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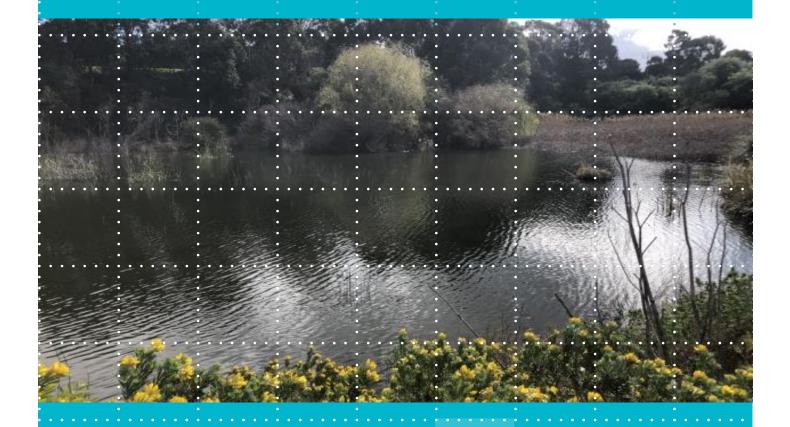
Final Report

Targeted Surveys for Growling Grass Frog: 1221-1249
Centre Road, Oakleigh South, Victoria

Prepared for

Sterling Global

February 2022



Ecology and Heritage Partners Pty Ltd



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Project number	15704						
Project manager	Matthew Jones (Zoologist)						
Report reviewer	Aaron Organ (Director/ Principal Ecologist)						
Other EHP staff	Sara Petrovic (Field Ecologist), Linda Parker (Consultant Ecologist)						
Mapping	Petra Sorensen (GIS Officer)						
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GLOSSARY

Acronym	Description					
CaLP	Catchment and Land Protection Act 1994					
CMA	Catchment Management Authority					
DAWE	Federal Department of Agriculture, Water and the Environment (former Department of Environment and Energy					
DELWP	Victorian Department of Environment, Land, Water and Planning					
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999					
FFG Act	Flora and Fauna Guarantee Act 1988					
NES	National Environmental Significance					
PMST	Protected Matters Search Tool					
VBA	Victorian Biodiversity Atlas					



SUMMARY

Introduction

Ecology and Heritage Partners Pty Ltd was engaged by Sterling Global to undertake Targeted Surveys for Growling Grass Frog at 1221-1249 Centre Road, Oakleigh South, Victoria. The surveys were required to determine the presence or absence of Growling Grass Frog within the study area and address any implications under Commonwealth and State environmental legislation.

Methods

Targeted surveys for the nationally significant Growling Grass Frog, were conducted by qualified zoologists during November and December 2021. Surveys were conducted in accordance with approved methodology identified within the *Significant Impact Guidelines for the Vulnerable Growling Grass Frog* (DSEWPaC 2009) and Biodiversity Precinct Structure Planning Kit (DSE 2010), with surveys focusing on suitable habitat identified within the study area during the Flora and Fauna Assessment (Ecology and Heritage Partners 2021).

Results

Despite targeted surveys being undertaken at an appropriate time of year and during weather conditions conducive for frog activity, Growling Grass Frog was not detected within the study area. During the surveys, locally common frog species were recorded in the study area including Common Eastern Froglet, Crinia signifera, Eastern Sign-bearing Froglet Crinia parasignifera, Spotted Marsh Frog Limnodynastes tasmaniensis, Striped Marsh Limnodynastes peronii and Southern Brown Tree Frog Litoria peronii (Appendix 1). Consequently, the Growling Grass Frog is not likely to use habitat within the study area for breeding and dispersal based on habitat present within the study area, landscape context, and the proximity of previous records.

Legislative and Policy Implications

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act - Federal)

The proposed action is unlikely to have a significant impact on any matter of NES. As such, a referral to the Commonwealth Environment Minister is unlikely to be required regarding matters listed under the EPBC Act.

Flora and Fauna Guarantee Act 1988 (FFG Act - Victoria)

There is suitable habitat within the study area for several species listed or protected under the FFG Act; however, the study area is privately owned, as such a permit under the FFG Act is not required.



