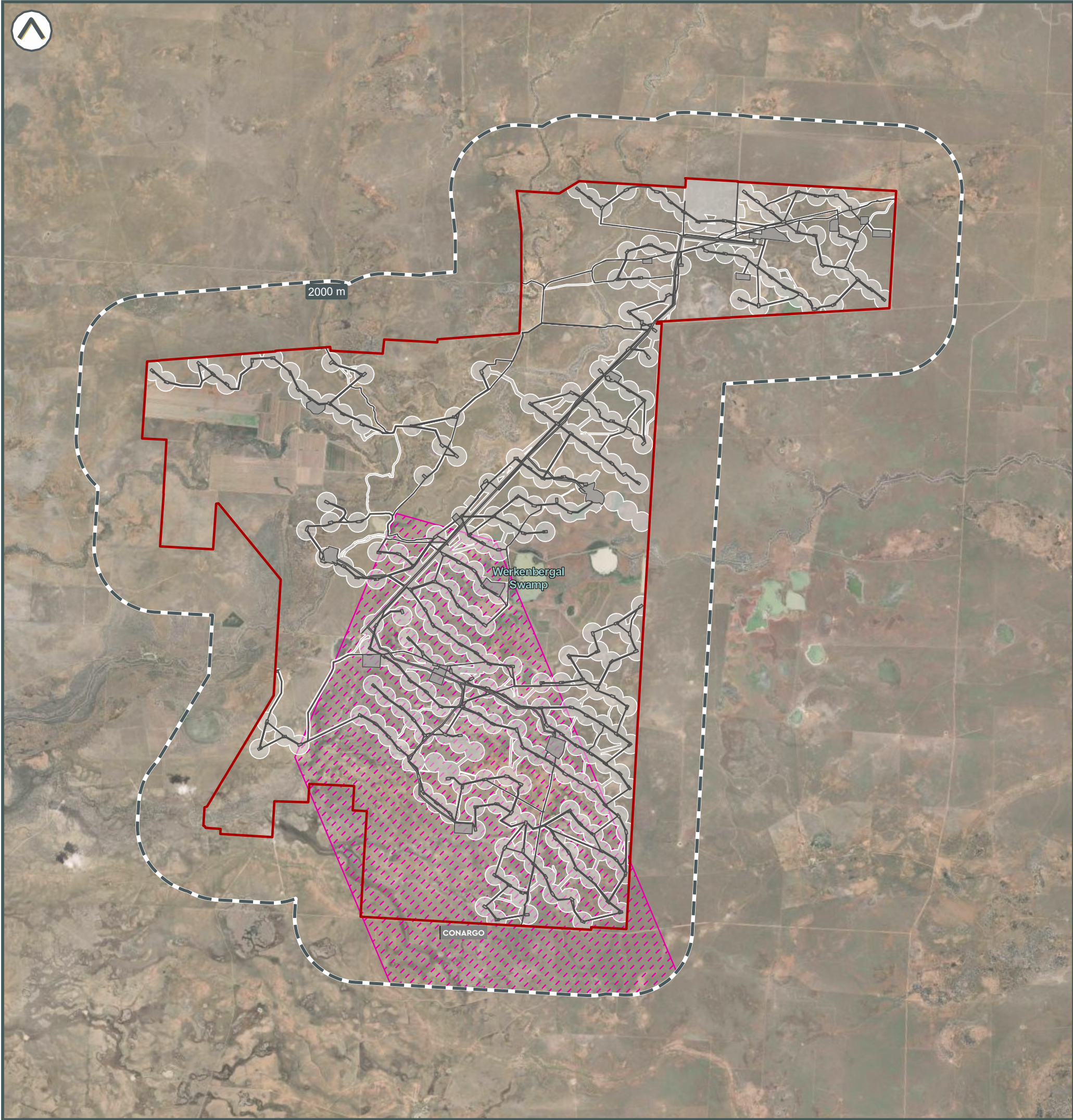
- Site boundary
- Survey area
- Disturbance footprint

