08/30/2021

EPA Water Quality Grant Datasets

1) **Data Dictionary**- This dictionary defines variables found in water quality datasets and defines units used.

2) **Water quality datasets -**Input data files for the final six water quality models:

    a. Biotic index (BI); (e.g., BI_data_EPA.csv)
    b. Fecal coliform (FC)
    c. Total Nitrogen (TN)
    d. Total Phosphorus (TP)
    e. Specific Conductance (SC)
    f. Turbidity (TDU)

3) Location of sampling sites- Latitude and longitude of sampling locations

    a. **Water quality sites_lat longitude.csv**- for FC, TN, TP, TDU, and SC.
    b. **BI_lat longitude.csv-** BI sampling locations

4) **Prediction models-** data and code used to predict management scenarios in the Upper Neuse River Basin (UNRB)

    a. **Predsites_mean conditions.csv**- Mean conditions
    b. **Predsites_MS1.csv**- Management scenario #1
    c. **data.WQ.daily.rds**- Input data files for the final six water quality models
    d. **fml.WQ.daily.rds**= WQ model for best six water quality models
    e. **NWALT_UNRB_newdata_2018-10-01.csv**- Mean conditions for prediction sites in UNRB
    f. **UNRB_wwtp_lakes,csv**- Matching wwtp and lakes to prediction sites
    g. **WWTP_TN_by_year.csv**- Yearly TN loading for WWTPs in the region
    h. WWTP_TP_by_year,csv-
    i. WWTP_flow_by_year.csv-
    j. UNRB_all_domIDs.csv- Identifiers to match precipitation to sites
    k. Jonathan_Piedmont_Precipitation_3day.csv- Previous 3 day precipitation values
    l. Jonathan_Piedmont_Precipitation_7day.csv- Previous 7 day precipitation values
    m. Jonathan_Piedmont_Precipitation_14day.csv- Previous 14 day precipitation values

5) R codes-
    a. Code for each initial water quality parameter (variable selection)
    b. Code to predict management scenarios in the Upper Neuse River Basin.