Figure 9: Ecological values at Simpson Barracks.
North East Link Project
Environment Effects Statement (EES)

Legend
- Project boundary - sub-surface
- Project boundary - surface

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Data source: Geological unit 50k - Geoscience Victoria - 2018. Created by igi

Geological unit 50k
Red Bluff Sandstone (Sxa): Sandstone, conglomerates; pale yellow and brown; fine to coarse-grained, massive to well bedded; cross-bedded; local ironstone

Newer Volcanic Group - basalt flows (Neo): Chumic tholeiite, quartz tholeiite, basaltic andesite, andesite, minor scoria and ash, fluvial sediments; holoclastic to alkaline; includes sheet flows and valley fills and intercalated gravel.

Newer Volcanic Group - stony mass basalt (Neo2): Tholeiitic to alkalic basalt; basaltic, young flows with little weathering or soil development (stony mass and hummocky lava flows)

Greensborough Basalt (Nug): Basalt: blue-grey; phenoocrysts of olivine in groundmass of tephra, minor olivine laths, pyroxene, iron oxide, interstitial glass; olivine partly altered to serpentinite.

sub-basaltic sediments (Nxp): Sediments under Moonee basalt:
Conglomerates, sandstone: alluvium (Qa1): Gravel, sand, silt; variegated and rounded, generally unconsolidated; includes deposits of low terraces, alluvial floodplain deposits alluvial terrace deposits (Qa2): Gravel, sand, silt; variegated and rounded, generally unconsolidated; dissected to form terraces higher than Qa1, alluvial floodplain deposits

Anderson Creek Formation (Sxa): Sandstone; thick to thin bedded; silicified, minor conglomerates

Melbourne Formation (Sxm): Siltstone and sandstone: mainly thin-bedded; most beds show undisturbed Bouma sequences.
Figure 11  Ecological values within the project boundary

Gippsland Plain

LEGEND

Project boundary - surface
Amenity Planting
No go zone
Bioregions

North East Link Project
Job Number
Revision
Date
31-35006
Q
13 Mar 2019

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Figure 13 Threatened fauna records (VBA)

LEGEND

VBA Threatened Fauna
- EPBC Act Listed
- FFO Act Listed
- DELWP Advisory Listed

Proposed reference project
- Underground tunnel

Surface road
- Road in trench
Figure 14 Database records of threatened fauna within and near the project boundary

File name: 3135006_014_Target_ThreatenedFauna_VBA_A3L_revH.pdf

1 page
Figure 15 Locations of 'currently mapped wetlands' and GDEs

5 pages
Figure 16 Groundwater dependent ecosystems and potential drawdown – late 2024

Figure 16-1 3135006_016_1_DDN_95th_Late_2024_A3L_RevB.pdf
Figure 16-2 3135006_016_2_DDN_95th_Late_2024_A3L_RevB.pdf
Figure 16-3 3135006_016_3_DDN_95th_Late_2024_A3L_RevB.pdf

3 pages
Figure 16 - 2

North East Link Project
Environment Effects Statement (EES)

Modelling prediction of groundwater drawdown
in late 2024 (95th percentile)

Northern Portal
North East Link Project
Environment Effects Statement (EES)

Modelled prediction of groundwater drawdown in late 2024 (95th percentile)
Southern Portal

Figure 16 - 3
Figure 17 Groundwater dependent ecosystems and potential drawdown – 2075

Figure 17-1 3135006_017_1_DDN_95th_2075_A3L_RevB.pdf
Figure 17-2 3135006_017_2_DDN_95th_2075_A3L_RevB.pdf
Figure 17-3 3135006_017_3_DDN_95th_2075_A3L_RevB.pdf

3 pages
Figure 17 - 3
North East Link Project
Environment Effects Statement (EES)
Modelled prediction of groundwater drawdown in 2075 (95th percentile)
Southern Portal
Figure 18 Groundwater dependent ecosystems and predicted depth to groundwater – late 2024

Legend:
- Project boundary - sub-surface
- Project boundary - surface
- Groundwater Dependent Ecosystems (PCC/A)
- Native Vegetation (EVC)
- Flora Grassy Woodland (GF)
- Flora in Riparian Woodland (FRW)

Predicted depth to groundwater at Late 2024 (m):
- 0 - 5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 25
- > 25

North East Link Project
Environment Effects Statement (EES)

Predicted depth to groundwater Late 2024
Northern Portal

Figure 18 - 1
Predicted depth to groundwater Late 2024
Southern Portal

LEGEND
- Project boundary - sub-surface
- Project boundary - surface
- Groundwater Dependent Ecosystems - surface expression (BOM)
  - Groundwater Dependent Ecosystems - subsurface expression (SOCA)
  - Native Vegetation (EVIC)
  - Floodplain Riparian Woodland (FRW)

Predicted depth to groundwater at Late 2024 (m)
- 10 - 15
- 15 - 20
- 20 - 25
- > 25

Ground level
- 0 - 10

North East Link Project
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Figure 18 - 2

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05 Mar 2019
Figure 20

Risk to native vegetation and GDEs from groundwater drawdown in vicinity of northern portal - Late 2024

(G60 percentile)

LEGEND

DCE Risk Rating Late 2024

- Very High Risk
- High Risk
- Moderate Risk
- Low Risk

Native Vegetation (NVC)

- Coolibah Grassland (CG)
- River Red Gum Woodland
- River Red Gum Woodland (SS)

Groundwater Dependent Ecologies (GDE)

- Coolibah Grassland
- River Red Gum Woodland
- River Red Gum Woodland (SS)

GDE Risk Rating Late 2024

- Very High Risk
- High Risk
- Moderate Risk
- Low Risk

Project boundary - sub-surface
Project boundary - surface
Groundwater Dependent Ecologies - surface expression (GDE)
Groundwater Dependent Ecologies - sub-surface expressions (GDE)

North East Link Project
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Risk to native vegetation and GDEs from groundwater drawdown in vicinity of northern portal - Late 2024

(60th percentile)
Figure 21 Risk to native vegetation and GDEs from groundwater drawdown in vicinity of northern portal - 2075 (Gha percentile)
Figure 22 Location of waterway modifications of Koonung Creek

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Location of waterway modifications of Koonung Creek

Legend
- Project boundary - surface
- Existing culvert
- Proposed culvert
- Watercourse
- Proposed creek diversion

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Location of waterway modifications of Koonung Creek

Figure 22 - 2
Figure 23 Location of waterway modifications of Banyule Creek