

Basic Information

Grant title

Ferrier-Artaud Potable Water Project

Type of Project**Humanitarian Project**

Address community needs and produce sustainable, measurable outcomes

Primary Contacts

Name	Club	District	Sponsor	Role
Magarette Georges	Cap-Haitien	7020	Club	Host
Sherry Chamberlain	Kamloops West	5060	District	International

Committee Members

Host committee

Name	Club	District	Role
Dieulin Joanis	Cap-Haitien	7020	Secondary Contact
Cleantus Jean	Cap-Haitien	7020	Secondary Contact
Jean-Rony Boulin	Cap-Haitien	7020	Secondary Contact

International committee

Name	Club	District	Role
Carin Smith	Wenatchee	5060	Secondary Contact International
Sam Dilly	Wenatchee	5060	Secondary Contact International
Stan Fike	Kamloops West	5060	Secondary Contact International

Do any of these committee members have potential conflicts of interest?

No

Project Overview

Tell us a little about your project. What are the main objectives of the project, and who will benefit from it?

The HANWASH (Haitian National Water, Sanitation and Hygiene Strategy) program is a country-wide effort to focus Local Rotary Clubs, International Clubs, and TRF resources to deliver access to sustainably managed WASH services to every household in Haiti by 2030. Each project undertaken within this program will deliver sustainable and safely managed water services in collaboration with local government, National Water line ministries and the populace.

Community overview

After the devastating natural disaster in Haiti in 2010, well-intentioned volunteers rushed in to provide short-term non-sustainable aid which is now not functioning. In the last year, spread of coronavirus made the sanitation situation in Haiti even worse, and public funds for infrastructure are non-existent. Without significant action now, this will result in new crises of public health and community safety in Haiti.

HANWASH and District 5060 are working with the government of Haiti to develop a sustainable, safely-managed water supply solution for the village of Artaud in the Nord-Est Department (Commune of Ferrier).

This project is about far more than equipment and mechanical improvements. We will provide intensive training for technical and administrative staff, and involve them in developing standard operating procedures (SOPs) and utilizing best practices. We will create operator manuals and training resources specifically for Artaud and begin operator mentoring and Train-the-Trainer programs. Much of the work done here will serve as the foundation of knowledge and expertise for additional water projects in Haiti, thus leveraging the investment in this initial community.

Fresh water is not locally available in Artaud, and there is no existing public water system in the area. Instead, private water trucks deliver potable water to local residents. For other uses (washing and cleaning), residents transport brackish water in buckets and jugs from hand dug wells and surface water sources.

A sample of homes (16/81) in Artaud report that there are no latrines at their homes. They use the fields for open defecation. The water taps installed as part of this Global Grant will be on premises and dispense drinking water brought to the homes from a distance which mitigates the risk of contaminated groundwater from open defecation. Sanitation and hygiene will be a component of the leadership training in this grant.

Rotary District 5060 recently engaged Northwater International to develop estimates of the work necessary to develop a safely managed water solution for Artaud and four other villages in the Commune of Ferrier. Northwater International is an environmental and geosciences consulting firm that specializes in supporting the water sector. They are a US-based company with offices in Haiti.

Northwater produced three reports, which have been paid for by District-raised funds:

- 1) Hydrogeological desk assessment to evaluate groundwater potential in the region, and
- 2) A rapid technical assessment to develop concept-level layout drawings and cost estimates

3) Proposal summary for Artaud

These detailed documents show the current water use patterns and groundwater assessments to determine the best location for a community well. These documents are included.

Fresh water is scarce in the region around Artaud. Fresh groundwater is available in an alluvial aquifer near Artaud. To increase the benefit and serve more residents, a regional water system is proposed that includes the villages of Meillac, Philibert, Mapou, Artaud and Bossus. The population estimate of the five villages is 4,772 residents, with a water demand of 223 m³/day (59,000 gal/day). To support planning and assuming a 20-year growth period, the population may increase to 7,823 with a demand of 469 m³/day (124,000 gal/day). The total cost of the regional water system is estimated to be between \$1.2M and \$2.4M.

The first stand-alone project in this vision, and the focus of this grant, is a water system for the village of Artaud. The Artaud water system will be constructed first because it is the closest community to the water source.

Community challenges

This project endeavors to improve upon often-failed efforts of the past, by creating a sustainable water system supported by the community with a fee-for-service policy that will provide sustainable funding for ongoing maintenance.

A few hand pump wells are operating within the communities of Meillac and Artaud. However, this water exceeds drinking water guidelines for dissolved solids. Because this water is “salty” residents use it only for washing and bathing. Instead, they pay to have fresh water transported to their homes by water truck. In Artaud, residents report paying as much as 10 HTG/gallon (US \$.13) for fresh water. Residents are paying some of the highest rates for water in the country. Typical rates in the rest of the country are 0.5 to 2 HTG/gallon. By contrast, the typical price for water from a piped water system in Haiti is between 0.5 to 1 HTG per gallon (US \$.01).

Artaud is a rural community with few resources. As such, any new water solution should be simple and low-cost to operate. The community will need coaching during all phases of the project to build capacity among community leaders and enable proper operation and management of the water system.

The Artaud system will be built as a stand-alone water system. But because fresh water is scarce in the region, the Artaud system will be designed with considerations to make expansion possible to serve other communities.

