



## Statewide seawater interface - Esperance groundwater area

# Twilight subarea

The saltwater interface in the Superficial aquifer extends across most of the central and eastern Twilight subarea, from Pink Lake to the ocean (Figure 1). The eastern toe of the saltwater interface runs south through the Twilight subarea and east into the Town subarea where it reaches the seawater interface. The hypersaline groundwater originating from Pink Lake is dispersed through the system and flows along the base of the aquifer from Pink Lake towards the ocean, when mixing between seawater and hypersaline water is expected to occur.

A freshwater lens sits above the denser saline water from both sources, and generally flows from the northwest, in the Eleven Mile subarea, to the Town subarea in the east. A thick brackish mixing zone is present between the freshwater and saline water. This is susceptible to saline upconing if abstraction occurs above the brackish groundwater, which will increase the thickness of this mixing zone. The western section of the Twilight subarea, in contact with the Eleven Mile subarea, contains freshwater to the base of the aquifer.

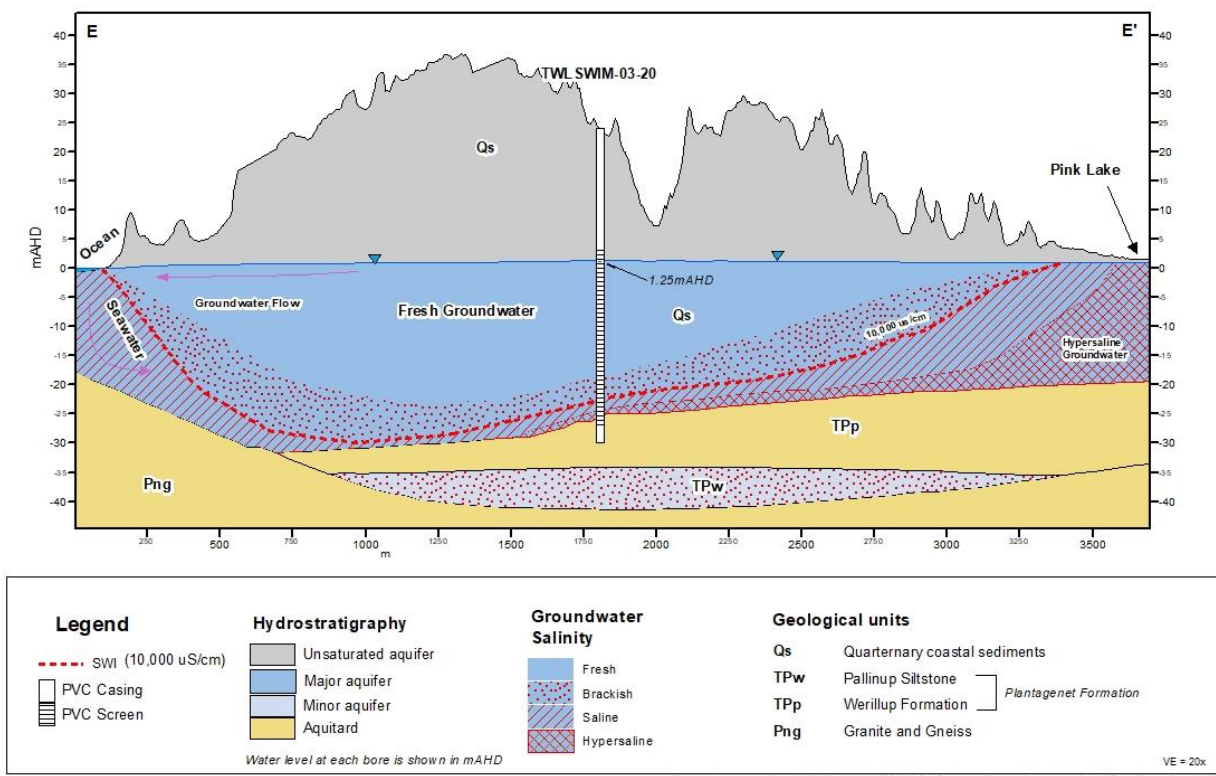


Figure 1: Cross section E-E' through Twilight subarea showing the saltwater interfaces are connected along the base of the Superficial aquifer