



EXPERT WITNESS STATEMENT OF BRETT LANE

9th September 2016

Witness information

I have been retained by Beacon Planning Pty Ltd on behalf of the landowner of the subject property (see below) to provide advice on ecological issues associated with the location of a stormwater retention basin and associated water quality treatment wetland proposed for the property. My details are provided below.

Brett Alexander Lane
Director
Brett Lane & Associates Pty Ltd
Suite 5, 61 - 63 Camberwell Road
Hawthorn East VICTORIA 3123

My area of expertise is Ecology; I hold a degree in Zoology and Physical Geography.

I am an ecologist with over 35 years' experience in ecological research and management, and in development impact assessment.

My qualifications and experience are detailed in Attachment A.

I am sufficiently expert to make this statement because:

- 1) I have appropriate qualifications and experience; and
- 2) I have expertise in flora and fauna.

I was accompanied on my site investigation by Brett Macdonald, Senior Ecologist and Project Manager with Brett Lane & Associates Pty Ltd, an experienced botanist with extensive experience in Victoria's western plains grasslands and grassy woodlands. Details of his qualifications and experience can be found at Attachment B.

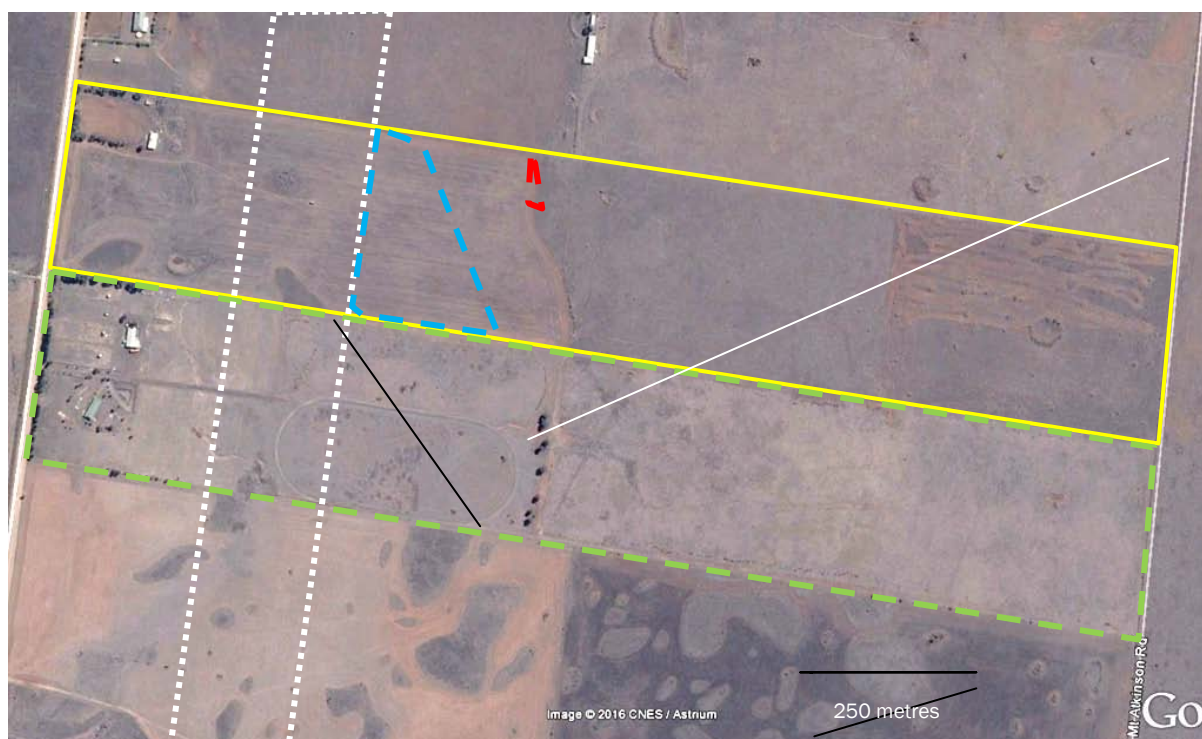
Declaration

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

Brett Alexander Lane (Director)
Brett Lane & Associates Pty Ltd
9th September 2016