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1 INTRODUCTION

1.1 Background

Ecology and Heritage Partners Pty Ltd was engaged by Sterling Global to undertake Targeted Surveys for Growling Grass Frog at 1221-1249 Centre Road, Oakleigh South, Victoria. Targeted surveys for Growling Grass Frog were previously completed following the recommendations of the initial Ecological Assessment of the study area (Ecology and Heritage Partners 2014a; 2014b). However, due to the time elapsed since the initial assessments, well as changes in legislation and the native vegetation assessment methodology, updated field assessments were required as part for the Planning Scheme Amendment application. The recent assessment identified suitable habitat for Growling Grass Frog within the study area (Ecology and Heritage Partners 2021). Targeted surveys were recommended to confirm previous findings at the site (Ecology and Heritage Partners 2014b), including presence or absence of the species, and where possible to ascertain its distribution and abundance and the extent of the species habitat within the study area.

The following addresses any implications under Commonwealth and State environmental legislation and provides information on mitigation measures associated with the proposed development, should Growling Grass Frog be identified within the study area.

1.2 Objectives

The objectives of the targeted surveys were to:

- Determine the presence/absence of Growling Grass Frog recorded or considered likely to occur within the study area;
- Provide information in relation to any implications of Commonwealth and State environmental legislation and Government policy associated with the proposed development;
- Determine any potential impacts on Growling Grass Frog, and their habitats at a National and State level associated with the proposed development; and,
- Provide advice on mitigation measures that may be undertaken to avoid and/or mitigate potential adverse impacts on significant ecological values.

1.3 Study Area

The study area is located at 1221-1249 Centre Road, Oakleigh South, approximately 17.5 kilometres southeast of Melbourne's CBD (Figure 1). The site covers approximately 18.8 hectares and is bound by a Council park and residential dwellings to the north, residential dwellings to the east, a Council park and residential units blocks to the south and Huntingdale Road to the west

The study area was previously a quarry but is now vacant and not used for any purpose. The water-filled, former quarry void and associated flat area next to it are located in the south-western section of the study area, which is surrounded by moderate to steep slopes. This area sits approximately 15 metres below the natural ground level. The perimeter of the remaining study area land (approximately 10-20 metres wide) is at





natural ground level, with the remaining internal area generally at a higher elevation by between approximately three and 10 metres through the stockpiling of soil within this area.

According to the Department of Environment, Land, Water and Planning (DELWP) NatureKit (DELWP 2021a), the study area occurs within the Gippsland Plain Bioregion. It is located within the jurisdiction of the Port Phillip and Westernport Catchment Management Authority (CMA) and the Monash City Council municipality.



1.4 Targeted Fauna Species

1.4.1 Growling Grass Frog (Litoria raniformis)

EPBC Act Conservation Status: Vulnerable

FFG Act Conservation Status: Listed

Victorian Advisory List: Endangered

Although formerly widely distributed across southern eastern Australia, including Tasmania (Littlejohn 1963, 1982; Hero et al. 1991), the Growling Grass Frog has declined markedly over the past two decades and in many areas, particularly in south and central Victoria where some populations have experienced local extinction.

Growling Grass Frog are largely associated with permanent or semi-permanent still or slow flowing waterbodies (i.e. streams, lagoons, farm dams and old quarry sites) (Hero et al. 1991; Barker et al. 1995; Cogger 1996; Ashworth 1998). The species can also utilise temporarily inundated waterbodies during breeding season, to facilitate reproduction (Organ 2003). The presence of key habitat attributes, primarily an extensive cover of emergent, submerged and floating vegetation



Plate 1. Growling Grass Frog (Litoria raniformis) Ecology and Heritage Partners Pty Ltd.

(Robertson et al. 2002, Organ 2004, 2005), and the spatial orientation of waterbodies (Robertson et al. 2002; Heard et al. 2004; Hamer and Organ 2008) are strong determinants of the species' presence. Terrestrial vegetation (grasses, sedges), rocks and other ground debris around wetland perimeters also provide important foraging, dispersal and over-wintering sites. Dispersal is thought to occur primarily along drainage lines or other low-lying areas between waterbodies, and unhindered movement between and within waterbodies is considered important for population viability.

The former quarry void which is currently filled in with water provides potentially suitable habitat for Growling Grass Frog.