0 1,000 2,000 3,000 4,000 5,000m





Sites Regulated by Other Jurisdictional Body



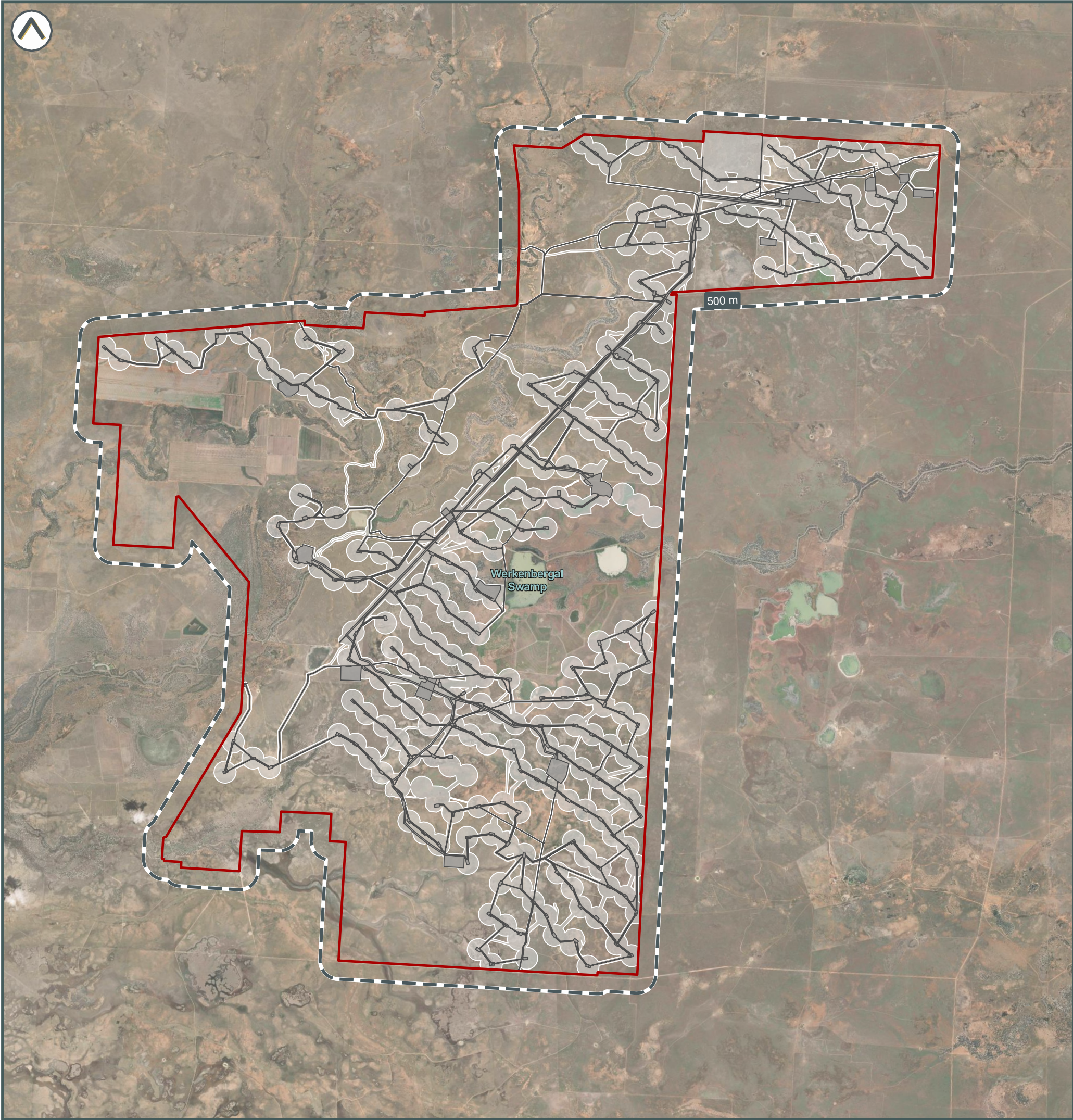
- Site boundary
- Survey area
- Disturbance footprint
- Unexploded Ordnance (UXO) Areas
- Other

0 1,000 2,000 3,000 4,000 5,000m





Other Potential Pollution Sources



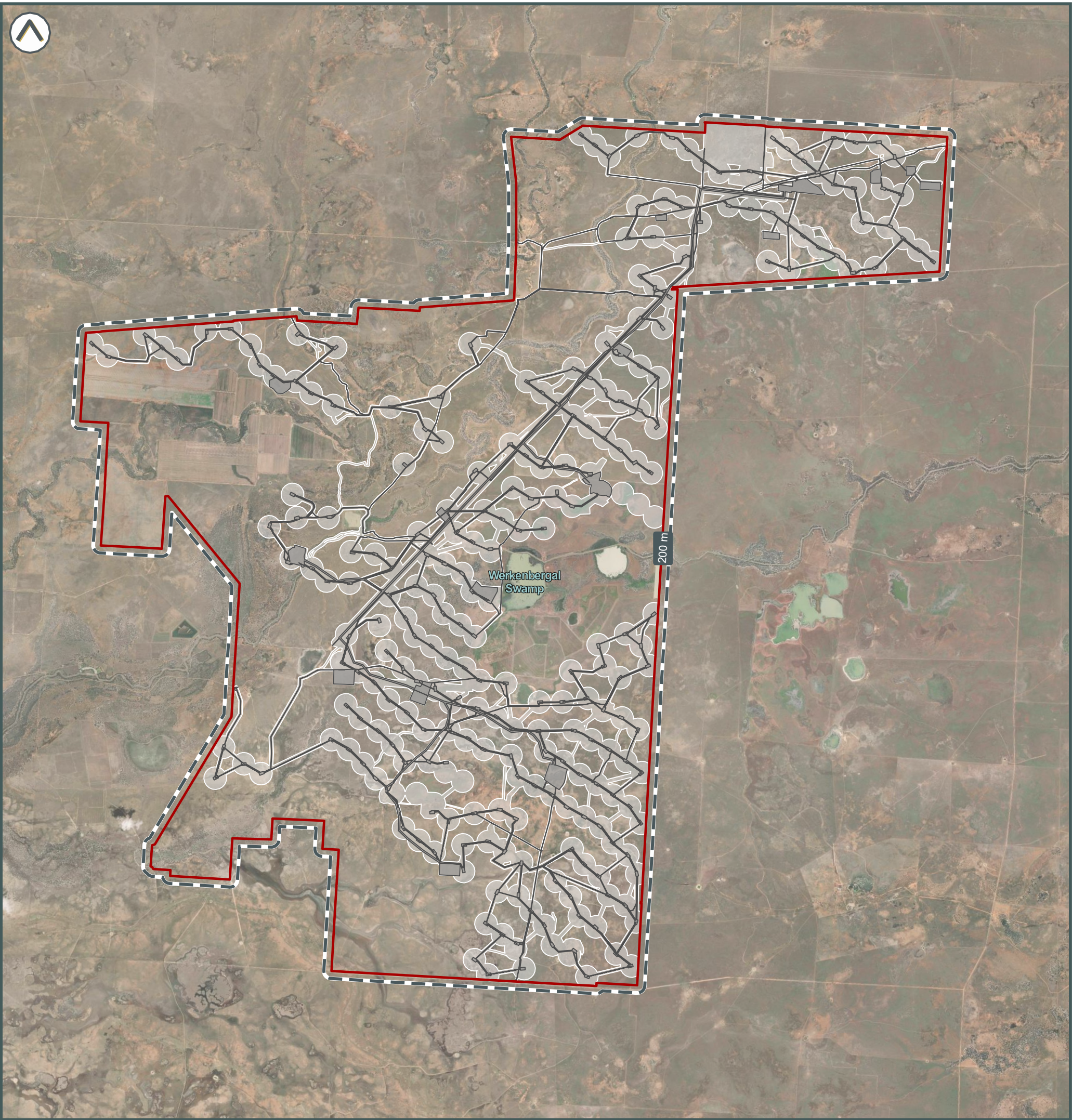
- Site boundary
- Survey area
- Disturbance footprint

