Current Projects

On August 15, 2003, the ACJF announced that the following five projects were funded as a result of RFP1 (Issued: April 15, 2003; Due: July 1, 2003).

RFP1 Text:

The Ann Campana Judge Foundation announces its first RFP with a due date of July 1, 2003. For this funding cycle, requests should not seek more than **\$4,000** from the ACJF. Proposals that leverage funds or include in-kind contributions from other organizations/individuals are especially encouraged; such funds/contributions must be documented. The ACJF is currently placing a priority on those proposals dealing with **water** and **sanitation issues in developing countries.** Please refer to the *Proposal Submission Guidelines* for complete information. Prospective proposers may also contact the ACJF at acjf@acjfoundation.org. Existing or completed projects are ineligible for funding.

The funded projects are:

1) Maasai Mara SODIS Demonstration and Technology Transfer

Organization: Maasai American Organization Amount granted: \$3,870

2) Santa Rita, Peru, Sewage Treatment System

Organization: Engineers Without Borders Amount granted: \$4,000

3) Geophysical Reconnaissance of Île de la Gonâve, Haiti

Organization: Union Church of San Juan Amount granted: \$4,000

4) Sanitation for Barrio San Martín, Sector Salida al Rastro, Camoapa, Nicaragua Organization: El Porvenir Amount granted: \$4,000

5) Esmeraldas Well Installation Project, Ecuador

Organization: World Radio Missionary Fellowship, Inc. Amount granted: \$4,000

Project abstracts and complete organizational information follow.

Maasai Mara SODIS Demonstration and Technology Transfer

Organization: Maasai American Organization <u>www.maasaiamerican.org</u> Start/End dates: December 1, 2003 – December 1, 2004 Amount requested: \$3,870 Amount granted: \$3,870 Principal Investigator: Cathleen M. Fitzgerald Phone: 775-853-8503 <u>fitzgeraldcathy@hotmail.com</u>

Abstract

This proposal will develop and implement a regimen of clean water practices and hygiene education, including: 1) the addition of alum for turbidity reduction of water, 2) SODIS (Solar Water Disinfection; www.sodis.ch) for bacterial count reduction of water, 3) proper procedures for safeguarding bacteria-free water from contamination, 4) fly abatement protocol, and 5) diarrhea episode monitoring to validate the efficacy of the regimen. The project is designed to be expandable to all of Narok County, Kenya. A pilot effort, the core of this proposal, will be the approximately 5,000 semi-pastoral cattle people of the Siana Group Ranch, (a geographic and governmental unit loosely comparable to a United States Indian reservation) in a thirst land region bordering the Maasai Mara Game Reserve. The major water sources for Siana inhabitants are polluted rivers that are shared with herd livestock and wildlife. Prevailing practices do not include filtering, boiling, or adding bleach to drinking water. Though high rates of typhoid fever are reported in the area, many of the traditional women who are responsible for water provision do not subscribe to a germ theory of disease and are skeptical of the benefit of treating water. The close proximity of cows and goats and the reliance on manure for fuel and building generate a high ambient load of flies.

Accordingly, the investigators propose a project to monitor incidence and severity of diarrheal events among children, introduce the sanitation regimen, motivate resident women to participate, and observe the outcome. The Siana Group Ranch is selected for the pilot project because the Maasai American Organization has an on-going partnership with the administrative structure and has a cooperative network of local volunteers, service groups, and community organizations.

Maasai American Organization volunteers from the United States who visit the field twice each year, at staggered intervals, will supervise the project and give technical and professional assistance. Support from the development network that the Maasai American Organization maintains will ease the myriad of obstacles inherent in working in an extremely resource-poor, marginalized, and remote rural area.

