U.S. GEOLOGICAL SURVEY (USGS) WATER SUPPLY DATA MONITORING AND ANALYSIS

JANUARY 2018 – DECEMBER 2022

$1 MILLION

OVERVIEW

The Kabul River Basin flows through eastern Afghanistan and northwestern Pakistan and is crucial to the livelihoods of millions of people for domestic water supplies, agriculture, power generation, and industry. The USGS, through support from USAID, is building the capacity of the Ministry of Energy and Water (MEW) to improve management of the Kabul River Basin through increasing water-data availability and analysis.
ACTIVITIES

- Revitalize existing Kabul River stream gauges, meaning locations where hydrologists or environmental scientists monitor and test bodies of water; provide training on proper maintenance of equipment and data collection and analysis at stream gauge stations
- Coordinate with the Kabul Managed Aquifer Recharge project to provide data and relevant training
- Develop a Kabul River Basin runoff model incorporating precipitation and snow water equivalent estimates
- Report on the impact of changing runoff patterns on domestic water supplies
- Transition of old and new Kabul River Basin water data into an improved water database
- Report on the Kabul River stream gauge network revitalization and data, trends of stream flows, and implications for domestic water supplies
- Capacity building of MEW staff on basic hydrology, record computation, the new water database, sediment collection, and hydrologic modeling.

ACCOMPLISHMENTS

- Improved capacity of MEW staff in the operation of field equipment, water quality, and laboratory work, mapping, aquifer testing, geophysics, and modeling