

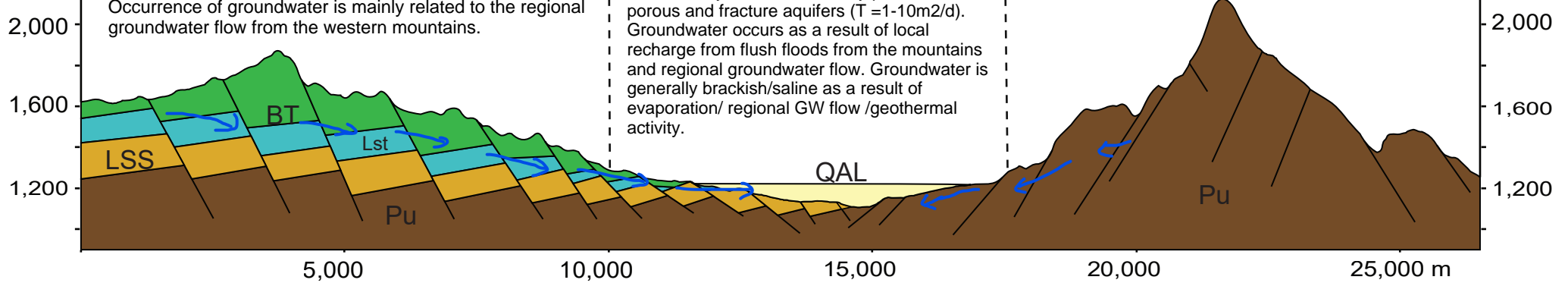
Hydrogeological Conceptual Model of Megale Woreda

A Transitional slope with step faults and Graben-Horst structures with moderately productive fissured aquifers ($T=1-10\text{m}^2/\text{d}$, $Q=0.5-5\text{l/s}$ for wells). Local recharge from rainfall is minimal as a result of low rainfall and high runoff. Occurrence of groundwater is mainly related to the regional groundwater flow from the western mountains.

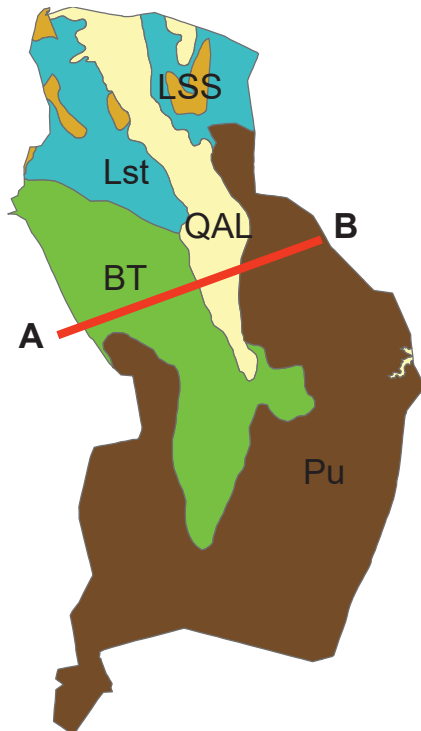
Marginal depression characterized by groundwater discharge into wadies and lakes. A zone underlain by Alluvial Sediments, Quaternary volcanic rocks and Mesozoic Sedimentary rocks. Moderately productive porous and fracture aquifers ($T=1-10\text{m}^2/\text{d}$). Groundwater occurs as a result of local recharge from flush floods from the mountains and regional groundwater flow. Groundwater is generally brackish/saline as a result of evaporation/ regional GW flow /geothermal activity.

B Metamorphic rocks mountain characterized by rugged terrain and steep slopes. Locally act as water divide.

Elevation (m.a.s.l)



Horizontal Scale 1:250,000



Lithostratigraphic Units

- QAL Alluvial Sediments
- BT Basalt with minor trachyte and pyroclastics
- Lst Limestone (Antalo)
- LSS Lower Sandstone (Adigrat)
- Pu Undifferentiated low grade metamorphic (metavolcano and metasediments)

Geologic Structures

- Normal Faults
- Lineament
- Groundwater flow