

**Ann Campana Judge Foundation**  
**Projects Funded – December 2004/January 2005**

**1) Togo, Africa – Hand Pump Repair**

Organization: Lifewater International

<http://www.lifewater.org/>

P.O. Box 3131

San Luis Obispo, CA 93403

Amount Requested: \$4,000

Start/End Dates: May 1, 2005 to December 30, 2005

Principal Investigators: John Nadolski and Garon Harris

Phone: 888-543-3426 Fax: 805-541-6649

Email: [john@lifewater.org](mailto:john@lifewater.org)

**Abstract**

Lifewater International is requesting \$4,000 for parts and supplies to assist in the repair of 25 hand pumps in rural villages in the Northern Area of Togo.

Diarrheal diseases, caused by unsafe water, kill one child every fifteen seconds. In Togo, fourteen percent, about one in seven Togolese children, never reach their fifth birthday. Most of these deaths are due to water related disease. Lifewater is sending a pump repair team to Togo to respond to this problem. Thousands of rural people in Togo rely on hand pumps for their family's drinking water supply. During the decade of water in the 1980s, great efforts were made by relief and development organizations to provide safe drinking water by drilling wells in Togo. Today, many of these water sources are unused because of broken hand pumps and the need for basic maintenance. Training national teams to repair these wells can utilize an abundant, readily available source of safe water at a greatly reduced cost. Lifewater's training provides the tools and the know-how for nationals to restore and rehabilitate broken pumps. Where water wells have already been drilled, this is the most cost-effective means to providing people in need with the *Gift of water... Gift of Life*.

We expect that this project will improve access or restore safe water to more than 8,000 rural poor in Northern Togo. Based on past experience, the participatory approach we utilize will enable the local communities to maintain the repaired wells for many years to come.

## 2) Community Water and Sanitation Project for Masicales, Honduras

Organization: Northlake Church of Christ

1625 Cooledge Road

Tucker, GA 30084

Phone: 770-414-8717 Fax: 770-414-8717

[www.northlake.org](http://www.northlake.org)

Amount requested: \$4,000

Start/End Dates: January 2005-December 2005

Principal Investigator: Ron Hudson

Phone: 787-722-5509 Email: [elkomanga@lycos.com](mailto:elkomanga@lycos.com)

### **Abstract**

The Northlake Church of Christ is requesting funds for a community water and sanitation project in Masicales, Honduras. Most residents currently collect drinking water from a shallow river polluted with pathogenic bacteria and parasites. Sanitation in the community is another problem, with most having no latrines.

The project will provide drinking water and flushing toilets to the community's 35 homes (280 people) through the collaborative efforts of the residents, Mission PREDISAN (a medical NGO), and Northlake. The water system will operate by gravity flow. A small dam constructed up gradient from the community will divert water from a spring-fed stream. The diverted water will flow through a buried pipeline to a 5000-gallon storage tank. Chlorine will then be added as a water treatment from a smaller tank. A buried distribution system will pipe the chlorinated water to each home. The flushable latrines will basically consist of a toilet bowl that drains into a concrete vault and leach field.

To insure that the project is sustainable on the long term, a series of meetings will be held to educate the community on the importance of maintenance and why safe water and sanitation are important for good health. Project sustainability will also be insured by establishing community ownership as a result of residents donating their labor, the formation of a water cooperative with an elected governing board, and the collection of maintenance fees.

This project is a good candidate for ACJ Foundation funding because they share the same goals, which are to improve the lives and health of the needy in a developing country by providing safe drinking water and sanitation. Total project costs are estimated to be \$15,980 USD. It is our hope that you will contribute a part. The balance of the funding will be donated by the Church of Christ membership.

### 3) Chiapas - Evaluation and Implementation of Rural Sanitation Alternatives

Organization: Engineers for a Sustainable World, UT-Austin

<http://www.engr.utexas.edu/esw/>

University of Texas at Austin

College of Engineering

Office of Student Affairs

1 University Station Stop C2108

Austin, TX 78712

Amount Requested: \$4,000

Start/End Dates: May 2005 – May 2006

Principal Investigator: Greg Landreth

Phone: 512-771-6980 Fax: 512-471-9686

Email: [gwlandreth@mail.utexas.edu](mailto:gwlandreth@mail.utexas.edu)

#### Abstract

Mexico's southern states, in particular Chiapas, suffer from conditions of extreme poverty, characterized by lack of access to basic services such as water supply and sanitation, particularly in rural areas. While state and federal programs are slowly addressing critical water supply needs for rural communities, accompanying efforts in sanitation have greatly lagged. The town of Damasco obtained piped water through a state government project in 1998, but sanitation solutions have not been provided. Some community members use pit latrines, which fill with water and are prone to caving in during the rainy season, requiring excavation of new latrines. Others defecate in the open, exposing themselves and their community to significant risk for vector-borne disease.

A rural community sanitation project is proposed, to consist of the identification of the most appropriate latrine design and subsequent construction of latrines for and with the 71 households of Damasco. The project is conceived as an opportunity for an engineering student from UT-Austin to collaborate with a Mexican civil society organization and an indigenous Tzotzil community to identify and implement the most appropriate solution to the community's sanitation needs.

#### **4) Well Rehabilitation and Latrine Project in Poza Azul, Nicaragua**

Organization: El Porvenir

48 Clifford Terrace, San Francisco, CA 94117

Phone: 415-566-3976 Fax: 413-618-4048

E-mail: info@elporvenir.org Website: www.elporvenir.org

Amount requested: \$3,898.12

Start/End Dates: January-February 2005

Contact person: Elisabeth Merritt, Co-Director, jemerritt@elporvenir.org, 303-520-0093

Project Director: Oneida Hernandez, epsauce@ibw.org.ni

##### **Abstract**

The proposed project responds to the need for potable water year-round and the need for family latrines in Poza Azul, a rural community located 6 miles outside of El Sauce, Nicaragua.