0 1,000 2,000 3,000 4,000 5,000m





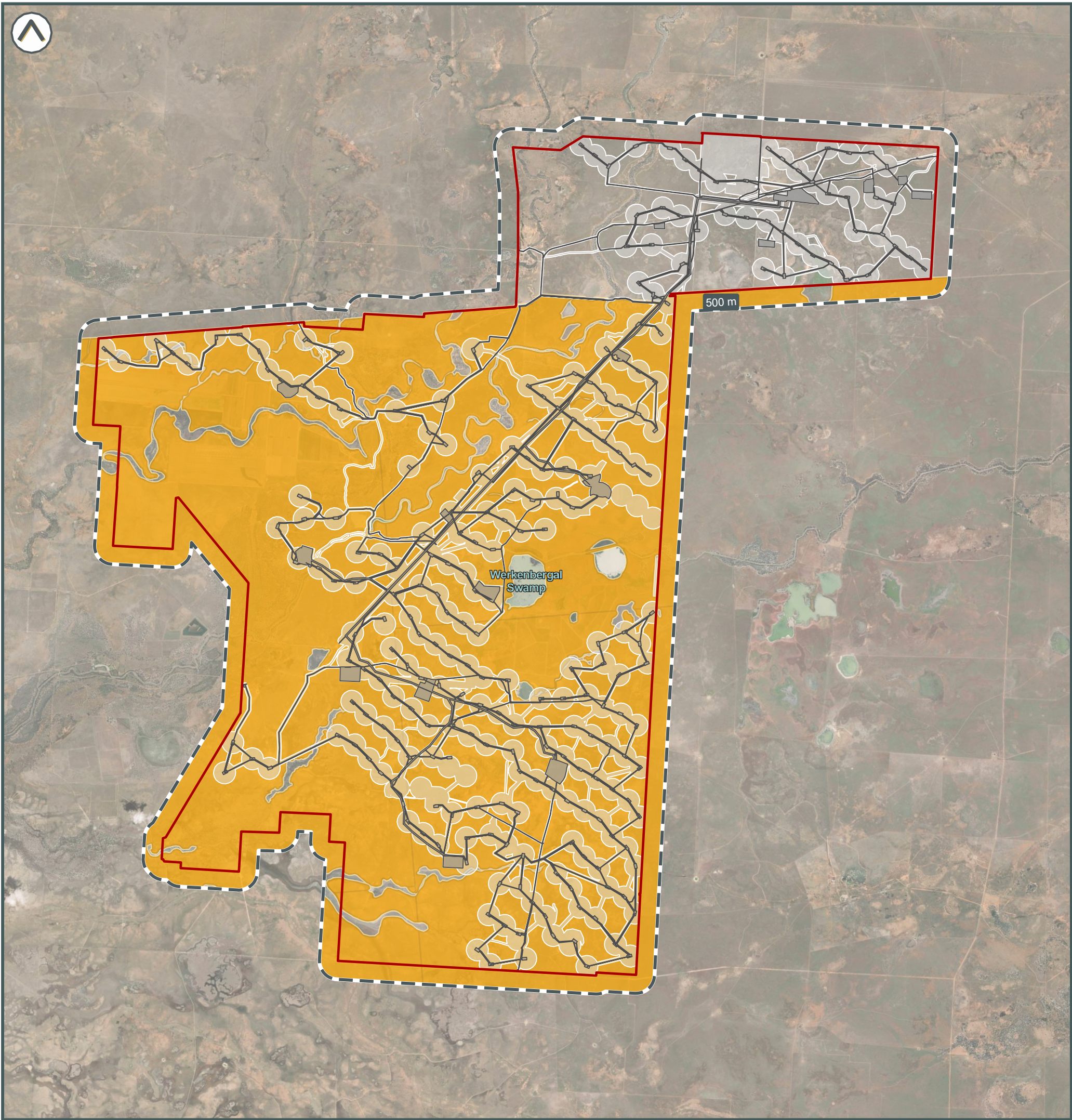
Current Potentially Contaminating Activities (PCAs)