2 METHODS

2.1 Desktop Assessment

Relevant literature, online-resources and numerous databases were reviewed to provide an assessment of flora and fauna values associated with the study area. The following information sources were reviewed:

- The Victorian Biodiversity Atlas (VBA) for previously documented flora and fauna records within the project locality (DELWP 2021a);
- The Commonwealth Department of Agriculture, Water and the Environment (DAWE) Protected Matters Search Tool (PMST) for matters of National Environmental Significance (NES) protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (DAWE 2021);
- Relevant listings under the Victorian Flora and Fauna Guarantee Act 1988 (FFG Act);
- Relevant environmental legislation and policies pertaining to target species including: EPBC Act Policy Statements; FFG Act Action Statements, National Recovery Plans;
- Relevant biological and ecological literature pertaining to the target species.
- Previous ecological assessments within the study area, including:
 - o Flora and Fauna Assessment at 1221-1249 Centre Road, Oakleigh South, Victora (Ecology and Heritage Partners 2021).
 - o Ecological Assessment at 1221-1249 Centre Road, Oakleigh South, Victoria (Ecology and Heritage Partners 2014)
 - o Targeted Growling Grass Frog *Litoria raniformis* surveys at 1221-1249 Centre Road, Oakleigh South, Victoria (Ecology and Heritage Partners 2014).
- Aerial photography of the study area.

2.2 Fauna Assessment

2.2.1 Growling Grass Frog

Nocturnal Growling Grass Frog surveys were undertaken at the water-filled former quarry void within the study area. Growling Grass Frog Surveys were undertaken in accordance with the methods outlined in the *Significant Impact Guidelines for the Vulnerable Growling Grass Frog* (DSEWPaC 2009). The targeted surveys were completed on 23 November and 6 December 2021 and were completed as follows:

- Survey sites within 30 meters of the primary water body were chosen based on the presence of supporting suitable habitat for Growling Grass Frog (i.e. moderate to good water quality, moderate to good percentage cover of fringing, emergent and floating vegetation, presence of other refuge).
- The survey site was visited on two occasions (23 November and 6 December 2021) during weather conditions considered suitable for Growling Grass Frog activity (warm, daytime temperature over 20 degrees, relatively still and clear).



- Two qualified zoologists, experienced in Growling Grass Frog detection, systematically walked around the waterbody.
- Zoologists searched fringing, emergent and floating vegetation within and adjacent to the watercourse/waterbody with 50W 12V hand-held spotlights and used call-playback to initiate a response from any males that may have been present.
- All frog species heard or seen were recorded and several site-specific habitat variables were documented including a visual assessment of water quality, flow and depth, and records of fringing, emergent, floating and submerged vegetation cover. The presence of fish (specifically Mosquito Fish *Gambusia holbrooki*) was also recorded.

2.3 Assessment Qualifications and Limitations

Flora and fauna data collected during the field assessment, and information obtained from relevant sources (e.g. biological databases and relevant literature) are considered adequate to provide an accurate assessment of the ecological values within the study area. Fauna surveys were conducted under the Ecology and Heritage Partners Pty Ltd research permit (#10009538) issued by DELWP under the *Wildlife Act 1975*.

Access on foot to fringing vegetation during targeted surveys was limited due to the steep banks and loose ground present at the site. Active searching for frogs with a spotlight was limited by this access. Where possible spotlighting was undertaken, otherwise these survey have relied predominantly on a listening and call playback method.



3 RESULTS

Despite targeted surveys being undertaken at an appropriate time of year and during weather conditions conducive for frog activity, Growling Grass Frog was not detected within the study area. During the surveys, locally common frog species were recorded in the study area including Common Eastern Froglet, Crinia signifera, Eastern Sign-bearing Froglet Crinia parasignifera, Spotted Marsh Frog Limnodynastes tasmaniensis, Striped Marsh Limnodynastes peronii and Southern Brown Tree Frog Litoria peronii (Appendix 1). Consequently, the Growling Grass Frog is not likely to use habitat within the study area for breeding and dispersal based on habitat present within the study area, landscape context, and the proximity of previous records.

3.1 Habitat Assessment

Potential habitat for Growling Grass Frog within the species was identified during the Biodiversity Assessment (Ecology and Heritage Partners 2021). The waterbodies present within the study area are former quarry void that have since filled with water and have steep slopes on all sides. During the habitat assessment for Growling Grass Frog water appeared to be shallow (approximately 1-2 metres across most of the waterbodies) and containing emergent vegetation in the centre of all three ponds. Mosquito fish *Gambusia holbrooki* were not detected during the surveys however access to the water's edge was limited given the steep edges and loose ground.



