

# El Potrero Water Project Rotary Club of Fort Collins Rotary E-Club of Lake Atitlán-Panajachel



### **El Potrero Water Project**





Host Sponsor: Rotary E-Club of Lake Atitlán-Panajachel International Sponsor: Rotary Club of Fort Collins

#### **Other Partners:**

Engineers Without Borders USA Fort Collins Professional Chapter Engineers Without Borders USA Guatemala Office Municipalidad de Sololá



**El Potrero Community** 

#### **Project Background/Description**

**Community Description:** The community of El Potrero is part of the village of El Tablón which is in the northern part of the municipality and department of Sololá, just north of Lake Atitlán in Guatemala. The Mayan language spoken by the people is Kakchiquel.

**Existing System and Community's Current Situation**: The water system in the community of El Potrero was built more than 34 years ago. Originally 30 families had been included in this gravity-fed system, which has a source is in the mountains on the northwest side of the village. There are some families who have some water every day (2 hours during a day). Other families do not have water at home at all. These families use water from their relatives, collect water or purchase water. Purchasing water is very expensive due to transportation, as the location of the community is remote. The shortage of water causes the children and mothers of the families to spend a lot of time looking for and collecting water every day, thus decreasing school attendance for children, and lessening other opportunities for women. The new project is planned to serve 85 families with an estimated population of 350.





## **Community Assessment**

El Potrero went through a community assessment process to determine their most immediate needs.

The people of the community determined that solving the water problem is their primary need. This idea was born out of the desperation of the families of not having enough water to consume and to use every day. The problem of having water has not changed overtime, but now, the community has great hope because they have been able to buy the land where a new spring is located and the land where a storage tank can be built.



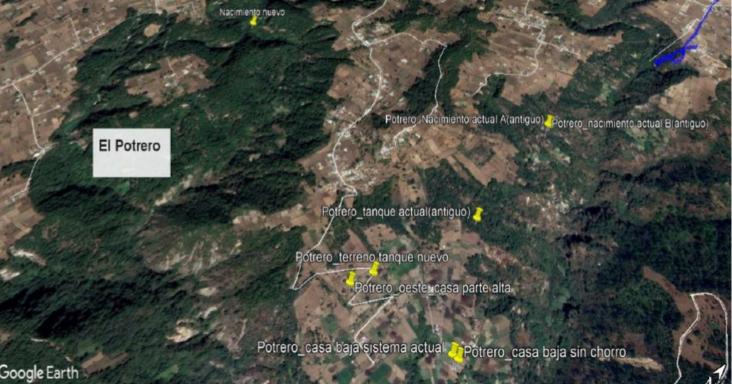
Engineers Without Borders USA (EWB-USA) Guatemala is partnering with Rotary on this project and EWB-USA conducted the community assessment. The assessment will meet the needs of Rotary. EWB-USA and the Guatemala office have previously partnered on projects with Rotary in the area.



## **Design Details**

**Solution Requested by the Community:** To improve people's quality of life and increase the quantity of water, the community has requested the project, and for that, the leaders and all the people of the community have come together to buy a spring, the cost of the spring was Q 115,000 (US\$ 15,132), the community also has been able to buy the land where the distribution tank will be built for this project, the cost of the land was Q50,000 (US \$ 6,579) and all this purchase was made by the entire community in which 85 families or users contributed to get it. The spring site is at upper elevation allowing for a gravity-fed system.

The scope proposal for this project is the unification of systems (births) that exist at different points, in this case the current (old) with the new spring. The following components will be built: catchment and conduction line for new spring, construction of a new tank and a new distribution system, connecting the current (old) spring and the new spring in the same distribution tank. The springs have been visited at the different points to get the flow rate. The results of the flowrates of the springs in liters per second were 0.54 Lts/sec. There have been no records of spring gauges before, but with this amount is enough to supply 60 liters per inhabitant per day. A water sample has also been taken for an analysis on the quality of the source. The water sample DOES MEET the bacteriological requirements established by the COGUANOR Standard (Guatemalan Standards Commission) NTG 29,001.





#### **Plans for Sustainability**



- The community has shown a commitment to the project and the sustainability. The community has a Community Based Organization, called the COCODE (Community Development Council)
- First accomplishment: The committee has been able to buy the spring of water for this project, the cost of the spring was Q 115,000 (US\$ 15,132), and this purchase was made by the entire community in which 85 families contributed.
- Second accomplishment: The committee has been able to buy the land where the distribution tank will be built for this project. The cost of the land was Q50,000 (US \$ 6,579) and this purchase was made by the entire community in which 85 families contributed.
- All members of the community can participate in the COCODE. To be part of the committee, people from the community propose the candidates in an assembly and select members through a vote.
- The community with the support of Rotary and EWB-USA Guatemala office will make a governance plan to manage, maintain and operate the water system, for its self-sustainability. Rotary and EWB-USA Guatemala do periodic follow-up on all their projects with the communities.





Rotary Foundation

#### **Questions?**

Please Contact: John Trone Rotary Club of Fort Collins

john.trone@fortcollinsrotary.org +1 970 305 2721 (Mobile/WhatsApp)

Some examples of Guatemala projects our club has participated

Quebrada Seca Water Project - similar project just completed

