

# ENVIRONMENT EFFECTS STATEMENT



# Groundwater

The 9km Mordialloc Freeway will improve access to Melbourne's south-eastern suburbs, completing the missing link from Frankston to Clayton.

We've now undertaken 13 key investigations to fulfil our requirements as part of the Environment Effects Statement (EES).

We engaged a team of technical experts to undertake detailed investigations for the project. Field assessments and water modelling were carried out to understand how the construction and operation of the freeway could impact upon groundwater systems in the area. The investigations undertaken by our technical experts will help inform how we manage the potential impacts of the project.

The full report of this study is available in Chapter 17: Groundwater of the EES Main Report

#### What our studies found

#### **Existing groundwater conditions**

We found that groundwater within the project area is typically shallow with water levels intersected within the first few metres below ground level.

The assessments carried out by our technical experts show that there are interactions between ground and surface water at several waterbodies in the project area. These interactions help maintain water levels within the ecologically significant Ramsar-listed Edithvale Seaford Wetlands.

#### How we could affect groundwater

The construction and operation of the project could adversely affect wetland water levels, which we have simplified into two categories:

- Impacts to groundwater levels
- Impacts to groundwater quality.

We have found that the project could affect groundwater availability through:

- Changes to groundwater levels, flows and recharge resulting from excavations and compression of soil
- Construction of road embankments with soil compaction potentially restricting groundwater flows
- Spills, stormwater runoff or changes to groundwater flows activating acid sulfate soils

Details on the investigation into groundwater contamination is found in Chapter 18: Soils and Contaminated Land.







### Minimising our impacts

We will be able to manage any potential groundwater impacts through Construction Environment Management Plans (CEMPs), which will be prepared by the contractor.

We will also develop a Water Management and Monitoring Plan (WMMP) so that we can identify where there is groundwater contamination. The Environmental Risk Assessment (ERA) that was undertaken by our technical experts found that potential groundwater impacts were negligible to low-risk.

## Being accountable for what we do

While we will develop plans to monitor groundwater activity during construction and operation of the freeway, additional Environmental Performance Requirements (EPRs) are not required for groundwater.

Relevant EPRs can be found in Chapter 16: Surface Water and Chapter 18 Soils and Contaminated Land of the EES Main Report.

#### **EES Documentation:**

You can view the full EES documentation

Online: roadprojects.vic.gov.au/projects/ mordialloc-freeway

In person at:

- Mordialloc Freeway Info Hub
- · City of Kingston offices
- City of Greater Dandenong offices
- Chelsea Library
- Springvale Library
- State Library of Victoria
- Department of Environment, Land, Water and Planning (Melbourne office)





#### **CONTACT US**

contact@roadprojects.vic.gov.au 1800 105 105 Major Road Projects Authority GPO Box 4509, Melbourne VIC 3001

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