EPBC Act referral

Australian Government
Department of Agriculture, Water and the Environment

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Title of proposal	2022/9187 - Residential Development, Warragul South

Section 1

Summary of your proposed action

1.1 Project industry type Residential Development

1.2 Provide a detailed description of the proposed action, including all proposed activities

A multi-lot residential subdivision at 295 Warragul-Lardner Road, Warragul South, Victoria. This proposed subdivision is consistent with the planning controls of the Baw Baw Planning Scheme and is considered to be generally in accordance with the Warragul Precinct Structure Plan (PSP) as applied to the site from its zoning within the Urban Growth Zone. The site can be identified as SW-10 in the Warragul PSP (Metropolitan Planning Authority 2014).

The overall property is 20.621 hectares. The proposed subdivision footprint includes 8.003 hectares of residential land comprising approximately 145 lots, 3.063 hectares of roads, 0.230 hectares in a Conservation Reserve and 5.041 hectares of Drainage/Waterway Reserve. In total the proposed subdivision comprises 16.33 hectares of the study area (79%), to the north and east of Hazel Creek and its tributaries. The remaining 4.291 hectares (21%) of the study area will not be impacted by the proposed subdivision and will remain as farming land (west of Hazel Creek) consistent with its zoning within the Farming Zone. See attachment entitled Development Plan v C.

All vehicular access to the proposed site from Warragul-Lardner will occur via the abutting Government Road, as an interim measure until such time as the 20m wide Access Street is constructed to the satisfaction of Baw Baw Shire Council. This road is required in the ultimate road configuration for the development of the property and PSP. The adjoining Government Road is not proposed to be closed, hence lots can continue to front this road.

The 29.5m wide Connector Boulevard will contain cycling facilities in accordance with Plan 8 (Public Transport & Path Network) of the Warragul PSP. Road widths shown on Development Plan v C are in accordance with the relevant cross sections in the Warragul PSP.

The two waterways are to be maintained in their current natural form in accordance with advice from the West Gippsland Catchment Management Authority. These waterways will be incorporated into the overall drainage reserve within the subdivision, and continue to provide habitat to the significant flora and fauna within the study area in the long-term. As part of the approved Stormwater Management Plan the West Gippsland Catchment Management Authority required that in 'regards to the waterways on the property, they are to be kept in their current natural form, placed in a minimum 30 metre waterway reserve either side of the waterway'. This requirement has been incorporated into the accompanying subdivision plan and will ensure ongoing management of the waterways. To the west of the drainage reserves, the existing farmland will be retained in its current form as Lot A in accordance with its zoning.

The works include the removal of native vegetation and earthworks, as well as civil works to construct the required infrastructure to support the proposed residential subdivision. These works may result in a temporary impact to 0.513 hectares of habitat for Dwarf Galaxias (Galaxiella pusilla) as well as up to 16 Strzelecki Gums (Eucalyptus strzeleckii) (See Attachment MNES Habitat Map). The proposed subdivision may also result in the removal of up to 0.064 hectares of Giant Gippsland Earthworm (Megascolides australis) potential estimated habitat and 0.078ha of Warragul Burrowing Crayfish (Engaeus sternalis) of potential habitat, subject to the final function engineering design of the internal road network.

1.3 What is the extent and location of your proposed action?

See Appendix B

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)

The property is located in Warragul South, approximately 2.5 kilometres south-west of the town centre. The study area is located within an agricultural landscape. The study area undulates, but generally slopes towards Hazels Creek, which bisects the northern portion of the study area, in an east-west direction. A tributary to Hazel Creek occurs from the south-western corner of the study area and runs through to Hazel Creek. A dam is located to the west of this tributary. The study area is mostly grazed by cattle, with the study area fenced into various paddocks.

The proposed residential development of the study area will take place to the east and north of Hazel Creek and its tributary. The land to the south and west of these creeks will remain farming land.

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1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

The property is 20.621 hectares. The proposed development footprint includes 8.003 hectares of residential lots, 3.063 hectares of roads, 0.230 hectares in a Conservation Reserve and 5.041 hectares of Drainage/Waterway Reserve. In total the development covers 16.33 hectares of the study area (79%), to the north and east of Hazel Creek and Its tributaries. The remaining 4.291 hectares (21%) of the study area will not be impacted by the proposed development and will remain farming land (west of Hazel Creek). See attachment entitled Development Plan v C

1.7 Proposed action location

Address - 295 Warragul-Lardner Rd, Warragul South, VIC, 3821, Australia

1.8 Primary jurisdiction Victoria

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

☐ Yes ☑ No

1.10 Is the proposed action subject to local government planning approval?

☑ Yes ☐ No

1.10.1 Is there a local government area and council contact for the proposal?

☑ Yes ☐ No

1.10.1.0 Council contact officer details

1.10.1.1 Name of relevant council contact officer	Baw Baw Shire Council
1.10.1.2 E-mail	bawbaw@bawbawshire.vic.gov.au
1.10.1.3 Telephone Number	03 5624 2411

1.11 Provide an estimated start and estimated end date for the proposed action

Start Date	01/06/2023
End Date	01/06/2026

1.12 Provide details of the context, planning framework and state and/or local Government requirements

Local Government

A planning permit application was submitted to Council via SPEAR on 24/08/2021 (Planning Permit Application Number: PLA0201/21; SPEAR Ref: S180698V). The is currently at the RFI stage which was provided on 09/11/2021. Their response is due by 09/05/22.

