

Rotary District 5340 – DISTRICT GRANT

Project Title: Water for Sudan, Inc. - Drilling Fresh Water Wells in Southern Sudan

The goal of Water for Sudan, Inc. (WFS) is to increase the quality of life and health of families in Southern Sudan by drilling wells to provide fresh, safe potable water. In the period 2005 – March, 2010, WFS has installed sixty (60) successful pumping systems in remote villages serving tens of thousands Southern Sudanese. WFS has two drilling rigs to install permanent “deep water” wells. Drilling locations include a highly populated region called Bahr al Ghazal around Wau and Tonj and some in the northeast called the Upper Nile.

WFS installs the villages' *first* water well in close proximity to the community providing fresh, safe, potable water.

About Water for Sudan drilling in this desolate land. Sudan, a country beset by war in many of the last 50 years, is 40% of the size of the U.S. Water for Sudan, Inc. is working in Southern Sudan, a completely undeveloped area of the country that is itself about the size of the U.S. State of Texas. Water pumping systems are being installed in the most destitute areas of Southern Sudan. In most areas there are no roads or bridges like those found in developed countries. If a river needs to be crossed, the trucks may have to be transported across on rafts.

The drilling teams work seven days a week during the dry season. Wells drilled in the rainy season will likely dry up in the dry season as the water table falls. The teams often work in temperatures of up to 120 degrees Fahrenheit. The timeline of the dry and wet seasons and the extreme climate coupled with delays and vehicle breakdowns drive the success of the well production for a given season.

There is no electricity, no supply stores, repair facilities, cell phones or gas stations. All provisions – pumping equipment, food, diesel fuel, maintenance equipment for vehicles and wells, drinking water, welding equipment, camping equipment and supplies must be carried by the Water for Sudan convoy.

All supplies must be imported and can take weeks to arrive. There are no roadside services; the teams must be self reliant. As equipment breaks down in the harsh conditions, staff members must create repairs that work until more highly-trained repair facilities can be found. Such parts and skilled-mechanics are often several days' drive from our drilling sites.

Medical clinics may be several days drive away. Few people speak English (WFS staff speaks Arabic and several Sudanese dialects.) There are wild animals like leopards, hyenas, scorpions, cobras and lions roaming our drilling areas.

About Sudan: The Southern Sudanese villagers have historically migrated seasonally to areas where water can be found. In many cases the water that is available is polluted. Their communities have not developed a sustaining economy with markets, cottage-type industries, educational or medical facilities due to the annual migration. For thousands of years they have sustained their families by gathering nuts and fruit; planting squash, millet, beans and sorghum while herding their cattle, goats and sheep in their search for water. The women walk as far as six miles daily with containers on their heads to collect water.

Each day hundreds of thousands of people in Southern Sudan drink water-borne, unsanitary water they have spent hours walking to gather. For their very survival people are forced to drink from these contaminated waters and subsequently become infected; often times resulting in diminished immune systems that fall prey to other opportunistic diseases.

What water is available to the mostly destitute people of Southern Sudan is most often found in shallow wells or surface ponds, in many cases many hours' walk from home villages. The water that is collected in these arduous journeys is often contaminated with parasites and Cholera bacteria. But, since water is a necessity of life the people must drink from these tainted waters with the result that many become ill thereby compromising their immune systems that then fall prey to other opportunistic diseases. This exposure results in pain, sickness, and often death for these destitute people. Improved nutrition and clean water would increase the ingestion of medications to enable a person's recovery from these illnesses. The only real measure to stop this preventable suffering is to provide fresh, clean water.

A. Water for Sudan addresses the areas of focus that correspond to The Rotary Foundation's mission. They are:

(1) Peace and conflict prevention/resolution

We believe that an essential key to the success of Water for Sudan, Inc is that our Africa-based staff is Sudanese. WFS is enabled to “conduct business” in Sudan, to deal with unwieldy government regulations as well as communicate with the local Southern Sudanese villagers and gain their respect. Our leadership and staff speak the national language of Arabic, English, and their native Dinka and Nuer languages. They are knowledgeable of local customs, traditions, the physical terrain, survival techniques and local politics. They have families living in Southern Sudan.

For centuries, these two large tribes, Dinka and Nuer, have warred. Since the WFS' team and leadership are comprised of members of both tribes, this project instills a spirit of "working for the common good" and has developed into mutual respect between the two communities.

Salva Dut is from the Dinka community in Tonj which is a region where most of our pumps to have been installed. Team Leader Dep Tuany is from a Nuer village near Maiwut. Both men are former *Lost Boys of Sudan*, immigrated to and have been educated in the U.S. and they are U.S. citizens.

