



Rota-Monica

Fri Apr 20, 2012

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Editor Scott Kunitz

If you have any comments or questions, please contact the editor.

Upcoming Programs

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Home Cooking for the Food Festival

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Olympics

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Upcoming Events

[District Conference](#)
Apr 19, 2012 - Apr 22, 2012

[International Food & Song Festival](#)
Tom & Stephanie Loo's
Apr 29, 2012 01:00 PM

[Rotary International Convention](#)
May 06, 2012 - May 09, 2012

Club Banners



Joan Behrens
April 13, 2012

Stories

GRAND BAHAMA EMERGENCY WATER RELIEF FOUNDATION

Posted by Scott Kunitz on Apr 19, 2012

GRAND BAHAMA EMERGENCY WATER RELIEF FOUNDATION

A ROTARY INTERNATIONAL PROJECT IN FREEPORT, GRAND BAHAMA

Purpose and function

To be able to manufacture and distribute drinking water to those in need after a natural disaster interrupts normal supply.



Importance of the facility

Recent Past:

- In 2004 Francis, Jeanne, and Wilma in 2005, were devastating hurricanes which damaged many homes on Grand Bahama.
- Storm surges sent salt water into existing fresh water wells; making the water undrinkable.
- Electricity and potable water was unavailable for many days; some Grand Bahama inhabitants went as long as 3 to 6 weeks without clean water and electricity

How the project came about

- After Francis & Jeanne the TK Foundation, a local charitable trust based in Nassau, wanted to respond proactively rather than reactively to assist the island suffering with water shortages after a storm cut off local supply. They needed a local partner to ensure that the project would be sustainable.
- Rotary was a natural choice.

Meanwhile thousands of miles away

- Myles Pritchard, a Bahamian who is a member of The Rotary Club of Santa Monica, contacted Barry Rassin in the Rotary Club of East Nassau (Myles' old club) stating that his club wanted to do a project in the Bahamas involving water.
- Lindsey Cancino, RCEN was also CFO of the TK Foundation was looking for an International Rotary partner and so they joined forces to build a reverse osmosis plant on Grand Bahama.

Legal framework

- Registered Bahamas Foundation – The Grand Bahama Emergency Water Relief Foundation was formed.
- Grand Bahama Port Authority Licensee
To carry on the business of an emergency only production and free distribution of clean drinking water from a reverse osmosis plant for water relief during and post emergencies and disasters to the needy in Grand Bahama and elsewhere in the region.
- Ability to import Duty Free goods and supplies

THE WHEEL STARTED TURNING

Project funding

Source of Funds	Amount
D 7020 DDF (District designated funds)	\$25,000
D 5280 DDF (District designated funds)	\$6,250



Alan Monroe
March 30, 2012

Club Videos

Santa Monica
Rotary Club's
90th Anniversary
Slide Show

Santa Monica
Rotary Club's
home makeover effort
at Upward Bound House

Puerto Rico
District Humanitarian Trip's
main project
distributing 110 wheelchairs

Rotary Club of Santa Monica
Service Since 1922
Meets Noon Most Fridays
Riviera Country Club
1250 Capri Drive
Pacific Palisades, CA 90272

Rotary Foundation 100% match	\$31,250
D 5280 – Rotary Club of Santa Monica	\$6,500
Rotary Foundation Match (50%)	\$3,250
D 5280 – Additional Rotary Clubs	\$15,167
Rotary Foundation 50% match	\$7,583
Grand Bahama Rotary Clubs	\$0
District 6990 contribution	\$0
TOTAL ROTARY FUNDS	\$95,000
TK Foundation matching grant	\$122,610
TOTAL FUNDS FOR PROJECT	\$217,610



Hurricane proof building

- 4 inch thick solid concrete walls
- Metal roof
- Steel doors
- 10 feet above grade
- All equipment is an additional 2 feet above floor

California Rotarians joined us while on their way to a service project in the Dominican Republic



Reverse Osmosis Machine



- 7,500 GPD capacity
- Fully automatic
- Self cleaning weekly
- Draws water from it's own well

Emergency power



- 20 KW Diesel generator
- 30 hours fuel capacity
- Extra fuel close by

5500 Gallons storage - 6 fill stations



Distribution

210g pickup truck tanks x 2



20 x 275 gallon tote tanks



Operating parameters

- Since the well is mostly sweet water the machine is not working hard at all
- We are running at just under 500 psi and producing 5-6 gallons per minute which is almost 8000 gallons per day
- Often these machines work up to 900 - 1000psi

Water quality (in total dissolved solids)



- The USEPA City water standard is 550 TDS/PPM (total dissolved solids parts per million)
- Purified Bottled water was tested from 58 to 268 TDS/PPM
- Water purchased from a local bottled water seller was tested at 21 TDS/PPM
- We have been producing 16 TDS/PPM

Water Maintenance



The water stored in the main tank is kept bacteria free with the use of an ozone water treatment system.

Spare parts

- We have spare pre-filters to last up to five years
- Every possible gauge, valve and electrical part that could go wrong is in stock
- Spare belt and HP Pump rebuild kit
- We have a credit at Watermakers Inc. for a new membrane should we need one in years to come (they have a shelf life)

Rotarian Training Session



16 Rotarians from all 4 clubs attended training session with Watermakers Technician.

Rotaract has also been to the plant for training

* Lions Club

Freeport City Distribution centers

Place 2 filled tote tanks at each location before the storm



- Captain of Salvation Army is an active Rotarian
- Red Cross director is a past Rotarian
- Both centers are known distribution centers
- 20,000 +- persons in close proximity

Other Distribution Centers

- Walk up traffic to the plant
- Established NEMA approved hurricane shelters (there were 12 last hurricane)
- Established churches in the East and West which we worked with in the last major storms
- Drive through effected areas with the pickup truck tanks and let residents fill their own jugs
- NEMA – provide water and logistics when requested

Communications

- Plant has a Satellite phone allotted
- Plant is equipped with a fixed VHF radio system
- Handheld VHF radios
- Master list of phone numbers so that texting can take place
- BBM list for those with Blackberry's
- Pre scripted message for public broadcasting (ZNS, etc) to alert public that water is available at plant

Operator Comforts

Since there is a good chance of 24 hour operations

- There is a bathroom and we can hook up a shower as well (good incentive to come out after your house supply is off)
- We have a two burner propane cook stove to prepare food, a coffee maker and microwave oven
- We need a fridge if anyone is swapping out theirs at home and wants to contribute to a good cause

Does the Rotary Club of Lucaya have a Disaster Committee

- Who is the chairperson of a hurricane, tornado or even a Volcano?

ROTARY CLUB OF SANTA MONICA



Service Since 1922 - Meets Noon Most Fridays
Riviera Country Club - 1250 Capri Drive - Pacific Palisades

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