

Estimation of groundwater balance for Pabbi region, Khyber Pakhtunkhwa

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This paper presents the methodology for estimation of groundwater balance for Pabbi region, Khyber Pakhtunkhwa. Due to heavy rainfall in summers, excessive irrigation and seepage from irrigation canals, the adjacent areas of Kabul River have suffered from water logging for a long time. It has been found that the recharge to groundwater storage due to seepage from canals and their distributaries in Pabbi region is 26 mm/year. According to the data collected from Metrological Department, Peshawar, mean annual rainfall of Pabbi region is 262.70 mm/year and recharge due to rainfall is calculated as 60.63 mm/year. Discharge through the tube wells and hand pumps in the area are found as 35 mm/year and 14 mm/year respectively. It has been concluded that 37.63 mm of groundwater level is increasing per year in Pabbi region.