Outcome Objectives: By bringing fresh, safe, potable water to the people of Southern Sudan, Water for Sudan, Inc. seeks to achieve the United Nation's *Millennium Development Goals*. These objectives parallel Rotary's mission:

(2) Disease prevention and treatment

Clean water is a fundamental basis upon which communities can subsist. Our wells have improved basic human health; aiding the Sudanese's livelihood and general well being. WFS strives to eradicate extreme poverty, hunger and thirst with the drilling of safe, fresh water wells.

Clean water makes people less vulnerable to pathogens that cause diarrhea, a major cause of death; hepatitis A and E, typhoid fever; malaria, dengue fever, Guinea Worm, Schistosomes, Cholera, African trypanosomiasis (sleeping sickness), schistosomiasis, meningococcal meningitis and rabies. With deep well pumps installed in proximity to villages, WFS *combats food, waterborne, respiratory, vector borne and animal-contact diseases*.

With the installation of fresh water wells, other NGO's may build or establish medical clinics within the community to treat the sick and vaccinate the people to prevent disease.

(3) Water and sanitation

Significant numbers of children die from water and sanitation-related diseases such as diarrhea. Safe water reduces child mortality.

(4) Maternal and child health

Clean water improves maternal health - Women have healthier pregnancies when they can rely on clean, non-contaminated drinking water. They have better personal hygiene. They do not have to carry heavy loads of water over great distances.

(5) Basic education and literacy

With clean fresh water, children (especially girls) are healthier and, since far less time is needed to gather drinking water, children are able to attend school. Bricks may be made with the nearby resource of water, thus schools may be constructed. WFS achieves the first steps of universal primary education with the building of a well.

(6) Economic and community development

For women and girls. WFS promotes gender equality as well as empowers women with the building of a well. Women and girls no longer need to walk miles each day to collect water. New water wells are located in proximity to the community it serves. They may attend school or do other work to enhance their livelihood. Also, to improve the families well being, small "pot gardens" are planted due to having water nearby.

For development to enable community stability - WFS staff organizes the village leaders in the decision process. The community participates in the building of and caring for the pumps. WFS trains local leaders to gain the technical and managerial skills to hire on-site well managers and operate a communal utility.

Our staff engages local villagers in virtually all aspects of a water wells site location, construction and installation. We encourage a region's village elders to decide among themselves where to locate the water well within their area. Once that decision is made we gain villager participation for site preparation and well construction. We train the villagers in the use of the well, proper maintenance of the machinery as well as how to manage the on-going 24-hour-per-day water distribution for the village. We believe that this process allows for greater village "ownership" and care of a newly-installed well.

B. How will this project meet the specific need and who specifically (e.g. how many) are its beneficiaries?

Water for Sudan, Inc. has provided tens of thousands of people in Southern Sudan with clean, fresh, safe water. We estimate each well may provide over 1,000 – 1,500 (duplicated) people (166 – 250 families) with water daily. Presently, we install one pump in a particular cluster of villages. This is the first clean water that the particular villagers have experienced. WFS estimates that 60,000 to 90,000 unduplicated people use these pumps on a daily basis.

The United Nations publishes a report in which they estimate 3,000 people (about 500 families) are served with each well on a daily basis.

B. (a) Will this project provide specific skills and/or knowledge that will allow the beneficiaries to help themselves in the future?

Village Management and Technical Trainings. Villagers assist in the site preparation and installation of the well. Villagers are trained in the maintenance of the pumping system as well as repair of the equipment. The village leaders are trained to manage the communal utility on an on-going basis. Two villagers are managers of the well and are paid by the village to manage (on site) the well water distribution.

Water Distribution: Village leaders manage the water distribution timetable. Multiple families may obtain water daily. The village leaders hire two people from the village to oversee on site distribution of the water to residents throughout the 24-hour day. There is a schedule that indicates daytime, evening and (conceivably) a nighttime water collection for each resident in all communities.

Indicators of Success: Representatives of Water for Sudan return to some of the villages served in previous seasons. We are continuously pleased to see that all of the wells we installed are operating normally and are providing adequate amounts of clean water to meet village needs. The families' daily intake (consumption) and usage of safe water increased due to the closeness of the "first" well in the community.

Village life had been radically altered in many ways. With the installation of the WFS pumps, the water is brought to the villages. They have drinkable, safe water for their families and animals. Village women, mothers and their daughters no longer spent hours walking each day to their seasonal swampy water hole in search of a jug of water. With a water pump, a community develops. Most importantly, the villages did not need to migrate for water to live.

