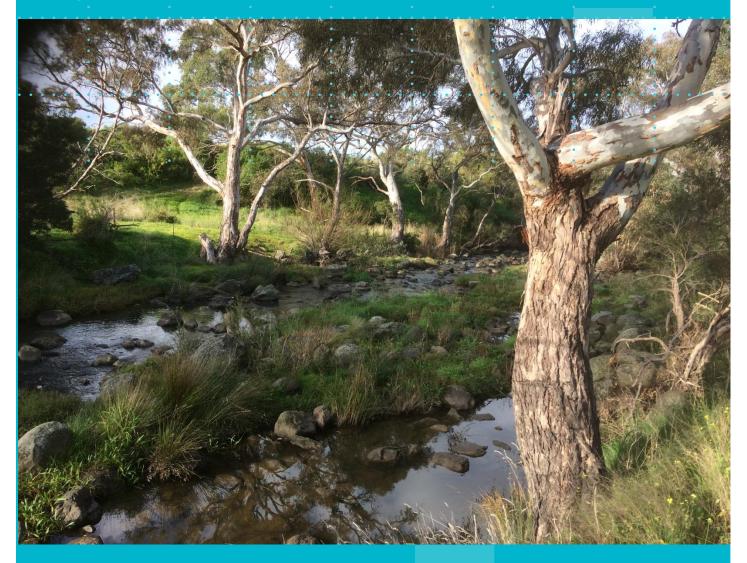


Statement of Expert Evidence: Fox Hollow Drive, Sunbury, Victoria

Prepared for:

Asia-Pacific Property Pty Ltd

August 2017



Ecology and Heritage Partners Pty Ltd

Aaron Organ



AUTHOR'S EXPERTISE

This Statement of Expert Evidence has been prepared by Mr Aaron Organ, Director / Principal Ecologist of Ecology and Heritage Partners Pty Ltd, of 292 Mt Alexander Road, Ascot Vale, Victoria.

Aaron has over 21 years' experience in the environmental field, including 17 years in an environmental consultant capacity. Aaron has a broad working knowledge of flora and fauna throughout Victoria and has either managed or played an important role in providing environmental advice on several large infrastructure projects such as proposed pipelines, and road and rail developments, and numerous urban development projects (residential, industrial and commercial).

He has also been a lead author and/ or co-author for over 450 project reports and has provided expert advice to a range of private and government clients. Some of these projects include a large number of proposed wind farms in Victoria, South Australia and Tasmania, long-term flora and fauna monitoring throughout the Illawarra escarpment of New South Wales, and various residential developments across Victoria (including many projects throughout Melbourne northern growth corridor). Aaron has previously been involved with a number of residential development projects throughout the Sunbury Precinct Structure Plan (PSP) area, including the co-location of stormwater assets within the Jackson's Creek conservation corridor.

1 AUTHOR'S STATEMENT

I, Aaron Organ, of Ecology and Heritage Partners Pty Ltd, have prepared this Statement of Expert Evidence pertaining to the ecological values and considerations at Fox Hollow Drive, Sunbury. The proceeding statement is based on a literature review, a brief site assessment, and expert knowledge of the ecological values within the PSP and broader north-western Melbourne growth corridor.

I have made all the inquiries that I believe are desirable and appropriate and that no matters of significance which I regard as relevant have to my knowledge been withheld from tribunal.



2 INTRODUCTION

2.1 Background

Ecology and Heritage Partners Pty Ltd was engaged by Gallagher Jeffs acting on behalf of Asia-Pacific Property Pty Ltd to undertake a review and provide advice regarding the feasibility of locating a stormwater asset within conservation area 21 (16 June 2017) as part of the proposed residential development at Fox Hollow Drive, Sunbury. Conservation area 21 is described as Growling Grass Frog conservation, floodplain and open space under the Biodiversity Conservation Strategy (BCS) and is associated with Jackson's Creek (DEPI 2013).

Initial advice was sought from the Department of Environment, Land, Water and Planning (DELWP) who advised a site assessment to ground-truth the modelled vegetation data for the conservation area (27 June 2017), prior to a formal meeting. The modelled vegetation was captured as part of the Melbourne Strategic Assessment (MSA) time-stamping project.

