## Anglesea Groundwater Model

Barwon Water and GHD developed the Anglesea Groundwater Model in 2008 and updated it in 2013 as part of our last Bulk Entitlement (BE) review. This helped inform our current BE and how much water we can sustainably take from the Anglesea borefield.

The model is now being reviewed and revised in the lead up to the BE review, to include new data, climate change scenarios and other groundwater users. Barwon Water and Alcoa have agreed to develop one consistent groundwater model for the Anglesea catchment. The intention is to develop a single model that is suitable for both Barwon Water and Alcoa's ongoing water management and planning needs.

Data from the pumping test will be used to update and re-calibrate the numerical groundwater model to assess the sustainable yield of the aquifer system (under different climate scenarios) as well as identify any potential risks from groundwater extraction.

The update of the Anglesea Groundwater Model will inform the review of Barwon Water's BE. It will provide support to Barwon Water's Anglesea borefield planning, management and approvals works under the BE process.

While Alcoa's Long Term Groundwater License Amendment process and the Barwon Water BE review process are independent activities and on different timelines, they will be informed by the same updated and improved Anglesea Groundwater Model. This will ensure we can continue to protect the environment through sound planning and management.



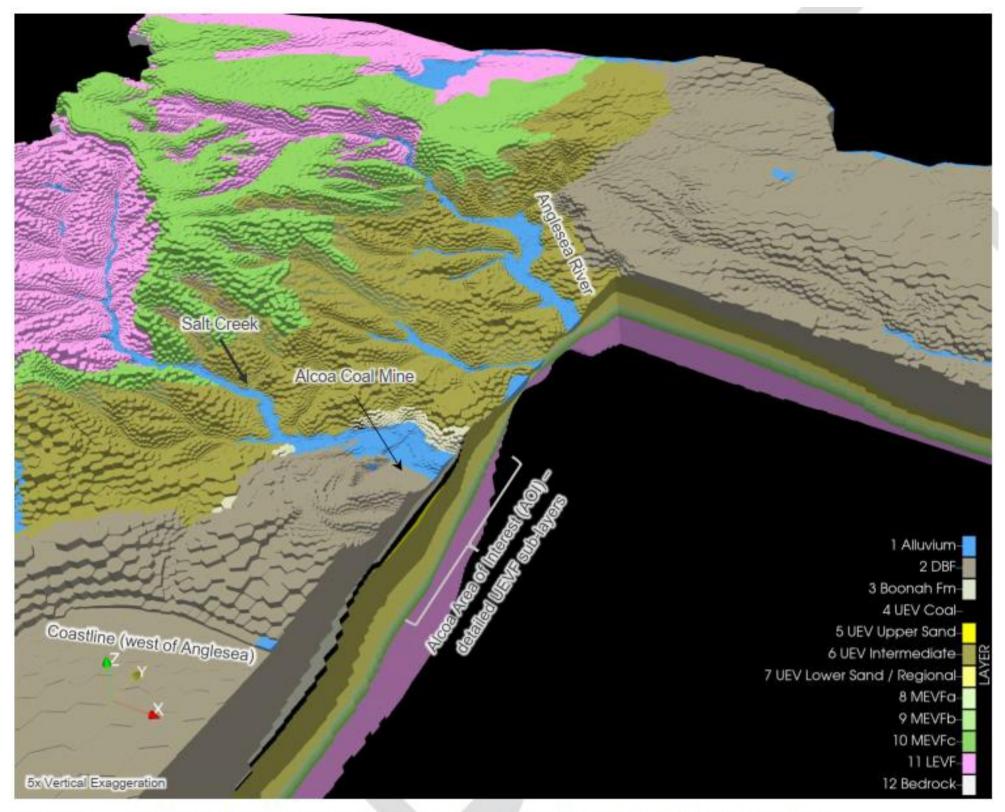


Figure 4-2 Groundwater Model Layering and Sub-layering: box cut view through Alcoa coal mine from southeast