

**ABACUS FOR COMMUNITIES  
COMMUNITY PROJECTS APPEAL**

**PROPOSAL**

**To Implement Clean Water Supply in  
Halls Delight District, Mavis Bank, St. Andrew**

**Submitted by: ABACUS FOR COMMUNITIES  
on behalf of the people of Halls Delight**

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## 1. PROJECT SUMMARY TABLE

<b>1. COUNTRY:</b> <b>JAMAICA</b>		<b>PRIORITY CODE(S):</b> <b>SECTOR CODE(S):</b> WATSAN 001 <b>PROJECT NUMBER:</b> A-2018-001	
<b>2. PROJECT TITLE:</b> To Implement Clean Water Supply in Halls Delight District, Mavis Bank, St. Andrew			
<b>3. PROJECT LOCATION(S):</b> Halls Delight Community Mavis Bank PO Jamaica		<b>4. OBJECTIVES:</b> <ol style="list-style-type: none"> <li>Increase access to safe water and sanitation</li> <li>To build capacity for sustainable management, regulation and expansion of the rural water and sanitation sector</li> <li>To create a healthy living environment.</li> <li>To create a sense of awareness for the people of the community towards sustainable development.</li> <li>To organize and strengthen the community for governance of its water and other resources</li> </ol>	
<b>5. MAIN BENEFICIARIES:</b> Total Persons: 300 Women: 170 Children: 100 Men: 30		<b>6. PARTNERS</b> <ol style="list-style-type: none"> <li>Halls Delight Community</li> <li>National Water Commission (NWC)</li> <li>Water Resource Authority (WRA)</li> </ol>	
<b>7. PREPARED BY:</b> Name: Abacus for Communities Address: 7 Eureka Crescent, Kingston 5, Jamaica Telephone: 876 754 7775; 876 775 4208 Email: <a href="mailto:stacey@abacusjamaica.com">stacey@abacusjamaica.com</a>		<b>8. IMPLEMENTING ORGANIZATION:</b> Name: Abacus for Communities Address: 7 Eureka Crescent, Kingston 5, Jamaica Telephone: 876 754 7775; 876 775 4208 Email: <a href="mailto:abacus@abacusjamaica.com">abacus@abacusjamaica.com</a>	
<b>9. PROJECT START DATE:</b> Planned : 16 July 2018 Actual: 16 July 2018	<b>PROJECT COMPLETION DATE:</b> Planned : 17 Oct 2018 Actual:	<b>REPORT SUBMISSION DATE:</b> Planned : 31 Oct 2018 Actual:	
<b>10. PROPOSED BUDGET (CAD\$)</b> <b>Donors Contributions:</b> US \$ 90,015 (Cash/In Kind) <b>Abacus Contributions:</b> US \$ 4,000 (Cash/In-Kind) <b>Beneficiaries Contributions:</b> US \$ 1,000 (In-Kind) <b>TOTAL PROJECT VALUE: US \$95,015 (J\$13,112,000)</b>			

## 2. EXECUTIVE SUMMARY

### a. The Situation



The Halls Delight community with an estimated population of 300 persons suffers from a lack of clean water. The valve on the water tank that serves the area is normally closed due among other reasons, to the extremely poor state of distribution pipes and the community is partially served by a

water truck that supplies the primary school. During the holidays, the water truck deliveries cease and community members are forced to either resort to local contaminated streams or to other more expensive options for those who can afford to, resulting in a 22% rate of water related health issues from skin rashes to diarrhea and other complaints.



primary school. During the holidays, the water truck deliveries cease and either resort to local contaminated options for those who can afford to, related health issues from skin rashes



### b. Priority Needs and Humanitarian Response

Funding is needed for procurement and installation of equipment and training with associated project management, operations and administration to sustainably rehabilitate the water supply distribution system for provision of clean and potable water to the Halls Delight District and nearby communities.

### c. Amount of money needed in US\$

The estimated project cost is **J\$12,152,000** (US\$90,015). The project has been designed to be sustainable beyond the initial funding period. Abacus has already contributed cash and in kind assets towards assessments and other preliminary set up activities, including development of this proposal, while "Appeal Funds" will be used to purchase and install necessary equipment, and to educate and train community personnel in the sustainable operation and maintenance of the system along with provision of skilled project management and administration personnel as described below.

### d. Time span covered by this appeal

The project will be implemented within a 6 Mth period.

### e. Sustainable Outputs and Impact

The main expected output of this project is to constantly provide distributed potable water for some 300 persons, including school children and elderly persons throughout the in Halls Delight District.

Additionally the following long term positive improvements will be realized.

- Strengthened community through establishment of a "Community Development Committee - CDC".
- Improved health standards and living environment through provision of clean water with average rate of diseases associated with water and sanitation expected to be eliminated from 22% to 0%.