The vegetation assessment was conducted by Jared McGuiness of Ecology and Heritage Partners on 5 July 2017 to map native vegetation within the study area.

Following the site assessment to map native vegetation, a meeting was held (27 July 2017) with representatives from DELWP (Hugh Stanford and Michael Ward), Melbourne Water (Jessica Walker), E2Design Lab (Gary Walsh), Taylors (Andrew Matheson) and Ecology and Heritage Partners (Brigette Gwynne) to discuss potential ecological implications with regard to the co-location of the stormwater asset within the conservation area. DELWP have since provided their in-principal support for the proposal (Hugh Stanford, 10 August 2017).

I received instructions to prepare this expert witness statement following a meeting with Gallagher Jeffs on 21 July 2017.

2.2 Scope

I have been instructed to provide expert ecological advice on the following:

- 1) Determine the ecological constraints and benefits associated with the proposed scenario; and,
- 2) The potential outcomes associated with Growling Grass Frog habitat within the conservation area as a result of the proposed scenario.

2.3 Study Area

The subject land is located at 55 Fox Hollow Drive, Victoria. The study area refers to the area of conservation area 21 adjacent to the development, in which the stormwater asset is proposed to be located. The property falls within the Sunbury South Precinct Structure Plan (PSP) and is subject to provisions under the BCS.



3 METHODS

3.1 Background Review

A review of relevant literature was undertaken to obtain an understanding of the ecological values that occur within the study area and to inform this Statement. The following information sources were reviewed:

- The DELWP Native Vegetation Information Management (NVIM) Tool (DELWP 2017a);
- Sunbury South Precinct Structure Plan (VPA 2016);
- Biodiversity Conservation Strategy for Melbourne's Growth Corridors (DEPI 2013) and Guidance note: Implementing the Biodiversity Conservation Strategy for Melbourne's Growth Corridors (DELWP 2015);
- DELWP's Growling Grass Frog Masterplan for Melbourne's Growth Corridors (DELWP 2017b);
- Email (dated 27 June 2017) from DELWP;
- Planning Maps Online [www Document]. URL: http://services.land.vic.gov.au/maps/pmo.jsp. Victorian Department of Environment, Land, Water and Planning, Melbourne, Victoria (DELWP 2017c); and,
- Maps and aerial photography of the study area.

3.2 Site Inspection

A site assessment of the study area was undertaken by a qualified botanist on 05 July 2017. The inspections sought primarily to identify the extent and type of remnant native vegetation present within the study area. Where remnant vegetation was identified a habitat hectare assessment was undertaken following methodology described in the Vegetation Quality Assessment Manual (DSE 2004).

The in-stream habitat of Jackson's Creek adjacent to the study area was also assessed with the aim to identify any areas that may be suitable for the location of outfall drains, and to avoid disturbing areas of higher quality habitat for Growling Grass Frog.

Ecological Vegetation Classes (EVCs) were determined with reference to DELWP pre-1750 and extant EVC mapping and their published descriptions (DELWP 2017b).



4 RESULTS

4.1 Vegetation

Five patches of native vegetation, and one scattered tree (dead) were recorded within the study area (Plate 1; Figure 1). The patches were representative of two Ecological Vegetation Classes (EVC): Grassy Woodland (EVC 175), and Stream Bank Shrubland (EVC 851).

Three patches of Grassy Woodland (GW) were recorded. The three patches lacked a canopy component and were dominated by Hedge Wattle *Acacia paradoxa* (Plate 2). Native grasses including Kangaroo Grass *Themeda triandra* and Spear-grass *Austrostipa sp.* were generally present, however exotic pasture grasses dominated the ground layer of vegetation.