4 IMPACTS AND MITIGATION MEASURES

4.1 Known Impacts

The proposed development will result in the conversion of the former quarry area into a series of wetlands which will provide habitat for waterbirds, frogs, and other dependent species. This will require the direct disturbance of current values within the study area.

No other matters of National Environmental Significance (NES) are present within the study area and therefore will not be impacted by the proposed development.

4.2 Potential Impacts

The proposed action is likely to directly impact on several indigenous flora and fauna species, and communities recorded within the study area. These impacts may include:

- Potential for further habitat fragmentation in a fragmented landscape and the associated creation of barriers to the movement and migration of locally common species;
- Potential disturbance associated with increased human activity and noise during construction.
- Potential indirect impacts on adjacent areas outside of the limit of construction if activities and drainage are not appropriately managed;
- The potential for injury and/or mortality from construction activities;
- Loss of Swampy Woodland (EVC 937) and Heathy Woodland (EVC 48) vegetation communities;
- Potential for the spread of weeds and soil pathogens due to on-site activities;

4.3 Mitigation Measures

Any loss of ecological values should be viewed in the overall context of on-going loss, fragmentation, and deterioration in the quality of remnant vegetation throughout the greater Gippsland Plain bioregion.

General recommended measures to minimise impacts upon terrestrial and aquatic values present within the study area were identified within the Biodiversity Assessment report (Ecology and Heritage Partners 2021).



5 LEGISLATIVE AND POLICY IMPLICATIONS

This section identifies biodiversity policy and legislation relevant to the proposed development.

5.1 Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)

The EPBC Act establishes a Commonwealth process for the assessment of proposed actions (i.e. project, development, undertaking, activity, or series of activities) that are likely to have a significant impact on matters of national environmental significance (NES), or on Commonwealth land.

For species listed under the EPBC Act, a 'significant impact' is defined as an impact which is important, notable, or of consequence, having regard to its context or intensity (DoE 2013). Whether an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is affected, and upon the intensity, duration, magnitude and geographic extent of the impacts. Importantly, for a 'significant impact' to be 'likely', it is not necessary for a significant impact to have a greater than 50% chance of happening; it is sufficient if a significant impact on the environment is a real or not remote chance or possibility (DoE 2013).

The proposed action is unlikely to have a significant impact on any matter of NES. As such, a referral to the Commonwealth Environment Minister is unlikely to be required regarding matters listed under the EPBC Act.

5.1.1 Growling Grass Frog

Despite systematic surveys within the study area during suitable survey conditions and at a time when Growling Grass Frog are known to be calling in Melbourne, no individuals were detected within the study area. Based on the significant impact guidelines for the species (DEWHA 2009a), the proposed action will not constitute a significant impact to the species.

5.2 Flora and Fauna Guarantee Act 1988 (Victoria)

The FFG Act is the primary legislation dealing with biodiversity conservation and sustainable use of native flora and fauna in Victoria. Proponents are required to apply for an FFG Act Permit to 'take' listed and/or protected flora species, listed vegetation communities and listed fish species in areas of public land (i.e. within road reserves, drainage lines and public reserves). An FFG Act permit is generally not required for removal of species or communities on private land, or for the removal of habitat for a listed terrestrial fauna species.

There is suitable habitat within the study area for several species listed or protected under the FFG Act. However the study area is privately owned, as such a permit under the FFG Act is not required.

¹ In addition to 'listed' flora species, the FFG Act identifies 'protected' flora species. This includes any of the Asteraceae (Daisies), all orchids, ferns (excluding Pteridium esculentum) and Acacia species (excluding Acacia dealbata, Acacia decurrens, Acacia implexa, Acacia melanoxylon and Acacia paradoxa), as well as any taxa that may be a component of a listed ecological community. A species may be both listed and protected.



5.3 Wildlife Act 1975 and Wildlife Regulations 2002 (Victoria)

The Wildlife Act 1975 (and associated Wildlife Regulations 2002) is the primary legislation in Victoria providing for protection and management of wildlife. Authorisation for habitat removal may be obtained under the Wildlife Act 1975 through a licence granted under the Forests Act 1958, or under any other Act such as the Planning and Environment Act 1987. Any persons engaged to remove, salvage, hold or relocate native fauna during construction must hold a current Management Authorisation under the Wildlife Act 1975.

