The Sandıklı (Afyonkarahisar) Basin is located in the southwest of Turkey and is a semi-closed basin.

Groundwater is widely used for drinking, domestic and irrigation purposes in the basin. The mismanagement of groundwater resources in the basin causes negative effects including depletion of the aquifer storage and groundwater level decline. To assure sustainability of the basin, determination of groundwater budget is necessary. In this study, the water-table fluctuation (WTF) and the meteorological water budget (MWB) methods were used to estimate groundwater budget in the Sandıklı basin (Turkey).

Conceptual hydrogeological model of the basin was used for understanding the relation between budget parameters. The groundwater potential of the basin calculated with MWB method as 42.10×10^6 m^3/year. In addition, it is also calculated with simplified WTF method as 38.48×10^6 m^3/year.