Monday, 9 December 2024

Our Ref: P22.100A-LRP-FVSR_0_FINAL-LakeWalyungup

WESTERN ENVIRONMENTAL

(08) 6162 8980
PO Box 437, Leederville, WA 6903
enquiries@westenv.com.au

UGL Engineering Pty Limited
[redacted]
153 Abernethy Road
Belmont WA 6104

ATTENTION: [redacted]

SUBJECT: PTA RADIO SYSTEMS REPLACEMENT (RSR) PROJECT – BIOLOGICAL ASSESSMENT, SITE #51 LAKE WALYUNGUP

Project Background

Western Environmental Pty Ltd (WEPL) was commissioned by UGL Engineering Pty Limited (the Client) to undertake Environmental Site Assessments (ESA) at several sites associated with the Public Transport Authority (PTA) Radio Systems Replacement (RSR) Project.

The RSR Project will upgrade the radio system of Perth's rail transport by replacing the existing analogue system with a digital system. This involves the installation of monopoles and new Western Power (WP) pillars across the rail network. The Project will help to deliver High Capacity Signalling, which will provide increased reliability and flexibility of trains, to support a more efficient rail network for Perth's growing population (Metronet, 2023).

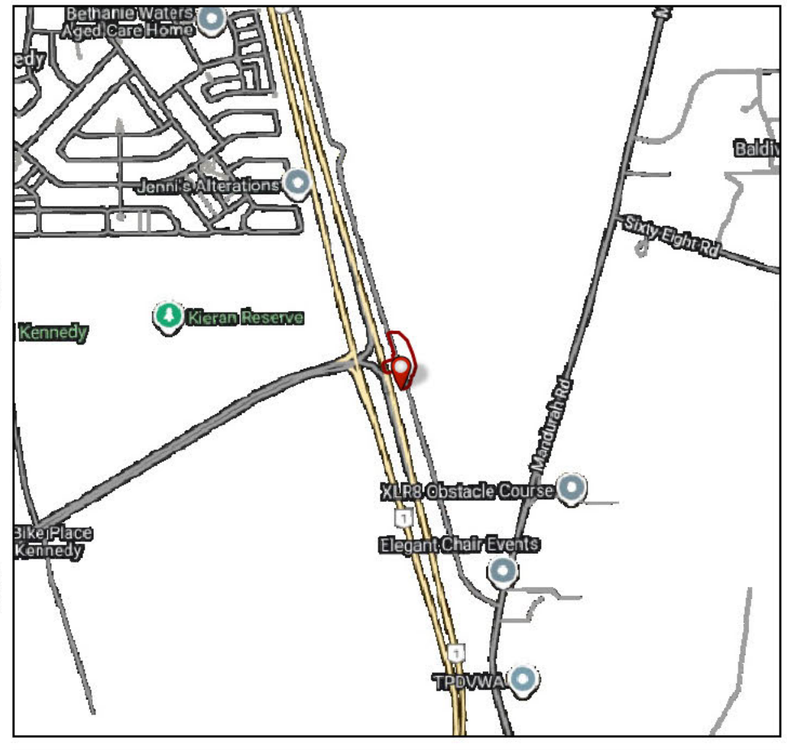
The assessments undertaken included a desktop review of the environmental site conditions and relevant surrounding and historical land uses. Where relevant, site assessments for flora, vegetation and fauna were undertaken to identify present environmental values.

UGL has requested an additional six sites to be surveyed due to design changes and identified Western Power works required within the sites. The purpose of the biological assessment was to identify and qualify the existing vegetation in the areas and determine the project impacts within the proposed clearing footprints.

Based on the survey findings and the site reference designs provided by UGL, site #51 – Lake Walyungup was identified requiring a Native Vegetation Clearing Permit under Part V of the *Environmental Protection Act 1986* (EP Act). Site location and clearing extent are displayed in Figure 1.