Location

The site of this investigation was the property at 38 Troups Road South, Mount Cottrell (Lot 4 LP 138528) ('the subject property'), west of Melbourne. The property lies in the Victorian Volcanic Plain bioregion on the western slopes of Mount Atkinson. It and adjacent properties are characterised by basalt-derived clay loam soils. The area is shown in the aerial photograph below, comprising the subject property (solid yellow outline) and the neighbouring property to the south (Lot 5 LP 138528), approximately 75 percent of which is proposed to become a nature conservation reserve under the Melbourne Strategic Assessment (*Environment Protection and Biodiversity Conservation Act 1999*) Biodiversity Conservation Strategy (BCS) (dashed green outline). The location of the Outer Metropolitan Ring Road Public Acquisition Overlay (white dashed line) and a stormwater retention basin and treatment wetland proposed in the Precinct Structure Plan (PSP) (blue dotted outline) is shown in this figure as well. Note that positions are approximate (plus or minus 10 metres).



Questions addressed

The question I was asked to address was whether moving the position of the proposed stormwater retention basin and treatment wetland (blue dashed line in the above figure) to the property to the south (red dashed line in the above figure) would have any significant ecological consequences given the ecological characteristics of both properties. I addressed this question through a combination of a review of existing information and a site investigation to characterise the nature and extent of native vegetation across the western portions of both the subject property and the proposed conservation reserve to the immediate south.

In the latter case, inspection of the property was undertaken from the northern boundary as access could not be obtained. Notwithstanding the lack of site access, it was possible to ascertain for a distance of up to approximately 200 metres, with the use of binoculars, whether the vegetation was indigenous grasses or introduced pasture grasses and weeds. The inspection was undertaken on 5th September 2016 and due to ample precipitation over the preceding autumn and winter, the vegetation was in a condition where native and exotic grasses were readily identifiable at up to 200 metres distance.

Existing information reviewed included:

- DELWP's time-stamped native vegetation map layer (on DELWP's Biodiversity Interactive Maps website);
- DEPI (2013) *Biodiversity Conservation Strategy for Melbourne's Growth Areas*. DEPI, East Melbourne;
- DELWP's 2005 EVC Mapping; and
- Growth Areas Authority (2010) *Biodiversity Assessment Report (Native Vegetation)-Melton Wyndham Investigation Area, Section E*. GAA, Melbourne.

Findings

Site investigation

Inspection of the subject property indicated that the proposed location of the stormwater retention basin and treatment wetland lacked native vegetation and comprised cropped, cultivated paddock sown to a cereal crop (see photo below). Review of existing information and interpretation of past aerial photographs of the area (via Google Earth) indicated that cropping had been undertaken for some years. Through on site observation, native vegetation appeared to commence at the toe of the western slope of Mount Atkinson, where cultivation had not occurred in the past. The approximate boundary of this native vegetation is shown in the preceding aerial image shaded in green.