The study area is zoned Urban Growth Zone – Schedule 1 within the Baw Baw Shire Council municipality. The UGZ1 gives rise to the Warragul PSP. It is covered by a Development Contributions Plan Overlay, but no other overlays pertinent to this referral (such as Environmental Significance Overlays or Vegetation Protection Overlays) cover the study area. It appears that the Environmental Significance Overlay – Schedule 4 (which previously included the Hazel Creek area and indicates Giant Gippsland Earthworm habitat) has been removed with the expansion of the town boundary.

State Government

Planning and Environment Act 1987 (Vic)

The Planning and Environment Act 1987 governs the use, development, protection and conservation of land in Victoria. The impacts to biodiversity values will be assessed through Victorian State Government policy including the 'Guidelines for the Removal, Destruction or Lopping of Native Vegetation' (the Guidelines) (Department of Environment Land Water and Planning 2017), under Clause 52.17 of the Planning and Environment Act 1987 (Vic). Native vegetation was identified during the site assessment and offsets will be required for its removal prior to the start of works, as per the Guidelines.

Flora and Fauna Guarantee Act 1988 (Vic)

The Flora and Fauna Guarantee Act 1998 (Vic) (FFG Act) provides a legal framework for enabling and promoting the

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conservation of all of Victoria's native flora and fauna, and to enable management of potentially threatening processes on public land. The Act lists native species, communities, and processes that threaten native flora and fauna, under Schedules of the Act. This enables the assessor and regulators to establish management measures to mitigate impacts on listed values within Victoria. There is an obligation on public authorities and ministers to consider potential biodiversity impacts when exercising their functions.

In additional, a 'Permit to Take Protected Flora' is required to 'take' listed flora species that are members of listed communities or protected flora from public land. 'Taking' flora is defined as any action which results in the removal or death of a native plant. A permit is not required under the FFG Act for private land, unless listed species are present and the land is declared 'critical habitat' for the species. As the current project is constrained to private land it does require such a referral.

Environment Effects Act 1978 (Vic)

The Environment Effects Act 1978 (EE Act) is an advisory act without a regulatory approval mechanism. The EE Act provides for the assessment of proposed project (works) that are capable of having a significant effect on the environment. The Ministerial Guidelines for the Assessment of Environment Effects under the EE Act provide guidance on the types of impacts that may be considered to contribute to a significant environmental impact. A referral to the Minister for Planning is required to determine whether the project is likely to result in a significant impact on the environment and whether further environmental assessment is necessary. It is noted that the current project does require such a referral.

Aboriginal Heritage Act 2006 (Vic)

The purpose of the Aboriginal Heritage Act 2006 (AH Act) is to provide for the protection of Aboriginal cultural heritage in Victoria. Impacts to cultural heritage values of the site will be managed through the development of a Cultural Heritage Management Plan, under the AH Act.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders

As the site lies in a PSP, no advertising is required, however consultations have taken place with the Registered Aboriginal Party (RAP) through the cultural heritage advisors (Unearthed Heritage, see below in section 3.9).

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

Ecolink Consulting Pty Ltd (2021). Biodiversity Assessment, 295 Warragul-Lardner Road, Warragul South, Victoria.
- General assessment of ecological values, with a vegetation quality assessment. Attachment: Ecolink Biodiversity Assessment

Ecolink Consulting Pty Ltd (2022). Targeted Dwarf Galaxias and Growling Grass Frog Surveys, 295 Warragul-Lardner Road, Warragul South.
- Dwarf Galaxias recorded within the study area, however Growling Grass Frog was not. Attachment: Ecolink GGF DG Surveys

John Patrick Landscape Architects Pty Ltd (2021). Arboricultural Report: 295 Warragul-Lardner Road, Warragul.
- Assessment of tree locations and health, including Strzelecki Gum. Attachment: Arboricultural Assessment

Van Praagh BD (2021). Giant Gippsland Earthworm and Warragul Burrowing Crayfish Assessment at a proposed residential development – 295 Warragul-Lardner Rd, Warragul.
- Targeted threatened species surveys. Both species recorded. Attachment: Invert_Eco GGE WBC Assessment

1.15 Is this action part of a staged development (or a component of a larger project)?

☐ Yes ☑ No

1.16 Is the proposed action related to other actions or proposals in the region?

☑ Yes ☐ No

1.16.1 Identify the nature/scope and location of the related action (Including under the relevant legislation)

The proposed development of the study area will be undertaken in accordance with the Warragul Precinct Structure Plan (Metropolitan Planning Authority 2014), which is a masterplan for the future urban development of the Warragul precinct. Development proponents within the Warragul precinct, such as the proponent for the current application, will be bound by the Warragul and Drouin Growth Areas Development Contributions Plan (the DCP). The DCP sets out requirements for infrastructure funding across the wider Warragul and Drouin townships and will be finalised and implemented separately to the

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PSP. Once complete, the DCP will be a separate document incorporated into the Baw Baw Planning Scheme and implemented through a Development Contributions Plan Overlay (DCPO).