- Site boundary
- Survey area
- Disturbance footprint

0 990 1,980 2,970 3,960 4,950m



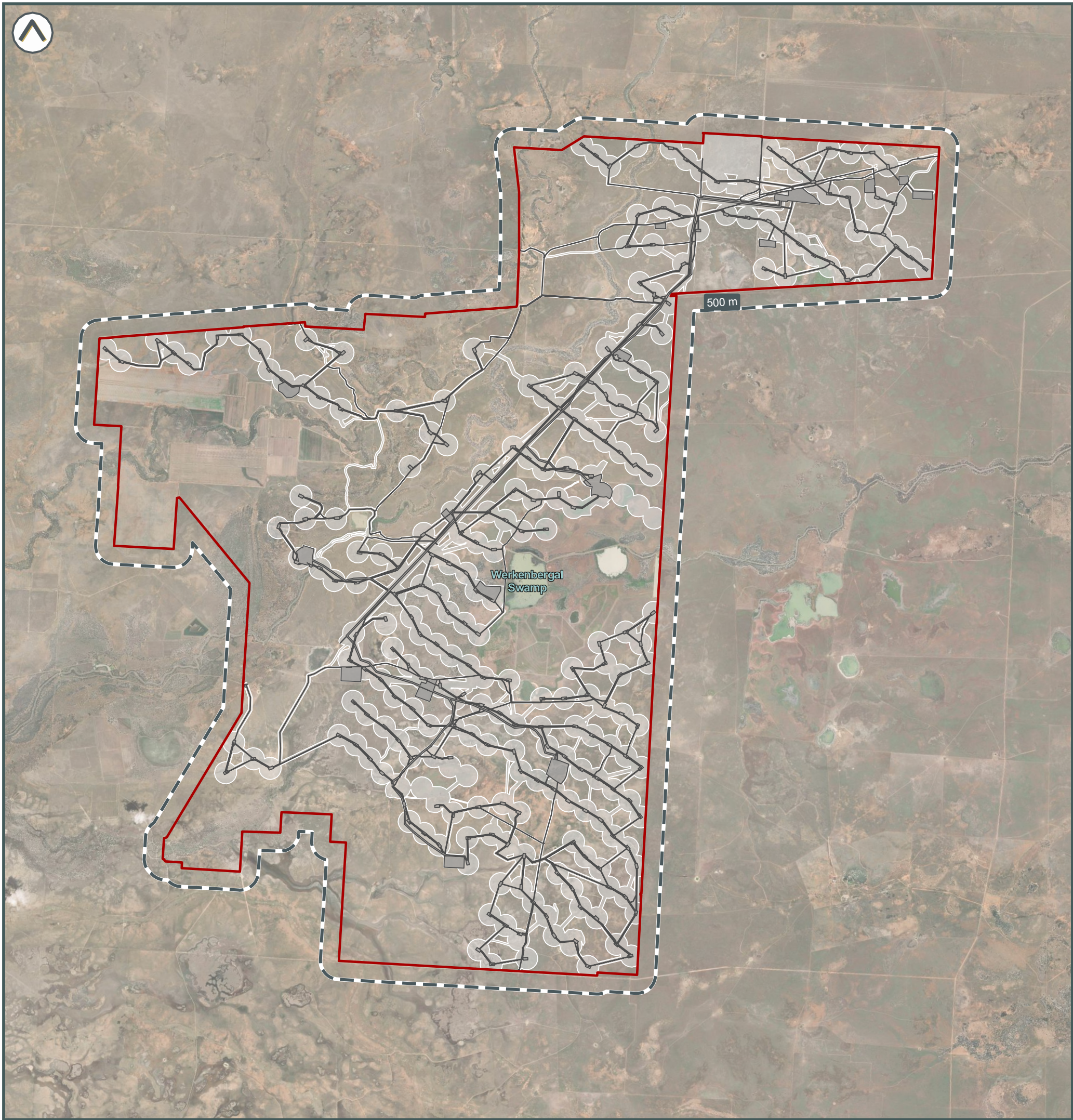


- Site boundary
- Survey area
- Disturbance footprint

- Vegetation Category 3
- Vegetation Buffer

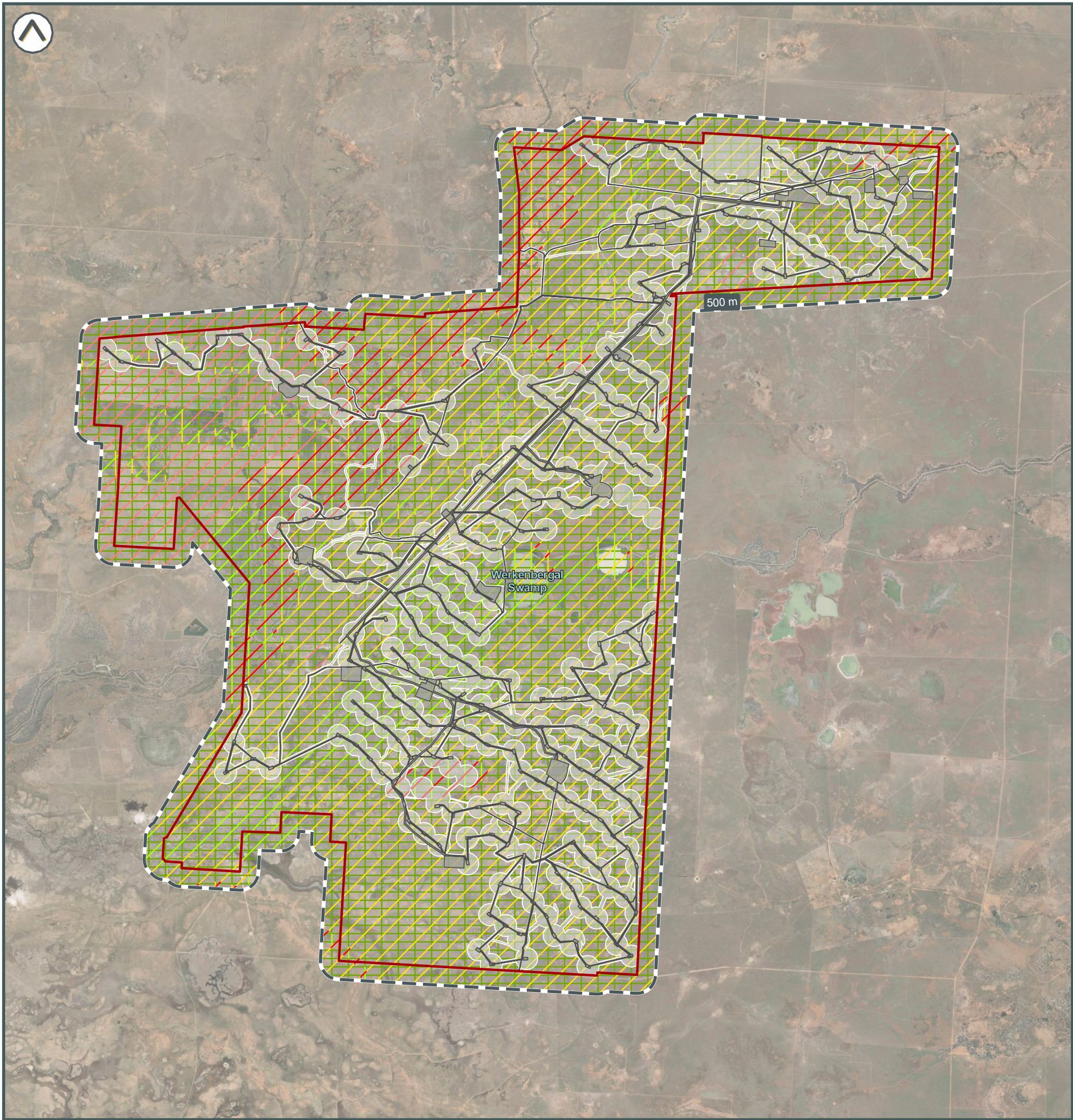
0 1,000 2,000 3,000 4,000 5,000m





- Site boundary
- Survey area
- Disturbance footprint

0 1,000 2,000 3,000 4,000 5,000m



- Site boundary
- Survey area
- Disturbance footprint

- Wind Erosion Risk
- Very High
 - High
 - Moderate
 - Low
- Water Erosion Risk
- Moderate