- Necessity for old women and children drawing heavy loads of water from stand pipes or from surrounding streams eliminated.
- The water supply will be owned by the entire community who will be trained and educated to sustainably operate and maintain the system.
- The project will serve as a prototype to be replicated in other neighboring communities with similar challenges.

### 3. ABOUT ABACUS FOR COMMUNITIES

Abacus for Communities (Abacus) is a self funded Jamaican registered charitable Non-Governmental Organization (NGO). Our Executive Chairman Retired Colonel Stacey Edmundo Thompson has decades of service in facilitating and implementing community development projects in vulnerable communities throughout Jamaica and the Caribbean as well as in conflict zones of the Middle East working through the United Nations. Abacus works in partnership with communities and Community Based Organizations (CBOs) to assist with development projects and has recently received awards from the Canadian and US Governments.

Our team includes highly qualified and experienced persons with community development and rural development backgrounds we are well prepared to develop and manage this project, which has been designed for sustainability well beyond the initial funding period.

Abacus is constantly seeking development partners and sponsors for participation in this effort regardless of the type or size of contributions" and hereby submit this proposal for a Water Supply project for US\$90,015 to reliably restore distributed potable water to the Halls Delight District community

### 4. CONTEXT

#### a. Background

Water is essential for human, plant and animal life, so since the beginning of civilization humans have settled close to water sources. Surprisingly, water is scarce or contaminated in many parts of Jamaica, one parish with such a disadvantage being St. Andrew, but more specifically the Halls Delight District near Mavis Bank.

Various maladies and diseases in developing communities are related to insufficient or unsafe water. Infectious diseases caused by pathogenic bacteria are among the most common and widespread health risks from drinking water. People are introduced to these microorganisms through contaminated drinking water, water drops, washing or bathing.

Some waterborne pathogenic microorganisms spread by water can cause severe, life-threatening diseases. Examples are typhoid fever, cholera and Hepatitis A or B. Other microorganisms induce less dangerous diseases. Often, diarrhea and skin rashes are the main symptoms. People in the community with low resistance, mainly the elderly and young children, are most vulnerable to these diseases.

In order to control these diseases availability of sufficient safe drinking water is necessary. This implies not only improvement to water supplies, but also in behavior and attitudes towards

sanitation and hygiene, which can be achieved by introducing sanitation programs. Improvements in water services can be facilitated by outsiders (eg politicians, CBOs, etc) but they must operate in partnership with members of the communities through democratically elected governance committees.

Improved water distribution minimizes the presence of stagnant or wastewater, where insects transmit the above mentioned diseases. There is no standard solution for all communities, but various solutions must be found for each community through planning and decision making evaluating pros and cons of each option and choosing best options.

## **b. Current Situation**

Reports from the Halls Delight community indicate that (3) out of (5) children between the ages of four (4) and ten (10) year olds, are often affected by skin rashes. (4) out of (5) adults between the ages of eighteen (18) and thirty (30) years old complain of frequent diarrhea, while elderly folks experience trouble with toxins in water which affects their digestion causing aggravation to the mouth and stomach.

The tank which is used by an estimated 300 persons is the main source of water supply to which the community members have no direct access. The journey to the tank on foot is for some persons as long as (45) mins.

Residents walk back and forth daily with (1) and (5) gallon buckets to collect water for household use. Unfortunately this is a heavy strain on the elderly who often enlist the assistance of younger men and women, or those with transportation to draw water from the tank, which can cost them as much as \$3,000 per delivery, sometimes (2)-(3) times per week.

## **c. What can be done to address the situation?**

Providing a better water supply can significantly improve the quality of life and be the source of a socio-economic development



## **5. CHALLENGES**

- i. The sole water source to the community is provided and treated by the NWC and normally chlorinated twice per day but sometimes (though not often) water is pumped even when there is no chlorine.
- ii. There is sometimes no water supply to the community for between 1 day – 2 weeks or more when the main pump is down for servicing and awaiting parts from the NWC.
- iii. There are 2 tanks in Halls Delight, a larger top tank fed directly by a diesel engine pump from the 'gully' water source, which in turn gravity feeds to a smaller bottom tank with a stand pipe from which water can be drawn. Even when the top tank in Halls Delight is full of water the valve is usually kept closed due to leaking distribution pipes and to unpaid water bills within the community so that no one is able to get piped water and must resort to streams in the area, most which are not 'clean' and often result in health issues.



- iv. Some community members have outstanding individual water bills accumulated to hundreds of thousands of dollars and are both unable and unwilling to pay given that they have not been receiving any water while being billed monthly on a flat rate basis with unfulfilled promises from NWC that pipes will be repaired and water restored.