Artaud Summary (See "Proposal Summary Artaud" document by Northwater)

Step 1. Secure a suitable water source. Northwater has identified three nearby zones for groundwater exploration. Each area has advantages and disadvantages; the farthest locations from Meillac and closer to Artaud are the most likely to find a good supply of water but also result in higher infrastructure and energy costs for a water system.

Northwater recommends a geophysical investigation to identify locations that have the best potential to produce the desired water quality and quantity. The investigation could increase the likelihood of finding higher producing wells and thus reducing the overall number of wells necessary to meet water demands.

Step 2. Drill a well at the location and depth recommended by the geophysical investigation. Once the well is constructed, a pumping test and water quality analysis will guide the pumping system design and water treatment requirements to achieve drinking water guidelines.

Step 3. Develop an engineering report that more accurately defines the layout, cost and operational plan for a complete water system. This would include items such as a tank and piping to individual property lines.

Step 4. Develop detailed plans, specifications and bidding documents for construction.

Step 5. Select a contractor, obtain materials, and construct elements of the Artaud water system.

Step 6. Conduct education and training in water system management, hygiene and sanitation. Recruit and train a professional operator entity for the Artaud water system.

The result will be piping to individual property lines with water meters installed, such that homes will be able to have a water spigot in front of their homes. The system will be chlorinated and will have an established procedure for water-quality testing at the source and at various points in the system to ensure clean water at the homes.

While some specific costs have yet to be determined, Northwater has extensive experience with such projects, including projects in Haiti, such that we feel confident of the budget estimates for this project.
(See Proposal Summary and Northwater Scope documents attached)

Desired outcomes

The ultimate goal of this project is to develop a sustainable and safely managed water solution for the community of Artaud. This proposal will focus on developing a water supply, engineering report and construction of infrastructure to deliver water to Artaud. This will provide a basis for which future work can be built upon to ultimately supply water to all 5 communities. Residents will continue to use the existing salty water for handwashing and cleaning. While there are some specific choices and actions to be made as the work ensues (e.g., well location, specific system layout), our budget reflects the most likely costs based on the expertise and experience of our partners and participants.

A professional operator entity will manage the water system revenue and expenditures. A percentage of the revenue will be used for long term maintenance and immediate service requirements. A portion of the revenue will also be used to provide ongoing site reviews and data storage.

We aim to draw upon a local and a diverse group, to be hired and trained to operate and manage the water system. Although government WASH authorities have final say in selecting the professional operator, we will undertake best efforts to encourage the consideration and prioritization of women-led enterprises in the selection process.

Areas of Focus

Which area of focus will this project support?

Water, sanitation, and hygiene

Measuring Success

Water, sanitation, and hygiene

Which goals will your activity support?

Facilitating universal and equitable access to safe and affordable drinking water; Improving community hygiene knowledge, behaviors, and practices that help prevent the spread of disease; Strengthening the capacity of governments, institutions, and communities to develop, finance, manage, and maintain sustainable water and sanitation services;

How will you measure your project's impact? You need to include at least one standardized measure from the drop-down menu as part of your application.

Measure	Collection Method	Frequency	Beneficiaries
Number of people with access to improved sources of drinking water	Public records	Every year	100-499
Number of communities with a functioning governance committee in place	Direct observation	Every year	1-19
Number of individuals trained	Grant records and reports	Every six months	1-19
Other	Public records	Every month	100-499
Other	Public records	Every month	100-499
Other	Public records	Every month	50-99

Do you know who will collect information for monitoring and evaluation?

Yes

Name of Individual or Organization

HANWASH, as Program Manager, will oversee the project's monitoring & evaluation activities, and aims to recruit and supervise a consultant or consultants to perform/support the work. This arrangement is intended to provide a check and balance on the activities performed under the Grant and the Cooperating Organizations will be asked to collaborate in the data collection process. Additionally, a local professional operator entity will report into OREPA's National Monitoring system using the mWater program. Local Contact: Myriame Dorfeuille - Director of National Observatory of Potable Water and Sanitation, Haiti. E: myriame.dorfeuille@dinepa.gouv.ht Prosper Michel Ange - TEPAC (see below for acronym definitions)

Briefly explain why this person or organization is qualified for this task.

HANWASH is well qualified and positioned to lead this task.

Since 2018, HANWASH has had a mandate from DINEPA to coordinate a program of technically sound and sustainable water and sanitation investments in several communes in Haiti, including Ferrier. In order to achieve this, HANWASH has developed a strong organizational structure composed of 45 volunteers from 20 international districts covering Haiti and other Caribbean countries, the USA, and Canada. These volunteers are organized into 11 Subcommittees representing key functional areas and core business processes, including monitoring & evaluation, and are led by a full-time Executive Director with experience in the WASH sector.

The Monitoring & Evaluation (M&E) Subcommittee takes the lead role in creating a system for the collection and analysis of data and promoting a learning culture and continuous improvement process throughout HANWASH (i.e., its staff, volunteers, cooperating organizations, contractors, and the Rotary Clubs of Haiti).

This Subcommittee is composed of professionals with experience in designing M&E tools and methods, collecting and analyzing data, and producing research for publication in scientific journals. Some of the volunteers on this Subcommittee are part of the Cadre of WASH Technical Advisers within Rotary itself. The Subcommittee works in close collaboration with DINEPA, its regional offices (OREPAs), local WASH authorities, cooperating organizations and contractors, as well as local Rotary Clubs, providing program management, technical guidance, fundraising, and monitoring & evaluation support in order to strengthen the sector as a whole.