Table 1: Site Identification and Land Descriptions

Site Name	Property Details
Site #51 **Lake Walyungup**	Lot 151 P069120 Land ID Number: 3968166 LGA: City of Rockingham Lot 152 P069121 Land ID Number: 3968169 LGA: City of Rockingham Lot 8046 P069121 Land ID Number: 3968173 LGA: City of Rockingham Within survey buffer but outside of clearing footprint: Lot 8045 P069120 Land ID Number: 3968167 LGA: City of Rockingham



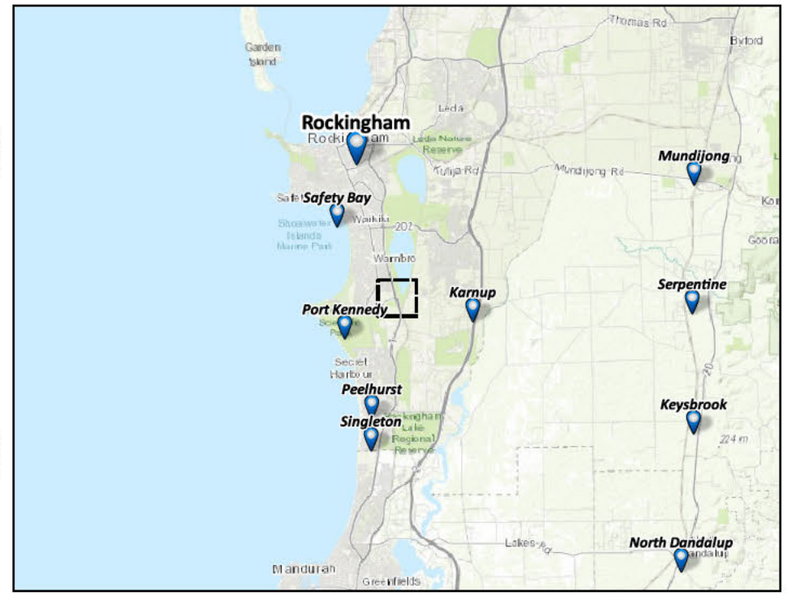


Figure 1: Site Location – Site #51 Lake Walyungup

N

0 15 30 45 60 m

PROJECT/REPORT NAME: Environmental Site Assessment Site #51 Lake Walyungup			
SCALE: 1:1,000	SHEET SIZE: A3 COLOUR	CLIENT: UGL Engineering Pty Limited	
COORDINATE REFERENCE SYSTEM: GDA2020 / MGA zone 50		PROJECT NUMBER: P22.100A	VERSION: 0
DATA SOURCE: LANDGATE AERIAL IMAGERY Summer 2023		DRAWN BY / REVIEWED BY: JP/JB	DATE: 9/12/2024

Legend
- Survey Area
- Clearing Footprint

No	Description	Drawn	Approved	Date
A	Original issue	JP	JB	9/12/2024

NOTES:
Cadastral boundary (LGATE-002). Base map ESRI Topo. Townsites (LGATE-248).

WESTERN ENVIRONMENTAL
Western Environmental Pty Ltd
08 6244 2310 | enquiries@westenv.com.au
Level 3/25 Prowse St, West Perth WA 6005
westenv.com.au

G:\GIS\Project Data\2022\22.100A\P22.100A.qgz

Survey Methodology

A flora and vegetation assessment was undertaken on 18 October 2024. The following elements were assessed:

- Broad description of vegetation types, including broad species composition and weed invasion.
- Vegetation Condition in consistence with the EPA *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessments* (EPA, 2016).
- Opportunistic sampling of flora species where taxa could not be identified on Site.
- Presence of potential black cockatoo habitat values and other significant fauna habitat values.
- Presence of TECs, Threatened and Priority Flora and other Environmentally Sensitive Areas (ESAs).

Results

The results of the assessment are presented in Table 2 and displayed in **Error! Reference source not found.** below.

Table 2: Lake Walyungup – Site Inspection Form

Site Inspection Form					
Date	18 October 2024	**Site Name**	51 – Lake Walyungup, Mandurah		
Coordinates (GDA2020-Z50)	[redacted]			**Portion No.**	5
Environmental Scientist	[redacted]				
Vegetation present	Yes				
Vegetation description	VT01 - Revegetation and Potential Natural Recruitment Species Mix Vegetation appears to be a mixture of landscaping/revegetation and natural regeneration. East of railway: Mid stratum of shrubland 1-2 m including *Acacia rostellifera, Acacia saligna, Melaleuca systena* and *Melaleuca huegelii.* Ground stratum 50-70% weed coverage. West of railway: Mainly weeds, with isolated Acacia and *Jacksonia furcellata*. VT02 – Acacia shrubland *Acacia rostellifera* over weeds (**Euphorbia terracina*, **Lolium perenne*, **Avena barbata*) and isolated *Acathicarpus preissii* 12 individuals of Priority 4 species *Conostylis pauciflora* subsp. *pauciflora* were recorded from one location within the buffer area.				
Vegetation condition	Degraded to Completely Degraded				
Weed percentage cover	25-75%%				
Disturbance	Historic clearing and weeds				
Wetland mapped	No				

