

# Chiapas, Mexico

WEFTA/WATERLINES SPONSORED TRIP

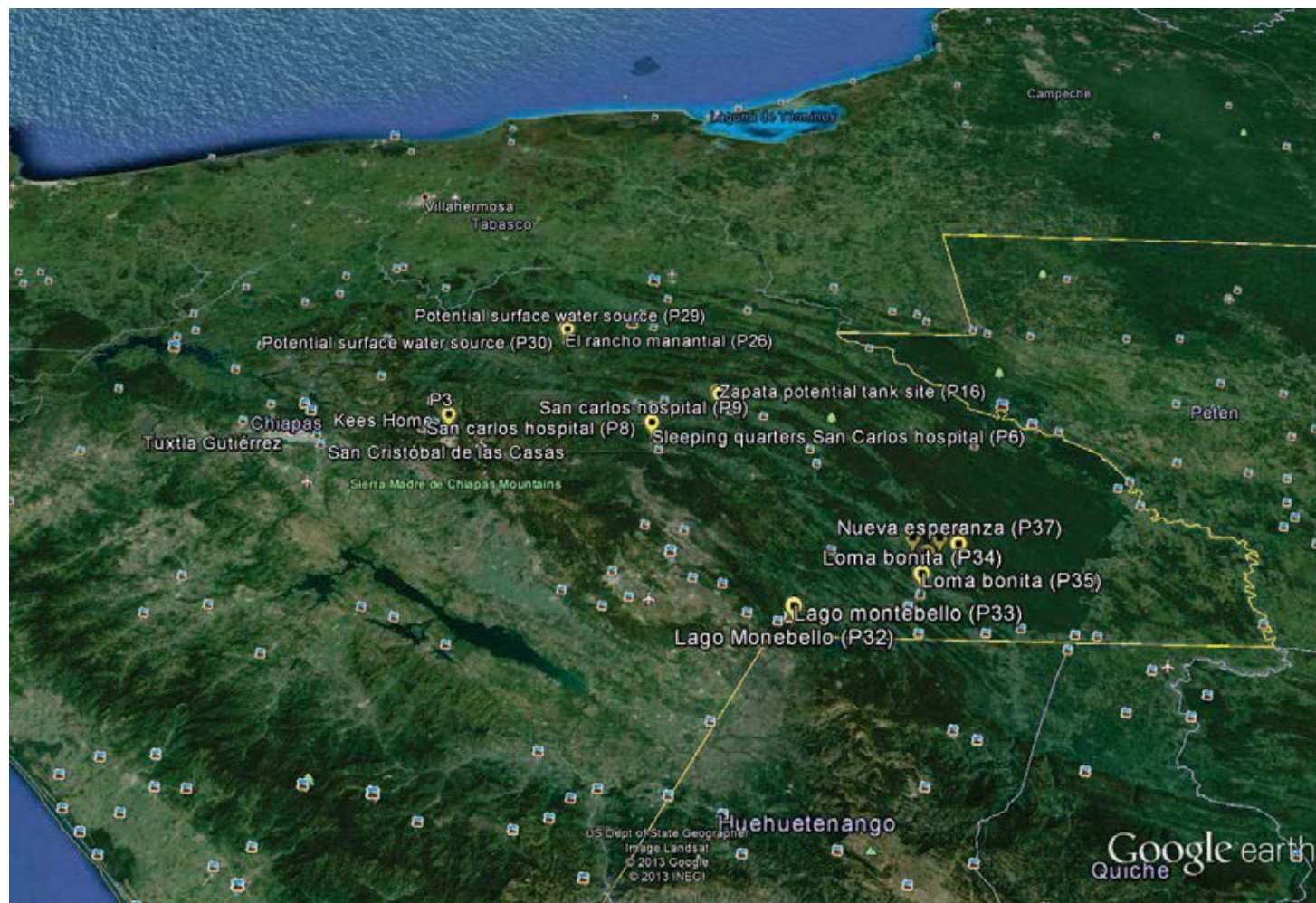
April 2013





# WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



## AGUA DE SANTIDAD – MIGUEL HIDALGO, RESERVA BIÓSFERA DE MONTE AZUL

CHIAPAS, MÉXICO

### TRIP REPORT

Related to Site Visits made by Ramón Lucero, Jr.  
to the State of Chiapas, Mexico  
April 3 – April 12, 2013

# WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

**Project:** SYJAC – San Cristóbal de la Casas, Chiapas, México  
Water System Improvement Project to include two water storage tanks, rain catchment system and water treatment facility

**Population:** 400 families or approximately 4,400 people

**Proposed Cost:** \$6,775 based on an exchange rate of \$13.29 on June 23, 2103

**WEFTA:** Looking for Sponsor

SKOLTA'EL YU'UN JLUMALTIC, A.C. (SYJAC) – “In Service to the Community” SYJAC was founded in 1993 by Archbishop Samuel Ruiz García in response to the expulsion of indigenous communities from their homelands supposedly due to religious practices. Since its inception, SYJAC has developed social programs with an ecumenical perspective.

SYJAC is a Civil Society Organization, legally organized to create bridges between the people of indigenous communities and national and international institutions and organizations.

The proposed project will take place in a community center that provides services to 400 families or approximately 4,400 people, including two public schools, two preschools and a secondary school.

The scope of work for the project will replace an existing water storage tank that is leaking and being infiltrated by storm water during the rainy season. Improvements will include the installation of a new water storage tank to collect water from the city, a rain catchment system, a second water storage tank and a water treatment facility, which will treat both water sources. The city of San Cristobal de Las Casas only delivers water to its citizens two days a week.



Existing water storage tank

## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



SYJAC Community Center – Water storage tanks are located to the left and behind the child's crib under the black metal lids



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Sabás Garcia, SYJAC General Director and Staff



SYJAC Multi Room Area



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

**Community:** Colonia Belén, Yajalón Chiapas, Mexico SYJAC – San Cristóbal de la Water System Improvement Project to include complete replacement of a spring catchment box and one and two-inch waterlines.

**Population:** 80 families or approximately 880 people

**Proposed Cost:** \$2,750 based on an exchange rate of \$13.29 on June 23, 2103

**WEFTA:** Looking for Sponsor



Existing Spring Box for Colonia de Belen

Proposed project will completely enclose this spring site to avoid contaminants entering the water system



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Colonia de Belen – Proposed location for waterline installation



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Colonia de Belen – Proposed location for waterline installation



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

**Community:** Yashalum del Apóstol Santiago, Casa Alberque Rancho Santiago  
Apostol, Yajalón Chiapas, México  
Water System Improvement Project to include complete replacement  
of a spring catchment box and two-inch galvanized waterlines

**Population:** 55 students and 6 faculty and staff

**Proposed Cost:** \$6,026 based on an exchange rate of \$13.29 on June 23, 2103

**WEFTA:** Looking for Sponsor



Board meeting organized to meet with WEFTA Representatives



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Alfredo presents us with spring catchment area. The scope of work will include enclosing the spring catchment area to prevent contaminants from entering the water system



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

<b>Community:</b>	<b>Zapata – Autonomous Zapatista Community in the Municipality of Francisco Gomez, Chiapas, México</b> <b>Water System Improvement Project to include a spring catchment system, approximately 1.2 miles of two-inch waterline, a water storage tank and outdoor faucets for each home</b>
<b>Population:</b>	<b>18 homes with a population of approximately 198 people</b>
<b>Local Leaders:</b>	<b>Manual Lopez Gomez – Promotor de Salud</b> <b>José Manual – Promotor de Educación</b> <b>Jacinto Lopez Gomez – Comisionado del Poblado</b> <b>Julio Espinoza Santiz – Agente del Poblado</b>
<b>Proposed Cost:</b>	<b>\$9,681 based on an exchange rate of \$13.29 on June 23, 2103</b>
<b>WEFTA:</b>	<b>Looking for Sponsor</b>