- Landslip Erosion Risk
- Very Low

0 1,000 2,000 3,000 4,000 5,000m

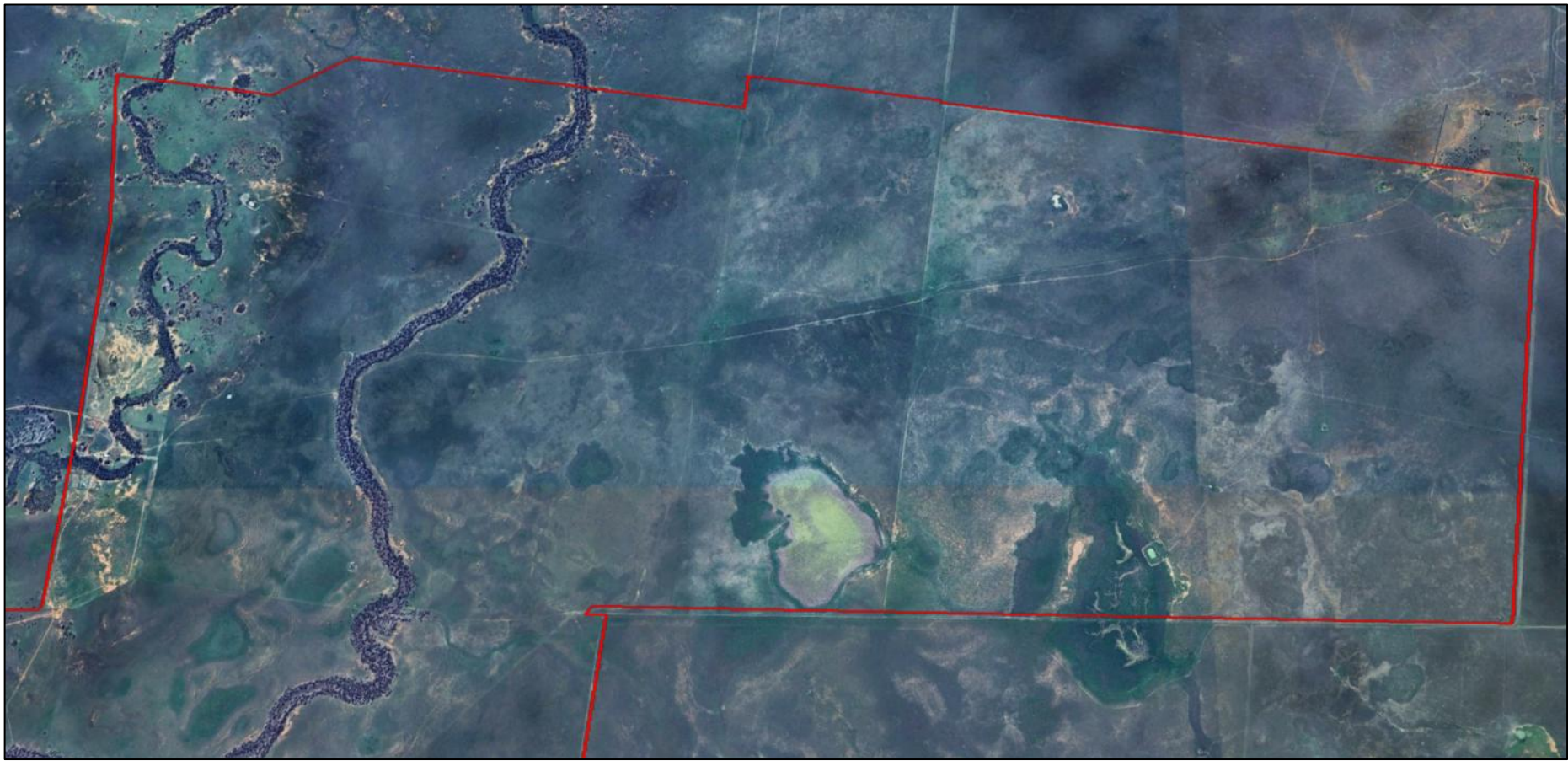


Appendix 3

Historical Aerial Imagery