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Section 2

Matters of national environmental significance

2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties?

☐ Yes ☑ No

2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places?

☐ Yes ☑ No

2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland?

☐ Yes ☑ No

2.4 Is the proposed action likely to have any direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

☑ Yes ☐ No

Species or threatened ecological community

Dwarf Galaxias (Galaxiella pusilla), listed as Vulnerable

Impact

The construction of a housing development, and its required infrastructure, has the potential to lead to the temporary loss of Dwarf Galaxias habitat, resulting from soil disturbance and hydrological changes within Hazel Creek. Approximately 300 m of creek line was identified as known and potential Dwarf Galaxias habitat, equating to approximately 0.513 ha. Works in these creeks are likely to present a short-term impact to the species that will be mediated by restoration of habitat following the completion of drainage works to support the development.

Dwarf Galaxias habitat is also vulnerable to indirect impacts particularly during the construction phase, which will be managed through the implementation of management plans to mitigate these risks.

See attachment: Ecolink GGF DG Surveys. p. 14 for self-assessment.

Species or threatened ecological community

Giant Gippsland Earthworm (Megascolides australis), listed as Vulnerable

Impact

The construction of a housing development, and its required infrastructure, has the potential to lead to the temporary loss of Giant Gippsland Earthworm habitat, resulting from soil disturbance and hydrological changes within the tributary to Hazel Creek. Works in the creek are likely to present a short-term impact to the species that will be mediated by restoration of habitat following the completion of drainage works to support the development.

The area over which Giant Gippsland Earthworms were recorded (e.g., within 30 m of the creekbank) will largely not be directly impacted by the proposal, with approximately 1.042 ha of habitat protected in the long term within the waterway reserve. However, there will be a loss of approximately 0.064 ha of the buffer zone, which will be impacted by a road, representing a 6.1% loss of potential habitat within the study area. Giant Gippsland Earthworm habitat is also vulnerable to indirect impacts particularly during the construction phase, which will be managed through the implementation of management plans to mitigate these risks.

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See Attachment: Invert_Eco GGE WBC Assessment. Section 5.1 (p. 25) for impact discussion and Table 2 (p. 42) for self-assessment

Species or threatened ecological community

Strzelecki Gum (Eucalyptus strzeleckii), listed as Vulnerable

Impact

Twenty-six Strzelecki Gums were recorded within the study area during a recent arboricultural assessment of the property. The development plan, including the waterway Reserve to service the proposed residential development is likely to directly or indirectly impact 16 of these trees. The remaining ten trees (38%) will be retained within a Conservation Reserve within the development.

See Attachment: Ecolink Biodiversity Assessment. p. 16 for description of findings and p. 20 for discussion of implications and recommendations under the EPBC Act

2.4.2 Do you consider this impact to be significant?

☐ Yes ☑ No

2.5 Is the proposed action likely to have any direct or indirect impact on the members of any listed migratory species or their habitat?

☐ Yes ☑ No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

☐ Yes ☑ No

2.7 Is the proposed action likely to be taken on or near Commonwealth land?

☐ Yes ☑ No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

☐ Yes ☑ No

2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development?

☐ Yes ☑ No

2.10 Is the proposed action a nuclear action?

☐ Yes ☑ No

2.11 Is the proposed action to be taken by a Commonwealth agency?

☐ Yes ☑ No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage place overseas?

☐ Yes ☑ No

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2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area?

☐ Yes ☑ No

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Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

A total of 104 flora species were recorded during the current assessment. This comprised 65 indigenous species, 38 exotic species, and the Victorian native, but non-indigenous, Sweet Pittosporum Pittopsorum undulatum. The vegetation within the study area generally comprises open pastures, dominated by exotic vegetation.

Nine threatened flora species have previously been recorded within three kilometres of the study area. An additional six threatened flora species are predicted to occur within the study area based on the Protected Matters Search Tool (PMST). Strzelecki Gum (Eucalyptus strzeleckii) has been widely recorded throughout the local area. Strzelecki Gum is listed as Vulnerable under the EPBC Act. It is also listed as Critically Endangered under the FFG Act. Strzelecki Gum was recorded within patches of native vegetation and as scattered trees alongside waterways during the current assessment. In total, Strzelecki Gum were recorded within the study area during recent ecological and arboricultural assessments of the property. 26 Other species identified by the desktop assessment are considered unlikely to occur within the study area on the basis that their habitat requirements are not met, or due to the high level of modification of habitats.