For example, HANWASH has recently provided US\$67,000 in funding support to ONEPA to strengthen the national M&E system with staff trainings and water quality testing kits for a survey of water points throughout the country. In addition, HANWASH has provided technical assistance and management support as well as

US\$25,000 in financial support to the professional operator in the commune of Cavaillon.

For this Global Grant, the M&E Subcommittee will oversee M&E activities and seek to measure the following with surveys, interviews, and/or focus groups:

- Capacity constraints on local stakeholders of contributing to the WASH sector;
- Participation rate, learning outcomes, and sustainability of trainings and follow-up activities (e.g. by Northwater, Operators without Borders, and Haiti Outreach);
- Level of stakeholder engagement in WASH sector planning in the commune;
- Household demand for paid connections to the new water system.

As much as possible, HANWASH and the Cooperating Organizations will strive to follow best practices in their qualitative and quantitative research methods in order to ensure overall data quality.

Once operations begin and the Global Grant period ends, the professional operator entity will be accountable for its performance to government WASH authorities according to indicators established under its management contract. Although monitoring of the operations is not budgeted or included as part of this Global Grant, the professional operation will receive technical and management training. Furthermore, HANWASH and the Cooperating Organizations all have strong relationships with government authorities enabling them to advise on and influence the development of a performance management framework for professional WASH system operators throughout Haiti.

Data collected as part of this Global Grant will be uploaded and made available on the online platform mWater (<https://www.mwater.co/>) to support transparency and accessibility by all sector stakeholders, including the Sponsor Club and International Committee.

The OREPA (Regional office for drinking and sanitation) are the regional branches of DINEPA (Haitian water department). DINEPA also includes ONEPA which is the information management and data collection group; mWater is its authorized tool. mWater is a free data management program used in over 180 countries. mWater mobile apps are simple to use and work on and offline, designed specifically for regions with spotty internet service. <https://www.mwater.co/> Local contacts are officials experienced with water programs. TEPAC is a French acronym for the local WASH technician.

Please note that on the list of "How will you measure," above, several items may appear as "other." These will be measured monthly and include:

- Average daily water use by system
- Gallons of water available per day from system
- Net number of households paying for water using metered water system (sign ups and drop outs)

Location and Dates

Humanitarian Project

Where will your project take place?

City or town

Artaud

Country

Haiti

Province or state

Ferrier Commune

When will your project take place?

2021-09-01 to 2023-09-01

Participants

Cooperating Organizations (Optional)

Name	Website	Location
HANWASH	www.hanwash.org	8200 Seminole Boulevard Seminole United States
Haiti Outreach Inc.	www.haitioutreach.org	8441 Wayzata Blvd. Suite 118 Golden Valley United States
Operators Without Borders	www.operatorswithoutborders.org	1820 W 10th Ave Vancouver Canada
OREPA Regional Office for Drinking Water and Sanitation	https://www.dinepa.gov.ht/orepa/	HT1110 77, Rue 23, Boulevard Cap-Haitien Haiti

Supporting Documents

- #3_Ferrier_MOU_-_Haiti_Outreach_Hanwash_-_Final.pdf
- #3_Ferrier_MOU_-_Haiti_Outreach_Hanwash_-_Final.pdf
- #1_Ferrier_MOU_-_OWB_-_Final.pdf
- #2_Ferrier_MOU_-_OREPA_Mayor_-_Final.pdf

Do any committee members have a potential conflict of interest related to a cooperating organization?

No

Why did you choose to partner with this organization and what will its role be?

We discovered this project via HANWASH. Their role is to bring fresh water to all of Haiti. They may assist with the governance and sustainability of any water project in Haiti, and will be overseeing this project. HANWASH and the local Rotary HANWASH Ambassador (from the Host Rotary Club) will work with the OREPA Nord and government entities to establish a sustainable oversight system.

Haiti Outreach provides data and management advice and services, with over 20 years of experience in Haiti. They use the mWater program for data storage and help us with sustainability of water projects in Haiti. They train local people to use the mWater program, which will be used to gather some of the measurements for this project.

The OREPA Nord is the regional implementation office in Northern Haiti. This is the local/regional water management arm of DINEPA, a national water utility. DINEPA is the governing body of water in Haiti and is a HANWASH partner.

Operators Without Borders will assist with training and is a HANWASH partner. OWB is a group that assists with water systems in developing countries through training and mentoring water operators. A Representative of OWB consults with the project manager (Northwater) to train a professional local Operator Entity. The Operator maintains, services and collects revenue and pays for services; profits will be stored in an account to pay for ongoing maintenance.

These partners will facilitate conversations around community-led sanitation with local leaders and authorities in order to enhance the potential for sustainability. The government of Haiti has a zero-subsidy policy on latrines, and delivering sustainable sanitation is a serious challenge throughout the country. HANWASH is committed to testing appropriate solutions and will bring partners to the table to support these efforts in Ferrier.

As a part of project management, there will also be developed some business management training for the professional operator in Ferrier, including subject matter such as:

- Business planning
- Marketing
- Finance
- Billing, collection, customer service
- Human resources / personnel

Our Partner organizations will be seeking a trainer based in Haiti who could provide some basic business training and mentoring and follow-up, and develop modules for us on these subjects in French and Kreyol.