The Stream Bank Shrubland patches recorded in the study area were present as sparse woodland comprised of River Red Gum *Eucalyptus camaldulensis* (Plate 3), which is characteristic of the EVC. The understory was dominated by exotic pasture grasses, including Toowoomba Canary-grass *Phalaris aquatica* and Cocksfoot *Dactylis glomerata*. Native shrubs were present, scattered intermittently throughout the understory. These included River Bottlebrush *Callistemon sieberi* and Prickly Moses *Acacia verticillata*. Habitat zones SBS1 and SBS2 were similar in species composition and structure, however SBS1 contained a higher percentage of 'high threat' weeds (as defined in the EVC description).

A windrow of planted Eucalypts is also present in the east of the study area (Plate 4).



Plate 1. PP1: Overview of the study area (facing Jackson Creek) (Ecology and Heritage Partners Pty Ltd 05/07/2017).



Plate 2. PP3: Remnant patch of Grassy Woodland within the study area (Ecology and Heritage Partners Pty Ltd 05/07/2017).





Plate 3. PP7: Stream Bank Shrubland with Common Reed understory (Ecology and Heritage Partners Pty Ltd 05/07/2017).



Plate 4. PP8: Planted vegetation (Ecology and Heritage Partners Pty Ltd 05/07/2017).

4.2 In-stream Habitat Investigation

The banks of the Jackson Creek were lined sporadically with River Red Gums, potentially providing sheltering habitat for Growling Grass Frog amongst the root structure. Exotic grasses and Common Reed were also prevalent on the banks of the creek. Due to the shallow nature of the creek, a grassy/rocky 'island' within the middle of the creek was identified (Plate 3). This could provide suitable habitat within the creek itself, when flows are low.



5 ECOLOGICAL IMPLICATIONS

5.1 Native Vegetation

Of the five patches of native vegetation and one scattered tree (dead) recorded during the field survey, all are located outside of the proposed stormwater wetland footprint presented by Andrew Matheson of Taylors.

There is expected to be no loss of native vegetation as a result of the proposed scenario. The outfall drain to Jackson's Creek will be designed to avoid impacts to native vegetation.

5.2 Growling Grass Frog Habitat

5.2.1 Additional Habitat within Conservation Area

The proposed scenario would result in the loss of approximately 0.95 hectares of terrestrial habitat for Growling Grass Frog. Currently, the area is highly disturbed with a high cover of invasive weeds, and could not be considered a high quality habitat resource to be utilised by the species, especially considering the remaining similar areas of terrestrial habitat within the conservation area. The proposed scenario provides higher value wetland habitat for the species within the conservation area which may be utilised for foraging and to a lesser extent, breeding.

The location of the wetland within the conservation area forms a more favourable configuration to allow movement of frogs between wetland habitats. The location within the conservation area also results in restricted access from the public meaning less anthropological disturbances (such as increased rubbish, disturbance from dogs etc.).

5.2.2 DELWP Growling Grass Frog Wetlands

As outlined within the Growling Grass Frog Masterplan (DELWP 2017b), the Jackson's Creek corridor has been identified as an area for investment for future Growling Grass Frog habitat enhancement by DLEWP, with a number of Growling Grass Frog breeding wetlands proposed to be constructed within conservation area 21. Within the study area there are three proposed Growling Grass Frog wetlands, one of which is a pre-existing farm dam. As described in the masterplan, the exact layout of the two proposed wetlands is indicative, with the need for site-specific planning in the future (DELWP 2017b).

The batter of the proposed stormwater wetland currently encroaches slightly into one of the proposed Growling Grass Frog wetlands. I have reviewed the expert evidence provided by Andrew Matheson of Taylors and I understand that there are significant topographical limitations with the site, and moving the wetland further up the slope would result in a significant increase to ground disturbance. To this effect, the PSP scenario would involve a much larger overall footprint due to the need for increased batters to compensate for the slope, however the wetland itself would be smaller than the proposed scenario.



Discussions with DELWP regarding the layout of the proposed scenario indicate that the proposed Growling Grass Frog wetlands can be manipulated to accommodate the stormwater wetland, by reducing the two smaller proposed Growling Grass Frog wetlands into one larger wetland. The existing dam will be unaffected by the proposed scenario. With the amended Growling Grass Frog wetlands, there will be no net loss of proposed Growling Grass Frog wetland area as a result of the proposed scenario. Additionally, the stormwater wetland will then be located outside of the necessary Growling Grass Frog wetland buffer (Area of Strategic Importance) by more than 50 meters. DELWP have indicated during discussions that they would prefer at least a 30 meter buffer from the proposed Growling Grass Frog wetlands.

