## Country Story: Liberia and an Innovative Data Source

## Background

**Liberia** reported for SDG indicator 6.3.2 for the first time in 2020 using an innovative data source.

The national focal point for Liberia Mr. Eugene Caine and colleagues at the National WASH Commission considered the existing ambient water quality monitoring activities to be insufficient to report on the indicator. They **explored** alternative data sources and identified that the **Mount Coffee Hydropower Facility** had potential.

As part of routine surveillance monitoring, the facility uses six *in-situ* water quality probes that collect data at 15-minute intervals.

The probes collect data on three of the five core parameters of the indicator: pH; dissolved oxygen; and electrical conductivity. In addition, turbidity and suspended solids were available.



Figure 1: Example of high frequency probe data used to calculate indicator

## **Outcomes**

This was the **first** example of data of this kind being used to report.

A total of **334,957** individual measurement were **repurposed** from routine surveillance monitoring of the hydropower facility.

**Four** water bodies were classified: the main reservoir (monitored at three locations), and three sections of river.

The reservoir and one river section were classified as having "good ambient water quality" to produce an **indicator score of 50**.

The standard methodology was **adapted** by aggregating high frequency measurements to daily averages, and by adding additional parameter data.

Staff developed new **data management skills** by converting probe output html files into Excel calculation templates.

## **Future**

**Maintain** the *in-situ* probe network to ensure a continuous data stream for 6.3.2 reporting.

**Explore** the feasibility to collect **nutrient** data at the probe monitoring locations to ensure data on all **five core parameters** are available.

**Analyse** data to **suggest** reasons why two river sections failed to be classified as having "good ambient water quality".

**Expand monitoring activities** to the whole river basin.

