Project description

- Area of focus: Water and sanitation.
- Target community: *"Escuela Secundaria Estatal #19" located at Cd. Juarez Chihuahua, Mexico.*
- Objective:

To ensure that students and personnel from the school will have sustainable access to water and sanitation by:

- 1. Providing access to safe drinking water, both in supply and quality.
- 2. Providing sufficient water supply to improve sanitation and hygiene at the restrooms.
- 3. Providing sufficient water supply to improve the evaporative coolers during the summer.

School location

• The school is located South-East of Cd. Juarez in one of the city's boundary communities:



Problem definition

The school supports in two shifts a total of 1800 students and 70 teachers and administrative personnel. The problems described below affect everybody in the same way:

- 1. Lack of drinking water, both in supply and quality:
 - There is only one watering station to fulfill the needs of the entire school.



- 2. Insufficient water supply for sanitation. At both, men and women restrooms:
 - Only 1 out of 4 sinks has enough water supply to allow the students to wash their hands.
 - During high water demand hours, there is not enough water supply to flush the toilets.



- 3. Insufficient water supply to sustain the evaporative coolers in the summer when the temperature may raise up to a max of 108°F (42 °C):
 - There are 12 classrooms in a second floor and the water supply is not enough to support the air conditioning for these classrooms. Up to 900 students are directly affected by the extreme hot conditions.
- 4. Insufficient water supply for watering green areas and vegetation:
 - o No green areas can be sustained.

Solution description

Install the following equipment:

- Four Rotoplas water storage tanks with a capacity of 10,000 liter each tank.
- E.SYBOX electronic water pressure system (2.1 HP).
- Water filtration system.
- Floor preparation for the water tanks.
- Security room for the equipment.
- General plumbing.

Timing

Implementation is expected to be completed within 6 months after project kickoff.

Sustainability

- 1. Start with the community: *The school's* principal and their staff did identify the need and developed the solution.
- 2. Encourage local ownership: *It is a true sign of a project's success when community members embrace the project as their own.*
- 3. Provide training: *Special training on* equipment maintenance will be provided to the school's maintenance crew.
- 4. Buy local: *Local suppliers will be used to implement the project.*
- 5. Find local funding: *The project will be sustained with the government budget through the school.*
- 6. Measure your success: The school's leadership will follow up on the project's results.

Investment needed

Estimated budget for this project is \$35,000 USD.

Some water facts according to ww.who.org

Water and health:

- Contaminated water and poor sanitation are linked to transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid, and polio.
- Absent, inadequate, or inappropriately managed water and sanitation services expose individuals to preventable health risks.

Economic and social effects:

- Better water sources also mean less expenditure on health, as people are less likely to fall ill and incur medical costs, and are better able to remain economically productive.
- With children particularly at risk from waterrelated diseases, access to improved sources of water can result in better health, and therefore better school attendance, with positive longer-term consequences for their lives.

Benefits of improving sanitation:

 Reducing the spread of intestinal worms, schistosomiasis and trachoma, which are neglected tropical diseases that cause suffering for millions;

Related information

Handbook for a safe and healthy school (www.paho.org):

 <u>https://www.paho.org/hq/index.php?option=</u> <u>com_topics&view=article&id=448&Itemid=72</u> <u>268&Iang=en</u>

BE THE INSPIRATION

CONTACTS

Club President:

- Pedro Perez pedro.leobardo@gmail.com Rotary Foundation Chair:
- Miguel Rodriguez miguel.a.rodriguez.orona@gmail.com
 Club Secretary:
- Gloria Angulo gangulo@tdedelnorte.com



Thirst for knowledge... not for water!!!