The girls were in school. Most remarkable were the new schools and attendance growth in the schools. In one village only 60 students had attended school prior to the installation of the village's well. Within one year, school enrollment had increased to 850 students with twelve teachers. The curriculum included English, mathematics and Christian religious education.

We noted the development of "industries" that require a reliable source of water close by such as brick-making enabling the village to build community buildings and homes. Our staff sees this increased water usage with the construction of permanent shelters and community buildings. We saw several new school structures either already standing or being built. We saw the establishment of village trade markets – locations where people could barter or sell their goods and purchase needed goods from the outside world.

Permanent homes were being built from bricks that were made near the well. Families, especially the wives and mothers, had developed "cottage-type" industries to provide extra income. We saw more gardens or "pot gardens" to provide for more stable food sources. Family members seemed to be healthier.

In Sudan, water is life. Clean, safe, potable water is community development, life enhancement and good health.

C. How will the Project Sponsoring Rotary Club, other Rotary Clubs and organizations work together to implement this project?

Rancho Bernardo Sunrise Rotary Club is sponsoring the project proposed in this district grant. RB Sunrise will work with the East Coast WFS committee, composed of multiple Rotary Clubs, e.g., Del Mar Rotary Club, Rancho Santa Fe Rotary Club, Rancho Bernardo Sunrise Rotary Club, San Diego Club #33, and other D5340 Clubs, in order to carry out proposed grant obligations. In addition, the East Coast WFS Board of Directors will be in charge of operations, organization, and project implementation, oversight, review, evaluation, and assessment. We will be collaborating on an ongoing basis to ensure proper use of funds, implementation, and project completion.

C. (a) How many Rotarians will participate in the project and in what roles?

In certain situations, Rotarians may be directly involved in the proposed project as been in certain projects in the past. In addition, negotiations are taking place between committee members of WFS and the newly chartered Juba Rotary Club. With this international collaboration, we will be working closely with Rotarians to ensure project monitoring and evaluation. The roles include budget allocation and oversight, team implementation, communication and overall management.

PROJECTED BUDGET

Include a complete itemized budget for the entire project. Please use separate pages if necessary.

Items to be purchased	Cost
A. Direct project expenses for well project in Africa	\$449,000
B. Indirect project expenses (administration)	<u>\$63,000</u>
Total budget:	\$512,000

PROPOSED FINANCING

Please list all financing.

	Amount Contributing
Sponsoring Rotary Club: Rancho Bernardo Sunrise Rotary Club	<u>\$4,000</u>
Amount DDF requested from the District Grants Committee	<u>\$4,000</u>
Funding from Additional Sources _____	<u>\$</u>
Total from all sources	<u>\$8,000</u>

Note: This total should equal the total on the proposed budget. If not, the application will be returned for correction.

COORDINATING THE PROJECT

Name the Club that assumes total responsibility for the project (the Project Sponsoring Club.)

Club **Rancho Bernardo Sunrise Rotary Club** Club Rotary ID # **25,699**

Contact Person **Mark Evans Kirkpatrick**

President **Nasrin Barbee**

President-Elect **Al Watson**

AGREEMENT

1. To utilize the Project Funds to support the project as outlined in this application. Funds provided by the District will not be used for any purposes other than those considered eligible by the District as described in the District Grants Terms and Conditions.)
2. That it has received and read the District Grant Terms and Conditions and will abide by all stipulations set forth therein.
3. To defend, indemnify, and hold harmless Rotary International (RI), TRF, District 5340, their respective Directors, Trustees, Officers, employees, and committee members (Collectively RI/TRF/District) from any and all damages, losses, judgments, costs, fines, awards, liabilities, and or expenses, including without limitation reasonable attorney's fees and costs of litigation, asserted or recovered from RI/TRF/District, that result or arise directly or indirectly, from the implementation of this project.
4. That this agreement may be cancelled for any reason without notice upon the failure of the sponsors to abide by the terms set forth herein. The sponsors agree to return total funds granted if funds are misused.
5. Reporting. The Project Sponsoring Club is required to submit semi-annual reports (interim reports) until the project is complete (final report) on District Grant Report to District 5340. All applicable laws of the State of California, USA, govern this Agreement.

Payee must be a Rotary Club controlled account, preferably one established for this project.

Payment cannot be made to an individual, cooperating organization or beneficiary.

NOTE. The final report will be due by March 31 of the Rotary Year in which the Grant was awarded.

NOTE:

Please retain a copy of this proposal for your files. The application must be made online: www.matchinggrants.org/district