

Ground Water

Water found in soil or pores,
crevices, etc. in rock.

Groundwater quality

- Expressed in terms of physical, chemical and biological properties of water.
- The quality of water should be related to its use eg. human, livestock or irrigation supply will pose different requirements to the properties of water.

Areas of Use of Groundwater

- Along the coastal area
- The North West District
- Nearby hinterland districts
- The intermediate Savannahs
- The Rupununi Savannahs

Artesian well

- A well bored perpendicularly into water-bearing strata lying at an angle, so that natural pressure produces a constant supply of water with little or no pumping.

Characteristics

- The **Coastal Artesian Basin** occupies an area of about 7,500 sq. mi.
- In this basin are sunk many wells to meet the needs of the coastal population.

Aquifer

- A layer of rock or soil able to hold or transmit much water.
- There are several types of Aquifer:-
- Confined and semi-confined
- And unconfined

Description of aquifers

- **3 main aquifers have been identified in the Coastal Plain area:-**
- The Upper sand.
- A sand.
- And the B sand

Upper sand

- The Upper sand aquifer outcrops in the White Sand area.
- The 'Upper' sand is the shallowest of the 3 aquifers. It occurs at depths varying from 100 to 200ft.

A-sand

- The 'A' sand underlies the 'Upper' sand and intermediate sands and clays. It is found at depths ranging from 300 to 1000ft

B Sand

- The 'B' sand is the deepest of the 3 aquifers and extends eastward from the Demerara River. Its depth varies from 1200 to 2600ft

Groundwater flow

- Water naturally flows from an area of high elevation to a low one.
- This flow takes place through the strata and is usually of a very slow pace, mm/day, week or year depending on the type of strata/pore space etc. Fractures in rocks may allow flows as fast as any river.