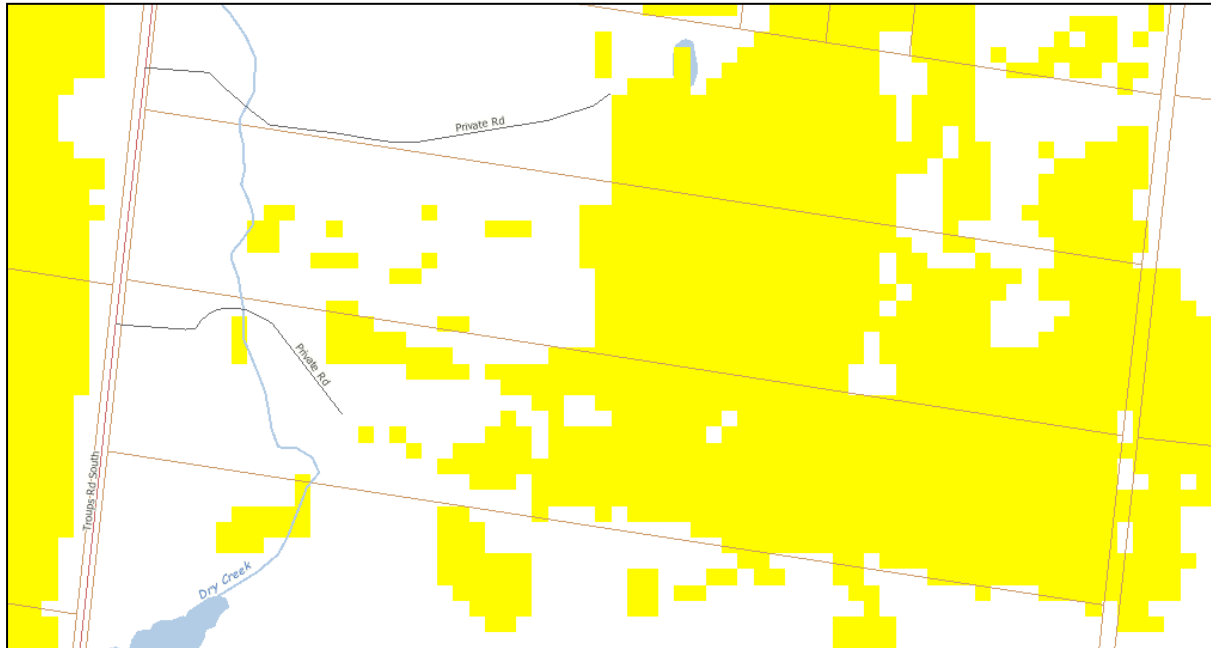
The viewing of the property to the south indicated that the vegetation there was dominated by exotic grasses and weeds, and that extensive past rock removal had occurred, removing many habitat features suited to ground fauna. The photo below shows the current character of the part of the southern property that provides an alternative location for the proposed stormwater retention basin and treatment wetland. Based on the characteristics of the vegetation observable across the property boundary, it was impossible to locate a western boundary of native vegetation so none is shown in the aerial image above.



Existing information

No previous inspections of the proposed conservation reserve have been undertaken, as indicated in the summary of sources below.

The first available information on the native vegetation of the area is DELWP's online 2005 Ecological Vegetation Class (EVC) mapping. An extract of this covering the area in question is presented below.



This map shows yellow Plains Grassland EVC in the eastern two-thirds of both properties and scattered, smaller patches in the balance of these properties. The presence of extensive vegetation in the eastern part of the subject property accords with the current situation on the ground. However, it is clear from site conditions on the southern property that native vegetation no longer occurs as extensively as shown above. The smaller patches of native vegetation in the western parts of both properties have largely disappeared based on the recent site investigation.