See attached document "Training Plan Final"

Partners (Optional)

List any other partners that will participate in this project.

Rotary Clubs of Districts included on this grant.

Rotary Club of Ouanaminthe Haiti

Rotary Club of Cap Haitian Haiti

Wenatchee Rotary Club member Carin Smith led the initial work on fundraising for this project and continues in her support & communications roles.

Wenatchee Rotary Club member Sam Dilly, a water systems engineer, is working with HANWASH on their Technical Committee, and will review design drawings and specifications and provide input on how the work will be inspected and managed during construction.

Rotary Club of Kamloops West includes a second cadre member Stan Fike and the District Hanwash chair PDG.Sherry Chamberlain.

Rotarian Participants

Describe the role that host Rotarians will have in this project.

Manage local payments and monitor grant budget.

Onsite project communications with Northwater project manager other participants.

Meet regularly with HANWASH and Haiti Outreach representatives, international host, and project partners.

Maintain grant documentation and help write final reports.

Publicize the project and work to raise awareness of local Rotary Clubs and The Rotary Foundation through the media, project signage and at Rotary events.

Describe the role that international Rotarians will have in this project.

Monitor grant finances, budget and timeline.

Communications between local host club and HANWASH and project partners.

Meet regularly with HANWASH representatives.

Help write final reports.

Publicize the project and work to raise awareness of local Rotary Clubs and The Rotary Foundation through the media, project signage and at Rotary events.

Budget

What local currency are you using in your project's budget?

The currency you select should be what you use for a majority of the project's expenses.

What is the budget for this grant?

List each item in your project's budget. Remember that the project's total budget must equal its total funding, which will be calculated in step 9. Every global grant includes a match of at least \$15,000 from The Rotary Foundation's World Fund. Project budgets, including the World Fund match, must be at least \$30,000.

#	Category	Description	Supplier	Cost in USD	Cost in USD
1	Operations	Geophysical investigation for areas 1-3, engineering report (See Scope of Work [SOW] Pg.5 Task 1)	Northwater	22500	22500
2	Equipment	Production Well: equipment (See SOW Pg. 5 Task 2)	Vendor in Haiti	12000	12000
3	Operations	Engineering Report (See SOW pg.6 Task 3)	Northwater	12000	12000
4	Equipment	Well house, pump, equipment- solar-90gpm) (See Engineers Estimate)	Vendor in Haiti	107500	107500
5	Equipment	Pressure Tank (2500-gal) (See Engineers Estimate)	Vendor In Haiti	30000	30000
6	Equipment	Distribution parts to 81 connections (See H2O Devis document)	Vendor in Haiti	89755	89755
7	Equipment	Water treatment supplies (See engineers estimate)	Vendor in Haiti	3500	3500
8	Supplies	Incidentals/contingencies/ US\$ changes/supplies	Vendors in Haiti	48000	48000
9	Project management	Program management and oversee, followup, supervision coordinate with with all partners (See proposal summary)	Hanwash	18000	18000
10	Project management	Construction management/Bidding/Vendors (See SOW pg. 7/8 Task 5/6)	Northwater	30000	30000
11	Operations	Engineering plans (See SOW Pg.6 Task 4)	Northwater	14000	14000
12	Training	Operator (entity) maintenance training (See SOW Pg. 9 Task 7)	Northwater	34500	34500
13	Training	Supervisor/Management training, Mwater applications, sanitation & hygiene (See proposal summary)	Haiti Outreach	26000	26000
14	Training	Support operator training (See Proposal	Operators	19000	19000

		Summary)	without Borders		
15	Monitoring/evaluation	Review water data reports, analyze and report, review and followup with all entities (See Proposal Summary)	Hanwash	8600	8600
16	Monitoring/evaluation	Technical support for sustainable maintenance/operations. Review using mWater.co site (See SOW Pg. 9 Task 8)	Northwater	15000	15000
				Total budget:	490355 490355

Supporting Documents

- Engineers_estimate_Artaud_26May21.pdf
- H2O_devis_de_vente_avec_remise_26052021pdf.pdf
- Northwater_Scope_and_Budget_Artaud_26may2021.pdf

Funding

Tell us about the funding you've secured for your project. We'll use the information you enter here to calculate your maximum possible funding match from the World Fund.

#	Source	Details	Amount (USD)	Support*	Total
1	Cash from Club	Wenatchee	9,524.00	476.20	10,000.20
2	Cash from Club	Okanogan-Omak	1,905.00	95.25	2,000.25
3	Cash from Club	Upper Kittitas County	2,858.00	142.90	3,000.90
4	Cash from Club	Kamloops West	1,905.00	95.25	2,000.25
5	Cash from Club	Moses Lake	2,381.00	119.05	2,500.05
6	Cash from Club	Penticton	1,429.00	71.45	1,500.45
7	Cash from Club	Salmon Arm (Shuswap)	1,429.00	71.45	1,500.45
8	Cash from Club	Salmon Arm	477.00	23.85	500.85
9	Cash from Club	Sunnyside	477.00	23.85	500.85
10	Cash from Club	Toppenish	477.00	23.85	500.85

