

POWER BI Workshop

Here is our data:

LINK	CSV file
https://data.sandiego.gov/datasets/drinking-water-sample-sites/	Sample Sites: sample_sites_datasd_v1.csv
https://data.sandiego.gov/datasets/monitoring-of-indicator-bacteria-in-drinking-water/	Latest Drinking Water Tests (Bacteria): latest_indicator_bac_tests_datasd_v1.csv All Drinking Water Tests (Bacteria): indicator_bacteria_tests_datasd_v1.csv

- 1) Connect files and open Power Query Editor
- 2) Turn the first row in **indicator_bacteria_tests_datasd_v1** query into the column names
- 3) If **latest_indicator_bac_tests_datasd_v1** data is not included in **indicator_bacteria_tests_datasd_v1** append data. If data is included then delete table.
- 4) Delete unrequired columns
- 5) Merge Queries. Select all fields from table **indicator_bacteria_tests_datasd_v1** and add matching fields from **sample_sites_datasd_v1**. Remove "nulls"
- 6) Load the queries into the data model.
- 7) Go to Model and link **latest_indicator_bac_tests_datasd_v1** data to **sample_sites_datasd_v1**
- 8) Create a map using Latitude and Longitude fields.
- 9) Show in the map all the areas where Coliform was present during the last year.
- 10) Add to the report a table identifying zone names
- 11) Add table identifying zones with coliform during years 2021 and 2022. Include the date sampled.

M-Language vs DAX:

M-language: Power Query formula language. It is used in data transformation. It is applied before you load the data into the data model.

DAX: Data analysis Expression language. It is the language used in data model. It is made for analytical data calculations (comparable to Excel functions.) It is applied to create insights into our data and data model.

<https://docs.microsoft.com/en-us/dax/>