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### Background Information

### Project Lead Biography

Rachael Burchett is the project lead for all water projects done through Solea Water. She facilitates, coordinates, and oversees project planning, implementation, and monitoring. Mrs. Burchett is present for each step in all Solea Water projects and coordinates and builds relationships with local partners and local community members. Mrs. Burchett speaks English/Spanish.

### Solea Water in Haiti

Solea Water is not an in-country organization in Haiti, but works with and through H-Pi, a formal Haitian NGO & our in-country partner.

### Local Partners

H-Pi is a Haitian NGO run by Mr. Jean Desrosiers, a local Haitian, in close conjunction with Mr. Jeff Schoonover. They work with and often host a variety of NGOs from the US working on water projects. Most of their time (Jean plus his crew) is spent repairing hand pumps. They also have a drilling rig, but it is not suitable for the terrain in its current condition. For more detail on these partners, please refer to the appendix.

## Partner Roles

Mr. Desrosiers is our translator/guide/cultural liaison in addition to all the waterspecific work he does. He will arrange in-country logistics as well as oversee and run the filter pilot program.

Ms. Schoonover works very closely with Mr. Desrosiers and is coordinating the US side of the pilot project. He will also be aiding Solea Water with the in-country logistics.

## Language

The local language of Haiti is Haitian Creole.

Objective

To provide 100 homes in the Port-au-Prince area with in-home water filters to ensure access to clean drinking water regardless of the municipal infrastructure's condition. To test the effectiveness, challenges, and advantages of the Sawyer Point One two-bucket filter system against a ceramic filter test also being done by H-Pi.

### Project Description

This project will utilize the in-country team and wealth of experience of H-Pi to conduct a 100 system test of the Sawyer Point One water filter in homes throughout Port-au-Prince. The H-Pi staff will speak with families interested in joining the study, assemble and implement the systems, distribute the systems, as well as conduct an impact study to determine the effectiveness of the filters as compared to the ceramic filter test also being done by H-Pi. Solea Water will facilitate training for H-Pi staff on the best way to train recipient families, basic WASH concepts to emphasize the importance of using the bucket filter system, as well as water testing methods and best practices.

Like nearly all Solea Water projects, our work in Port-au-Prince focuses on utilizing current infrastructure and improving it to meet the needs of the community. Due to the political, financial, and practical implications of managing the postearthquake municipal water system in a very dense urban area, focusing on in-home methods of water treatment in conjunction with hand pump repair is the most practical option for a long term solution.

### **Project Justification**

The work in Port-au-Prince seems to be endless due to the extreme levels of poverty seen especially after the earthquake. Solea Water chose to work in Haiti due to a network of relationships, dedicated and competent in-country presence, as well as the obvious potential outcomes of the project. First, being the provision of clean water for up to 10 years per family, and second, the benefits of doing an evidence-based impact study that could speak to our work being done in other countries as well.

## Community Participation

The local team of H-Pi will be heavily involved in the project implementation from planning, to implementation, to evaluation. Families receiving filters will be responsible for all maintenance of the system post-distribution.

Community Overview

Demographics

Haiti has a population of 9.9 million.

80% of residents live in poverty.

There are around 900,000 residents in Port-au-Prince. Heritage of the community is ultimately traced back to the African slaves of the French colonists.

### Health

Life expectancy at birth is 62.7 Fertility rate is 3.2 Infant mortality rate is 57 Intestinal illness is of great concern due to great frequency in Port-au-Prince. Cholera still remains a problem due to its introduction by aid workers after the earthquake.

## Water & Sanitation

- 3.59 million lack clean drinking water (36% of country)
  - $\circ$  Only 1/2 of those in rural areas have access to clean water
- 7.3 million lack access to any kind of sanitation service (73.9% of country)

The current water system in Port-au-Prince consists of piped water received at standpipes or hand pumps. A large number of these are not functional due to a lack of funding for maintenance or general operation.

# Political Implications

As with many developing nations, governmental corruption results in a lack of funds going into the public sector for infrastructure improvement, social services, etc. Previous attempts at rehabilitation have been unsuccessful. Those appointed to Water Boards are often done so politically, without regard to skill or capability, leading often to poor management and the level of accountability required for water systems.

As a number of large international players are financing the water and sanitation efforts in Haiti, an effort will be made to collaborate with these other partners when appropriate as well as plans for sustainability in a dependence-filled culture.

\*Statistics Source: Unicef & WHO.

## Further Project Details

This project will provide a sustainable source of clean drinking water for 100 homes. The urban water infrastructure is managed by a number of agencies within the local government and provides inconsistent, not-always-safe-to-drink water. This is not a "stop-gap" project from our perspective because as an NGO we can only do so much with urban, municipal water systems. Ideally the problem would be addressed at the source, but that is without of our practical and financial reach. When appropriate, Solea Water will advocate for the poor to receive support in the water and sanitation sector.

#### Short Term Goals

Develop impact study details.

Take trip to train the trainers, conduct water testing, and gather information.

#### Mid Term Goals

Place a Sawyer water filter in 100 homes in Port-au-Prince. Train families on proper maintenance, WASH, and the importance of drinking clean water.

#### Long Term Goals

100 families provided with clean water for at least 10 years. See urban water infrastructure improved in Port-au-Prince.

#### Timeline

### 1. August 2015

Finalize study plans.

\*Milestone: August trip

\*Progress Point: families selected for study

2. August 2015 - October 2015

Implement water systems

\*Milestone: 100 families have water filters in their homes

### 3. November 2015 - November 2016

Conduct impact study evaluations.

\*Progress Point: follow up every 4 months after implementation for one year via phone and site visits.

### Estimated Expenses

Solea Water has applied for grant funding for this project and may seek additional funding from other organizations.

**Project Funding** 

BUDGET | 100 Filter Systems

ltem	Quantity	Budgeted
Sawyer Filters	100	3200
Spigots	100	500
Buckets	200	800
Transportation of Supplies		
Gas		100
Time		400
Storage of Supplies		200
Assembly/ Distribution		
Assembly		500
Transportation		200
Time		500
Impact Study		
Phone Calls		20
Transportation		65
Time		600
	TOTAL	7085