- v. Some community members are able to make individual arrangements with the valve operators to get the valve turned on long enough to fill containers with water on a “personalized” basis, either because they pay water bills, or if they have special relationships with operators who are themselves third or fourth generation community members with ownership interest in the water supply and who also work for the NWC. This situation has led to quiet distrust and potential conflict with the operators. 
- vi. Galvanized distribution pipes throughout the community are in very poor condition and unable to prevent water running to waste if the valve is opened due to (i) significant leakage due to damage, both accidental and wilful and (ii) theft of pipes by some community members.
- vii. A Large section of the community is higher than the top tank so no ‘gravity fed’ water gets to them and they must draw water from the stand pipe at the Halls Delight tank, in the rare event the valve is turned on. In any event, there are no existing pipes between the existing Halls Delight tanks and the higher community.
- viii. The smaller Halls Delight tank is in good condition and is periodically cleaned by the NWC, especially during school breaks. This is now due cleaning before school resumption next month, but water to the school will continue to be limited due to reasons already explained. 
- ix. No community management committee has ever been established to manage the water supply as a group hence rumours abound about the entire operation of the water supply.

## 6. HUMANITARIAN NEEDS

### a. Who is most affected?

Mostly Women and Children

### b. Immediate Needs To Address The Situation

- i. Establish Community Development Committee (CDC)
- ii. Negotiate outstanding bills and billing system with NWC
- iii. Retain a reserve (emergency) supply of chlorine from NWC and regularly chlorinate ‘gully’ water sources twice per day to avoid potable water lock off.
- iv. Procure and install a backup pump to allow servicing and repair down time of the main pump and avoid potable water lock off.
- v. Immediately plug large holes in distribution pipes as a temporary measure and turn water valve on for scheduled periods to allow potable water supply to the entire community.
- vi. Procure, install and repair galvanized pipes throughout the lower gravity fed community
- vii. Procure and install a tank for the upper Halls Delight community at Mt Hybla.
- viii. Procure and place a lift pump at the larger top Halls Delight tank and install piping to a new Mt Hybla tank for gravity feeding the upper community.
- ix. Procure and install distribution pipes from the new Mt Hybla Tank for water distribution to households throughout the upper community.

- x. Clean the smaller Halls Delight tank before school resumption.

## 7. GOAL AND OBJECTIVES

### a. Goal

The goal of this project is to provide the members of the community with an abundant supply of safe and clean water which will also prevent them from being afflicted by diseases caused by contaminated water. The easy access to the water supply through distribution pipes to households will result to savings in time in fetching drinking water, therefore, allowing more time to less effort residents to accomplish other profitable activities.

### b. Objectives

The overall objective of the project is to develop the water supply in a community that will serve the local community of Halls Delight District community.

- Increase access to safe water and sanitation
- To build capacity for sustainable management, regulation and expansion of the rural water and sanitation sector
- To create a healthy living environment.
- To create a sense of awareness for the people of the community towards sustainable development.
- To organize and strengthen the community for governance of its water and other resources