Santa Rita, Peru, Sewage Treatment System

Organization: Engineers Without Borders <u>www.ewb-usa.org</u> University of Colorado Boulder Civil, Environmental & Architectural Engineering Campus Box 428 Boulder, CO 80309-0428 Amount Requested: \$5,000 Amount Granted: \$4,000 Start/End Dates: June 1, 2004 to June 21, 2004 Principal Investigators: April Tumey and Joy Jenkins Phone: 303-735-2995 Fax: 303-492-7317 Email: joy.jenkins@colorado.edu and Tumey@colorado.edu

Abstract

This proposal is requesting \$5,000 toward the June 2004, installation of a sewage collection and treatment system for the impoverished rural town of Santa Rita, Peru. We are graduate students involved in an organization called Engineers Without Borders whose goal is to provide engineering assistance to developing countries. The town of Santa Rita currently has a fresh water supply system but no facilities for in-home bathing and wastewater removal. On a recent assessment trip to Santa Rita the people expressed that their first priority was to install a sewage collection and treatment system so that the people could install flush toilet and bathing facilities in their own homes. This will dramatically improve the sanitary conditions that the people experience in the village by limiting their exposure to unsanitary outhouses and polluted water in the irrigation ditches where many people currently bath and wash laundry. Information gathered on the recent assessment trip has allowed us to design an efficient collection and leach field treatment system. This type of system is ideal for the remote location, because there is adequate land available and the system requires low maintenance. Also the collection system will be set up so that homes can connect to the main collection lines when they are ready to do so. The village has expressed its willingness to contribute to the project in the form of manual labor, community regulation of the system to ensure appropriate maintenance, and personal funds to provide in-home bathroom fixtures. Not only will the people of Santa Rita benefit from the implementation of this project, but also the student participants will gain an invaluable educational experience.

Geophysical Reconnaissance of Île de la Gonâve, Haiti

Organization: Union Church of San Juan 2310 Laurel Street San Juan, PR 00913 Phone: 787-726-0280 Fax: 787-726-0378 Email: <u>ucsj@coqui.net</u> <u>www.unionchurchofsanjuan.org</u> Amount requested: \$4,000 Amount granted: \$4,000 Start/End Dates: July 2003 – December 2003 Principal Investigator: Joseph W. Troester Phone: 787-722-5509 Email: josephtroester@earthlink.net

Abstract

A geophysical reconnaissance expedition using electromagnetic surface geophysical tools, such as the EM-47, is proposed for Île de la Gonâve, Haiti to better understand the subsurface hydrostratigraphy of the island. An increased understanding of the hydrogeology of the island will help mission agencies and NGOs develop community water supplies in areas where drilling is difficult and the water table is expected to be greater than 60 meters below the land surface.

The island of La Gonâve, which is off the western coast of Haiti, is a dry place in a dry land. Water use on the island of La Gonâve is only 7 liters (2 gallons) per person per day and women spend an average of 3 hours per day obtaining water for their family (Lindegger, 2002; Troester, 2002; Troester and Turvey, *in press*). At times, people on La Gonâve are literally starving because they do not have sufficient water to cook the basic staples of rice and beans.

The geophysical reconnaissance expedition will supplement the education of the students in a 3-year vocational program in Well Drilling and Pump Repair at the Methodist Church vocational school in Port-au-Prince.

Lindegger, M.O., 2002, Water harvesting in Haiti: EcoLogical Solutions Ltd., Conondale, Australia.

- Troester, J.W., and Turvey, M.D., *in press*, Water-resources reconnaissance of Île de la Gonâve, Haiti: submitted to the Hydrogeology Journal.
- Troester, J.W., 2002, Changing Water-Resources on Île de la Gonâve, Haiti [abstract]: EOS Transactions, American Geophysical Union, v. 83, no. 47, Fall Meeting Supplement, Abstract H61C-0804.

