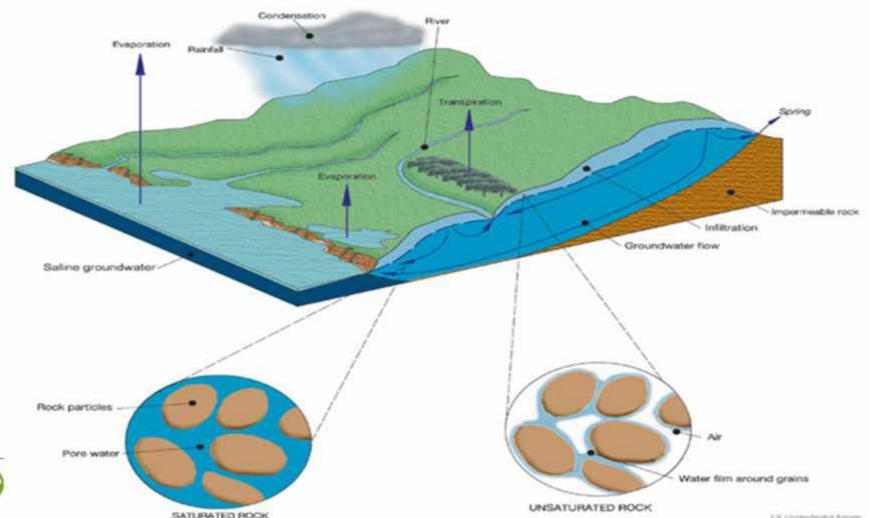
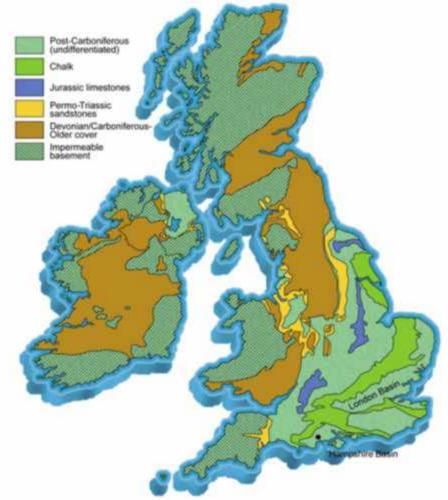
# What is Groundwater? water held underground in soil or pores & crevices in rock



## What is an Aquifer?

Defined as a permeable rock that stores groundwater and allows it to flow readily into a well or borehole.





Main aquifer – Lower Mersey & North Merseyside & Rufford

sandstone aquifers





### **Groundwater in rocks**

### Sandstone

Rapid to medium flow of water and pollutants between grains of sand and in fractures in the rock





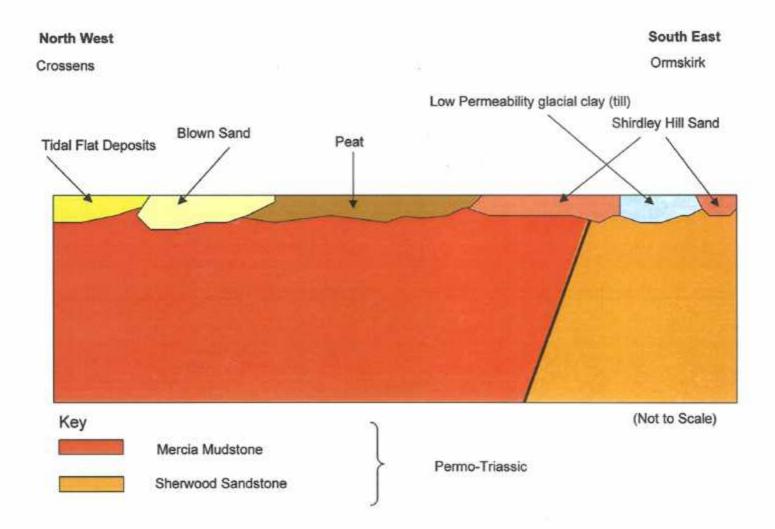
#### Sandstone aquifers in Alt & Crossens

Area to west - the bedrock is mudstone, a poor aquifer





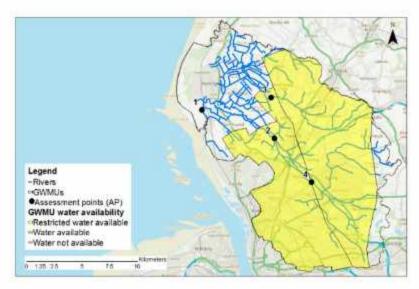
#### Crossens Schematic Geological Cross Section