The habitats for native fauna are generally modified. The study area contains open exotic grasslands, with occasional indigenous scattered trees throughout the paddock. Open exotic grasslands provide limited fauna habitat but are expected to provide foraging habitat for a range of birds. Australia Magpie (Cracticus tibicen) and Magpie-lark (Grallina cyanoleuca) were recorded in these areas. Ground-dwelling fauna may move across the paddocks when moving to higher quality habitats.

The dam, drainage line and creek lines provided aquatic habitats. Waterfowl such as Grey Teal (Anas gracilis) and Purple Swamphen (Porphyrio porphyrio) were recorded in areas of open water and nearby fringing vegetation. Four frog species, including Common Froglet (Crinia signifera), Southern Brown Tree Frog (Litoria ewingii), Spotted Marsh Frog (Limnodynastes tasmaniensis) and Pobblebonk (Limnodynastes dumerilii), were recorded in this location. Potential habitats for Dwarf Galaxias, Growling Grass Frog, Giant Gippsland Earthworm and Warragul Burrowing Crayfish were also recorded in these locations.

Mature trees were generally also located along the waterways. Trees provide roosting and nesting opportunities for birds and bats, with many of the trees providing tree hollows. Eastern Rosella (Platycercus eximius) and Galah (Eolophus roseicapilla) were nesting in hollow-bearing trees during the current assessment. Mammals such as Common Ringtail Possums (Pseudocheirus peregrinus) also likely to forage in the canopy of these trees, whilst micro-bats may use the fissures and flaking bark as diurnal roosting locations on occasion.

Small bird species were recorded where the trees were densest, and where the understorey vegetation was present in the southern portion of the study area. These areas provided foraging, shelter and possibly nesting opportunities for Grey Fantail (Rhipidura albiscapa), Grey Shrike-thrush (Colluricincla harmonica), Brown Thornbill (Acanthiza pusilla), Yellow-rumped Thornbill (Acanthiza chrysorrhoa) and Superb Fairywren (Malurus cyaneus).

Seven threatened fauna species have previously been recorded within three kilometres of the study area. A further 16 threatened fauna species are predicted to occur within the study area, based on the PMST.

Most of the threatened fauna species identified in the desktop assessment are unlikely to occur as their habitat requirements are not met within the study area, or due to the high level of modification of habitats. However, four nationally significant species have been confirmed or have a moderate or high likelihood of occurrence within the study area: Growling Grass Frog, Dwarf Galaxias, Giant Gippsland Earthworm and Warragul Burrowing Crayfish. Targeted surveys for Growling Grass Frog suggest that this species does not, in fact, occur within the study area, however the other three were recorded within the study area. In addition, we also expect that waterbirds such Eastern Great Egret (Ardea alba modesta) may opportunistically forage at the dam. This species is listed as Vulnerable on the FFG Act, however, the study area is unlikely to provide important habitat (e.g. breeding habitat) to a resident population of the species.

Additional detail on the above is provided as Attachment: Ecolink Biodiversity Assessment

3.2 Describe the hydrology relevant to the project area (including water flows)

Eastern sections of the tributary to Hazel Creek, in the north of the study area, supported low quality habitat and were dominated by Toowoomba Canary-grass (Phalaris aquatica). The western section of the tributary to Hazel Creek supported higher quality vegetation in the form of Slender Knotweed (Persicaria decipiens) and emergent aquatic vegetation such as Narrow-leaf Cumbungi (Typha domingensis), Common Water-plantain (Alisma plantago aquatica), and Tall Spike-sedge (Eleocharis sphacelata), as well as trailing bank grasses typically favoured by Dwarf Galaxias.

The creek running north/south through the property was narrow and shallow, with water flowing from the south-west of the study area until intersecting Hazel Creek in the north of the study area. Emergent vegetation consisted of Tassel Sedge (Carex fascicularis), ferns, pasture grasses and Blackberry (Rubus fruticosus spp. agg.), which completely covered the water along most of the creek, with only patches of open water observed. Multiple cattle crossings were present within the creek proper.

A medium sized farm dam, which was full at the time of assessment and likely to hold water much of the year, was located in the central portion of the study area, to the west of the creeklines, in the land that will not be developed under the Warragul PSP. The southern portion of the dam was dominated by high levels of emergent vegetation which included indigenous Tall Spike-sedge. Exotic pasture grasses dominated much of the surrounding and partly fringing vegetation in areas which were not fallow by foot traffic from cattle. One emergent tree was also growing in the middle of the farm dam.

In situ water quality data collected that the time of the survey is within the range that would support Dwarf Galaxias, with no outliers (see Attachement Ecolink GGF DG Surveys. p. 12).

3.3 Describe the soil and vegetation characteristics relevant to the project area

Blue-grey/red clay soils, patchily waterlogged in low lying parts of the study area, near the Hazel Creek tributaries.

