

6.3 Fluctuations due to evapotranspiration

Evaporation effect Fig 6.12

Transpiration

Evapotranspiration Fig 6.14

6.15

6.4 Fluctuations Due to Meteorological Phenomena

Atmospheres pressure barometric efficiency Fig 6.1.7

Rainfall to unconfined aquifer Fig 6.22

Wind

Frost

6.5 Fluctuations due to Tides

Ocean Tides Tidal efficiency

Earth Tides Moon , Sun

6.6 Urbanization

Decrease in recharge → charges in GW Fig 6.29

In crease withdrawn → **pollution salt Intrusion**

6.7 Earthquakes

6.8 External loveless eq. Wells near railroads Fig 6.32, Fig 6.33

6.9 Land Subsidence and GW

- changes in GW levels or subsurface moisture conduction
- Lowering of Piezometric surface Fig 6.23,6.24
- Hydrocompaction → water load
- Denaturing of Organic Soils
 - Lower GW. level → level subsidence
- Sinkholes Formation
- Crustal Uplift

6.10 Effect of Climate Change

Greenhouse effect

Influence water storage

Changes in GW recharge

More severe and longer lasting droughts

Changes in evapotranspiration

Possible increased demand of GW as a backup source