### c. Strategy

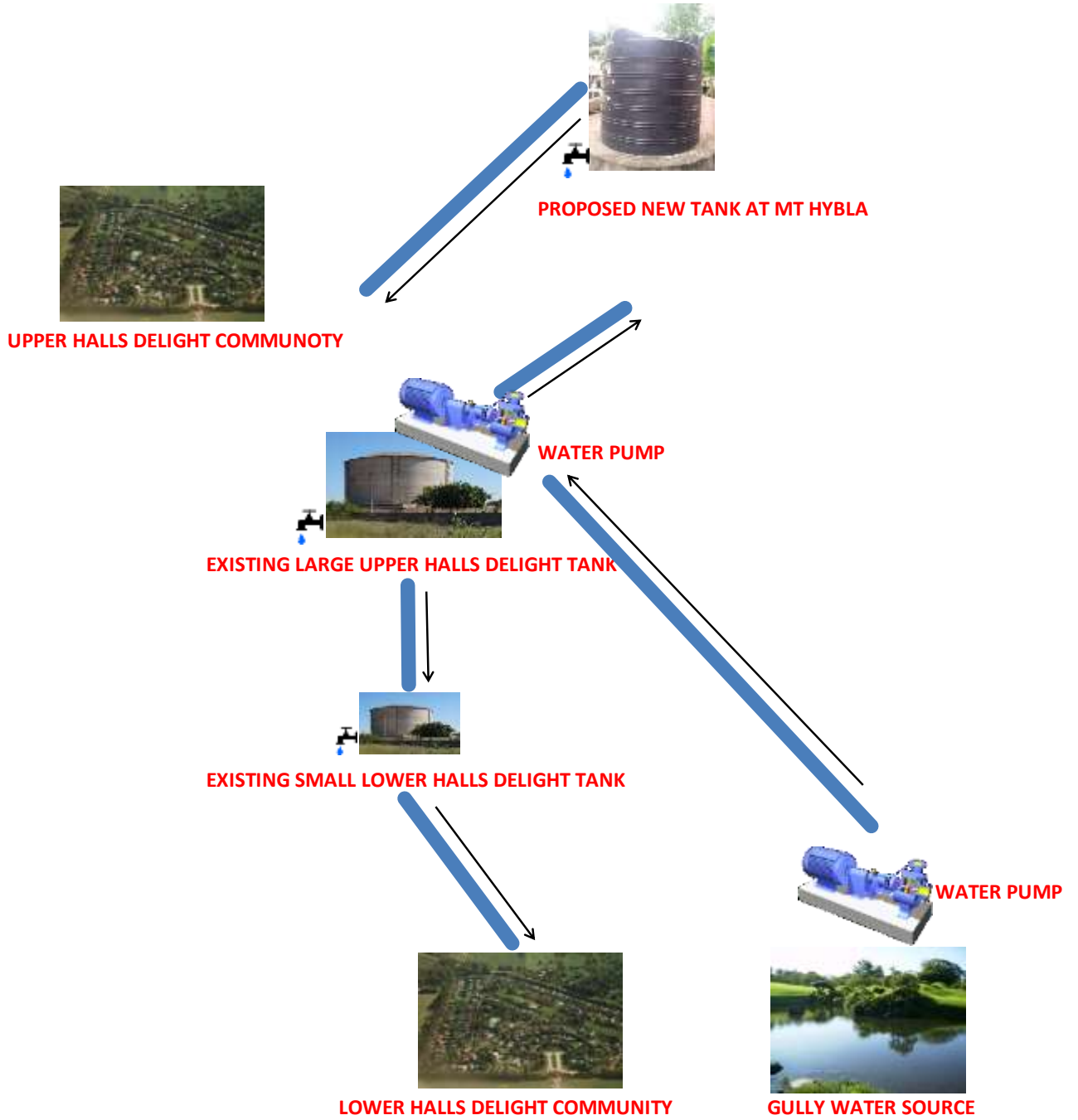
The under mentioned strategies will be carried out to achieve the set objectives:

- Community mobilization and sensitization for the further understanding of the project.
- Regularly programmed site supervision, monitoring, reporting and evaluation of project activities and post project operations.
- Sustainable operation of the water supply system through training of community members for maintenance of the water supply system.
- Working with government officials to integrate the program into local infrastructure



# 8. RESPONSE EXECUTION PLANS

## WATER SUPPLY SYSTEM DESIGN



**PROJECT START UP**

<b>ACTIVITY</b>	<b>INPUTS</b>	<b>OUTPUTS</b>	<b>KEY PERFORMANCE INDICATORS (KPIs)</b>	<b>START</b>	<b>END</b>	<b>LED BY</b>
Develop Project Concept / Proposal / Plan	<ul style="list-style-type: none"> <li>▪ Project Manager</li> <li>▪ Community Members</li> </ul>	Project Proposal / Plan	Project Plan developed for use to manage project	16-Jul-18	27-Jul-18	ABACUS
Hold Town Hall meetings to assess problem, sensitize, include and hand over to Community Members	<ul style="list-style-type: none"> <li>▪ Project Manager</li> <li>▪ Community Members</li> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Lunch</li> <li>▪ Project and Admin Staff</li> </ul>	At Least (3) Town Hall Meetings	At Least (3) Town Hall meetings held over the life of the projects, each attended by at least 30 community members from every district in the community.	16-Jul-18	16-Jul-18	ABACUS
Establish a Community Development Committee (CDC)	As Above	Community Committee. <ul style="list-style-type: none"> <li>▪ <b>President - Mrs Barnett-Warner</b></li> <li>▪ <b>V/President - Henry Clarke</b></li> <li>▪ <b>Secretary - Lauren Milwood</b></li> <li>▪ <b>Damiam Asphall</b></li> <li>▪ <b>Howard Taylor</b></li> <li>▪ <b>Robert Taylor</b></li> <li>▪ <b>Niran Shaw</b></li> <li>▪ <b>Aubyn Asphall</b></li> <li>▪ <b>Sylvia Walker</b></li> </ul>	CDC Established by democratic votes by community members and meet weekly during the project life.	16-Jul-18	16-Jul-18	ABACUS

