

Bolivian-Canadian Clean Water Network

Cooperativa Boliviana- Canadiense para Agua Limpia (COBAGUAL)

MORE THAN JUST A DROP IN THE BUCKET...

BCC Water Network Quick facts:

- **Founded on February 28, 2007 in Ascension de Guarayos - In Bolivia's Amazon Basin**
- **Currently has a team of 4 Bolivian paid staff , one Bolivian volunteer and two Canadian volunteers**
- **Employs a participatory development model, where filter users help construct their filters rather than pay for them to address need of the poorest**
- **Currently 59 filters installed and over 300 people with clean water**

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July 30, 2007

Volume 1, Issue 1

Welcome!

Hello and welcome to the first edition of the Bolivian-Canadian Clean Water Network's newsletter.

To the small group of individuals who have donated to our organization in the five short months that we have been in existence—THANK YOU! We have truly felt blessed to have your support.

For those of you who haven't heard too much about the BCC Water Network, we hope that you'll find this newsletter informative.

The last couple of weeks have brought much reflection on the direction in which to take the organization. Our goal has



always been to help address water issues in the entire country rather than just in the Department of Santa Cruz of Eastern Bolivia.

We've come to realize that the most efficient way to do this

would be to provide logistical, technical and in some cases financial support to locally initiated projects while continuing the work we started in the east of the country.

For this reason we felt it appropriate to change our name in English, to a network, which better captures the mission of our work. And as awkward as the name COBAGUAL is in English, it has really caught on in the town of Ascension, where our team is currently working so will remain the project's name in Bolivia.

The new name for the organization in Canada is a first step in becoming incorporated, and a registered charity to be able to provide tax receipts to our donors - something we see as very important.



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Project Update

When we left Bolivia 2 months ago the organization had already installed 24 filters in homes in Ascension. Our team of 4 trained local employees and 1 Bolivian administrative volunteer appeared ready to continue the work of the BCC Water Network in our absence. The first four weeks after our departure were rather successful. The team managed to build and install 14 filters while making adjustments to improve our work schedule and becoming accustomed to working without us.

During this time some positive media attention and word-of-mouth testimony from satisfied filter recipients sparked increased interest in the project. Some people even began approaching our employees at the worksite offering to buy filters at a price that would cover the expenses of their manufacture and delivery. Though we remain committed to helping the poorest of the poor, by

giving them filters in exchange for their labour, we are currently examining the logistics of selling filters to people who can afford them while sticking to our regular work cycles. This will allow us to benefit more people without increasing the cost incurred by the organization.

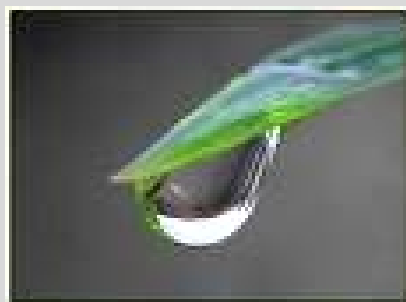
July has been an exciting month for the BCC Water Network with 21 filters installed so far this month and 10 more installations planned for next week. All in all, 59 families in Ascension have received filters up to this point, providing over 300 people with clean drinking water since our first installation on April 17th.

Follow-up visits have revealed that the users are satisfied with their filters, in some cases already reporting health benefits after only few weeks. We remain in close contact with our team in Bolivia through phone calls and email, and will continue to provide updates about their successes and the challenges they face as the project unfolds.

“ Water is life’s mater
and matrix, mother
and medium. There is
no life without water. ”

- Albert Szent-Gyorgyi, 1937

Nobel Laureate for Medicine



Agua Limpia = Options

Agua limpia, l'eau pure, clean water. No matter how you choose to say it, the importance of clean water cannot be stressed enough. It is something we need everyday to ensure that our bodies are healthy.

United Nations findings peg Bolivia as a country where over 1.3 million people are without sustainable access to an improved water source and more than 50% of the population lacks sustainable access to improved sanitation. These people are mostly found in rural areas or small towns

like Ascension.

When the only option for families is to consume water that is contaminated, this leads to illness triggering a host of symptoms and physical discomforts including diarrhea, stomach pains, weight loss, fever and headaches. In some cases these illnesses even lead to death, especially in children under the age of five, and the elderly.

On top of the tragic loss of life, this can be a financial blow to a family in a developing country. Hospital visits to treat illness are expensive and are often temporary solutions if the

cause of waterborne disease are still persisting.

Some have defined poverty as the lack of options or alternatives. While clean water cannot alleviate all the barriers associated with being poor, it is certainly a logical first step in addressing a host of issues. Clean water means a reduction of disease in the household, allowing children to miss less school, parents to miss less work, and families to pay fewer doctor's bills (if doctors are even available). All of these elements lead to economic and social benefits which can be key to alleviating poverty.



BioSand Filter 101

The Bio Sand Filter (BSF) is a relatively simple technology that consists of a concrete box filled with layers of coarse and fine gravels that act as an under drain and a thick sand layer. It is intended for household use, and can be conveniently located in any part of the home.

To use the filter, water from any source is simply poured through an opening at the top. The sand pack is responsible for the filtration of incoming water by trapping disease-causing parasites between the sand grains or allowing bacteria and viruses to adhere to the sand grains themselves.