The vegetation within the study area generally comprises open pastures, dominated by exotic vegetation, including pasture grasses such as Sweet Vernal-grass (Anthoxanthum odoratum), White Clover (Trifolium repens), Perennial Rye-grass (Lolium perenne), Cocksfoot (Dactylis glomerata), Brown-top Bent (Agrostis capillaris), Yorkshire Fog (Holcus lanatus) and Prairie Grass (Bromus catharticus), as well as environmental weeds such as Common Mouse-ear Chickweed (Cerastium glomeratum), Flatweed (Hypochaeris radicata) and Capeweed (Arctotheca calendula).

Some Blackwoods (Acacia melanoxylon) occur alongside the driveway in the western portion of the study area. Strzelecki Gum occur in the low-lying parts of the study area, including along Hazel Creek and its tributary. Occasional Manna Gum (Eucalyptus pryoriana) also occur further up the tributary, mixed with the Strzelecki Gums.

Hazel Creek generally does not contain trees and shrubs, but includes aquatic and semi-aquatic species such as Tall Spike-sedge, Broad-leaf Rush (Juncus planifolius), Green Rush (Juncus gregiflorus), Water Couch (Paspalum distichum), Slender Knotweed (Persicaria decipiens) and Narrow-leaf Cumbungi. Exotic species in this location includes Blackberry, Brown-top Bent and Yorkshire Fog.

An artificial dam has been created to the west of the drainage line. Tall Spike-sedge occurs within the dam, which is fringed by Common Spike-sedge (Eleocharis acuta), Small Loosestrife (Lythrum hyssopifolia), as well as the above-mentioned exotic species.

A less disturbed remnant patch of native vegetation occurs in the southern-most portion of the study area, along the tributary to Hazel Creek. It contained an overstorey of Strzelecki Gum and occasional Manna Gum. The midstorey included Blackwood, Prickly Moses (Acacia verticillata), Scented Paperbark (Melaleuca squarrosa), Prickly Currant-bush (Coprosma quadrifida) and Common Cassinia (Cassinia aculeata). The understorey included a range of ferns, such as Rough Tree-fern (Cyathea australis), Hard Water-fern (Blechnum wattsii), Soft Water-fern (Blechnum minus), Mother Shield-fern (Polystichum proliferum) and Pouched Coral-fern (Gleichenia dicarpa). It also included Bracken (Pteridium esculentum), Forest Wire-grass (Tetrarrhena juncea) and herbs and climbers, including Mountain Clematis (Clematis aristata) and Wonga Vine (Pandorea pandorana). The cover abundance of weeds was generally low in this location.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area

None recorded

3.5 Describe the status of native vegetation relevant to the project area

The study area contains three patches of native vegetation. These patches differed in their quality:

Patch 1 includes the Hazel Creek. It is generally treeless, although some trees, such as the Backwoods and some Strzelecki Gums, are located in close proximity. It is dominated by Rushes and is therefore best represented by EVC 136: Sedge Wetland. It has a Habitat Hectare Score of 16 (out of 100), supports 2 Large trees, and is 1.66 ha in size;

Patch 2 is located in the southern portion of the study area. It contains a high diversity of native vegetation within the study area compared with the EVC Benchmark for EVC 29: Damp Forest. It contains the highest quality vegetation within the study area and has a Habitat Hectare Score of 42 (out of 100), supports 13 Large trees, and is 2.09 ha in size;

Patch 3 is located along the tributary to Hazel Creek in the central portion of the study area. Consistent with the Warragul PSP this patch is best represented by Swampy Riparian Woodland. It contains an overstorey of Strzelecki Gums, but generally contains a high cover abundance of weeds in the understorey. It has a Habitat Hectare Score of 21 (out of 100), supports 11 Large trees, and is 1.25 ha in size.

The Warragul PSP maps a patch of native vegetation to the east of the drainage line, which is proposed to be retained: VR-SW-03. This vegetation coincides with part of Patch 3.

In addition, six scattered indigenous trees were recorded within the study area or whose tree protection zones extended into the study area, 3 of which are classified as Large.

Maps showing the location of these patches and a table providing detail about how the Habitat Hectare Scores were calculated are provided within the Biodiversity Assessment (Attachment: Ecolink Biodiversity Assessment).

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area

The study area undulates, but generally slopes towards Hazels Creek, which bisects the northern portion of the study area, in an east-west direction.

3.7 Describe the current condition of the environment relevant to the project area

The study area is 20.621 ha and is bound by agricultural land, with a herb farm adjacent to the eastern boundary. The land is gently undulating, with both south and west facing slopes. The site comprises open pasture grasses and is used for grazing by cattle, with several Alpaca also present. A tributary of Hazel Creek with a defined channel flows north-south through the central portion of the property. Hazel Creek branches east-west in the north of the site and is surrounded by a wide, treeless floodplain, supporting aquatic and semiaquatic flora species. The northern tributary is fringed by remnant vegetation with an overstorey of Strzelecki and Manna Gums.