11	Cash from Club	Wenatchee Confluence	477.00	23.85	500.85
12	Cash from Club	Kelowna	2,762.00	138.10	2,900.10
13	Cash from Club	Vernon Silver Star	477.00	23.85	500.85
14	Cash from Club	Grand Coulee Dam	535.00	26.75	561.75
15	Cash from Club	Hollis-Brookline	5,000.00	250.00	5,250.00
16	Cash from Club	Leavenworth	477.00	23.85	500.85
17	Cash from Club	Kelowna Ogopogo	1,000.00	50.00	1,050.00
18	Cash from Club	East Wenatchee	1,477.00	73.85	1,550.85
19	District Designated Fund (DDF)	5060	58,247.00	0.00	58,247.00
20	District Designated Fund (DDF)	7890	5,600.00	0.00	5,600.00
21	District Designated Fund (DDF)	7280	8,940.00	0.00	8,940.00
22	District Designated Fund (DDF)	7020	10,000.00	0.00	10,000.00
23	District Designated Fund (DDF)	7870	5,000.00	0.00	5,000.00
24	District Designated Fund (DDF)	7680	5,000.00	0.00	5,000.00
25	District Designated Fund (DDF)	7305	30,000.00	0.00	30,000.00
26	Cash from Club	Wenatchee Sunrise	477.00	23.85	500.85
27	District Designated Fund (DDF)	6940	27,717.00	0.00	27,717.00
28	Cash from Club	South Everett/Mukilteo	1,905.00	95.25	2,000.25
29	District Designated Fund (DDF)	7670	5,000.00	0.00	5,000.00
30	District Designated Fund (DDF)	6950	15,000.00	0.00	15,000.00
31	District Designated Fund (DDF)	6970	35,000.00	0.00	35,000.00
32	District Designated Fund (DDF)	6930	5,000.00	0.00	5,000.00
33	District Designated Fund (DDF)	7570	10,000.00	0.00	10,000.00
34	District Designated Fund (DDF)	7600	10,000.00	0.00	10,000.00
35	District Designated Fund (DDF)	7770	5,000.00	0.00	5,000.00
36	District Designated Fund (DDF)	6960	15,000.00	0.00	15,000.00

37	The Rotary Foundation Donor Advised Fund	WASHRAG - 427	2,000.00	0.00	2,000.00
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*Whenever cash is contributed to the Foundation to help fund a global grant project, an additional 5 percent is applied to help cover the cost of processing these funds. Clubs and districts can receive Paul Harris Fellow recognition points for the additional expense.

How much World Fund money would you like to use on this project?

You may request up to 200,403.00 USD from the World Fund.

200402

Funding Summary

	DDF contributions:	250,504.00
	Cash contributions:	37,449.00
	The Rotary Foundation Donor Advised Fund:	2,000.00
	Financing subtotal (matched contributions + World Fund):	490,355.00
	Total funding:	490,355.00
	Total budget:	490,355.00

Sustainability

Humanitarian Projects

Project planning

Describe the community needs that your project will address.

Currently the homes in Artaud do not have access to potable drinking water. Residents are paying some of the highest rates for water in the country. Typical rates in the rest of the country are 0.5 to 2 HTG/gallon. Our assessment shows that the people in this area have to pay 5-10 HTG (Haitian Goud) (US \$06-.13) for water delivered by truck when it is in the area. The people are not getting enough drinking water. The water system built will be able to deliver water to their homes and payment for water will only be between .05 and 1 per HTG (US\$.01) per gallon. This will provide the people with better health including the children who do not get enough water daily and show signs of dehydration.

The project will also provide water at more reasonable rates.

How did your project team identify these needs?

The regional water utility organization and the mayor of Ferrier Commune informed Haiti Hanwash of the desperate need in Ferrier Commune to bring potable drinking water to this region. The towns north of Ferrier city and up to Meillac do not have the aquifers to deliver drinking water. The nearest town that has aquifers for enough water for all of Ferrier Commune is in Artaud.

We have found that the people of the Ferrier Commune want an accessible clean drinking water solution at less cost. This was determined by doing site-to-site community assessments, talking to the villagers by the OREPA Nord team and the Haiti Outreach team, and reviewing data stored now in Mwater.

* OREPA is the local regional water management arm of DINEPA, a national water utility.

How were members of the benefiting community involved in finding solutions?

The Mayor of Ferrier Commune, Local OREPA Nord team members, community leaders and local Rotarians plus Haiti Outreach members all were involved in planning and reviewing what is needed. District 5060 hired NorthWater International to go on site and review the areas in order to create the Hydrogeology Study and the Technical Assessment which was finalized and paid for separately by the Rotary Clubs of District 5060.

How were community members involved in planning the project?

The Mayor of Ferrier Commune, OREPA members, and Rotarians all spoke with the community members in November 2019 as well as January and February 2021 to review all the communities and advise on the best place to start the water system. The meeting in November 2019 included all the community leaders with International Rotarians Sherry & Jim Chamberlain on site. They were hosted by Rotarians Neil Van Dine and Fritz Pierre-Louis who both live in Haiti. Rotarians from two clubs in District 7020 also attended the meetings in 2019: Rotary Club of Cap Haitien and Rotary Club of Ouanaminthe. Two of the leaders were Assistant Governors.

DINEPA, OREPA, Rotary and local leaders participated in the Northwater assessments during October, 2020. As recently as April 2021 another meeting took place with the Mayor and OREPA to get final approvals and commitment to this project.

Project implementation

Summarize each step of your project’s implementation.