Site Inspection Form	
Is vegetation indicative of wetland vegetation?	No
Does the condition align with MU/RE/CCW?	N/A
Black cockatoo foraging habitat	No
Black cockatoo roosting habitat	No
Black cockatoo breeding habitat	No
Fauna evidence	No
Site Photos	See Appendix A

General Comments

Flora and Vegetation

VT01 – Revegetation and Potential Natural Recruitment Species Mix:

The vegetation within the clearing footprint was assessed to likely be a planted mix with a potential for natural recruitment (Figure 2). The vegetation is considered representative of that naturally occurring in adjacent areas outside the railway corridor and therefore considered native under the EP Act.

East of the railway line: native shrubs present, including *Acacia rostellifera, Melaleuca huegelii, Spyridium globulosum, Grevillea preissii, Templetonia retusa, Clematis pubesences* and *Melaleuca systena* over weeds. The vegetation is in Degraded condition.

West of the railway line the vegetation is in Completely Degraded condition and mainly consists of weeds with one small *Acacia* sp. and *Jacksonia furcellata*.

Condition: Degraded to Completely Degraded (Figure 3).

0.049 ha of VT01 is located within the clearing extent.

VT02 – Acacia shrubland:

The vegetation is dominated by *Acacia cochlearis* and *Acacia rostellifera* with some *Hakea prostrata* and *Spyridium globulosum* over *Acanthocarpus preissii, Clematis linearifolia* and *Lomandra maritima* in the understory.

There was a presence of weedy species like **Asphodelus fistulosus* and **Pelargonium capitatum.*

Ground stratum weed coverage was 10%.

12 individuals of Priority 4 species *Conostylis pauciflora* subsp. *pauciflora* were recorded from one location within the buffer area (Figure 2).

A total of five individuals of Bridal creeper (**Asparagus asparagoides*) was recorded at one location during the survey (Figure 2). These were located within in the buffer zone, outside the clearing footprint. Bridal creeper is a Declared Plant (DP) under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) and is considered a Weed of National Significant (WoNS).

Condition: Good

0.019 ha of VT02 is located within the clearing extent.

See Appendix B for species list.

Vegetation and clearing footprint mapping are presented in Error! Reference source not found..

The Site is located within Bush Forever Site No. 356, which is identified as Environmentally Sensitive Area (ESA).

Figure 2: Biological Assessment – Site #51 Lake Walyungup

N 0 7 14 21 28 m	PROJECT/REPORT NAME: Environmental Site Assessment Site #51 Lake Walyungup		
SCALE: 1:780	SHEET SIZE: A3 COLOUR	CLIENT: UGL Engineering Pty Limited	
COORDINATE REFERENCE SYSTEM: GDA2020 / MGA zone 50		PROJECT NUMBER: P22.100A	VERSION: 0
DATA SOURCE: LANDGATE AERIAL IMAGERY Summer 2023		DRAWN BY / REVIEWED BY: JP/JB	DATE: 5/12/2024

Legend

- Survey Area
- FloraObs
- Bridal creeper (*Asparagus asparagoides) – Declared Pest and Weed of National Significance

Vegetation Type

- Cleared
- VT01 - Revegetation and Potential Natural Recruitment Species Mix - Regrowth since 2008
- VT02 - Acacia shrubland

No	Description	Drawn	Approved	Date
A	Original issue	JP	JB	5/12/2024

NOTES:

Cadastral boundary (LGATE-002). Label corresponds to the vegetation association number.

WESTERN ENVIRONMENTAL

Western Environmental Pty Ltd
08 6244 2310 | enquiries@westenv.com.au
Level 3/25 Prowse St, West Perth WA 6005
westenv.com.au

G:\GIS\Project Data\2022\22.100A\P22.100A.qgz

Figure 3: Vegetation Condition – Site #51 Lake Walyungup

N

0 7 14 21 28 m

PROJECT/REPORT NAME	Environmental Site Assessment Site #51 Lake Walyungup
SCALE	1:780
SHEET SIZE	A3 COLOUR
CLIENT	UGL Engineering Pty Limited
COORDINATE REFERENCE SYSTEM	GDA2020 / MGA zone 50
PROJECT NUMBER	P22.100A
VERSION	0
DATA SOURCE	LANDGATE AERIAL IMAGERY Summer 2023
DRAWN BY / REVIEWED BY	JP/JB
DATE	5/12/2024

Legend

Survey Area

Vegetation Condition

- Good
- Degraded
- Completely Degraded

No	Description	Drawn	Approved	Date
A	Original issue	JP	JB	5/12/2024

NOTES:

Cadastral boundary (LGATE-002). Label corresponds to the vegetation association number.