The drive between Altamirano and Zapata is approximately 2.5 hours. Zapata is a community formed by the sons and daughters of the nearby community of Achurmaluc. Achurmaluc obtains its water from the city of Pamela, however the community is under the threat of having their water turned off unless they can come up with \$100,000 pesos (approximately \$7,500 dollars) – a tremendous amount of money for a rural community. Approximately four homes in the community of Zapata also receive their water from Pamela via Achurmaluc, however due to political differences between Zapata and Achurmaluc water delivery to Zapata will cease. Zapata is an autonomous Zapatista community while Achurmaluc is a community under the PRI (Institutional Revolutionary Party), the political party currently governing the country of Mexico. Zapatista autonomous communities do not accept assistance from the government.

The proposed spring is located approximately 1.2 miles from the community. The spring produces approximately four gallons per minute, however according to the community never dries-up. According to the elevations readings on the Garmin GPS unit, there is a 310-foot elevation difference between the proposed spring catchment area and the potential tank site. The 18 homes are spread over an area of approximately a half-mile at an elevation slightly lower from the potential tank site.



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Zapata Proposed Spring Site



View of Zapata Village from Spring Site



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Kees and Zapata Community Members at Proposed Tank Site



**The tree from which these masks were carved date between 1250 – 1528 Chiapas, Mexico**



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

**Community:** San Vicente – Autonomous Zapatista Community in the Municipality of Francisco Gomez, Chiapas, México

**Population:** 20 homes with a population of approximately 220 people

**Proposed Cost:** The community will submit a request for support

Aurora, a local doctor providing services at the San Carlos Hospital in Altamirano, requested that I drive with her to the community of Nuevo Progreso, which is located near the community of San Vicente. San Vicente is a Zapatista autonomous community, which we did not visit because I had not yet been formally introduced. Community members from San Vicente were later informed about WEFTA and will be sending us correspondence to request our support for a water system improvement project.

**WEFTA:** Awaiting communities request for support

**Community:** Hermosillo – Autonomous Zapatista Community located approximately half-hour boat ride up the Jatate River from the community of Miguel Hidalgo, Chiapas, México

**Population:** Unknown

**Proposed Cost:** Unknown

Similar to San Vicente, because we had not previously been introduced, the community members of Hermosillo did not openly welcome us. We arrived in the community and waited approximately 30 minutes before we were greeted by un-official members of the community leadership. Upon concluding our conversation with these individuals the official members of the community leadership greeted us. We formally introduced ourselves ensuring the community we were not government officials. We spoke about 30 minutes regarding their potable water needs and concluded that the community leadership would approach their “Caracol.” (The literal translation is “snail.” Politically, however, the named is used to represent what we typically consider a municipal government. While the states of México are broken out into municipalities, the Zapatista autonomous communities are divided into “caracoles”.) The name Caracol is given to an ancient Mayan archeological site located in Belize. During the classic period the site was one of the most important regional political centers of the Mayan Lowlands. The Caracol covered an area of approximately 200 square kilometers, an area much larger than present-day Belize City and supported more than twice the modern city’s population.) for permission to submit a request for support.

**WEFTA:** Awaiting communities request for support

## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

<b>Community:</b>	<b>Tierra y Libertad – Autonomous Zapatista Community located approximately an hour walk (in the dry season) from the community of Miguel Hidalgo, Chiapas, México</b> <b>Water System Improvement Project to include either spring catchment systems or the equivalent of horizontal gravity wells to capture at least three distinct springs into a single distribution system to a water storage tank and finally water faucets to the outside of each dwelling unit.</b>
<b>Population:</b>	<b>60 homes with a population of approximately 450 people</b>
<b>Local Leaders:</b>	<b>Please see the attached copy of the leaders solicitation</b>
<b>Proposed Cost:</b>	<b>\$10,537 based on an exchange rate of \$13.29 on June 23, 2103</b>
<b>WEFTA:</b>	<b>Looking for Sponsor</b>



