

SURFACE WATER

Iluka Resources is preparing an Environment Effects Statement (EES) for the Wimmera Project, a proposed mineral sands mine located approximately 35km south-west of Horsham. The Wimmera Project will introduce mining infrastructure and activities into an agricultural landscape, and the EES process seeks to understand and manage the potential impacts of this change on people and the environment.

SPECIALIST STUDIES

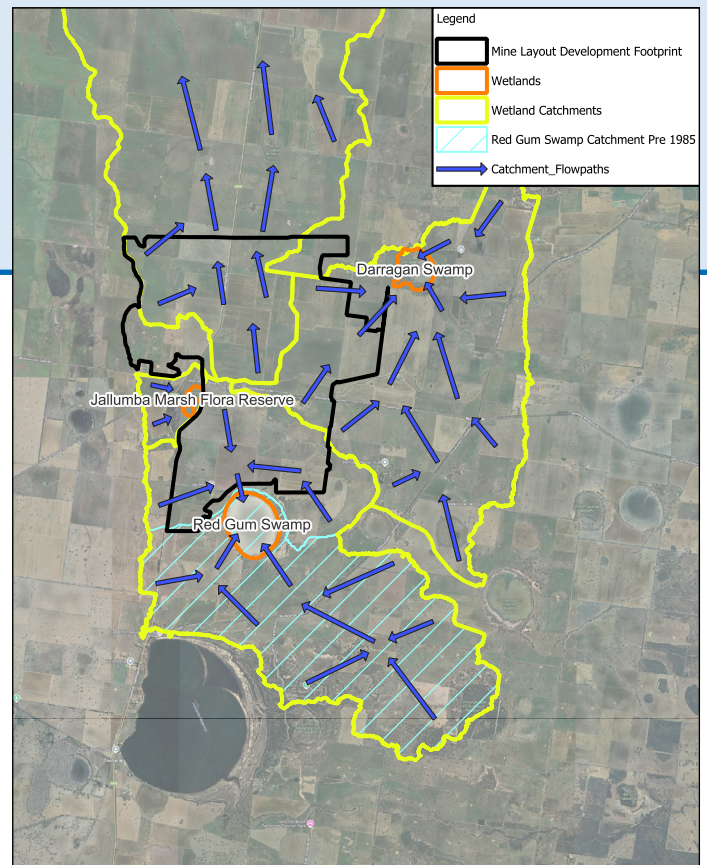
A Surface Water Impact Assessment (SWIA) is being prepared by consultants at Water Technology to determine the project's effects on surface water. The assessment characterises the regional and local surface water catchments and considers the effects the project may have on the functions, values and uses of nearby and downstream water environments. The assessment examines water usage impacts; changes to stormwater runoff and flood flows; potential for onsite and offsite soil erosion; inundation and ponding due to changes in the flow of water; surface water availability and quality; potential contamination of soils and surface water; and surface water flow patterns following mine rehabilitation.

As part of this assessment, Water Technology attended a Wimmera Project community information session to describe the study and listen to community feedback. Baseline data and stakeholder input are considered by both Water Technology and Iluka to inform project design and management strategies.

EXISTING CONDITIONS

The Wimmera Project sits in a relatively flat landscape with no distinct natural surface water flow paths other than irrigation channels. The proposed mine site is outside any riverine floodplains. In a 1-in-100-year flood, the mean water depth across the site is 0.16m, with deeper inundation in the wetlands in the surrounding area. The largest area of inundation occurs in the south-eastern part of the mine site, north of Red Gum Swamp.

The project area intersects with four catchments: the localised catchments of Red Gum Swamp, Darragan Swamp, Jallumba Marsh Flora Reserve and the catchment of Lake Natimuk, located 17km north of the proposed mine site. Excess rainfall that becomes runoff within the proposed mine site currently flows towards nearby swamps and wetlands via overland flow paths and agricultural drains.



Wetland receptor catchments and flowpath directions in relation to the project area



IMPACTS AND MANAGEMENT

The project will require water for ore and mineral processing, dust suppression, rehabilitation, wash down, and other operational purposes. It is estimated that the project will require approximately 3.5GL of water annually, which will be sourced from Rocklands Reservoir and Strathlynn Borefield. Allocations and availability are contingent on seasonal conditions and storage levels, and will be governed by GWMWater and existing conditions of the borefield license.

Iluka seeks to avoid impacts on the environment and people from the outset through careful project design. Where complete avoidance of impacts is not possible, Iluka will implement measures to minimise their duration, intensity and extent as far as reasonably practicable.

The primary measures to avoid, minimise or mitigate surface water impacts include minimising the area of disturbance, adopting designs that minimise erosion, and installing site drainage to capture and retain mine-affected runoff and sediment from any erosion that does occur. Any water that comes into contact with the mine, including surface water runoff, is intended to be captured in onsite surface water storage dams or directed to the mine dredge pond to prevent off-site discharge.

In the absence of mitigation measures, the mine would reduce the local catchment areas of wetland receptors. This would affect the annual inflow volumes to Red Gum Swamp and Darragan Swamp and reduce water levels, decreasing the duration and frequency of inundation events.

Iluka proposes to provide supplementary water supply to these wetlands to mitigate these potential impacts.

The mine will disrupt existing drainage lines and overland flow paths within the project area. This will be minimised with diversion of existing channels around the mine and reduction of the mine footprint as far as reasonably practicable. Internal mine drainage design will also minimise undesirable changes to stormwater inundation and pooling in and around the mine.

In addition to the SWIA, Water Technology is preparing a Surface Water Management Plan and Wetland Watering Plan. The intent of the Surface Water Management Plan is to minimise the potential for off-site discharge of mine-impacted runoff to downstream environments, as far as reasonably practicable. The Wetland Watering Plan will ensure water is added to Red Gum and Darragan Swamps so that their environmental values are protected.

Water quality monitoring will be conducted during all phases of the project, and the project will reduce the consumption of water as far as reasonably practicable to minimise potential environmental effects of sourcing, storing and using water.



NEXT STEPS

The Surface Water Impact Assessment is being finalised and will be available to view when the EES is submitted in mid-2026. If you would like to be kept informed about this process and future opportunities for engagement on the Wimmera Project, please email wimmera.project@iluka.com to be added to the project email list.