		<ul style="list-style-type: none"> <li>• Eric Thompson (Draft Notes from Committee meeting attached at Annex A)</li> </ul>				
Negotiate outstanding bills and billing system with NWC	<ul style="list-style-type: none"> <li>▪ Community Members / CDC</li> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> </ul>	Billing meeting with NWC	Outstanding NWC bills rationalized with community members and new path set for water billing system going forward	17-Jul-18	30-Jul-18	CDC
<b>WATER SUPPLY AND PUMPS</b>						
Retain a reserve (emergency) supply of chlorine from NWC and regularly chlorinate 'gully' water sources twice per day to avoid potable water lock off.	<ul style="list-style-type: none"> <li>▪ NWC</li> </ul>	Reserve chlorine supply	Water from 'gully' source never locked off for want of chlorination	17-Jul-18	30-Jul-18	NWC
Identify and negotiate a secure location at Mt Hybla for installation of water tanks	<ul style="list-style-type: none"> <li>▪ Community Members / CDC</li> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> </ul>	Agreed location for installing Mt Hybla water tank	Formalized (100 years) agreement with land owner to allow construction of community water tank(s) on land Mt Hybla.  Land contoured for adequate	17-Jul-18	30-Jul-18	CDC

			drainage, wind and other protection during floods, hurricanes, landslides and other disasters.			
Procure and install a backup pump to allow servicing and repair down time of the main pump and avoid water lock off	<ul style="list-style-type: none"> <li>▪ NWC</li> <li>▪ Equipment</li> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Technical Staff and Manual Labour</li> </ul>	Backup Pump installed.	Backup pump installed at Gully with capacity specifications to operate as reserve capacity for main pump.	30-Aug-18	26-Sep-18	CREW 1
Procure and place a lift pump at the larger top Halls Delight tank and install piping to a new Mt Hybla tank for gravity feeding the upper community.	<ul style="list-style-type: none"> <li>▪ NWC</li> <li>▪ Community Members / CDC</li> <li>▪ Equipment Funds</li> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Technical Staff and Manual Labour</li> </ul>	Lift pump installed at Mt Hybla	Lift pump installed at Primary (50,000 Gal) tank with capacity to pump water to Mt Hybla tank .	30-Aug-18	26-Sep-18	CREW 2
<b>WATER TANKS</b>						
Recruit, Hire and Mobilize Project Team	<ul style="list-style-type: none"> <li>▪ Project Manager</li> <li>▪ Mobilization Funds</li> <li>▪ Technical and Admin Staff</li> <li>▪ Community Members / CDC</li> </ul>	Project Team in place	Qualified and experienced team with ability to manage a successful project to achieve targeted outputs, objectives and outcomes put	30-Aug-18	5-Sep-18	ABACUS

			together.			
Mobilize Suppliers and Contractors	<ul style="list-style-type: none"> <li>▪ Project Manager</li> <li>▪ Mobilization Funds</li> <li>▪ Technical and Admin Staff</li> <li>▪ Community Members / CDC</li> </ul>	Suppliers and contractors selected	Contractors selected and hired based on competitive bids, certified products, protective warranties and proven track record with water supply systems.	30-Aug-18	3-Sep-18	ABACUS
Procure and install tank for the upper Halls Delight community at Mt Hybla.	<ul style="list-style-type: none"> <li>▪ Tank equipment</li> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Technical Staff and Manual Labour</li> <li>▪ Community Members / CDC</li> </ul>	Water tank installed at Mt Hybla	20,000 gal water storage and connected to distribution pipes available to reliably store and gravity feed water to approx. 100 persons in upper Halls Delight community.	30-Aug-18	26-Sep-18	CREW 3
Procure Equipment and Material (Pumps and Distribution Pipes)	<ul style="list-style-type: none"> <li>▪ Project Manager</li> <li>▪ Pipes and pump Equipment</li> <li>▪ Communications</li> <li>▪ Technical and Admin Staff</li> </ul>	Pumps and distribution pipes procured	2x 5 HP 1.5" bore pumps with 3" adapters, 2.5 miles galvanized pipes procured and certified to meet lift, flow and distribution requirements.	30-Aug-18	26-Sep-18	ABACUS

Transport Equipment and Material to Site	<ul style="list-style-type: none"> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Technical Staff and Manual Labour</li> <li>▪ Community Members / CDC</li> </ul>	Pumps and distribution pipes delivered to Halls Delight	2x 5 HP, 1.5" bore pumps with 3" adapters, 2.5 miles galvanized pipes stored in a pre-determined safe site in Halls Delight.	27-Sep-18	28-Sep-18	ABACUS
Clean the smaller Halls Delight tank before school resumption.	<ul style="list-style-type: none"> <li>▪ NWC</li> </ul>	Cleaned water tank	Small tank cleaned and filled by NWC before school commencement.	17-Jul-18	17-Jul-18	NWC
Certify Water Tanks through Government Agencies	<ul style="list-style-type: none"> <li>▪ NWC</li> <li>▪ WRA</li> </ul>	Certified small water tank.	Tanks and water certified by Water Resources Authority (WRA) and NWC water quality standards team before school Christmas term commencement.	18-Jul-18	24-Jul-18	NWC / WRA
<b>DISTRIBUTION PIPES</b>						
Plug large holes in distribution pipes as a temporary measure and turn on water valve for scheduled periods to allow potable water supply to the entire	<ul style="list-style-type: none"> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Material / Parts</li> <li>▪ Communications</li> <li>▪ Technical Staff and Manual Labour</li> <li>▪ Community Members / CDC</li> </ul>	Existing water pipes temporarily repaired.	Water periodically turned on during limited scheduled hours through existing pipes repaired within community resources under	17-Jul-18	30-Jul-18	NWC