The study area contains three weed species that are listed as ‘noxious’ within the Port Phillip and Westernport Catchment Management Area: Blackberry, Bridal Creeper (Asparagus asparagoides), and Ragwort (Senecio jacobaea), which are all listed as ‘Regionally Controlled’. Blackberry and Bridal Creeper are also listed as Weeds of National Significance.

3.8 Describe any Commonwealth Heritage places or other places recognised as having heritage values relevant to the project

None recorded

3.9 Describe any Indigenous heritage values relevant to the project area

Thirty-three previously unrecorded Aboriginal Cultural Heritage Places (ACHP), comprising artefact scatters were recorded throughout the study area (VAHR 8021-0495 1-32 and 8021-0497), representing as many as an estimated 500 surface and subsurface stone artefacts. Salvage is proposed in some of the areas, as shown in the Cultural Heritage Management Plan (CHMP) prepared for the site. The draft CHMP is provided as an attachment to this referral (Attachment: DRAFT CHMP Not for public display).

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area

Freehold land

3.11 Describe any existing or any proposed uses relevant to the project area

The study area is used for grazing, with Alpaca and cattle present during the recent assessments.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 4

Measures to avoid or reduce impacts

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action

The study area will be developed broadly in line with the Warragul PSP. This document identifies parts of the study area to the west and north of the creeklines for residential development. No works will be undertaken in the area identified for ongoing farming practices (south and esat of Hazel Creek and its tributaries). Within the development, impacts to significant habitat for threatened species will largely be short-term to facilitate the construction of drainage reserves to service the residential lots, after which time this habitat will be restored and improved in the long-term for the affected threatened species that are found in the creeks. Despite this, waterways within the study area are to be kept in their current natural form and vegetation is to be managed in accordance with a Waterway Management Plan (Attachment: Stormwater Management Strategy) , that includes the retention of significant vegetation, such as the 15 Strzelecki Gums that occur within the creek-lines. In addition, a 0.230 hectare Conservation Reserve is also proposed to protect additional areas of native vegetation, including Strzelecki Gum (VR-SW-03: part of Patch 3).

The result is a temporary impact to up to approximately 1.043 ha of habitat for Giant Gippsland Earthworm and 0.513 hectares of Dwarf Galaxias habitat that will be reinstated and improved at the completion of works. Longer term impacts, and permanent removal of habitat, are also proposed to approximately 0.064 ha of Giant Gippsland Earthworm habitat on the western edge of the area presumed to support habitat for this species, uphill from the creekline and in decreasingly suitable habitat, as well as the removal of 1 Strzelecki Gum trees.

To avoid indirect impacts to ecological values off-site, the proposed action will be governed through best practice construction techniques that are consistent with the protocols described in Construction Techniques for Sediment Pollution Control (EPA Victoria 1991) and Environmental Guidelines for Major Construction Sites (EPA Victoria 1996). This will include preparation of a Construction Environment Management Plan (not yet prepared), to be implemented to manage weeds, and to mitigate impacts to the adjoining Hazel Creek (and its tributaries) area, including:

- A specific work method statement designed to minimise the risk of impacts to Dwarf Galaxias and Giant Gippsland Earthworm, including contingency planning for encounters with either species (to be endorsed by council);
- Appropriate exclusion fencing and access protocols for the undeveloped, western portion of the study area;
- Installation and maintenance of sediment and erosion control measures to limit impacts to the Hazel Creek area outside of the study area;
- A Weed Management Plan (to be endorsed by Council);
- A Waterway Restoration Plan that includes Water Sensitive Urban Design principles, that may include treatment of stormwater run-off from roads/housing before entering Hazel Creek and the implementation of bioretention systems at streetscape/housing level. E.g., Construct Swales along roadsides adjacent to Giant Gippsland Earthworm habitat;
- Vehicle hygiene protocols;
- Undertaking construction personnel inductions to alert them to sensitive areas within the study area;
- Establishment of No Go Zones and temporary fencing to keep construction personnel to the nominated construction footprint and exclude them from the areas of retained native vegetation and habitat for MNES; and
- Implementing animal welfare protocols prior to soil disturbance, the removal of vegetation, and during the construction phase of the project.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

Long-term outcomes for Giant Gippsland Earthworm and Dwarf Galaxias are expected to be positive as result of an improvement in habitat within the study area. The restoration of the Waterway Reserve, with indigenous plantings that are sensitive to the habitat requirements of Giant Gippsland Earthworm and Dwarf Galaxias, and the removal of weeds, will result in habitat within the study area that is better than the habitat that is currently found within the study area. The location of the Waterway Reserve will also preserve and protect the habitat for these species in the long-term and also preserve (and improve) a habitat corridor for the species as they move across the landscape.