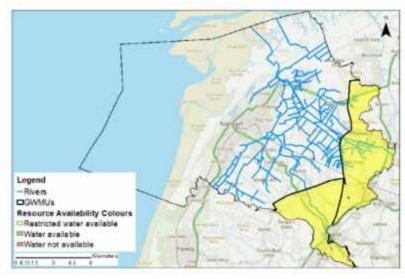


## Abstraction Licence Strategy - Groundwater

22% of the Crossens is underlain by principal aquifer 69% of the Alt is underlain by principal aquifer



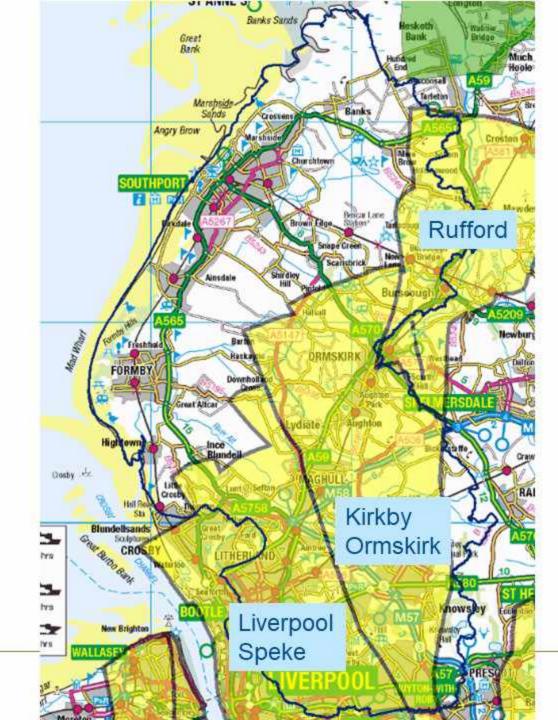
Alt Restricted Groundwater Available



Crossens Restricted Groundwater Available

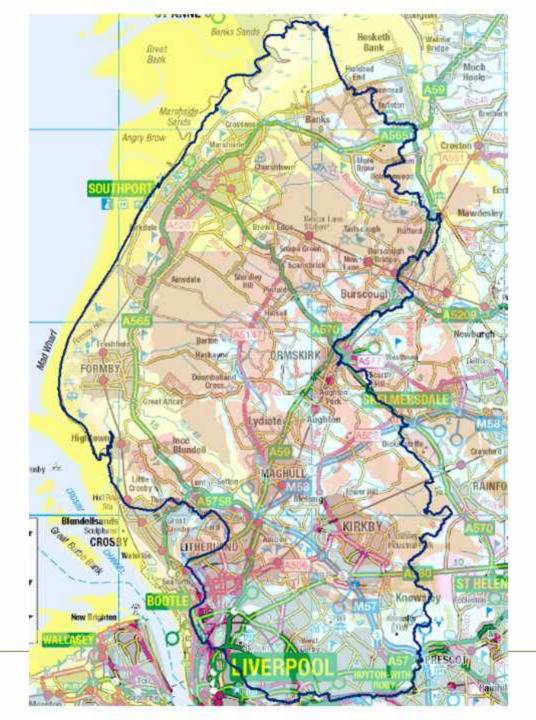


### Groundwater Management units



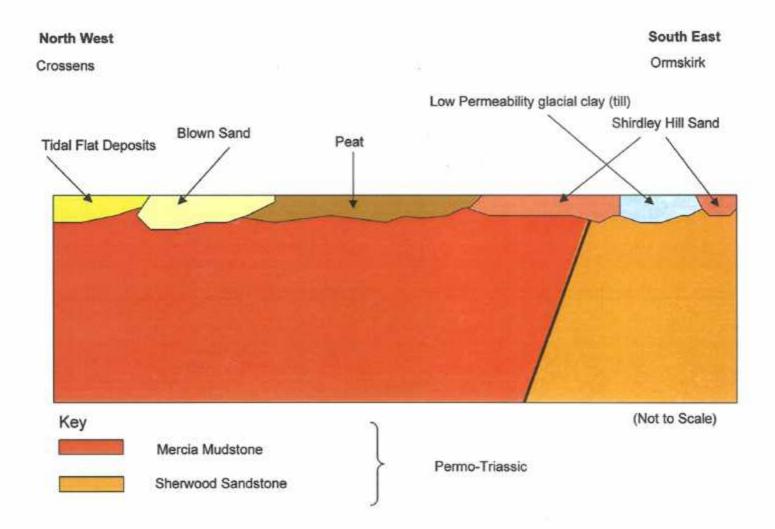


# Shallow / Superficial Geology





#### Crossens Schematic Geological Cross Section





# Permeable shallow Geology

Eg sands & gravels, generally shallow small yields





# Agricultural Abstractions