community.			mobilization by the newly formed CDC.			
Install new and repaired galvanized pipes throughout the lower gravity fed community	<ul style="list-style-type: none"> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Technical Staff and Manual Labour</li> <li>▪ Community Members / CDC</li> </ul>	Pipes installed throughout lower community	Gravity fed water system in lower community rehabilitated and adequate water reliably and regularly distributed throughout.	30-Aug-18	26-Sep-18	CREW 4
Run supply pipes between new Mt Hybla Tank and upper Halls Delight Tank	<ul style="list-style-type: none"> <li>▪ Pipe Equipment</li> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Technical Staff and Manual Labour</li> <li>▪ Community Members / CDC</li> </ul>	Supply Pipes installed	Primary tank and new Mt Hybla tanks connected with 1/2 mile of galvanized supply pipes	30-Aug-18	26-Sep-18	CREW 6
Install distribution pipes from the new Mt Hybla Tank for water distribution to households throughout the upper community.	<ul style="list-style-type: none"> <li>▪ Pipe Equipment</li> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Technical Staff and Manual Labour</li> <li>▪ Community Members / CDC</li> </ul>	Pipes installed throughout upper community and pump installed at the primary tank.	2.5 miles of pipes installed in the upper community along with 1x 5 HP Lift pump installed at the primary tank with adequate water reliably and regularly distributed throughout.	30-Aug-18	26-Sep-18	CREW 7
Test entire system	<ul style="list-style-type: none"> <li>▪ Transportation</li> </ul>	Entire water	Adequate and	27-Sep-18	10-Oct-18	ABACUS

	<ul style="list-style-type: none"> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Technical Staff and Manual Labour</li> <li>▪ Community Members / CDC</li> </ul>	supply system tested.	reliable water pressure through gravity fed flows throughout upper and lower communities.			
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**TRAINING**

Identify Community Members to be trained for sustainable operation and maintenance of water system	<ul style="list-style-type: none"> <li>▪ Communications</li> <li>▪ Community Members / CDC</li> </ul>	Trainees identified	(10) honest, qualified and reliable community members are selected for training in operating and maintaining the water system	16-Jul-18	17-Jul-18	CDC
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Train Community members to operate and maintain water system	<ul style="list-style-type: none"> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Lunch</li> <li>▪ Project Manager</li> <li>▪ Project and Admin Staff</li> <li>▪ Community Members / CDC</li> </ul>	Community members trained.	(10) community members are trained in operating and maintaining the water supply system.	11-Oct-18	17-Oct-18	ABACUS
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**PROJECT CLOSURE**

Commission System	<ul style="list-style-type: none"> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Lunch</li> <li>▪ Project Manager</li> <li>▪ Project and Admin Staff</li> </ul>	Water system commissioned.	Water supply system tested and formally commissioned for full and immediate service	11-Oct-18	15-Oct-18	NWC
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	<ul style="list-style-type: none"> <li>▪ Community Members / CDC</li> </ul>		by NWC and WRA quality control officials.			
Project Closing / Hand Over Ceremony	<ul style="list-style-type: none"> <li>▪ Transportation</li> <li>▪ Fuel</li> <li>▪ Communications</li> <li>▪ Lunch</li> <li>▪ Project Manager</li> <li>▪ Project and Admin Staff</li> <li>▪ Community Members / CDC</li> </ul>	System handed over to community through CDC for operation	System signed off and handed over to CDC on behalf of the community through a formal event with hand over documents certifying all work done and equipment installed.	16-Oct-18	16-Oct-18	ABACUS
End Project				17-Oct-18	17-Oct-18	CDC

#### **d. Management Team**

The project will be managed through a chain of command associated comprising:

- Project Manager who will be responsible for overall project execution
- Community Management Committee Leader representing community decisions and ownership
- Selected technicians, construction workers and labourers primarily from the community
- Authorized government personnel

### **9. EXPECTED IMPACT**

The project will constantly provide distributed potable water for some 300 persons, including school children and elderly persons throughout the Halls Delight community. Additionally and more specifically, the following long term positive improvements should be realized.