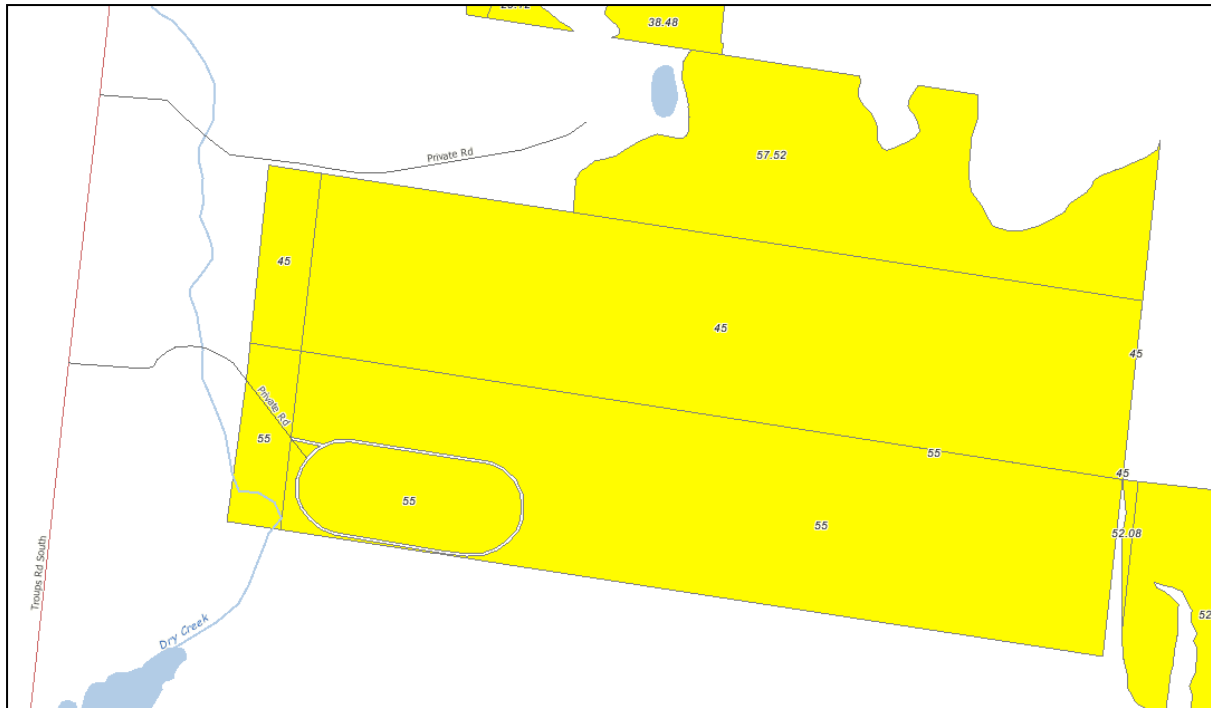
To inform the Melbourne EPBC Act Strategic Assessment, the former Growth Areas Authority commissioned detailed vegetation mapping across as much private land as possible within the growth areas. The area was surveyed in 2008-2009. Portions of Figures 2e and 2f from GAA (2010) cited earlier have been conjoined and presented as a single map of the subject area below.



For the GAA surveys in 2008-9, no site visits were undertaken as access to both properties was not possible. Both were inspected from the roadside only. Based on this, and having viewed both properties much more extensively than the GAA surveys, the results of those reconnaissance surveys are not considered a reliable, definitive basis for land use decision-making. The boundary of the native vegetation on the subject property indicated in this map is considered reasonable as it follows a clear demarcation on aerial photography from 2009 (Google Earth) and follows the approximate boundary of the 2005 EVC mapping.

The boundary of the vegetation on the southern property (proposed conservation reserve) is not accurate as the lower parts of that property have been extensively disturbed, evidence of which can be seen on the same 2009 aerial photography.

The next source of information that has informed land use decisions is the native vegetation time-stamping. This was conceptually to be based on the information gathered during the GAA's vegetation mapping work, presented in GAA (2010). A copy is provided on the next page of the current DELWP time-stamped native vegetation layer.



This bears little resemblance to the areas that the GAA (2010) mapped as being 'highly likely native vegetation (grassy)'. The vegetation boundary has moved about 500 metres further west than the GAA line on the subject property. It is not known where the vegetation boundary is on the southern property so the extent of the mapping error cannot be quantified.

Two consequences of this are that:

- 1) The extent of native vegetation in the proposed conservation reserve has been significantly over-estimated and the reserve is therefore larger than is required to protect potential remnant ecological values.
- 2) Habitat compensation costs for the subject property have been significantly over-estimated.

Based on what was observed in the western part of the southern property, it is possible to locate a stormwater retention and treatment wetland system where indicated on the map above without affecting any significant native vegetation or habitat for matters of national environmental significance. Despite this, through the dubious designation of unvegetated areas as conservation reserve, it is not possible to locate such a feature here. If the boundary of the reserve were adjusted to exclude areas in the west not supporting native vegetation it would more accurately reflect conditions on the ground.

The BCS defines a regime of habitat compensation payments from landowners where development removed native vegetation and species' habitat. Whereas the extent of native vegetation on the subject property is actually 22.295 hectares, the habitat compensation costs for which (native vegetation plus Spiny Rice-flower habitat) would be \$2,526,884.00, the time stamped layer used in the DELWP NVIM system for calculating



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Ecological Research & Management

compensation obligations uses an area of 31.850 hectares which has a habitat compensation cost of \$3,609,025.00, a difference of about \$1,082,140.00.