The Conservation Reserve will protect 25 Strzelecki Gum in the long-term in the Conservation Reserve and the Waterway Reserve. Impacts will be limited to 1 tree that will be directly impacted by the placement of a road (Tree 36). Revegetation of the study area, in parts of the Waterway Reserve, will include locally sourced Strzelecki Gums in the palette of plants recommended for overstorey planting.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 5

Conclusion on the likelihood of significant impacts

5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled action

- ☐ World Heritage properties
- ☐ National Heritage places
- ☐ Wetlands of international importance (declared Ramsar wetlands)
- ☐ Listed threatened species or any threatened ecological community
- ☐ Listed migratory species
- ☐ Marine environment outside Commonwealth marine areas
- ☐ Protection of the environment from actions involving Commonwealth land
- ☐ Great Barrier Reef Marine Park
- ☐ A water resource, in relation to coal seam gas development and large coal mining development
- ☐ Protection of the environment from nuclear actions
- ☐ Protection of the environment from Commonwealth actions
- ☐ Commonwealth Heritage places overseas
- ☐ Commonwealth marine areas

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action

The proposed action will temporarily impact up to 0.513 ha of Dwarf Galaxias (DG) habitat and 1.043 ha of Giant Gippsland Earthworm (GGE) habitat. An additional 0.064 ha of Giant Gippsland Earthworm habitat will be permanently impacted by the proposed action, as well as the loss of 1 Strzelecki Gum (SG) tree.

This is not considered a significant impact on the basis that the impact is largely temporary, with positive ecological outcomes to occur following the completion of works and the restoration of the creeks within the study area. A self-assessment was undertaken using the Significant Impact Guidelines 1.1; Environment Protection and Biodiversity Conservation Act 1999 (Department of the Environment 2013) for Vulnerable MNES:

Lead to a long-term decrease in the size of an important population of a species:
DG: The study area does not support a known important population of the species. Development of the study area could, negatively impact the total numbers of DG in the region and the population observed within the study area during the current assessment may be important in a local, rather than regional or national context
GGE: Small colony of GGE identified from study area. Will be protected in a reserve and managed for GGE habitat
SG: The development of the study area may result in a small reduction in the availability of habitat for the species within the study area in the short-term, although revegetation will address this impact

Reduce the area of occupancy of an important population:
DG: As above
GGE: Small colony of GGE identified from study area. Not considered an important population
SG: As above

Fragment an existing important population into two or more populations:
DG: The study area does not currently provide habitat for an important population of DG (as above), however the population recorded during the current assessment may be fragmented by proposed works given that ostensibly suitable habitat occurs upstream of the study area to its west, and the significance of the population within the local area is not known
GGE: Small discrete colony identified. Site will be protected within reserve. No chance of fragmentation
SG: Impact is small and restricted, unlikely to fragment the existing population

Adversely affect habitat critical to the survival of a species:
DG: The proposed development will impact habitat critical to the survival of a species within the study area, and potentially upstream of the study area by restricting dispersal routes within the landscape
GGE: Small colony of GGE identified from study area. Will be protected in a reserve. The study area is not habitat critical to the survival of the species.
SG: No critical habitat will be impacted

Disrupt the breeding cycle of an important population:
DG: The study area does not currently provide habitat for an important population of DG, however the development of the study area may disrupt the breeding cycle of an important population by restricting dispersal routes within the landscape
GGE: Small colony of GGE identified from study area. Will be protected in a reserve. The action will not disrupt the breeding cycle of the species.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

SG: No impact to the breeding cycle of SG

Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline:
DG: The development of the study area may result in a small reduction in the availability of habitat for the species within the study area, as well as upstream of the study area
GGE: Small colony of GGE identified from study area. Will be protected in a reserve. The action will not significantly impact or decrease the availability or quality of habitat to cause species decline
SG: The development of the study area may result in a small reduction in the availability of habitat for the species within the study area in the short-term, although revegetation will address this impact

Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat:
All MNES: The proposed development will not facilitate the introduction or expansion of invasive species. The project will produce Management Plans, which will reduce the extent of noxious weeds

Introduce disease that may cause the species to decline:
All MNES: No, no diseases known for DG, GGE and construction hygiene protocols will protect SG

Interfere substantially with the recovery of the species:
DG: No, the study area does not provide habitat for an important population of DG
GGE: Small colony of GGE identified from study area that will be protected in a reserve. The works proposed will not interfere with the management or recovery of these areas
SG: No, the study area does not provide habitat for an important population of SG

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 6

Environmental record of the person proposing to take the action

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Explain in further detail

Yes. The proponents have no history of environmental law breaches

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

None

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

☐ Yes ☑ No

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

☐ Yes ☑ No

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 7

Information sources

Reference source

Warragul Precinct Structure Plan (PSP) (Metropolitan Planning Authority 2014)

Reliability

High

Uncertainties

None, this is an endorsed document in the planning scheme

Reference source

Construction Techniques for Sediment Pollution Control (EPA Victoria 1991)

Reliability

High

Uncertainties

None

Reference source

Environmental Guidelines for Major Construction Sites (EPA Victoria 1996)

Reliability

High

Uncertainties

None

Reference source

Significant Impact Guidelines 1.1; Environment Protection and Biodiversity Conservation Act 1999 (Department of the Environment 2013)

Reliability

High

Uncertainties

None

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 8

Proposed alternatives

Do you have any feasible alternatives to taking the proposed action?

