



## Customer Story

### Haiti Outreach Uses CBT Kit and mWater to Map 13,000+ Water Points in Haiti



Haiti Outreach is a U.S. non-profit organization whose principle work is in Pignon, Haiti. Their focus is on community initiated development projects in rural communities, primarily in increasing sustainable access to clean water.

[www.haitioutreach.org](http://www.haitioutreach.org)

#### Aquagenx CBT Kit



The Compartment Bag Test (CBT) is a portable, simple water quality test kit that detects and quantifies *E. coli* in 100 mL to determine the health risk of water.



[mWater](http://mWater) is a free, open source data platform for managing projects in water, sanitation and health using smart phones and mobile technology.

#### Project Description

Haiti Outreach, in collaboration with World Vision, mapped all public access water points across one-third of Haiti throughout 2016. They used the Aquagenx CBT Kit together with the mWater mobile app. A Haiti Outreach team was out in the field daily for nine months, traveling by motorcycle and collecting data on smart phones that registered water points' GPS location, functionality and potability, among many other indicators. The data was verified and compiled into a map of the country and paired with the locations of homes to geographically show access to clean water.

In collaboration with local authorities and water officials, they collected and used this data to create a Commune Action Plan that outlines three main points: 1) The current state of access to potable water; 2) Infrastructure needed to clean/repair/create potable water sources; 3) Percentage of access to potable water these investments would achieve.

Haiti Outreach's work enabled the Haitian national water agency (DINEPA) and local authorities to be in control of monitoring the water sector. Anyone can visit [frape.mwater.co](http://frape.mwater.co) for more information.

#### Aquagenx CBT and mWater

Haiti Outreach used the Aquagenx CBT Kit to measure *E. coli* and also tested for 12 other parameters in more than 7,000 water points. They adopted the CBT Kit because of its simplicity and convenience in low resource, rural areas while generating quantitative test results, the Most Probable Number (MPN) of *E. coli* in a 100 mL sample.

In order to facilitate infrastructure planning, Haiti Outreach used mWater on smart phones to map the water infrastructure (wells, capped springs, fountains, etc). The principal indicators were Functionality, Management, Access, Potability and Inspection Frequency.

#### Test Results

Data results are found at [frape.mwater.co](http://frape.mwater.co). The detailed results are part of live dashboards that are being used by all partners to plan interventions, monitor their progression and update their impact on access to potable water.



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### Benefits of Aquagenx CBT and mWater

“The Aquagenx CBT is perfect for large field surveys and pairs very well with the mWater platform,” says Brian Jensen, Haiti Outreach Director of Monitoring and Evaluation.

Jensen continues, “Together, the CBT Kit and the mWater app provide a very simple workflow that reduces training time, equipment cost and sophistication, and testing turn-around time. On average one water point survey takes 25-30 minutes to cover 50+ questions and 12 water quality parameters. The results are immediately available, after the ambient temperature incubation time for the CBT Kit, in a format that makes it easy to perform quality assurance and visualize results. This has allowed longitudinal monitoring of water quality and access to potable water.”

Haiti Outreach finished the clean water survey in December 2016, registering over 13,000 water points to date. The CBT Kit paired with mWater allows Haiti Outreach and all actors working to provide clean water in Haiti to know who has access to potable water within 500 meters of homes. The mWater map that includes Aquagenx CBT data on *E. coli* demonstrates the expansion and assurance of safe, potable water for all Haitian citizens.



Using the Aquagenx CBT Kit in Haiti



Using the mWater app on smart phone