

North and south poles



**ASSIGN
BUSTER**

Humans need fresh water. We use it for drinking, for washing and to water our plants. Industries need it to power the chemical reactions that produce our modern lives.

Even if more than 60% of the Earth's surface is covered in water, this is salt water which is not adept for the purposes we listed above. Of the freshwater in the surface, a vast majority of it is locked in ice caps at the North and South Poles.

Moreover, human activity has also slowly contributed to the degradation of surface freshwater sources such as rivers and lakes. Because of this, groundwater is slowly becoming an important source of freshwater for daily use.

The search for aquifers would need to draw on some geological concepts. First, aquifers would need a source of groundwater. This groundwater usually comes from rainfall meaning that areas with higher amounts of rainfall are much more likely to have aquifers than areas which don't have as much rain.

Some aquifers may be found in areas which do not have much rain. The water in these aquifers are prehistoric water which came from the previous ice age.

While useful, these aquifers are not good sources as the water in the water table is not anymore replenished. Second, aquifers rely on the existence of semi porous rocks to store water. Knowledge of the composition of the rock in an area will help identify possible aquifers if the kind of semi porous rock needed for aquifer formation is found.

Lastly, I'd also prioritize valleys and plains over hills and mountains. Specifically, I will choose low lying areas near open bodies of water as these areas would have more accessible ground water as the surface of the ground is not very far from the water table.

Incidentally, I would avoid areas near the sea as the groundwater in these places are suspect for saltwater intrusion. Also, I'd be wary of human activity in the area as the aquifer may be located in an area such as a former landfill, chemical disposal, or city. These things may contaminate the groundwater and make it unsafe for drinking.

Bibliography

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