☑ Yes ☐ No

8.0 Provide a description of the feasible alternative

Not undertaking the development and leaving the site as is

8.1 Select the relevant alternatives related to your proposed action

☐ Timeframes
☐ Locations
☐ Activities

8.25 Do you have another alternative?

☐ Yes ☑ No

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 9

Person proposing the action

9.1.1 Is the person proposing the action an organisation or business?

☑ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	W 295 Pty Ltd
Business name	
ABN	
ACN	648450855
Business address	1341 Dandenong Rd, Suite 8215, Level 8, Tower 1, Chadstone, 3148, VIC, Australia
Postal address	
Main Phone number	0487588888
Fax	
Primary email address	admin@titanau.com
Secondary email address	

9.1.2 I qualify for exemption from fees under Regulation 5.23(1)(ii) of the EPBC Regulations because I am:

☑ Small business
☐ Not applicable

9.1.2.1 You must provide the date/income year that you became a small business entity:

04/03/2021

9.1.2.2 I would like to apply for a waiver of full or partial fees under Regulation 5.21A of the EPBC Regulations

☐ Yes ☑ No

9.1.3 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Amy
Last name	Shaw
Job title	Project Manager
Phone	
Mobile	
Fax	
Email	amy.shaw@titanau.com
Primary address	1341 Dandenong Rd, Chadstone, 3148, VIC, Australia
Address	

Declaration: Person proposing the action (To be signed by the person at 9.1.3)

I, Amy Shaw, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity.

Signature: ..... Date: 25/3/22

I, Amy Shaw, the person proposing the action, consent to the designation of _____ as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:..... Date: 25/3/22

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small business entity and confirm that I qualify for a small business exemption.

Signature:..... Date: 25/3/22

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Proposed designated proponent

9.2.1 Is the proposed designated proponent an organisation or business?

☑ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	W 295 Pty Ltd
Business name	
ABN	
ACN	648450855
Business address	1341 Dandenong Rd, Chadstone, 3148, VIC, Australia
Postal address	
Main Phone number	0487588888
Fax	
Primary email address	admin@titanau.com
Secondary email address	

9.2.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Amy
Last name	Shaw
Job title	Project Manager
Phone	0487588888
Mobile	
Fax	
Email	amy.shaw@titanau.com
Primary address	1341 Dandenong Rd, Chadstone, 3148, VIC, Australia
Address	

Declaration: Proposed Designated Proponent

I, Amy Shaw **,the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.**

Signature: ..... **Date:** 25/3/22

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Referring party (person preparing the information)

9.3.1 Is the referring party an organisation or a business?

☑ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	The Trustee for ECOLINK CONSULTING UNIT TRUST
Business name	
ABN	80646930817
ACN	
Business address	473 High Street, Northcote, 3070, Victoria, Australia
Postal address	N/A, N/A, N/A, N/A, N/A
Main Phone number	+61419894948
Fax	
Primary email address	Stuart.cooney@ecolinkconsulting.com.au
Secondary email address	info@ecolinkconsulting.com.au

9.3.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Stuart
Last name	Cooney
Job title	Director/Principal Ecologist
Phone	0419 894 948
Mobile	
Fax	
Email	stuart.cooney@ecolinkconsulting.com.au
Primary address	473 High St, Northcote, 3070, VIC, Australia
Address	

Declaration: Referring party (person preparing the information)

I, _____Stuart Cooney_____, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature: ..... **Date:** 25/03/2022.....

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Appendix A

Attachment

Document Type	File Name
action_area_images	Development Plan v C.pdf
action_area_images	MNES Habitat Map.pdf
public_consultation_reports	*DRAFT CHMP Not for public display.pdf
supporting_tech_reports	Ecolink Biodiversity Assessment.pdf
supporting_tech_reports	Ecolink GGF DG Surveys.pdf
supporting_tech_reports	Invert_Eco GGE WBC Assessment.pdf
supporting_tech_reports	Arboricultural Assessment.pdf
hydro_investigation_files	Stormwater Management Strategy.pdf
trust-deed	Trust Deed.pdf

* NOT PUBLISHED - SENSITIVE

Appendix B

Coordinates

Area 1
-38.175517171848,145.90758554346
-38.175517399571,145.90758745006
-38.179009410364,145.9069006603
-38.179150699584,145.90687286966
-38.180059700333,145.90669408052
-38.1809297299,145.90652292976
-38.180460809663,145.9027294196
-38.175073141531,145.90378889634
-38.174957310961,145.90384711962
-38.174905110138,145.90341026002
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-38.174777770377,145.90234488947
-38.174700640174,145.90236215978
-38.174764180256,145.90289370947
-38.174827969766,145.90342752026
-38.174891729745,145.90396113037
-38.174968870107,145.9039438604
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