Do not include sensitive personal data, such as government ID numbers, religion, race, health information, etc. If you include personal data, you are responsible for informing those whose personal data is included that you are providing it to Rotary and that it will be processed in accordance with Rotary’s [Privacy Policy](#).

#	Activity	Duration
1	Secure a suitable water source. Northwater recommends a geophysical investigation to identify locations that have the best potential to produce the desired water quality and quantity. The investigation could increase the likelihood of finding higher producing wells and thus reducing the overall number of wells necessary to meet water demands.	2 months
2	Drill a well at the location and depth recommended by the geophysical investigation. Once the well is constructed, a pumping test and water quality analysis will guide the pumping system design and water treatment requirements to achieve drinking water guidelines.	3 months
3	Develop an engineering report that more accurately defines the layout, cost and operational plan for a complete water system.	2 months
4	Develop detailed plans, specifications and bidding documents for construction. The bid documents will require construction to follow local (DINEPA/OREPA) requirements for materials and methods.	2 months
5	Select a contractor and construct elements of the water system. The contractor will be selected through a competitive bidding process from a list of pre-approved vendors. A professional operator entity will be recruited to review and learn about the system during construction. Local labor/materials will be used whenever possible.	10 months
6	Conduct management, hygiene and sanitation education and training. The management training will seek to recruit and train a professional operator entity for the regional water system.	1-3 months initially, then ongoing under supervision of OREPA Nord with assistance from Haiti Outreach

Will you work in coordination with any related initiatives in the community?

Yes

Briefly describe the other initiatives and how they relate to this project.

HANWASH has established a system in Cavaillon and is working at establishing more systems throughout Haiti including the villages in the Commune of Ferrier. The expertise and resources they developed will be used in this project.

Operators Without Borders (OWB) will assist in professional operator training and support on site, coordinating with Northwater. OWB will work with the Professional Operator to develop Standard Operating Procedures. OWB is a partner providing in-kind services. OWB labor is provided by volunteers; the only costs to the project are for travel and lodging expenses.

Haiti Outreach has over 20 years of experience providing water in Haiti. They are coordinating with HANWASH, Rotary, and DINEPA/OREPA to establish additional water systems in the country. They also provide data and data collection services. They are our main connection for data and we will be working with them on ensuring that sanitation issues, if any, are addressed. There will be a Haiti Outreach person on the ground to provide the leadership training, coaching and conversations necessary to have the entire community engaged in being a clean community (continuously managing their water, sanitation and hygiene).

See attached file, "Haiti Outreach Community Management Model" for an example of what may be done.

Please describe the training, community outreach, or educational programs this project will include.

Trainers from Haiti Outreach will go to Artaud and train the professional operator entity on site, “teach the teacher” for managing the system parts and also the financial management of the water metered homes (eg collecting funds, paying bills). They will work with community engagement, leadership, social mobilization and non-technical training.

Workers from the professional operator entity will go to each house and train the residents by educating them on the savings associated with having water directly piped to their homes.

Haiti Outreach will provide leadership training on sanitation and hygiene best practices to local authorities.

When the project is completed, we will have followed the MERL process (Monitor, Evaluate, Resolve & Learn).

How were these needs identified?

As described previously, via community involvement.

The local community asked the local Haitian leaders for access to clean water; the community leaders went to DINEPA/OREPA, which went to Haiti Outreach, which went to HANWASH, which turned into Rotary involvement by District 5060 and others.

mWater data includes current water supply, locations and numbers of toilets, and more.

Northwater evaluation also confirmed these needs.

As part of the community assessment, to establish a baseline, a field survey was conducted by the OREPA staff; 20% of houses were surveyed to collect data on household water access, sanitation and hygiene. That data was input into mWater.

What incentives (for example, monetary compensation, awards, certification, or publicity), will you use, if any, to encourage community members to participate in the project?

Water will cost less than they currently pay. Residents will have the ability to access water more often and at better quality than the current water source.

Clean water will be available at their home (to property)

Community members will be healthier, because they have easier access to sufficient clean drinking water

Water meter will encourage sensible water use

Facts about cost savings and health benefits will be shared with the community.

The monitoring program will strengthen the local community in self reliance and sustainability of their own system.

List any community members or community groups that will oversee the continuation of the project after grant-funded activities conclude.

DINEPA / OREPA / TEPAC (WASH technicians trained by DINEPA)
Commune of Ferrier mayor and other elected officials
Professional operator will be overseen by the mayor and OREPA
Host clubs and the Hanwash ambassadors
Haiti Outreach
HANWASH

Budget

Will you purchase budget items from local vendors?

Yes

Explain the process you used to select vendors.

Nearly all of the construction materials will be purchased in Haiti. The only exceptions are those items that are not available in-country, for example specialized well casing, if necessary; well pump and water treatment equipment. For the purposes of this grant we obtained single bids to estimate costs, and will launch competitive bids once financing is approved.

HANWASH is in the process of creating a list of pre-qualified bidders through a process called Request for Qualifications. They must have a good reputation and have done good work to be able to be on the list. This will be a pre-approved list of vendors that provide sustainable and good quality equipment, products and services. We will ask for bids from just those vendors on the list, who must provide items that meet the HANWASH equipment specifications.

Did you use competitive bidding to select vendors?