5.4 Other Legislation

Implications relating to other relevant legislation and policy were identified within the Flora and Fauna Assessment report (Ecology and Heritage Partners 2021) and include:

- Planning and Environment Act 1987
- Catchment and Land Protection Act 1994
- Wildlife Act 1975



6 FURTHER REQUIREMENTS

Further requirements associated with development of the study area, including relevant legislation and policy identified within the Flora and Fauna Assessment report (Ecology and Heritage Partners 2021), are provided in Table 2, below.

Table 2. Further requirements associated with development of the study area

Relevant Legislation	Implications	Further Action		
Environment Protection and Biodiversity Conservation Act 1999	The proposed action is unlikely to have a significant impact on any matter of NES. As such, a referral to the Commonwealth Environment Minister is unlikely to be required regarding matters listed under the EPBC Act.	No further action required.		
Flora and Fauna Guarantee Act 1988	There is suitable habitat within the study area for several species listed or protected under the FFG Act. However the study area is privately owned, as such a permit under the FFG Act is not required.	No further action required.		
Planning and Environment Act 1987	A Planning Permit from Monash City Council is required to remove, destroy or lop any native vegetation. In this instance, the application would not be referred to DELWP as less than 0.5 hectares of vegetation is proposed for removal.	Prepare and submit a Planning Permit Application.		
Catchment and Land Protection Act 1994	Several weed species listed under the CaLP Act were recorded within the study area. To meet requirements under the CaLP Act, listed noxious weeds should be appropriately controlled throughout the study area.	Listed noxious weeds should be appropriately controlled throughout the study area		
Wildlife Act 1975	Any persons engaged to conduct salvage and translocation or general handling of terrestrial fauna species must hold a current Management Authorisation.	Ensure wildlife specialists hold a current Management Authorisation.		



7 CONCLUSION

Following the recent Flora and Fauna Assessment of the study area (Ecology and Heritage Partners 2021), targeted surveys for the nationally significant Growling Grass Frog were recommended due to the presence of potential habitat on-site. The former quarry area, which is now partially-filled with water, provides potential foraging and breeding resources for the species.

Despite surveys being undertaken during suitable conditions and in accordance with the survey guidelines for the species (DEWHA 2010), Growling Grass Frog were not detected within the study area.

The proposed future residential development and wetland construction within the study area would result in the removal of remaining areas of habitat which do not support a population of Growling Grass Frog. Therefore based on available information, there are no implications under the EPBC Act or under State legislation or policy pertaining to the proposed development.



REFERENCES

- DSE 2010. Biodiversity Precinct Structure Planning Kit. Department of Sustainability and Environment Melbourne, May 2010. http://www.depi.vic.gov.au
- DELWP 2021a. NatureKit [WWW Document] https://www.environment.vic.gov.au/biodiversity/naturekit. Victorian Department of Environment, Land, Water and Planning. [accessed November 3 2021]
- DELWP 2021b. Victorian Biodiversity Atlas. Sourced from: "VBA_FLORA25", "VBA_FLORA100", "VBA_FAUNA25", "VBA_FAUNA100", December 2017. Victorian Department of Environment, Land, Water and Planning. [accessed November 3 2021]
- DEWHA 2009a. Significant Impact Guidelines 1.1. Matters of National Environmental Significance. Federal Department of the Environment, Water, Heritage and the Arts, Canberra.
- DEWHA 2010. Significant Impact Guidelines for the Vulnerable Growling Grass Frog (Litoria raniformis), EPBC Act Policy Statement 3.14. Canberra, ACT.
- DoEE 2021. Protected Matters Search Tool: Interactive Map [WWW Document]. URL http://www.environment.gov.au/epbc/pmst/ [accessed November 3 2021]. Federal Department of Sustainability, Environment, Water, Population and Communities, Canberra.
- Ecology and Heritage Partners 2014a. Ecological Assessment at 1221-1249 Centre Road, Oakleigh South, Victoria.
- Ecology and Heritage Partners 2014b. Targeted Growling Grass Frog *Litoria raniformis* surveys at 1221-1249 Centre Road, Oakleigh South, Victoria.
- Ecology and Heritage Partners 2021. Flora and Fauna Assessment: 12221-1249 Centre Road Oakleigh South, Victoria.
- DSEWPaC 2009. Environment Protection and Biodiversity Conservation Act 1999 Referral Guidelines for the vulnerable Growling Grass Frog, *Litoria raniformis*. Department of the Environment, Water, Heritage and the Arts. Canberra, ACT.

