



Guatemala Project Overview

Michigan Technological University's Student Chapter of Engineers Without Borders-USA has been working with the communities of Fronterizo and Canton in Guatemala since 2006, with a goal to meet their water supply needs. Previous projects have included hand-dug wells, a manually bored well, and spring boxes. Work has continued due to a growing population in the communities and extended droughts that have become more common in recent years.

Recent Work

EWB-MTU completed a monitoring and assessment trip to both communities in May of 2024, and the team has been corresponding with community leaders over the past year.

Canton: The spring-fed, gravity-flow water distribution system was confirmed to be fully operational, and the project was officially closed out.



Fronterizo: The team helped the community to construct a concrete spring box with filtration and collection chambers to enhance water supply and storage. The team assessed the water quality, recharge rate, elevation, and distance from the spring box to the center of the community. They also conducted community surveys to determine future steps for the project.

Future Work

EWB-MTU is working to complete the spring box project in Fronterizo by installing a reinforced concrete cover on the box and constructing a transmission system to deliver the water to a storage tank near the center of the community. Additional water quality testing will be done, and a watershed protection plan will be developed.