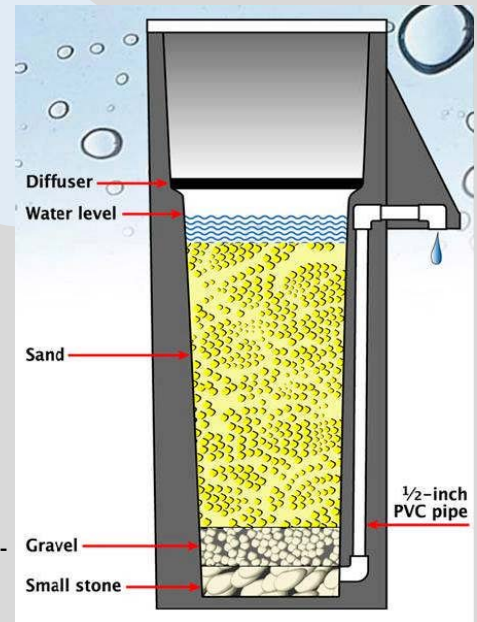


Within a few weeks of regular use a “biolayer” forms on top of the sand. This layer consists of bacteria and protozoa from the water itself and helps trap pathogens which may otherwise be able to pass through the sand, thus, greatly increasing the efficiency of the filtration. Designed by Dr. David Manz at

the University of Calgary, the BioSand filter has many benefits for use in the developing world. Most notably, the materials from which the filters are made and the molds necessary to construct their concrete outer

boxes can be obtained in almost any region. This allows for the filters to be constructed locally in developing countries, making them a relatively cheap option for water treatment and gives local organizations the opportunity to help their own communities.

On top of these benefits, their sturdy design means the filters can be used indefinitely with minimal maintenance, effectively providing a family with tools to purify a lifetime’s supply of water.



“When the well is dry,
we know the worth of
water.”

- Benjamin Franklin, 1746

How we work

The goal of the BCC Water Network is to provide the poorest of the poor with the opportunity to improve their quality of life through better access to clean water. We recognize the importance of involving the com-

munity in our work so that they can have a sense of ownership and pride in their filter. For this reason, we require that people help construct their filter (under the guidance of our employees) before they can receive it.

To accomplish this in the most efficient way possible, we work in a two week cycle where ten families come to the work site to build filters in the first week, and the same ten families get their filters installed in their home in the second week of the cycle.

We also make time in our cycles for educational workshops (including talks on hygiene and other water treatment options) and follow-up visits to ensure that the filters are being properly used and maintained.

The goal of our current project is to reach the twenty families with the most urgent need for clean water in each of the sixteen neighbourhoods of Ascension, a town where the majority of citizens drink water from highly contaminated shallow wells because it is all that they can afford. We are coordinating with community leaders to prioritize which families in each neighbourhood have the greatest need.

This is just a pilot project, and the organization plans to work in the town and its surrounding communities for many years to come.



Project Dollars and Cents

Below is a breakdown of the cost of our project, with prices in Bolivianos (Bs)

Cost per 2 week cycle:

Labour:

Workplace and mold maintenance.....	100.00
House visits and workshops.....	370.00
Installations.....	640.00
(including user education)	
Filter construction.....	950.00

Materials:

Materials for each filter:

Wear and tear on tools (approximate)...	3.20
Wood and nails for the lid.....	4.00
Hose.....	8.00
Acrylic plastic.....	15.00
Sand and Gravel.....	15.03
(including transportation)	
Cement.....	16.77

Total cost.....62.00

Total Cost per cycle.....2660.00 Bs

Cost in Canadian dollars: \$366.90

(at an exchange rate of 7.25 Bs per CAD)

We receive free transportation for our filters and a free workspace thanks to a written agreement with the municipal government, which greatly lowers our expenses.

The cost of the project from the time we received our first major donations on June 21st until its end in early September of 2008 (29 cycles) is therefore anticipated to be \$10 640.00.

Each household will receive the tools and education necessary to treat a lifetime's supply of drinking water for \$36 CAD. Labour is definitely our most significant expense, but we feel that it is important to provide our employees with a good living wage so that they can support their families. It is also important to remember that since the co-directors are volunteers and cover the costs of money transfers and long-distance phone calls themselves, every dollar that is donated goes directly to Ascension, thereby giving a significant boost to the local economy.

Thanks to the generosity of our donors, we've already received just under \$4000.00, so we are well on our way to our target, and are gratefully accepting donations of any size. Once we have worked out the logistics of selling filters, the extra income generated should allow us to decrease our per filter expenses in our regular cycles.

Thank you to our donors!

Derek Baker · Dan Hampson · Gary and Shirley Hirsche · Keith Hirsche and Jan Porter-Hirsche · Aarthi Jayanthan · Jay and Puspa Jayanthan · Ann Martinez · Nic Martini

If you would like to donate, please send cheques to COBAGUAL at the address below



We sincerely hope that you've enjoyed our first newsletter. You can expect the next one out in late September. In the meantime, if you have any questions or suggestions regarding the project or our newsletter, please do not hesitate to contact us.

Thank you once again for your continued support!

Sincerely,

Trevor Hirsche and Janaki Jayanthan

Co-directors, Bolivian-Canadian Clean Water Network

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