Path to Proposed Spring Catchment Site



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Kees and Tierra y Libertad Community Members at Proposed Tank Site



Head – Regional Museum of Chiapas

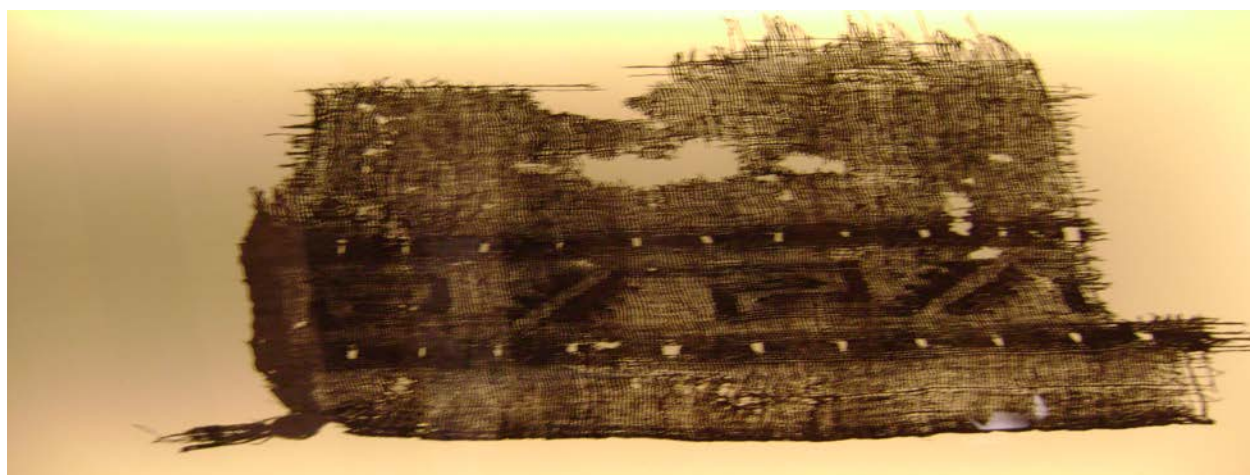


## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Young boys in front of church in Tierra y Libertad



Chiapas Textile dating between the Classic Periods 600 - 900



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

### **Village: Miguel Hidalgo – Chiapas, México**

Miguel Hidalgo is a Zapatista community with 150 homes and approximately 1,750 people. The community is organized similar to a development in the suburbs of any major US city, although it is in the middle of the jungle, with the best mode of transportation to arrive in the community being a small motorized boat (lancha) on the Rio Jatate. Each house is on a 50 square meter piece of property, divided in blocks and separated by areas which could be classified as roads.

A new water system for the community was completed in 2011. The project included a spring catchment tank at the manantial (spring), approximately 1,600 meters of 2-inch and 2-1/2-inch PVC from the manantial through the jungle to a new water storage tank and finally PVC pipe from the water storage tank culminating with an outdoor faucet to the outside of each dwelling.

Prior to bringing the waterline into the community, the women and children gathered their water from an arroyo at the bottom of a steep bank near the community. Due to the heavy rains in the region, the water was often the color of chocolate milk and full of silt from the runoff.

Two years later, members of the community are doing a great job maintaining the water system. Upon entering the community after a two-year absence, people from the community are as appreciative of the water system today as they were when first installed. As a result of the project the community has seen a decline in water borne illnesses, especially to the infants and the elderly.

With the goal of efficiently operating and maintaining the system, two families are chosen annually for this purpose. Usually the families' responsibility are to conduct a visual inspection of the spring catchment tank, the waterline between the spring and the tank, the water storage tank and the outdoor faucets at each dwelling. Once the evaluation is complete, the families organize other families in the community to assist in making the necessary repairs.

Repairs usually include maintenance of the spring catchment tank to guarantee the containment of all available water, protecting the PVC pipe from the sun by planting cacao and other similar vegetation for shade, and ensuring that water for each outdoor faucet has the appropriate drainage in order to avoid pools where mosquitos can hatch and live.

## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Miguel Hidalgo children find relief for the over 100 degree temperature commonly found in the Biosfera del Monte Azul by swimming in the Rio Jatate



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Miguel Hidalgo children on the day of our arrival – they were all gathered to get their vaccinations

# WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

**Village:**        **Laguna Chum Cerro – Chiapas, Mexico**

Laguna Chum Cerro is a community divided by Zapatista and non-Zapatista families, which seem to get along well. There are approximately 20 families with a total population of approximately 200 people.

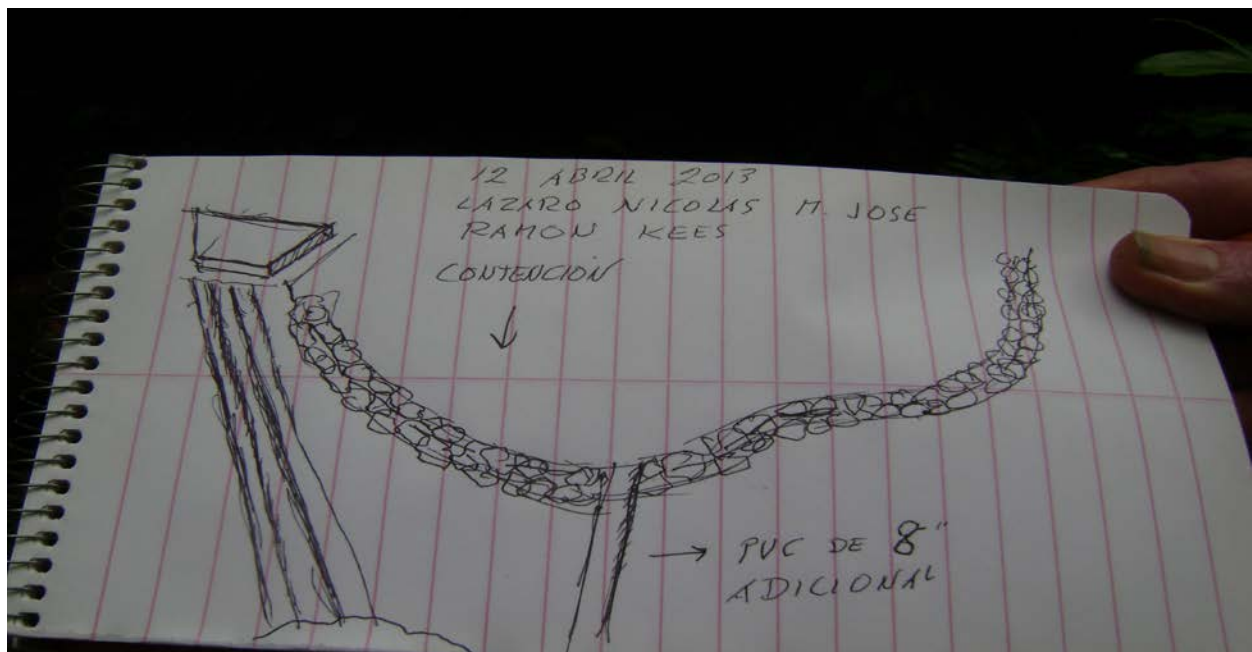
In 2010 approximately 2,520 meters of 2-inch waterline were installed from the manantial to the new water storage tank in the community. Distribution waterline was installed from the water storage tank to an outdoor yard hydrant in front of each home.

In 2011 construction of 15 latrines and outdoor showers were completed in the community of Laguna Chum Cerro. While construction of the concrete septic tanks was expensive due to the high cost of cement, labor and transportation of materials into the community, the combination of the new water system and the latrines offer a higher quality of life from a sanitary and health perspective.

In 2013 construction of six additional latrines were completed to accommodate a future school building, the church and for additional growth in the community.

During our visit to Chum Cerro this year, we completed a thorough inspection of the entire water system and a percentage of the latrines.