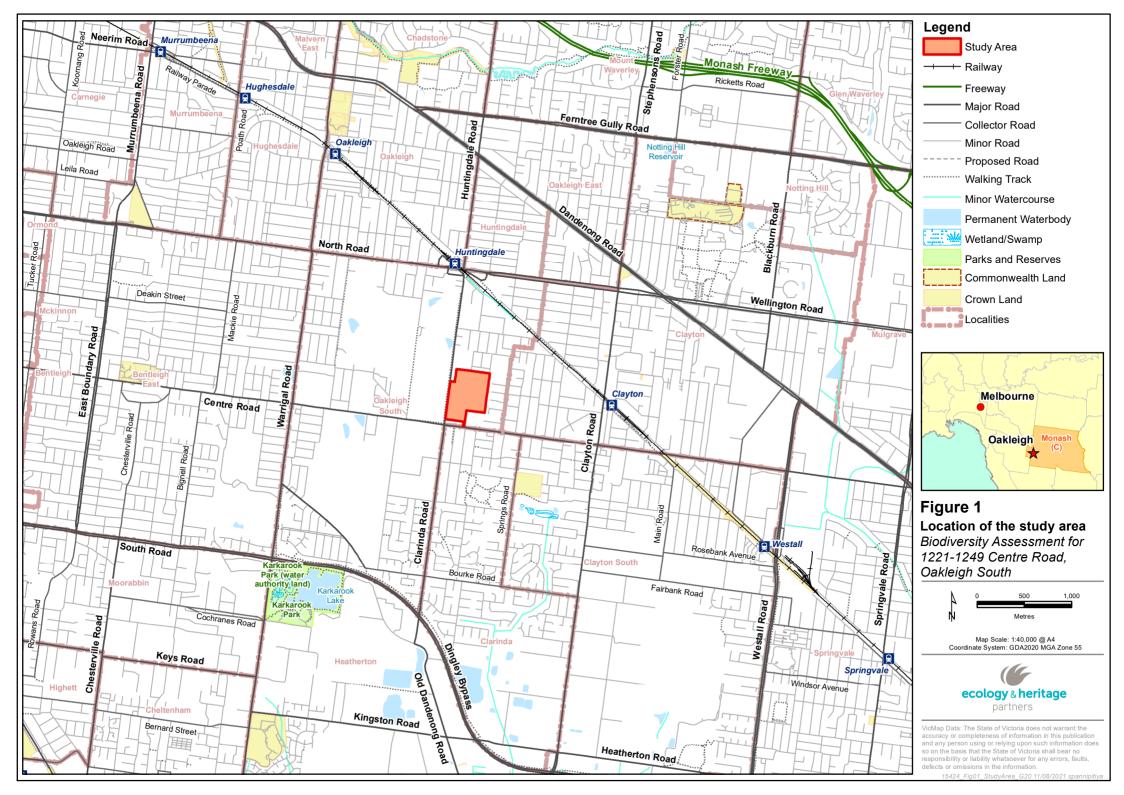




Figure 2 Survey results

Targeted surveys for Growling Grass Frog, 1221-1249 Centre Road, Oakleigh South

Legend

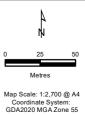
Study Area

DELWP Current Wetlands

Suitable habitat for Growling Grass Frog







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APPENDIX 1 – TARGETED SURVEY RESULTS

Table A.1.1 Summary of Growling Grass Frog survey results

Date	Time	Temp (°C)	Rain (mm)	Wind (Km/h)	Relative humidity (%)	Cloud Cover (%)	GGF Observed	Juveniles Observed	Tadpoles Observed	Other species observed
23/11/2021	20:20	23	0	3	67	90	No	No	No	Common Eastern Froglet Crinia signifera Eastern Sign-bearing Froglet Crinia parasignifera Spotted Marsh Frog Limnodynastes tasmaniensis Striped Marsh Limnodynastes peronii Southern Brown Tree Frog Litoria peronii
13/12/2021	20:15	17.5	0	22	93	90	No	No	No	Common Eastern Froglet <i>Crinia signifera</i> Striped Marsh <i>Limnodynastes peronii</i> Southern Brown Tree Frog <i>Litoria peronii</i>