Conclusions

There are no differences in the ecological characteristics of the two alternative locations for the proposed stormwater retention basin and treatment wetland. Construction of this feature in either location will not result in any significant impact on a matter of national or any other environmental significance.

Brett Lane

9th September 2016.

Attachment 1: Curriculum Vitae for Brett Lane

Brett Lane

Principal Consultant and Director

Profile

Brett has over 35 years' experience in ecological research and management. He has worked in a range of positions with environmental consultancies in Melbourne and Brisbane and with non-government environmental groups in Australia and East Asia. He has specialist knowledge in birds and wetlands, and extensive experience in ecological impact assessment, including in the infrastructure, renewable energy, property development and mining industries. Brett has undertaken and managed many hundreds of ecological assessments and prepared and reviewed documents that have accompanied development applications on behalf of private companies, government infrastructure agencies and private individuals. His extensive experience has given him an excellent knowledge of the regulatory environment relevant to native vegetation, flora and fauna and he can advise on the scope of scientific information needed to inform the development assessment and decision-making process. He has also defended his scientific work as an expert witness in courts and tribunals. Brett founded BL&A in 2001.

Biography

Working in industry since 1979

Qualifications

BA (Zoology & Physical Geography) *Monash University*

Certificates and Licenses

Management Authorisation – Salvage and Translocation
Victorian Animal Ethics Approval

Employment History

2001 – present

Director, *Brett Lane & Associates Pty Ltd, Melbourne*

1999 – 2000

Natural Resource Specialist, *PPK Environment & Infrastructure Pty Ltd, Melbourne*

1996 – 1998

Senior Ecologist, *Ecology Australia Pty Ltd, Melbourne*

1993 – 1996

Principal Terrestrial Ecologist, *WBM Oceanics Australia, Brisbane*

1991 – 1993

Assistant Director (East Asia), *Asian Wetland Bureau, Kuala Lumpur, Malaysia*

1987 – 1991

Director, *Brett A Lane Pty Ltd (Melbourne)*

1980 – 1986

Wader Studies Co-ordinator, *Royal Australasian Ornithologists' Union (now Birdlife Australia, Melbourne)*

1979

Research Assistant, *Kinhill Planners Pty Ltd., Melbourne*

Key Skills

- Experienced advisor on state and federal biodiversity legislation and policy
- EPBC Act and EES Referrals
- Preparation of environmental assessment reports (preliminary documentation, public environmental report and environmental impact statement)
- Preparation of native vegetation planning permit applications
- Design of developments to comply with biodiversity legislation and policies
- Expert witness for VCAT, planning panels and courts
- Ecological risk assessment
- Native vegetation assessment
- Terrestrial fauna assessment and wetland ecology
- Ornithologist specialising in wetland and migratory shorebirds
- Wind energy development specialist and minimizing impacts on wildlife including collision risk modelling

Project Examples

Property Development

Eynesbury Township, Eynesbury, Victoria: Flora, Fauna and Habitat Hectare Assessment, Targeted Flora Surveys, Growling Grass Frog Survey, Plains-wanderer Survey and Development of an Offset Tracking Tool. Net Gain Analysis for Planning Permit Applications of subsequent stages and advice on offset management (2003 – present)

Tailors Rd, Sydenham, Victoria (Broadcast Australia): EPBC Act Referral, preparation of EPBC Act Public Environment Report (PER), Offset Site Search and Offset Management Plan, Spiny Rice-flower Propagation and Translocation Plans, Seed Collection (2006 – present)

Somerfield Estate, Keysborough, Victoria: Flora, Fauna and Growling Grass Frog Survey and Offset Plan Preparation, preparation of offset tracking reports for each stage of development (2008 – present)

Modena Estate, Burnside, Victoria: Flora and Fauna Assessment, targeted threatened species surveys, EPBC Act referrals and assessment approvals, development of offset and mitigation plans (2002 – present)

Renewable Energy

Dundonnell Wind Farm, Dundonnell, Victoria: Overview and Targeted Assessments including Brolga, bat, migratory bird, Striped Legless Lizard, Flora Surveys, assessment of powerline route and road access options, EPBC Act Referral, Input to EES Referral, preparation of EES technical appendix on flora and fauna, Brolga impact assessment, collision risk modelling (2009 – present)

