New Data Process

# Stream Temp Data Cleaning:

Initial data processing steps are specific to data source. Existing scripts are located in *temperatureProject \code\processRawData*. If the raw data is sub-daily then use the script called “aggregateHourlyToDailyData.R” otherwise proceed to cleaning up daily data.

Note: When cleaning is completed, the result should be a dataframe containing (at minimum) site, temp, and date. Latitude and longitude columns are necessary if you are planning to pair air temperature from an external source such as Daymet or Maurer as well as any covariate data.

The file should be saved to a new, agency specific folder in the *temperatureProject\dataIn* folder.

# Pair stream temperature sites with covariate data and climate timeseries:

Run the “indexDataForObservedStreamTempSites.Rmd” script to join the watershed covariates to the sites. Documentation within this script walks the user through the process of pairing the data. This script does the following:

1. Creates a point shapefile of the sites.
2. Pairs the covariate landscape data with the stream temperature sites, based on the NHDPlus catchments. This step requires the user to manually check that the sites fall into the correct NHDPlus catchment. This is further outlined in the script documentation
3. Pairs Daymet climate variables with the site based on values within the local catchment.
4. Creates and saves raw data plots.
5. Pairs Daymet climate variables with the site based on values within the entire upstream delineation.

# Index prediction values for covariate data and climate timeseries