2023 - 1

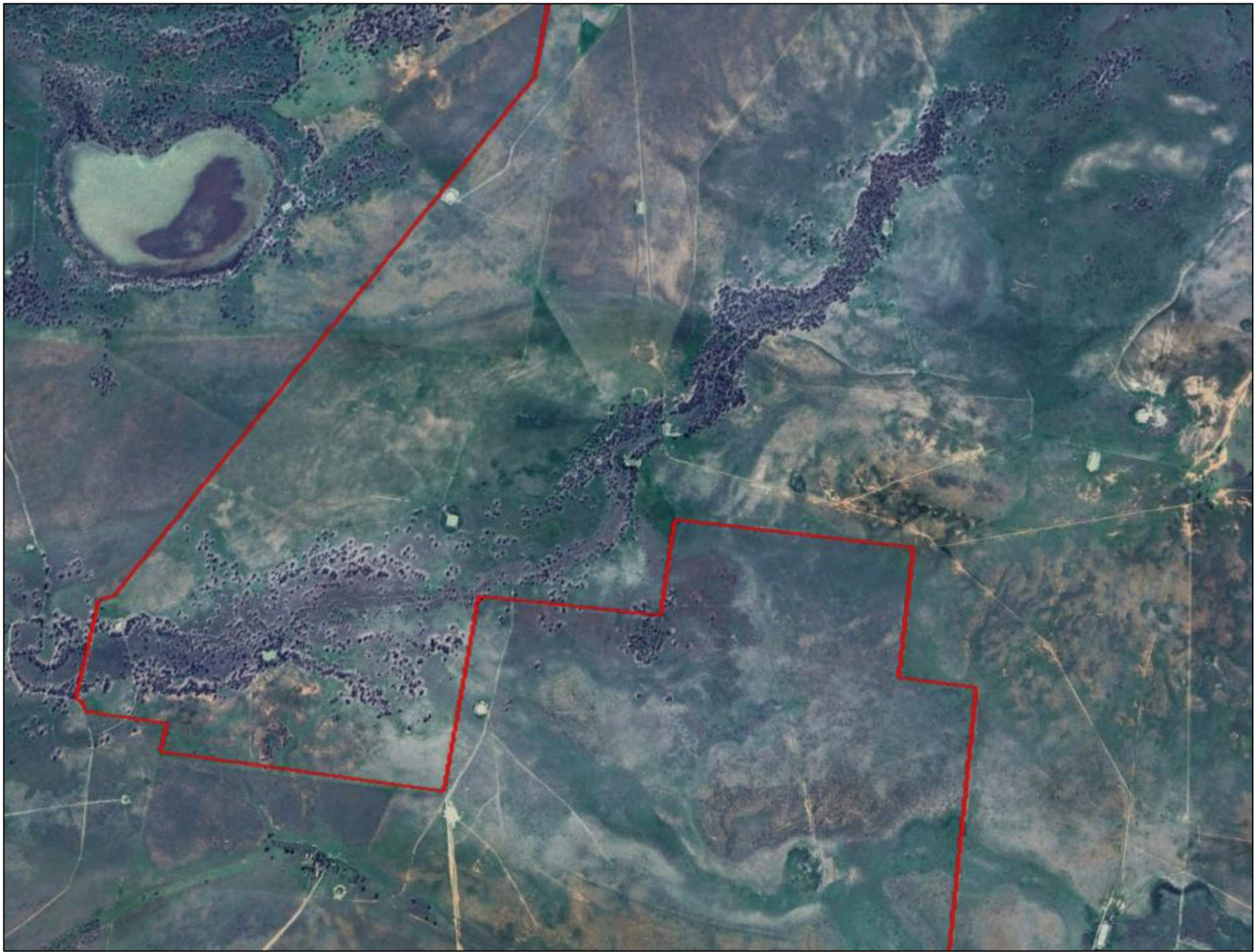


2023 - 2

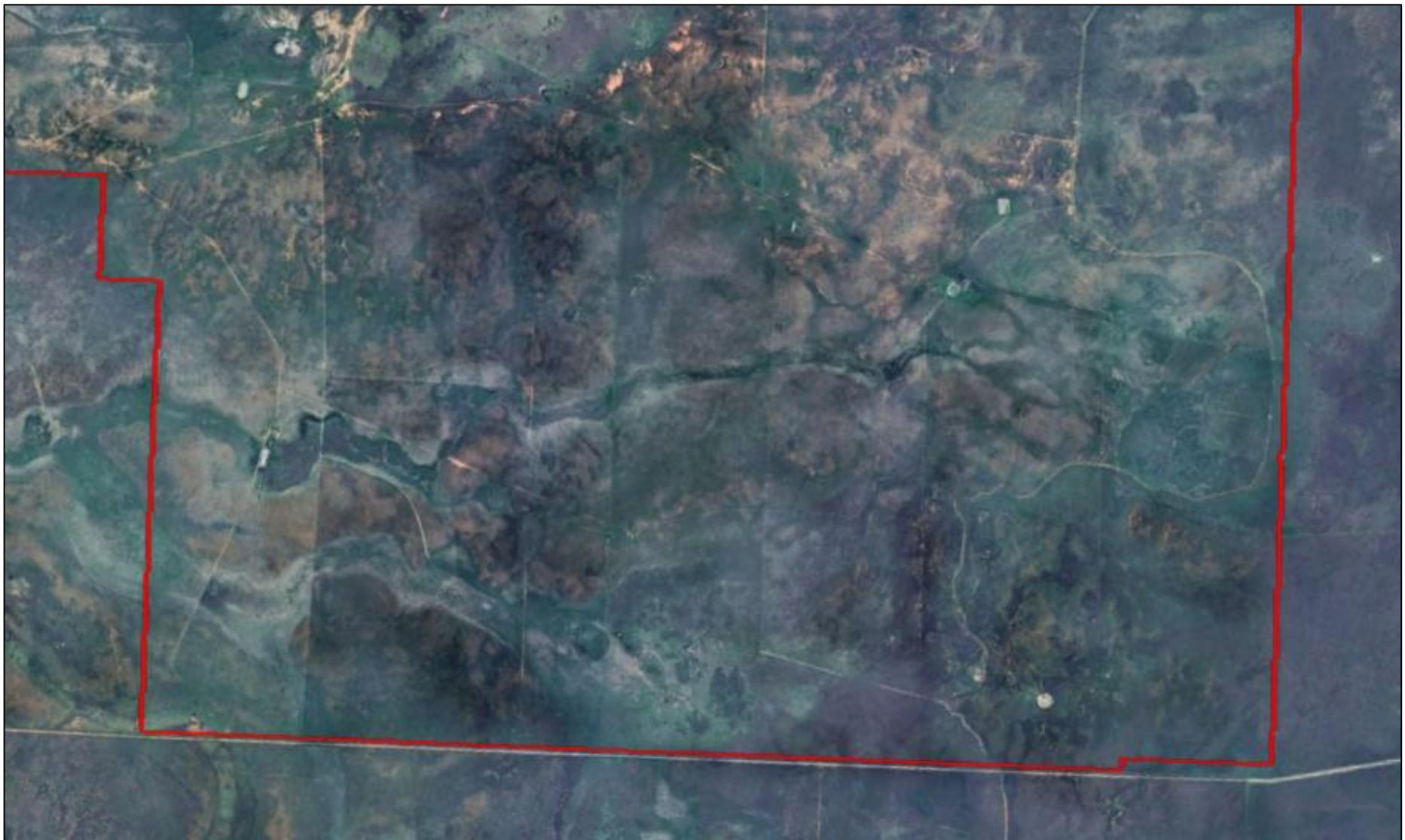




2023 – 5



2023 – 6



2015 - 1