Granville Wind Farm, Granville Harbour, Tasmania: Overview Assessment, targeted surveys including Orange-bellied Parrot and bat surveys, EPBC Act Referral and advice for regulator negotiations (2011 – present)

MacArthur Wind Farm, MacArthur, Victoria: Overview assessment, detailed flora and fauna surveys, impact assessment, input to EPBC Act Referral and state EES, assessment of powerline and road route options, appearance at state Planning Panel hearings as expert witness, preparation of pre-construction and operational flora and fauna management plans, net gain analysis and identification of suitable offsets (2004 – 2012)

Cherry Tree Wind Farm, Victoria: Overview assessment, native vegetation and threatened flora surveys, targeted threatened fauna surveys, assessment of powerline and road route options, offset site sourcing and assessment, preparation of expert witness statement and appearance at VCAT (2010 - 2015)

Mt Gellibrand Wind Farm, Mt Gellibrand, Victoria: Overview assessment, detailed flora and fauna surveys, including targeted Brolga and migratory bird surveys, and Striped Legless Lizard tile grid surveys, input to state planning permit application, preparation of witness statement and appearance at state Planning Panel hearing, preparation and early implementation of pre-construction flora and fauna management plans, including bat and avifauna management plan, native vegetation mapping, offset mapping, development of Brolga monitoring and mitigation strategies (2004 – present).

Road and Rail Infrastructure

Avalon Airport Rail Link, Little River, Victoria: Flora and Fauna Mapping, Constraint Analysis and Net Gain Analysis (2011 – 2013)

Dingley Bypass, Keysborough, Victoria: Flora and Fauna Assessment, including targeted flora surveys, habitat hectare assessment and Net Gain analysis, expert witness at VCAT case (approved) (2008 – 2014)

Nagambie bypass, Nagambie Victoria: Flora and Fauna Assessment, including habitat hectare assessment and Net Gain analysis (2008)

Second Murray River Bridge Crossing at Echuca-Moama: Detailed Flora Assessment, Targeted Flora Survey (2008 – present)

Ecosystem Monitoring and Management

Scientific Review Panel, Kerang Lakes Bypass project (North Central Catchment Management Authority, Goulburn Murray Water): Scientific review of detailed technical reports to inform decisions of water savings plans and associated watering plans for five wetlands that form part of the Ramsar-listed Kerang Lakes wetlands system. (2013)

Northern Victoria Irrigation Renewal Program (NVIRP): Assessed the impact of a major federal water industry investment project on Matters of National Environmental Significance, including threatened flora, threatened fauna and listed migratory birds using wetlands located in the potential impact area. (2009-2011)

Attachment 2: Curriculum Vitae for Brett Macdonald

Brett Macdonald

Senior Ecologist and Project Manager

Profile

Brett has extensive working experience as an environmental consultant in Victoria and New South Wales, with extensive knowledge and experience in natural ecosystems and the flora and fauna of south-eastern Australia. He has expertise in the identification and management of Victoria's rare and threatened flora and fauna and ecological communities. As a project manager, Brett has attained detailed knowledge of the biodiversity regulatory systems in Victoria and New South Wales, as well as the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

Brett has extensive experience in resolving flora and fauna issues throughout all stages of development with particular focus on assessing impacts on flora species and native vegetation and providing mitigation strategies.

Biography

Working in industry since 2003

Qualifications

Certificate IV in Conservation and Land Management,
Victoria University
BSc (Ecology), *Victoria University*

Certificates and Licenses

DSE Certificate of Competency - Vegetation Quality
Assessments (Habitat Hectares)
Construction Induction 'White Card'
4WD competency accreditation
Track Safety Awareness Level 1

Employment History

2015 – Present
Senior Ecologist and Project Manager, *BL&A, Melbourne*
2012 - 2015
Senior Ecologist, *BL&A, Melbourne*.
2007 – 2012
Ecologist, *BL&A, Melbourne*
2005 – 2007
Plant Nursery and Grounds Management, Iramoo
Sustainable Community Centre - *Victoria University, St Albans*
2003 – 2007
Technical Officer, *Mount Rothwell Conservation and Research Centre (formally Little River Earth Sanctuary Pty Ltd), Little River*