While conducting an inspection of the manantial (spring) catchment tank, it was decided that additional work was needed to fully contain all available water from the spring. Kees complete the following design to obtain this result.





## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

The additional work will consist of installing a protected containment tank with a protruding 8-inch PVC waterline. Water from the containment tank will be directly piped to an existing spring catchment tank that delivers water directly to the community.

Between the spring catchment tank and the community water storage tank there is a section of approximately 750 meters where the waterline crosses a section of land that is slightly elevated. In order to maintain good gravity between the spring catchment tank and the community water storage tank, the community will dig the trench an additional 50 centimeters to maintain good gravity.



Lazaro examines location where trench needs to be 50 cm deeper to maintain good gravity



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

In addition, there are five sections in the distribution line between the spring catchment tank and the community water storage tank that are leaking and need repairs. Two of the leaks are at the location where two pipes were joined together and the remaining three are due to fallen trees.



Example of waterline locations where leaks are occurring



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

Due to additional growth in the community, there are additional households which have been built at a similar elevation to the community water storage tank. As a result, these homes are getting very little pressure. Three ideas were discussed to address this issue; make the existing community water storage tank taller, install a small booster pump that can be run with solar power, and a waterline tied directly from the waterline from the spring before it enters the tank to the new homes. After some discussion, it was agreed that the most cost effective alternative is to run a direct distribution line from the waterline from the spring before it enters into the tank to the new homes.

Kees was going to attempt to accomplish all of this work with any funding that may remain from the additional latrine project and/or from funding left over from the \$1,000 provided to him for previous community visits.



Kees, Maestro José, Lazaro and Nicolas resting after inspection of Chum Cerro spring catchment tank



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



Walking through the jungle while inspecting Chum Cerro water distribution line



Alfonso and his family – gracious hosts while staying in Chum Cerro



# WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

**Municipality:** Altamirano – Chiapas, México

**Hospital San Carlos**

**Sponsor:** WEFTA / Looking for Sponsor

Alameda County Medical Facility (California) – Highland General Hospital – Department of Emergency Medicine

Hospital San Carlos:

Highland has an ongoing relationship through an international elective with Hospital San Carlos, a 60-bed hospital in rural Chiapas, Mexico in the town of Altamirano. The hospital provides adult medicine, pediatric and obstetrical care for predominantly indigenous communities. It has a well-stocked pharmacy, ultrasound, x-ray, an operating suite, and basic lab tests available on-site.

Since 1998, Doctors for Global Health has organized international physicians to help provide regular patient care at Hospital San Carlos. In-patient and outpatient services are dominated by pediatrics, obstetrics, and infectious disease. Approximately 1,000 patients are seen each month.



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



[Click here to read a full report on the needs of Hospital San Carlos and the proposal by WEFTA for to address these needs in the most efficient and cost-effective manner.](#)



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

Across certain Northern New Mexico communities we celebrate “La Bajada de la Santa Cruz” on or near May 3<sup>rd</sup>. This celebration commemorates the day St. Helen, the mother of Constantine (who later found Constantinople, today called Istanbul), found the holy cross on which Christ was crucified.

Similarly, indigenous communities living in La Selva Lacandona (the Lacandona Jungle) in Los Montes Azules of Chiapas, Mexico celebrate the finding of the holy cross, and just as importantly, the blessing of the water which in their words “la madre tierra” (mother earth) blesses them with.

Please find a few photos of the Tzeltals (Mayan Ancestors) celebrating the sanctity of water.



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---

**Community:** Benito Juarez Miramar

**Population:** 55 homes with a population of approximately 600 people

**Local Leaders:** Please see the attached copy of the leaders solicitation

**Project:** Latrines for 55 homes

**Proposed Cost:** \$34,705 based on the cost of \$631 per latrine to build the latrines in Chum Cerro in 2011

**WEFTA:** Looking for Sponsor



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---





## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---





## WEFTA/WATERLINES SPONSORED TRIP TO CHIAPAS, MÉXICO

---



[Click here to view a slideshow of photos from this trip to Chiapas](#)