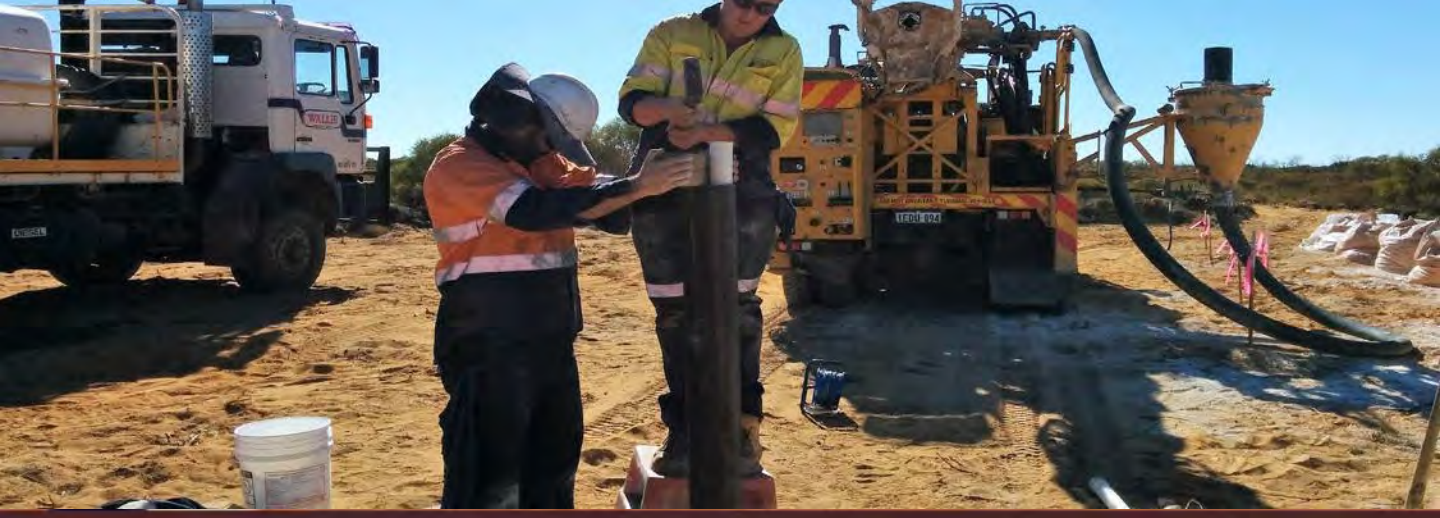

Sandy Ridge – Inland waters

The location of the proposed Sandy Ridge Facility was specifically chosen due to the absence of surface water and groundwater (aquifers).

Surface water (hydrology) investigations found that no rivers, streams, channels or creeks occur in the proposed development envelope. There are no major flow paths in the area of the proposed waste disposal cells. Any surface water runoff is only generated from rare, and infrequent high rainfall events. Runoff flows drain to low-lying depressions. They are generally retained for short periods of time.

Groundwater (hydrogeology) investigations found that the geology of the area restricts surface water moving into the soil more than a few metres, where it stays until it is removed by high rates of natural evaporation. Groundwater bore holes encountered no aquifers and were only dry or, on rare occasions, found slightly damp soil.

This demonstrates that it is very difficult for any rainwater to penetrate beyond the top layers of soil before the water evaporates. This natural process would be maintained once the waste cells are capped. The cap would be specifically designed to prevent surface water from entering the pit/cell.

Tellus commissioned detailed modelling of the hydrogeology and the existing natural environment using rainfall/climate assumptions. This included long-term performance analysis of the constructed waste cells under a range of scenarios.

Soil moisture probes are in place to measure a range of soil properties (image below).

Based on the information taken from these models, the cells are predicted to be stable over geological time with no water ingress.

The report concluded that after 10,000 years, there would be relatively little change to the "domed" caps and resistant to erosion over the very long term.

Tellus are confident the existing groundwater and surface water environment of the site would be maintained both during operations and for the very long term following closure of the proposed Sandy Ridge Facility.

Tellus applies innovative ground water research to confirm no aquifers