- Strengthened community through establishment of a "Community Development Committee - CDC".
- Easy and increased sustainable access to clean water supply
- Awareness of sustainable development created within the community.
- Improved health standards and living environment through provision of clean water
- Improved environment through potable and waste water management.
- Necessity for old women and children drawing heavy loads of water from stand pipes or from surrounding streams eliminated.
- Positive attitudinal and behavioral changes among 300 people with respect to hygiene and health reinforced.
- The average rate of diseases associated with water and sanitation expected to be eliminated from 22% to 0%.
- The water supply will be owned by the entire community who will be trained and educated to sustainably operate and maintain the system, an improvement on the existing situation where only two persons totally control the water supply system.
- Savings of time and effort from directly distributed drinking water, allowing residents to accomplish more productive and profitable activity.

- The project will serve as a prototype to be replicated in other neighboring communities with similar challenges.
- Increased capacity for sustainable management, regulation and expansion of the rural water and sanitation sector

**10. BUDGET**

<b>Item</b>	<b>Description</b>	<b>Amount (J\$)</b>	<b>Amount (US\$)</b>
<b>Equipment</b>	2 1/2 Miles of 2 inch galvanized Pipes	3,360,000	<b>24,889</b>
	20,000 Gallon Water Tank (with piping and fittings)	1,030,000	<b>7,630</b>
	2 x 5 HP 1.5 inch Bore Diesel Water Pumps including pipes and valve fittings	240,000	<b>1,778</b>
<b>Landscaping and Pipe Installation</b>	Pay Work Force of suitably qualified community members to: <ul style="list-style-type: none"><li>• Bush out areas around tanks</li><li>• Laying Pipes</li><li>• Dig Gutters for Laying Pipes</li><li>• Covering and Compacting laid Pipes</li><li>• Coordinate Arrangements</li><li>• Reporting</li></ul>	960,000	<b>7,111</b>
	Labour and Material for preparation and installation of Base for 20,000 Gals water tanks and Pumps (2)	500,000	<b>3,704</b>
<b>Pump Installation</b>	Install Pumps at Gully water source and Mt Hybla	500,000	<b>3,704</b>
	Construct Concrete Housing for Pump and Tanks at Mt Hybla	500,000	<b>3,704</b>

<b>Training</b>	Train Community Members to: <ul style="list-style-type: none"> <li>• Check water Quality</li> <li>• Check Landscaping Monthly for deterioration</li> <li>• Communicating with NWC and Community Members</li> <li>• Managing the Community Committee</li> <li>• Coordinating arrangements</li> <li>• Other topics TBD</li> <li>• Reporting</li> </ul>	500,000	<b>3,704</b>
<b>System Testing and Commissioning</b>	Project Evaluation and Testing to certify: <ul style="list-style-type: none"> <li>• Equipment and Materials Usage</li> <li>• Quality of Workmanship</li> <li>• System Functionality</li> <li>• Water Quality</li> <li>• Other Criteria TBD in terms of Reference</li> </ul>	100,000	<b>741</b>
<b>Travel and Transportation</b>	Transport Heavy Equipment and Material to Halls Delight from Kingston	200,000	<b>1,481</b>
	Transportation for management and technical personnel teams (Abacus/NWC/Suppliers/ Contractors) between Kingston and Halls Delight	230,000	<b>1,704</b>
<b>Accommodation and Meals</b>	Accommodation and Meals for Project Site Management Personnel during Field Work / Visits	200,000	<b>1,481</b>
<b>Stationery and Printing</b>	Items needed for Project Administration over project period: <ul style="list-style-type: none"> <li>• Pens, Pencils, ruled and blank paper</li> <li>• Contingency</li> </ul>	30,000	<b>222</b>

<b>Communications</b>	Cell Phone Calls and other communications used by all Project Personnel	90,000	<b>667</b>
<b>Project Office Rental</b>	Rental of space for Project Operations Base.	240,000	<b>1,778</b>
<b>Sub Total:</b>		<b>8,680,000</b>	<b>64,296</b>
<b>Resource Mobilization</b>	Fund Raising Costs for Project Financing	868,000	<b>6,430</b>
<b>Project Management and Staffing Costs</b>	<p><b>Professional Project Management and Technical (Engineering, IT, etc) Team to design, plan and manage entire project for maximum sustainable impact:</b></p> <ul style="list-style-type: none"> <li>• Project Management and Monitoring</li> <li>• IT Services</li> <li>• Personnel Services (incl. security)</li> <li>• Accounting and Procurement</li> <li>• Admin and Logistics Services</li> <li>• Liaison and Communications</li> <li>• Coordination</li> <li>• Reporting</li> </ul>	2,604,000	<b>19,289</b>
<b>Total Project Funds Sought</b>		<b>12,152,000</b>	<b>90,015</b>

**N.B. - It is to be noted that the Abacus team and community have already commenced and continue to make cash and in kind contributions to this project having already conducted preliminary start up shaded activities at para 8 on page 10 above.**

## 11. MONITORING AND EVALUATION

The project team and CDC are responsible for consistently monitoring project implementation and make necessary recommendations through community meetings for effective decision-making. Observations, field visit, meetings and group discussions will form part of the participatory monitoring methodology.