2015 - 2



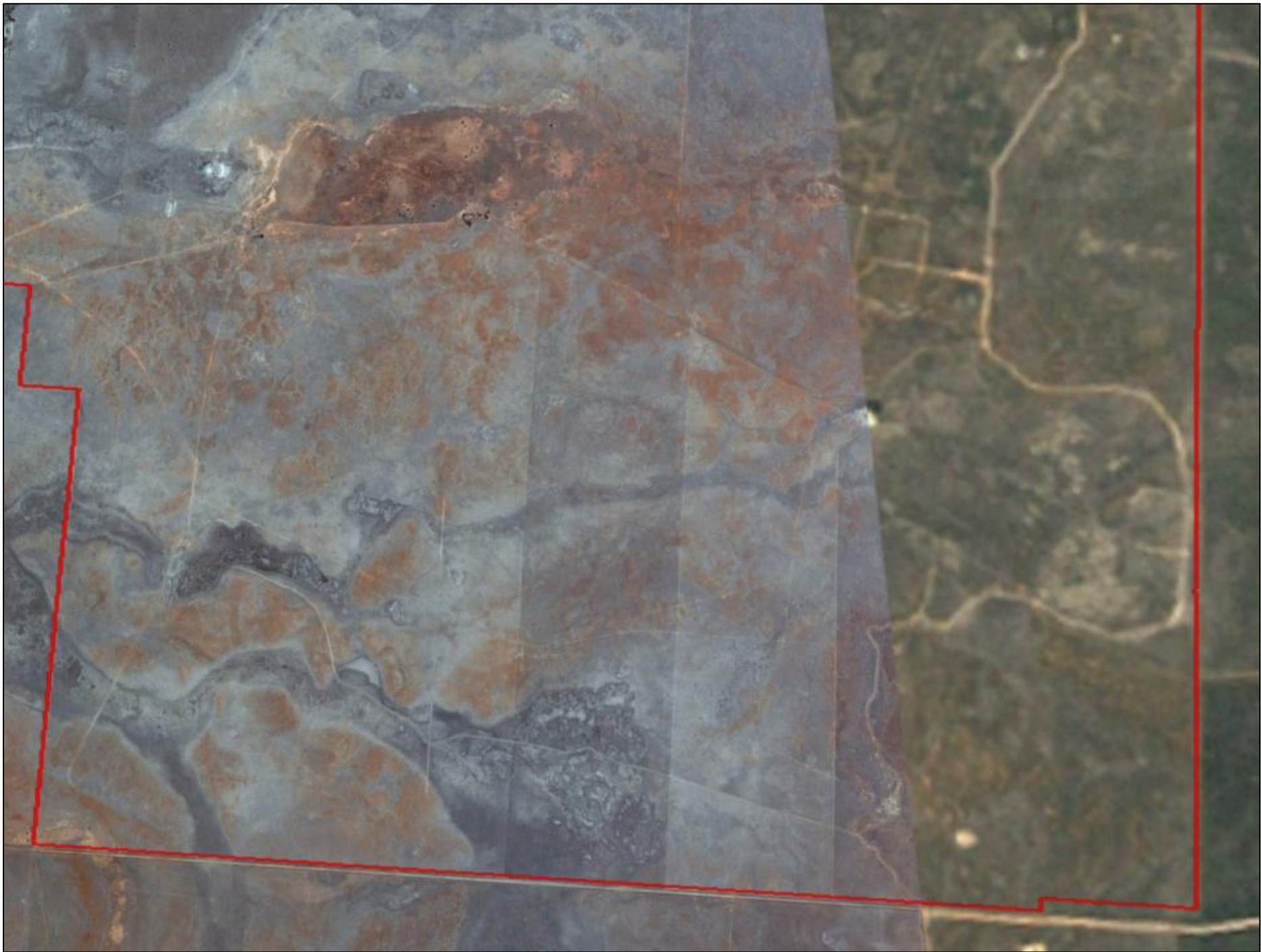
2015 - 3



2015 - 4







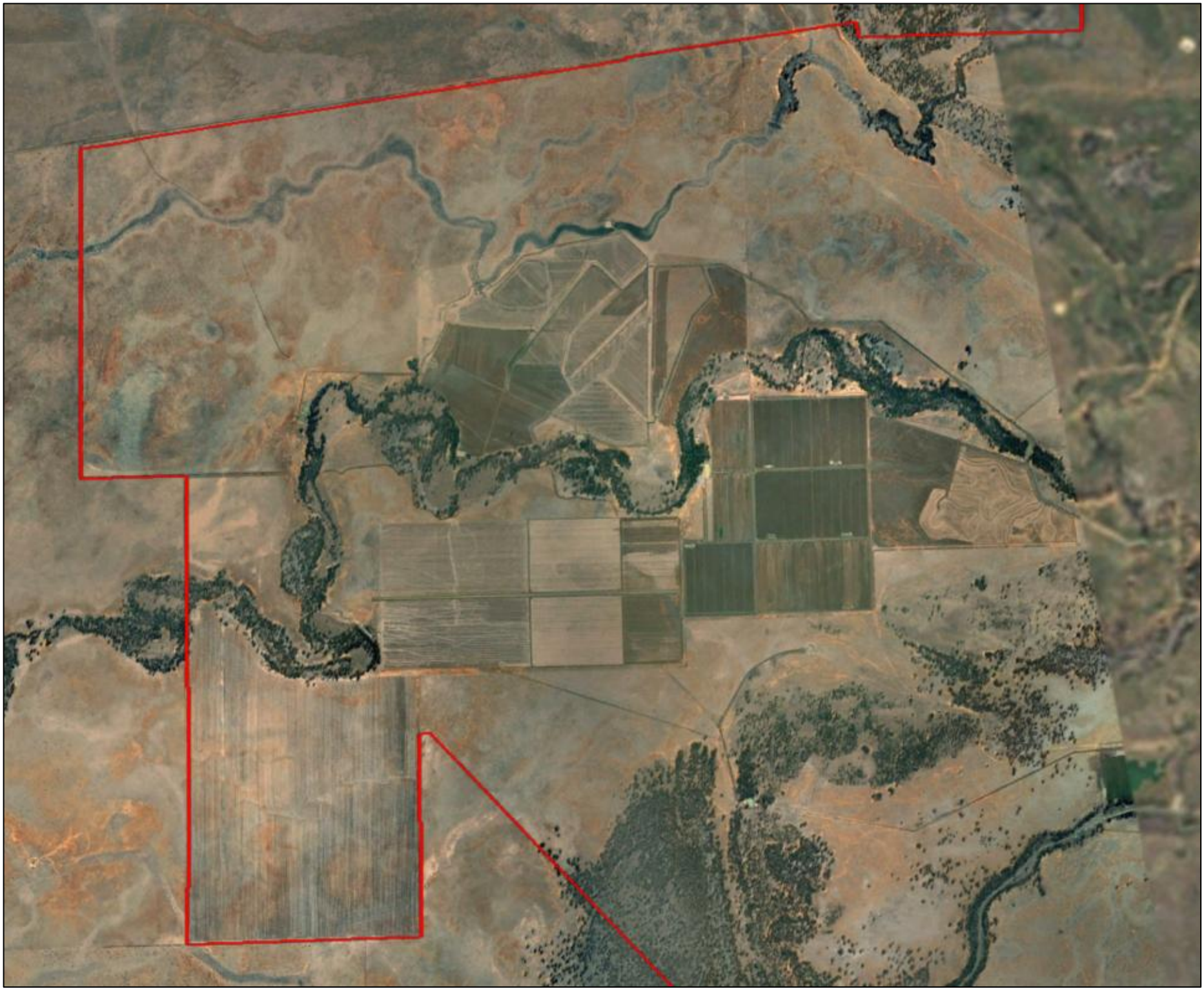
2006 – 1



2006 – 2



