

# Potomac River Flow & Water Quality

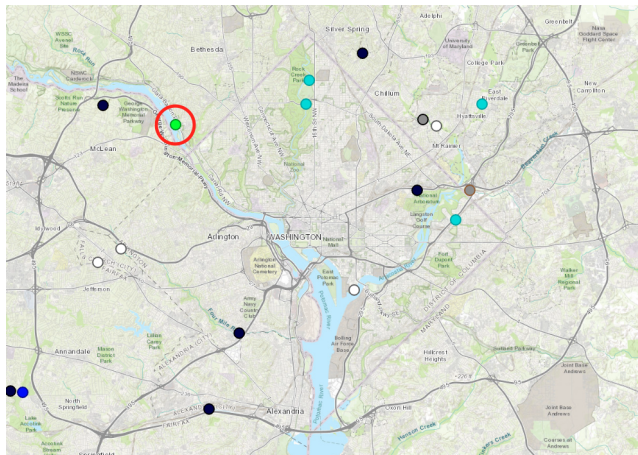
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## Description of Data

- Data downloaded from the United States Geological Survey (USGS) database as a .txt file
- Daily data of the Potomac River from the Little Falls Pump Station (USGS site 01646500) for every day of 2023 (365 observations)
- The site is located 1 mi upstream of DC
- Water parameters include: temperature, pH, turbidity, dissolved oxygen, nitrogen, and discharge
- USGS gives its data a grade for approved, provisional, and estimated. Assumed data is approved for this analysis
- Data was opened and cleaned in Excel, analyzed in RStudio
- Analysis seeks to answer: How do flow levels and oxygen/nitrogen concentrations change over time?

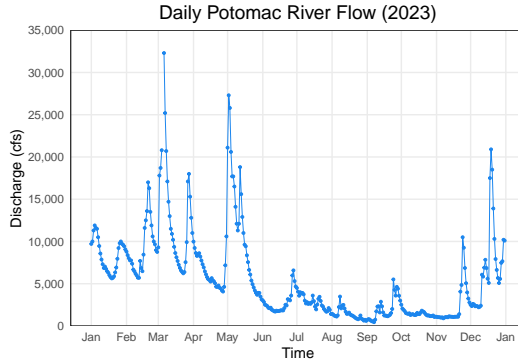
# Site Location



# Discharge

- Discharge (Q) is a measure of water flow. Units are cubic ft per sec (cfs) and gal per min (gpm).

Min	1st Qu.	Median	Mean	3rd Qu.	Max
450	1,720	3,990	5,709	7,920	35,700



## Dissolved Oxygen and Nitrogen

- Dissolved oxygen (DO) is a measure of how much dissolved oxygen is in water. Units are mg/L as DO.
- Nitrogen (N) is a measure of the amount of dissolved nitrogen in water. Units are mg/L as N.