The proposed scenario has been designed to allow treated water to fill the DELWP wetlands, which is the preferred scenario in this situation as identified by DLEWP (email correspondence 26 June 2017 and 10 August 2017). I have reviewed the expert evidence provided by Gary Walsh of E2Design and I understand the proposed scenario would result in increased surface run off, and therefore an increased supply of treated water, which can then be utilised to ensure a permanent water supply to the Growling Grass Frog wetlands.

5.3 Other Considerations

The Holden Flora Reserve is located along the Jackson's Creek corridor forming an interface between the development and the creek. Regardless of the stormwater wetland location, an outfall drain will need to traverse the reserve to reach Jackson's Creek. Therefore effects to the reserve have not been considered further.



6 CONCLUSION

I conclude that the incorporation of a stormwater wetland within Conservation Area 21 is unlikely to results in any negative impacts to the current environmental condition of the study area. The proposed scenario will avoid all patches of native vegetation and will result in the loss of a relatively small area of poor quality terrestrial habitat for Growling Grass Frog. Benefits to the proposed scenario include additional wetland habitat for Growling Grass Frog within the conservation area and additional treated water available to feed into the proposed DELWP Growling Grass Frog habitat wetlands. DELWP has provided their in-principal support of the revised stormwater location within the conservation area.



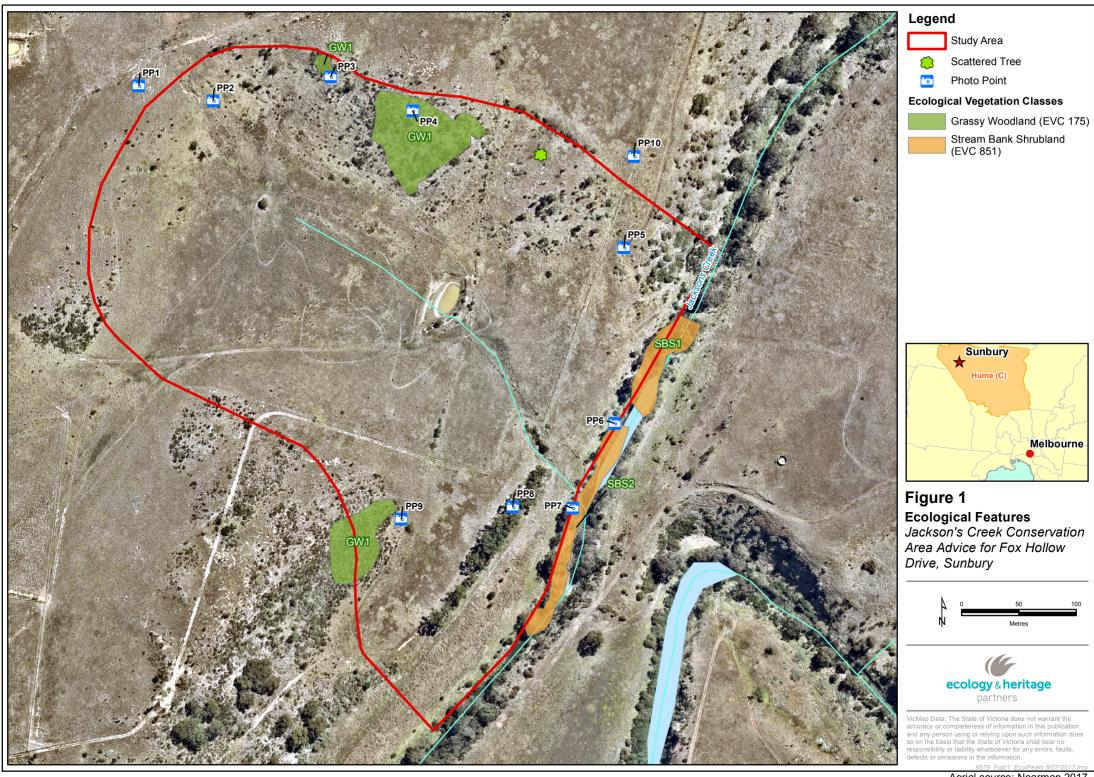
7 REFERENCES

- DELWP 2015. Guidance note: Implementing the Biodiversity Conservation Strategy for Melbourne's Growth Corridors. Working document February 2015. Melbourne Strategic Assessment. The Department of Environment, Land, Water and Planning, Melbourne.
- DELWP 2017a. Native Vegetation Information Management Tool [www Document]. URL: https://nvim.delwp.vic.gov.au/. Victorian Department of Environment, Land, Water and Planning, Melbourne, Victoria.
- DELWP 2017b. Growling Grass Frog Masterplan for Melbourne's Growth Corridors. Victorian Department of Environment, Land, Water and Planning, Melbourne, Victoria.
- DELWP 2017c. Planning Maps Online [www Document]. URL: http://services.land.vic.gov.au/maps/pmo.jsp. Victorian Department of Environment, Land, Water and Planning, Melbourne, Victoria.
- DELWP 2017d. Ecological Vegetation Class (EVC) Benchmarks for each Bioregion [www Document].

 URL: http://www.depi.vic.gov.au/environment-and-wildlife/biodiversity/evc-benchmarks#bioregionname. Victorian Department of Environment, Land, Water and Planning, Melbourne, Victoria.
