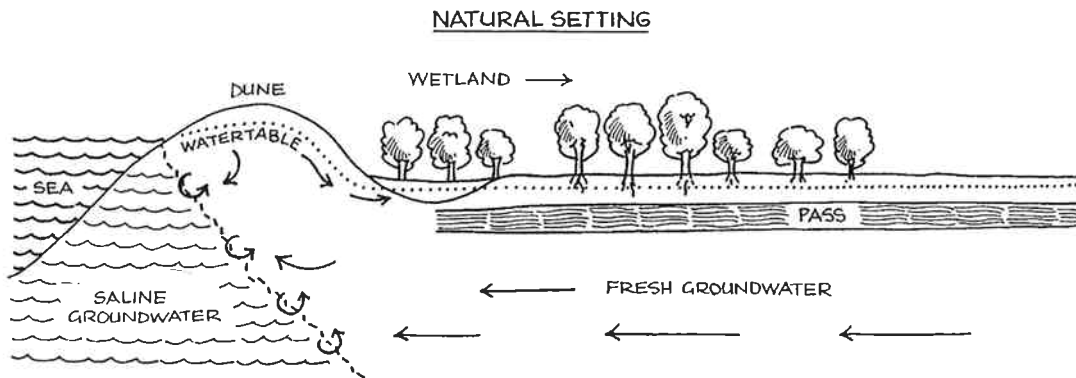
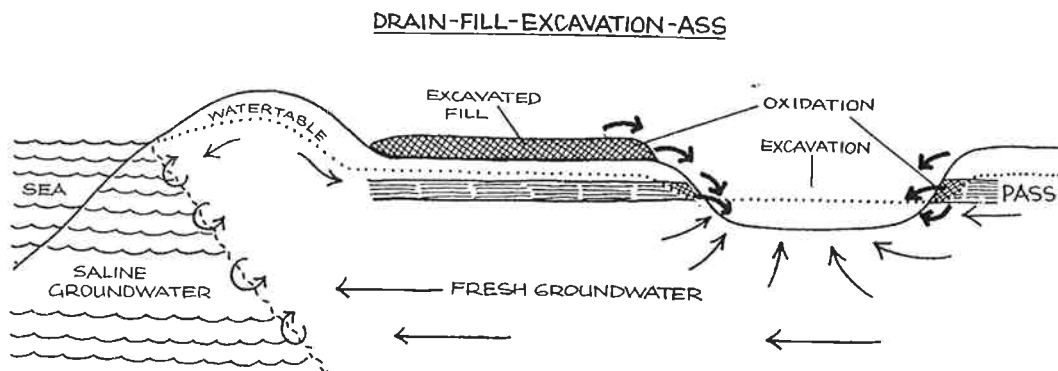


### 2.3 Effects of excavation on groundwater

In undisturbed wetlands and back swamp areas, the watertable is naturally high, with fresh groundwater flowing naturally towards the dune system and the sea. The potential acid sulfate layer (PASS) is covered with water.



Excavation of the floodplain areas overlying acid sulfate soil may lower the watertable exposing potential acid sulfate layers to air and creating acid sulfate soils and sulfuric acid. Excavated potential acid sulfate material left on the banks will oxidise and produce sulfuric acid which will wash back into the drain, pond or dam.



Excavation of floodplain soil to use as fill for residential subdivisions or house slabs can also acidify groundwater. If the soil is potential acid sulfate soil, it will oxidise and form sulfuric acid that will drain off the raised site into the soil. The acid may corrode the concrete slab and footings on which the house is sited as well as attack fence footings, water and sewerage pipes.