There will be monthly inspections on the water tank from the head of committee to help in managing and providing the necessary assistance to examine the water supply.

Terms of Reference will be developed for Town hall meetings to be regularly held at least every three (3) months to ensure that the water supply system is kept clean and in working order.

Quarterly Health surveys will be conducted by the CDC throughout the community and results presented at town hall meetings.

The National Water Commission will conduct in-depth project evaluation and make necessary recommendations towards project implementation and replication.

## 12. RISK MANAGEMENT

<b>Risk Factors</b>	<b>Counter Measures</b>
▪ Weather conditions	▪ Choose dry season for project implementation and make allowance in project schedule for any unexpected weather disruption
▪ Theft of equipment and material	▪ Hire Site Security and make community committee accountable for any theft of material
▪ Poor workmanship	▪ Hire qualified and credible workmen ▪ Regular site inspections for work quality.
▪ Lack of community interest	▪ <b>During Project</b> - Hold regular Town Hall meetings during the project to communicate directly with community membership for motivation and to address concerns head on.

	<ul style="list-style-type: none"> <li>▪ <b>Post Project</b> - Hold inter-community competitions, fundraising events</li> </ul>
<ul style="list-style-type: none"> <li>▪ Inadequate post project ownership and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monthly inspections</li> <li>▪ Hold inter-community competitions, fundraising events</li> </ul>
<ul style="list-style-type: none"> <li>▪ Intentional damages / Sabotage</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lay Pipes underground to minimize unauthorized access.</li> <li>▪ CDC to devise and implement a clean water security plan with community agreed sanctions for perpetrators.</li> <li>▪ Community ownership and accountability through the CDC.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Inadequate funding</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ongoing fundraising and other resource mobilization strategies</li> </ul>
<ul style="list-style-type: none"> <li>▪ Cost over runs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ongoing fundraising and other resource mobilization strategies</li> </ul>
<ul style="list-style-type: none"> <li>▪ Delays from contractors and government agencies</li> </ul>	<ul style="list-style-type: none"> <li>▪ No down-payment, C.O.D. policy.</li> <li>▪ Hold payments until satisfactory delivery of goods.</li> <li>▪ Earmark alternate backup contractors and suppliers for timely changes where necessary</li> </ul>
<ul style="list-style-type: none"> <li>▪ Corruption</li> </ul>	<ul style="list-style-type: none"> <li>▪ Regular checks or interactions with community members and/ or contractors.</li> <li>▪ Close and regular coordination and internal audits with project partner agencies.</li> </ul>

### 13. SUSTAINABILITY

The sustainability of this project can be guaranteed because of several reasons.

- This Project involves the participation of different stakeholders especially the community and government offices. These will handle and monitor the project
- It is expected that with the provision of funds, the project will be able to achieve its objectives.



- Once completed, the project shall be turned over to the National Water Commission who shall be directly responsible for the operation and management of the project. Water fee shall be imposed per household to cover monthly operational expenses and to cover future repair and replacement of pipes and other materials and facilities.
- Monthly meetings will be held to inspect the water tank and check for any damages or contamination.



## ANNEX A - DRAFT NOTES OF INAUGURAL COMMITTEE MEETING

ABACAS Group

Mr Clarke

" Thompson

Olecia

Present at the meeting

Mr Reid, Bishop Castle, Lavern, Sewell, Nickerson, Danielle and baby millwood, Roy Walker, Ronald Tyrell, Jennifer Gordon, Howard Hector, Parkes, Florence Phinn, Vivilyn Davis, Robert Taylor, Roy Walker, Philmore Grant, Wilfred Carr, D Asphall.

Intro. Mr Clarke states not government funded non-political group.

Donors need to know if tank is open/closed.

Rubyn Asphall, Junior Headlam, Tom Tyrell, Ellison Barnott,

Monitoring is improper,

Churchill Nelsen, Tracy Powell, Mass Bunny Clarke, Sherryann Taylor, Garcia Headlam, Nella Tait, Nyro Shaw, Linval Walters, Albert Campbell

Mr Reid to form Committee

Myself, Henry Clarke Jr President

Lavern Millwood Secretary

Robert Taylor

Damian Asphall

Howard Hector

Nyro Niran Shaw

Rubyn Asphall

Sylvia Walker

Eric Thompson