Sanitation for Barrio San Martín, Sector Salida al Rastro, Camoapa, Nicaragua

Organization: El Porvenir 2508 42nd Street, Sacramento, CA 95817 Phone: 916-736-3663 Fax: 916-227-5068 Email: info@elporvenir.org www.elporvenir.org Amount requested: \$4,000 Amount granted: \$4,000 Start/End Dates: November 1, 2003 – April 30, 2004 Contact person: Carole Harper, President, El Porvenir <u>ch1979@earthlink.net</u> Principal Investigator: Rámon Mendoza Urbina

The proposed project responds to the need for family latrines in "Salida al Rastro" in the large, poor Barrio San Martíin of the provincial town of Camoapa, Boaco province, Nicaragua. The project seeks to achieve more complete latrinification of an urban neighborhood, which is vulnerable to disease because of the lack of sanitation. Sector Salida al Rastro has 80 homes with approximately 480 inhabitants. This project would benefit 33 families, 141 inhabitants, 73 adults and 68 children. At present, these families have no sanitary facilities whatsoever.

Since 1990 El Porvenir has partnered with poor communities in Nicaragua to improve their health through sustainable community development, principally small-scale water, sanitation, health education, and reforestation projects. We have completed over 350 projects to date.

El Porvenir does not initiate projects. A community must identify their need, come to El Porvenir to ask for help, elect a committee, carry out a census, provide all labor on a volunteer basis, and contribute any locally available materials. El Porvenir provides materials, which must be purchased, and gives training to enable the community to construct the project and then undertake its long-term maintenance. El Porvenir staff will provide hygiene education.

Salida al Rastro has already requested our help, elected the project committee, and made a commitment to volunteer labor and some materials. The project would be undertaken as soon as the rainy season is over (end of November 2003) to be completed by the beginning of May 2004.

The cost of materials, tools, transportation, and staff for the 33 latrines is \$5,085.67. El Porvenir requests \$4,000 from the Ann Campana Judge Foundation and will cover the remaining cost from unrestricted donations. The value of community contributions (labor and wood) is estimated at \$2006.76.

The expected result of this project is improved health for all adults and children living in the barrio, a reduction in cases of diarrhea and dysentery, and decreased infant mortality.

Esmeraldas Well Installation Project, Ecuador

Organization: World Radio Missionary Fellowship, Inc. P. O. Box 39800 Colorado Springs, CO 80949-9800 Phone: 719-590-9800 <u>www.hcjb.org</u> Amount requested: \$4,000 Amount granted: \$4,000 Duration: 2 months Principal Investigator: Cesar M. Cortez Phone (Ecuador): (011 5932) 2269-234 Email: <u>ccortez@hcjb.org.ec</u>

Abstract

The HCJB well drilling program is primarily focused on the northern sector of Esmeraldas Province located along the Ecuadorian border with Colombia, between the Andes Mountains and the Pacific Ocean. The Cayapas River and Santiago River watersheds include an area of about 5,000 km² and extend from the Cotacachi volcano, to the mouth of the Cayapas River. The population of this area is estimated to be about 60,000. The area is sparsely settled although there are distinct communities along the navigable rivers. Travel is primarily by horseback and by dugout canoes powered by outboard motors. The people are a mixture of different ethnic groups; the majority of them are Negroes, and native Indian tribes. The Indians are primarily Awa and Chachi. Some Indians still survive by hunting, fishing and collecting food.

The health and social problems in the area are quite severe. About 60% of the children in the area show signs of malnutrition. USAID and CARE reported that 30% of children died before 2 years old because of diseases related to water. There are only two medical doctors for every 7,000 people. Only 40% of the children received vaccination against measles and other childhood diseases. They do not have potable water *(except where the HCJB program has installed wells)*, sanitation, garbage disposal or latrines except in the municipalities. The wastes of upstream users most often pollute the river water. Often dead animals are seen floating downstream. The social ills, which include prostitution, alcoholism, drug abuse, family violence are at epidemic levels.

The HCJB potable water program began in the area in 1996 with 40 wells river with a dramatic success and positive reception of the potable water in these communities for the communities by the Onzoles River. When we finished our work by the Onzoles River, we were convinced we must continue drilling in this province. At least 300 wells are required to provide potable water for the rural communities in this entire area of the country. The equipment used to drill the wells at the time is a Lonestar Bits LS-100 donated by Lifewater International (www.lifewater.org). Our goal is to provide potable water, hygiene training, latrines, and training in leadership in seven communities of Esmeraldas Province.