WESTERN ENVIRONMENTAL

Western Environmental Pty Ltd
08 6244 2310 | enquiries@westenv.com.au
Level 3/25 Prowse St, West Perth WA 6005
westenv.com.au

G:\GIS\Project Data\2022\22.100A\P22.100A.qgz

Summary of Residual Clearing Impact and Significance Assessment

A summary of the clearing necessitated by the Project is presented in Table 3. The impact significance was assessed to comply with the EPBC Act *Significant impact guidelines 1.1 – Matters of National Environmental Significance* (DoE, 2013).

Table 3: Clearing Impact for Lake Walyungup

Site	Impacted Vegetation - Description	Clearing Impact (ha)	Significance Assessment under the EPBC Act
Site #51 **Lake Walyungup**	• The project necessitates clearing of 0.068 ha of native vegetation under the EP Act. • Remnant native vegetation within the clearing extent is in Good to Completely Degraded condition, with o Good - 0.019 ha. o Degraded – 0.040 ha o Completely Degraded – 0.009 ha. • No TECs, Threatened or Priority Flora will be impacted. • The vegetation has no habitat value for Threatened Black cockatoo species. • The Site is located within the mapped Bush Forever Site No. 356, which represents an Environmentally Sensitive Area (ESA).	0.068 ha	Not significant

Conclusions

Based on review of publicly available data and biological assessment of the Site, the following key findings have been identified:

- The following two vegetation types have been identified within the survey buffer area:
    - VT01: Revegetation and potentially natural recruitment species mix of native shrubs (*Acacia* spp., *Melaleuca* spp.) over weedy understory. The vegetation is in Degraded to Completely Degraded condition. This vegetation type is located within the railway corridor and impacted by the project works. The project necessities the clearing of 0.049 ha of VT01.
    - VT02: Acacia shrubland over native shrubs and herbs with 10% weeds in the understory. The vegetation is in Good condition. The project necessities the clearing of 0.019 ha of VT02.
- A total of five individuals of Bridal creeper (DP, WoNS) were recorded within the buffer area, outside the clearing extent.

- Twelve individuals of Priority 4 species *Conostylis pauciflora* subsp. *pauciflora* have been recorded at one location within the buffer area, outside the clearing extent.

- The Site is located within Bush Forever Site No. 356 and mapped as ESA.

Based on the findings of the flora and vegetation assessment Site #51 – Lake Walyungup, the Project necessitates clearing of 0.068 ha of native vegetation within a mapped ESA. A Native Vegetation Clearing Permit will be required.

This report should be read in conjunction with the Schedule - Statement of Limitations. Should you have any queries regarding the above, please contact the undersigned on (08) 6162 8980.

Yours sincerely,
Western Environmental Approvals Pty Ltd

[redacted]

[redacted]
Director

Schedule

- Statement of Limitation

Appendices

- Appendix A: Site Photos
- Appendix B: Species List

SCHEDULE Statement of Limitation

Statement of Limitations

Copyright Statement

Scope of Services

This environmental report ("this report") has been prepared for the sole benefit and exclusive use of the Client for the purpose for which it was prepared in accordance with the agreement between the Client and WEPL ("the Agreement"). However, in addressing the requirements of the Contaminated Sites Act 2003, an Accredited Contaminated Sites Auditor may be engaged by the Client to undertake review of this report, prior to its submission to the DWER. The report shall be made available and can be relied upon for the purposes of the Contaminated Sites Act.

WEPL disclaims any and all liability with respect to any use of or reliance upon this report for any other purpose whatsoever.

In particular, it should be noted that this report is based on a scope of services defined by the Client, and is limited by budgetary and time constraints, the information supplied by the Client (and its agents) and, in some circumstances, access and/or site disturbance constraints.

The scope of services did not include any assessment of the title to or ownership of the properties, buildings and structures referred to in this report, or the application or interpretation of laws in the jurisdiction in which those properties, buildings and structures are located.

Reliance on Data

In preparing this report, WEPL has relied on data, surveys, analyses, designs, plans and other information provided by the Client (or its agents), other individuals and organisations ("the data").