2006 - 3



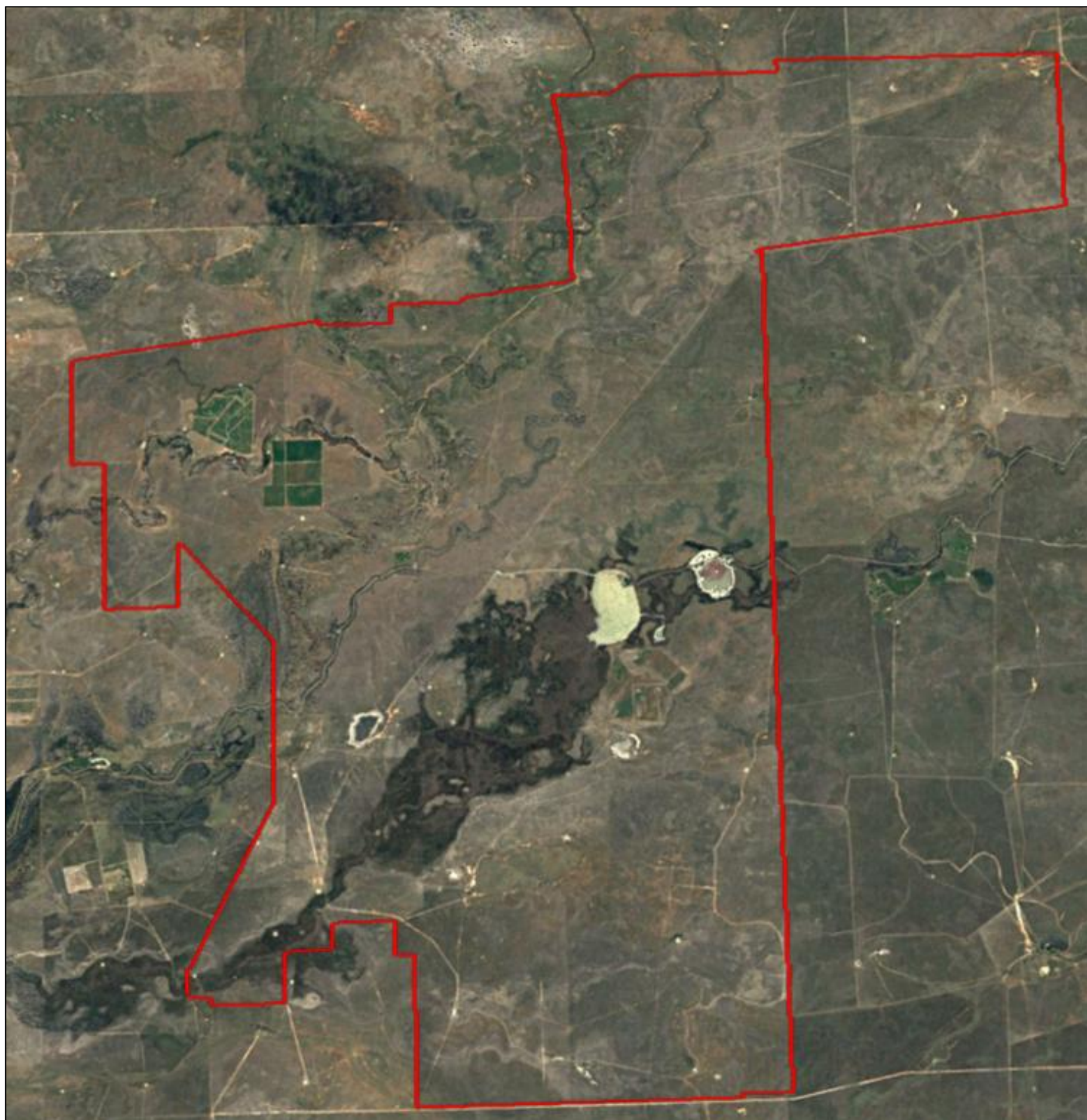
2006 - 4







1985 - 1



1985 - 2



1985 - 3



1985 - 4



1985 - 5





1985 - 7