- DSE 2004. Vegetation quality assessment manual: Guidelines for applying the habitat hectares scoring method. Version 1.3. Victorian Department of Sustainability and Environment, Melbourne Victoria.
- VPA 2016. Sunbury South Precinct Structure Plan (November 2016 Exhibition). Victorian Planning Authority, Melbourne.



8 ATTACHMENTS



Aerial source: Nearmap 2017



9 REQUIRED INFORMATION

Name and Address

This report has been prepared by Aaron Organ, Director of Ecology and Heritage Partners, 292 Mt Alexander Road, Ascot Vale, Ph: (03) 9377 0100, aorgan@ehpartners.com.au

Area of Expertise

Aaron Organ is an expert ecologist, with skills in all the major ecological environments of south-eastern Australia. He has particular expertise in the workings of ecological systems, both under natural conditions and when affected by unnatural disturbance regimes such as weed invasion and impacts of development projects. He has also considerable experience in the application and practical implementation of current Commonwealth and State environmental legislation and Government Policy.

Aaron has appeared as an expert witness for multiple large PSPs throughout Melbourne's growth areas, including the Wollert PSP.

Expertise to make the Report

Aaron Organ has considerable knowledge of the native flora and fauna throughout south eastern Australia, including areas across western Victoria. A selection of past VCAT and Panel appearances include:

- 2015: Yaringa Boat Harbour Expansion, Yaringa, Victoria (Panel)
- 2015: Proposed residential development at 134-166 Aspinall Street, Golden Square, Victoria
 – (VCAT)
- 2015: Amended Permit Associated with the use and development of the land for the purpose of a Place of Worship 171 197 Harkness Road, Melton West, Victoria (VCAT).
- 2014: Proposed Development Plan Overlay and Planning Permit Applications for a Proposed Residential Development at 370A Riddell Road, Sunbury, Victoria – (VCAT).
- 2014: Kilmore Wallan Bypass (Panel).
- 2014. Proposed residential development at 107 Gipps Street, Port Fairy (VCAT)
- 2014: NBN Fixed Wireless Telecommunications Facility at 49D Eddy Avenue, Mt Helen, Victoria Clayton Utz Lawyers (VCAT)
- 2014: Proposed residential development at 10 Fullarton Drive, Paynesville, Victoria Hall & Wilcox Pty Ltd (VCAT)
- 2014: Proposed residential development at 95 Wests Road, Langwarrin South Planning and Property Partners Pty Ltd (VCAT)
- 2014: Amendment C101 to the Manningham Planning Scheme and Proposed Eastern Golf Course Development Plan Mirvac Doncaster Pty Ltd. (Panel)