Except as otherwise stated in this report, WEPL has not verified the accuracy or completeness of the data. WEPL does not represent or warrant that the data is true or accurate, and disclaims any and all responsibility or liability with respect to the use of the data.

To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in this report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data.

WEPL does not accept any responsibility or liability for any incorrect or inaccurate conclusions should any data be incorrect, inaccurate or incomplete or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WEPL.

The conclusions must also be considered in light of the agreed scope of services (including any constraints or limitation therein) and the methods used to carry out those services, both of which are as stated or referred to in this report.

Environmental Conclusions

In accordance with the scope of services, WEPL has conducted environmental field monitoring and/or testing in the preparation of this report. The nature and extent of monitoring and/or testing conducted is described in this report.

On all sites, varying degrees of non-uniformity of vertical and horizontal conditions in media (soil, water, air, waste or other media as described in the report) are encountered. Hence no monitoring, common testing or sampling technique can eliminate the possibility that monitoring or testing results/samples are not totally representative of media conditions encountered. The conclusions are based on the data and the environmental field monitoring and/or testing actually undertaken, and are therefore merely indicative of the environmental condition of the site at the time of preparing this report, including the presence or otherwise of contaminants or emissions. It should be recognised that site conditions, including the extent and concentration of contaminants, can change.

Within the limitations imposed by the scope of services, the monitoring, testing, sampling and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. To the maximum extent permitted by law, no other warranty, express or implied, is made.

Report for Benefit of Client

This report is confidential. Neither the whole nor any part of this report, or any copy or extract thereof, may be disclosed or otherwise made available to any third party without the prior written approval of WEPL.

WEPL accepts no liability or responsibility whatsoever in respect of any use of or reliance upon this report, by any person or organisation who is not a party to the Agreement. Reliance on this report by any person who is not a party to the Agreement is expressly prohibited. Any representation in this report is made only to the parties to the Agreement.

WEPL assumes no responsibility and disclaims any and all liability to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in this report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in this report (including without limitation matters arising from any negligent act or omission of WEPL or for any loss or damage suffered by any other party using or relying on the matters dealt with or conclusions expressed in this report, even if WEPL has been advised of the possibility of such use or reliance).

Other parties should not rely on this report or the accuracy or completeness of any conclusions contained in this report, and should make their own enquiries and obtain independent advice in relation to such matters.

If an Auditor is engaged by the Client to undertake review of this report, it shall be made available subject to the terms and conditions of the agreement between the Client and WEPL and the caveats in this statement.

Other Limitations

This report is intended to be read in its entirety, and sections or parts of this report should therefore not be read and relied on out of context.

WEPL will not be liable to update or revise this report to take into account any events or circumstances or facts becoming apparent after the date of this report.

References

Department of the Environment (DoE). (2013). *Significant impact guidelines 1.1 – Matters of National Environmental Significance.* Accessed on 1 November from https://www.dcceew.gov.au/sites/default/files/documents/nes-guidelines_1.pdf

Metronet. (2023). *High Capacity Signalling: Radio Systems Replacement Fact Sheet*. Retrieved on 1 November 2023 from https://metronet.wa.gov.au/Portals/31/Project%20Documents/High%20Capacity%20Signalling/Radio%20Systems%20Replacement%20Fact%20Sheet.pdf.

Appendix A

Site Photos

Photo 1		Date: 18 October 2024

Description: Vegetation within VT01, west of the railway, Completely Degraded

Photo 2		Date: 18 October 2024

Description: Vegetation within VT01, east of the railway, Degraded

Photo 3		Date: 18 October 2024

Description: Vegetation within VT02, Acacia shrubland, Degraded

Photo 4		Date: 18 October 2024

Description: Vegetation within VT02, Acacia shrubland, Degraded

Appendix B

Species List

Species	Stratum
Melaleuca systena	Mid
Melaleuca huegelii	Mid
Clematis pubescens	Mid
Acacia saligna	Mid
Acacia rostellifera	Mid
Grevillea preissii	Mid
Templetonia retusa	Mid
Crassula glomerata	Ground
Spyridium globulosum	Ground
**Avena barbata*	Ground
**Fumaria capreolata*	Ground
**Bromus diandrus*	Ground
**Ehrarta longiflora*	Ground
**Sonchus oleraceus*	Ground
**Asparagus asparagoides* (DP, WoNS)	Ground