Key Skills

- Project Manager including budgeting, staffing, client liaison, production of high quality technical reports
- Negotiation with regulators, and referral authorities including local councils, the Victorian Department of Environment, Land, Water and Planning and the Commonwealth Department of the Environment
- Grassland assessment and management
- Vegetation monitoring
- Native vegetation assessments
- Habitat hectare and net gain assessments
- Flora assessments
- Terrestrial Fauna Assessments
- Targeted surveys for listed flora species
- Management plan preparation for listed flora values and offset sites
- Salvage protocol implementation
- Project design recommendation
- Preparation of mitigation measures
- EPBC Act Referrals
- Offset Plan preparation



Project Examples

Property Development

- McPherson Precinct Structure Plan, Victoria - flora and fauna assessment and fauna targeted surveys (2016)
- Burnside Hub, Victoria - Preparation of EPBC Act Preliminary Documentation and offset facilitation - State and Commonwealth (2014 to present)
- Bayview Road Hastings, Victoria - flora and fauna assessment and flora targeted surveys (2015 – present)
- Robinsons Road Truganina, Victoria - flora and fauna assessment, flora and fauna targeted surveys and offset facilitation - State and Commonwealth assessments (2007 – present)
- Coronation Drive, North Congarinni, NSW - flora and fauna assessment (2013)
- Eynesbury Township, Eynesbury, Victoria: Flora, Fauna and Habitat Hectare Assessment and Targeted Flora and Fauna Surveys, (2009 – present)
- River Valley Estate, Sunshine North, Victoria — flora and fauna assessments, multiple targeted flora surveys and net gain analysis (2008 to present)
- Harpley Estate, Black Forest Road, Werribee, Victoria: preparation of Environmental Management Plan (2012)
- Madjura Lane, Sutton, NSW - flora and fauna assessment (2009)

Renewable Energy

- Bald Hills Wind Farm, Tarwin Lower, Victoria - Implementation of Bat and Avifauna Management Plan, Pest Plant and Animal Management Plan and Native Vegetation Management Plan (2009 - present)
- Bulgana Wind Farm, Bulgana, Victoria - Initial scoping study, flora and fauna assessment, flora and fauna targeted surveys and offset facilitation (2012 - present)
- Ararat Wind Farm, Ararat, Victoria: Flora and Fauna Assessment of the Wind Farm and Transmission Line, Offset Plan, Native Vegetation and Pest Plans (2007 – present)
- Cherry Tree Wind Farm, Seymour, Victoria: Flora and Fauna Assessment and offset facilitation (2010 – present)
- Dundonnell Wind Farm, Dundonnell, Victoria: Flora and Fauna Assessment, flora and fauna targeted surveys, EES and EPBC Act Referral (2010 – present)

Road and Rail Infrastructure

- St Albans grade separation project, St Albans, Victoria - flora and fauna assessment and targeted surveys and EPBC Act Referral (2012 - present)
- Second Murray River Bridge Crossing at Echuca-Moama, Victoria and NSW: Detailed Flora Assessment, Targeted Flora Surveys, EES and EPBC Act Referral (2008 – present)
- Avalon Airport rail Link, Victoria, flora and fauna assessment and targeted surveys and net gain assessments of three potential alignments and Department of Transport liaison (2012)
- Nagambie bypass, Nagambie Victoria: Flora and Fauna Assessment, including habitat hectare assessment and Net Gain analysis (2008)

Ecosystem Monitoring and Management

- DSE Vegetation Condition Assessment Project, East Gippsland, Victoria: Broad scale assessment of the quality and bushfire fuel loads of native vegetation across East Gippsland (2012)
- Warrambeen Station, Victoria - offset monitoring and reporting (2012 - present)
- Moonee Ponds Creek, Tullamarine – Growling Grass Frog monitoring (2008 – 2012)
- Woodland Grove Grassland Reserve, Craigieburn, Victoria - offset monitoring and reporting (2016)