partners

- 2014: Princes Highway duplication, Winchelsea to Colac HWL Ebsworth Lawyers Pty Ltd. (Panel)
- 2014: Proposed Commercial Development, Federation Drive, Melton Best Hooper Lawyers Pty Ltd. (VCAT)
- 2013: Statement of Expert Evidence: 1 Hobbs Road Wyndham Vale, Victoria. Amendment C171 Ballan Road Precinct Structure Plan (PSP 40)
- 2013: Statement of Expert Evidence: Review of time stamped data for Amendment C172 Ballan Road, Wyndham Vale (PSP 92)
- 2013: Statement of Expert Evidence: 305-315 Craigieburn Road East, Wollert, Victoria. Wollert Developments Pty Ltd. (VCAT)
- 2013: Proposed Planning Scheme Amendment C164 275 Racecourse Road, Sunbury Hume City Council (Panel)
- 2013: Western Highway Duplication Section 3, Ararat to Stawell, Victoria DLA Phillip Piper (Panel).
- 2013: Cherry Tree Wind Farm Maddocks Lawyers (VCAT).
- 2012: Western Highway Duplication Section 2, Beaufort to Ararat, Victoria DLA Phillip Piper (Panel)
- 2012: Proposed Peninsula Link Freeway Service Centres, 83 Sages Road Baxter, Victoria Rigby Cook Lawyers Pty Ltd (VCAT)
- 2011: Western Highway Duplication Section 1, Burrumbeet to Beaufort, Victoria DLA Phillip Fox (Panel)
- 2011: Old Warrandyte Road, flora and fauna review and Panel hearing, Donvale Norton Rose Australia Pty Ltd. (Panel)
- 2010: Marquands Road and Leakes Road (Lot 9), Truganina, Truganina South Precinct Structure Plan Stockland (Panel)
- 2010: Proposed Eastern Golf Course relocation to 'Windsor Park', 215–217 Victoria Road, Yering, Victoria for Best Hooper (VCAT)
- 2010: Truganina South Community Precinct Structure Plan for Central Equity and Stockland Limited (Panel)
- 2010: Craigieburn R2 Precinct Structure Plan for Peet Limited (Panel)
- 2009: Melton Planning Scheme Amendment C65 489-555 Robinsons Road South Precinct (Marksx Property), Truganina (Panel)
- 2008: Donald Mineral Sands Panel and associated works. Donald Mineral Sands project (Panel)
- 2008: Amendment C88 to the Bass Coast Shire Planning Scheme Silverleaves, Phillip Island (Panel)



partners

- 2008: Proposed medium density development located on the corner of 1587-1589 Point Nepean Road and 1-1A Chatfield Avenue, Rosebud – for Fulcrum Town Planning Pty. Ltd. (VCAT)
- 2008: Residential development at 2 Rowe Street, Alphington for Rob Wignall Architects (VCAT)
- 2008: Officer Service Centres, Officer for Clayton UTZ Pty. Ltd. (VCAT)
- 2007: Anglesea Golf Club proposed Amendment C32 for TGM Group Pty. Ltd. (Panel)
- 2007: Medium density housing at 2 Ramptons Road, Eltham for Nillimbik Shire Council (VCAT)
- 2007: Medium density unit development in Frankston (adjacent to Kananook Creek) for Gary Testro Lawyer (VCAT)
- 2007: Single dwelling development at 683 Great Ocean Road, Eastern Views, Victoria for SJB Planning Pty. Ltd (VCAT)
- 2006: Construction of a dwelling at 8 Charlotte Court, Warrandyte for Glossop Town Planning Pty. Ltd. (VCAT)
- 2005: Dollar Wind Farm, Gippsland for Freehills Lawyers (Panel)

Author's Declaration

I, Aaron Organ, have made all the inquiries that I believe are desirable and appropriate and that no matters of significance which I regard as relevant have to my knowledge been withheld from the tribunal.

Arjan		
	Date:	11/08/2017