

VISTA HERMOSA WATER AND SANITATION, SANTA LUCIA UTATLÁN, SOLOLÁ, LAKE ATITLAN.

Global Grant #GG2344748

Presentation:

The community of Vista Hermosa, Caserío Pamezabal, Santa Lucía Utatlán, in the department of Sololá, Guatemala suffers from a lack of drinking water due to reduced flows from existing sources. The system currently works by electric pumping, serving 26 household connections, and a public school for 100 students.

Community Context:

The Vista Hermosa area, Caserío Pamezabal, in the municipality of Santa Lucia Utatlán, in the Department of Sololá, is located 2.5 km from the municipal seat, 23 km from the departmental seat and 150 km from the capital city of Guatemala. It has two entrances, one through the Pamezabal farmhouse and one through the center of Santa Lucia Utatlán. The village is located in a mountainous region in the watershed of Lake Atitlan.



Vista Hermosa School

The Caserío has a total of 25 families, 128 people, and they have 1 water system that supplies the entire community and the school with 100 students which is expected to double in the next 5 years. The current system has two sources that reach a 30 M³ suction tank, by gravity, from the suction tank water is pumped upward to a 30 M³ distribution tank with a 2 HP submersible



pump, currently they have a flow of 0.029 liters per second which is insufficient to supply the 25 families and the school, and clearly not enough for future expansion.

Problems of Water and Sanitation:

a) Findings in relation to the water system

Vista Hermosa has two springs that supply the community but one produces any water flow. The other only produces 0.029 liters per second which is extremely insufficient. The families of Vista Hermosa only have water once a week in their homes. Due to this problem the local water committee has sought ways to improve the water supply in the community, for which help has been sought to be able to dig more in the springs in search of more water or to drill an artisanal well.

b) Findings in relation to sanitation

The basic sanitation system of the population of Vista Hermosa, for the management of human excreta, is through traditional latrines with booths made of different materials, bowl, concrete plate, most of which have been made with the community's own resources. The state of some latrine structures has been observed in poor condition because the construction material is too weak to resist inclement weather. Sewage flows to the surface of the ground on the roads or land in the upper part of the community and ends up in a stream near the springs, so this could contaminate the water sources that are in the place, not only of the community but also of communities that collect their water downstream.

Proposed Solution:

According to the preliminary data taken through visits to the Vista Hermosa farmhouse, the following aspects are raised:

• Due to the complication of working in the springs, drilling a well next to the suction tank is suggested.

• Improvement of home connections, implementing the use of meters for better control of water use.

• Community strengthening through training on the use of water and the operation and maintenance of the system.

• In the case of sanitation, 6 wastewater treatment systems (engineered septic systems) would be built, 5 for groups of houses and one for the school, since the topography of the place makes it difficult to build a single system. For the construction of these treatment systems, the village agrees to provide areas of land for their construction and give them due maintenance.

The village will provide labor and materials for the construction of sanitary structures that will connect to the new engineered septic systems.

The engineered septic systems will have 5 houses per system and one large system for the school.



Overview of Village:



Budget: \$65,525.75 USD

A detailed budget and Engineering drawings are available upon request.