In the village of Poza Azul, there are two water sources for 45 homes with 160 inhabitants. One is a well built with the help of a sister city organization that is in need of renovation; the other is a community spring capture that dries up in the summer months. The proposed water project would consist of improving the well; there is no way to improve the spring. Nine families (made up of 45 individuals: 19 adults, 26 children) propose the deepening of the well and replacing the deteriorated rope pump. Of the 45 latrines, built many years ago, in the community, only 19 are still in good condition. The community is vulnerable to disease because of the lack of sanitary facilities; the community asks for 26 new latrines to replace the ones no longer usable. These 26 latrines will benefit 112 individuals (57 adults, 55 children).

Poza Azul has requested the help of El Porvenir. They have elected a project committee and agreed to provide the labor voluntarily as well as locally available materials. The community will begin the latrine project after the new year in January 2005; following the latrine project, they will begin rehabilitating the well and expect to complete both projects by the end of February 2005. The cost of the materials, tools, transportation, health and hygiene workshop, and local development worker for the 26 latrines and the well rehabilitation is \$3,898.12. El Porvenir requests \$3,898.12 from the Ann Campana Judge Foundation. Additionally, community contributions have an estimated value of \$1,460.

The expected outcome of the projects is improved health for the residents of Poza Azul, a reduction in cases of diarrhea and dysentery, and decreased infant mortality. Through the project process, communities also have increased confidence as well as pride in their accomplishment.

El Porvenir is a non-profit organization that enables poor people in rural Nicaragua to improve their health, environment, and standard of living through sustainable community development projects. These goals are achieved through the construction of water, sanitation, and reforestation projects. Since its founding in 1990, El Porvenir has supported over 400 water, sanitation and reforestation projects in three regions of Nicaragua.

## 5) Rabondo, Kenya - Well Drilling and Hygiene Education Project

Organization: SAIWI

<http://www.unr.nevada.edu/~saiwi/>

University of Nevada Reno

Graduate Programs of Hydrologic Sciences/175

LMR, Rm.267

Reno NV 89557-0180

Start and End Dates: June 1, 2005 – June 30, 2005

Amount Requested: \$4,000

Principal Investigators: Ron Peterson and Richard M. Redd

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### Abstract

This proposal is to provide funding for Phase 2 of the Rabondo, Kenya Water Project to be conducted by the Student Association for International Water Issues (SAIWI) from the University of Nevada Reno, led by Cathy Fitzgerald. Phase I involved a project by 5 SAIWI students in June 2004 that included successfully drilling a water well using the LS-100 drill rig, testing the water quality of a hand-dug well, teaching a hygiene education and hydrology program to the primary and secondary school students as well as community members, and conducting a geophysical survey to determine optimal locations for future wells.

The community of Rabondo, located in southwest Kenya, has approximately 5,000 people who are currently using one drilled well, one hand-dug well, and surface water to provide all of their water needs. The major water sources for the community are a contaminated river and tributary streams that collect rain water and are shared with the local livestock. In 2004, IDM sampled water quality from both the river and tributaries finding dangerously unsafe levels of fecal coliform bacteria.

The cultural tradition in Rabondo is for the women (specifically the girls) of the community to provide the families with water on a daily basis. The community of Rabondo has been very proactive in teaching and empowering their women to seek more reliable and safer water for daily use. However, the amount of time and energy expended daily in water acquisition by women and young girls has prevented many of them from obtaining the education they need or caring adequately for their families.

SAIWI proposes to return to Rabondo in June 2005 to accomplish the following tasks:

- 1) to drill another water well using the LS-100 drill rig,
- 2) provide training in the construction of a hand dug well for those areas in the community where the terrain is unsuitable for the LS-100,
- 3) construct a rain water harvesting system for the clinic,
- 4) provide additional hygiene education training with emphasis on sanitation and water purification, using the SODIS method, and
- 5) to repair the surface seal on an existing hand dug well.

**6) Point-of-Use Drinking Water Purification, Bheram Slum - Bombay, India**

Organization: Engineers for a Sustainable World -- UC-Berkeley

[www.ce.berkeley.edu/~esw](http://www.ce.berkeley.edu/~esw)

209 O'Brien Hall

University of California, Berkeley

Berkeley, CA 94720

Start and End Dates: October 1, 2004 – August 31, 2005

Amount Requested (US\$): \$4000

Project Director: Ashley Murray, Graduate Student

Environmental Engineering

UC Berkeley

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**Abstract**

The 50,000 residents of the Bheram slum located in Bombay, India suffer from the consumption of highly contaminated water. Although drinking water is supplied to the slum by the municipality, the pipelines are immersed in trenches that carry raw sewerage. As a result of poor maintenance and corrosion of the water pipes, the water is infiltrated by waterborne pathogens.

In response to the severe health impacts this is causing the community, students from Engineers for a Sustainable World-Berkeley (ESW-B) are proposing to design and implement point-of-use water filters to be used by slum residents in their homes. A multidisciplinary team of Berkeley students will conduct the project in two phases: iterative design and development of a filter on campus between October 2004 and May 2005, and diffusion and adoption of the filter by the Bheram Slum community in India between June and August 2005.

The project will be carried-out in cooperation with Committee for Right Housing (CRH), a local Bombay non-governmental organization (NGO) that has a long standing relationship with the community, and will also rely on feedback from the slum community. Successful completion of the project will be based on three primary achievements: dramatically improved health of the Bheram community by eliminating pathogen contamination in their drinking water supply; empowerment of the community by eliminating reliance on government intervention to improve their water supply; and the creation of economic opportunity for local craftsmen who engage in producing the filters.