

Water: Science, Society, and Policy

Word Problem Assignment 01

Date: November 06, 2025

Submission date: November 20, 2025

Assignment Instructions:

This assignment consists of **two parts**, both to be completed in **Microsoft Excel** using **built-in formulas**. You may refer to the **YouTube videos provided** or explore other tutorials to guide you through the steps.

Part 1: Hydrograph Creation

- Using flow data from the **Sindh Irrigation Department** website and precipitation data from the **Pakistan Meteorological Department**, create a **hydrograph**.
- Choose **one** of the following locations for your flow data:
 - Guddu Barrage
 - Sukkur Barrage
 - Kotri Barrage
- Identify the **nearest meteorological station** to your selected barrage and use its **precipitation data**.
- Prepare a hydrograph showing **both flow and precipitation** for **one month** (e.g., *October 2025*).

Part 2: Flow Duration Curve

- Using the same flow data from Part 1, create a **Flow Duration Curve** in Excel. Formula provided in the YouTube video shared in class.

Both **Part 1** and **Part 2** should be included in **the same Excel file** (as separate pages) and submitted via **Canvas**.