Yes

Please provide an operations and maintenance plan for the equipment or materials you anticipate purchasing for this project. This plan should include who will operate and maintain the equipment and how they will be trained.

The Operations Manual is to be completed once the specific materials are determined. We haven't purchased the materials yet so it's not possible to provide an operations manual at this time.

Operator Without Borders will create the operations plan and document, working with Northwater. The supplier of each piece of equipment will provide training and documentation for use of that specific item that is then incorporated into the overall Operations manual.

Attached document "H2O_devis de vente" shows an example of some of the costs of materials dated May 26, 2021.

Describe how community members will maintain the equipment after grant-funded activities conclude. Will replacement parts be available?

A professional operator entity will oversee maintenance of the system using funds from volumetric water metering. The local operator will be trained in the maintenance and operation of equipment. This is sustained by water meter costs that will pay for all expenses. The operator will also be provided (in the O&M manual created by Operators Without Borders, Northwater and/or other contractor(s)) with contact details of vendors that supplied original equipment. Ideally, the operator will also participate in construction of the water system to gain experience in working with the materials supplied.

The system will be created using locally-available parts whenever possible. Replacement parts will thus be

available locally.

HANWASH will work with the OREPA Nord and government entities to establish a sustainable oversight system.

The attached document, "Ferrier Artaud Cash Flow Projections" shows the estimated income and expenses over time, demonstrating that the system is expected to be financially sustainable.

If the grant will be used to purchase any equipment, will the equipment be culturally appropriate and conform to the community's technology standards?

Yes

Please explain.

Northwater plan is based on parts and equipment that can be obtained in Haiti, in accordance with DINEPA standards.

Water meters are new. Such meters are employed in other areas in Haiti and have been adopted well.

All of the materials proposed to be used in this project are common throughout Haiti. This includes pipe (HDPE flexible plastic pipe/a DINEPA requirement), solar pumps and solar panels. Generator and grid power has proven not to be sustainable in Haiti due to high operating costs. This is why this project proposes solar power. It has a higher up-front cost but operating costs are lower making it easier for communities to afford operation costs.

After the project is completed, who will own the items purchased by grant funds? No items may be owned by a Rotary district, club, or member.

The Commune of Ferrier (Artaud is within this Commune).

Funding

Does your project involve microcredit activities?

Have you found a local funding source to sustain project outcomes for the long term?

Yes

Please describe this funding source.

Water meters will be provided at all water access points. Each user will be required to sign a contract that defines the terms of service. Water fees will be based on usage. Money will be maintained, accounted for, and budgeted by the professional operator entity, overseen by OREPA Nord and local leaders as described previously. Funds will be used to maintain and manage the water system over the long term. Water meters have been used successfully in other parts of Haiti.

The water cost for users has been determined based on the estimated maintenance costs of the system. For the project initiation, there will be a visible bank account held by the host Rotary club to be sure the funds are going where designated. Host club is only given money for expenses for 3-6 months. They will need to make a requisition for the money and give us the receipts for purchases made with that money.

The attached document, "Ferrier Artaud Cash Flow Projections" shows the estimated income and expenses over time, demonstrating that the system is expected to be financially sustainable.

NOTE The online grant application does not show this question "Does your project involve microcredit?" But, the PDF generated does show that question. The answer is No, our project does not involve microcredit.

Will any part of the project generate income for ongoing project funding? If yes, please explain.

Yes, the water meters will allow households to pay for use. This will provide for ongoing maintenance, and be

able to expand to new households and expand services.

1. The Professional operator entity will submit a financial report to the mayor's office each month. This must include copies of bank statements and deposit/withdrawal receipts.
2. An outside firm conducts an audit of the water system annually. The audit reports on both financial and functional elements of the water system.

Supporting Documents

- #1_Ferrier_MOU_-_OWB_-_Final.pdf
- #2_Ferrier_MOU_Host_Orepa_Mayor_-_Final.pdf
- #3_Ferrier_MOU_-_Haiti_Outreach_Hanwash_-_Final.pdf
- #4_Ferrier_MOU_-_International_Club_-_Final.pdf
- #4a_Ferrier_Financial_MGT_Plan_-_International_Club_-_Final.pdf
- Ferrier_Artaud_Cash_Flow_Projections_-_Package_for_Global_Grant.pdf
- HANWASH_Dist5060MOU_Final.pdf
- HaitiMapRegion.jpg
- Haiti_Outreach_Community_management_model_07-2020.pdf
- Hydrogeological_Assessment_Meillac_FINAL.pdf
- Northwater_Scope_and_Budget_Artaud_26may2021.pdf
- Proposal_summary_Artaud_May_26_2021.pdf
- Rotary_rapid_technical_assessment_Meillac_FINAL.pdf
- Task_Force.jpg
- TrainingPlanFinal.pdf
- WenatcheeRotaryMOUGlobalGrant.pdf

Authorizations

Authorizations & Legal Agreements

Legal agreement

Global Grant Agreement

I confirm and agree to the following:

1. All information contained in this application is, to the best of our knowledge, true and accurate.
2. We have read the Terms and Conditions for Rotary Foundation District Grants and Global Grants ("Terms and Conditions") and will adhere to all policies therein.
3. The grant sponsors ("Sponsors") shall defend, indemnify, and hold harmless Rotary International (RI) and The Rotary Foundation (TRF), including their directors, trustees, officers, committees, employees, agents, associate foundations and representatives (collectively "RI/TRF"), from and against all claims, including but not limited to claims of subrogation, demands, actions, damages, losses, costs, liabilities, expenses (including reasonable attorney's fees and other legal expenses), awards, judgments, and fines asserted against or recovered from RI/TRF arising out of any act, conduct, omission, negligence, misconduct, or unlawful act (or act contrary to any applicable governmental order or regulation) resulting directly or indirectly from a Sponsor's and/or participant's involvement in grant-funded activities, including all travel related to the grant.
4. The failure of the parties to comply with the terms of this Agreement due to an act of God, strike, war, fire, riot, civil unrest, hurricane, earthquake, or other natural disasters, acts of public enemies, curtailment of transportation facilities, political upheavals, acts of terrorism, or any similar cause beyond the control of the

parties shall not be deemed a breach of this Agreement. In such an event, the Agreement shall be deemed terminated and the Sponsors shall refund all unexpended global grant funds within 30 days of termination.

5. TRF's entire responsibility is expressly limited to payment of the total financing amount. TRF does not assume any further responsibility in connection with this grant.

6. TRF reserves the right to cancel the grant and/or this Agreement without notice upon the failure of either or both of the Sponsors to abide by the terms set forth in this Agreement and the Terms and Conditions. Upon cancellation, TRF shall be entitled to a refund of any global grant funds, including any interest earned, that have not been expended.

7. The laws of the State of Illinois, USA, without reference to its conflicts of laws principles, shall govern all matters arising out of or relating to this Agreement, including, without limitation, its interpretation, construction, performance, and enforcement.

8. Any legal action brought by either party against the other party arising out of or relating to this Agreement must be brought in either, the Circuit Court of Cook County, State of Illinois, USA or the Federal District Court for the Northern District of Illinois, USA. Each party consents to the exclusive jurisdiction of these courts, and their respective appellate courts for the purpose of such actions. Nothing herein prohibits a party that obtains a judgment in either of the designated courts from enforcing the judgment in any other court. Notwithstanding the foregoing, TRF may also bring legal action against Sponsors and/or individuals traveling on grant funds in any court with jurisdiction over them.

9. This Agreement binds and benefits the parties and their respective administrators, legal representatives, and permitted successors and assigns.

10. If any provision of this Agreement is determined to be illegal, invalid or unenforceable, the remaining provisions of this Agreement shall remain in full force and effect.

11. Sponsors may not assign any of its rights under this Agreement except with the prior written consent of TRF. Sponsors may not delegate any performance under this Agreement without the prior written consent of TRF. Any purported assignment of a Sponsor's rights or delegation of performance without TRF's prior written consent is void.

12. TRF may assign some or all of its rights under this Agreement to an associate foundation of TRF. TRF may delegate any performance under this Agreement to an associate foundation. Any other purported assignment of TRF's rights or delegation of performance without the Sponsors' prior written consent is void.

13. Sponsors will comply with all economic and trade sanctions, including those implemented by the Office of Foreign Assets Control (OFAC) of the United States Department of Treasury, and will ensure that they do not support or promote violence, terrorist activity or related training, or money laundering.

14. This Agreement constitutes the final agreement between the parties. No amendment or waiver of any provision of this Agreement shall be effective unless it is in the form of a writing signed by the parties.

15. Rotary International (RI) and TRF may use information contained in this application and subsequent reports to promote the activities by various means such as The Rotarian, Rotary Leader, rotary.org, etc. Unless indicated otherwise in writing, by submission of the photos, the parties hereby grant to RI and TRF the worldwide right to publish and use the photos, including but not limited to, in RI and TRF publications, advertisements, and Web sites and on social media channels and to license use to others, including, but not limited to, media outlets and its partners and through RI's online image database, for the purposes of promoting Rotary. By submitting the photos, the parties represent and warrant that all persons appearing in the photos have given their unrestricted written consent to use their likenesses and to license use to third parties.

16. The Sponsors agree to share information on best practices when asked, and TRF may provide their contact information to other Rotarians who may wish advice on implementing similar activities.

17. The Sponsors will ensure that all individuals traveling on grant funds have been informed of the travel policies stated in the Terms and Conditions and have been made aware that they are responsible for obtaining travel insurance.

Primary contact authorizations

Application Authorization

By submitting this global grant application, we agree to the following:

1. All information contained in this application is, to the best of our knowledge, true and accurate, and we intend to implement the activities as presented in this application.
2. The club/district agrees to undertake these activities as a club/district.
3. We will ensure all cash contributions (as detailed in the grant financing) will be forwarded to The Rotary Foundation (TRF) or sent directly to the global grant bank account after Trustee approval of the grant.
4. Rotary International (RI) and TRF may use information contained in this application to promote the activities by various means such as The Rotarian, the RI international convention, RVM: The Rotarian Video Magazine, etc.
5. We agree to share information on best practices when asked, and TRF may provide our contact information to other Rotarians who may wish advice on implementing similar activities.
6. To the best of our knowledge and belief, except as disclosed herewith, neither we nor any person with whom we have or had a personal or business relationship are engaged, or intend to engage, in benefiting from TRF grant funds or have any interest that may represent a potential competing or conflicting interest. A conflict of interest is defined as a situation in which a Rotarian, in relationship to an outside organization, is in a position to influence the spending of TRF grant funds, or influence decisions in ways that could lead directly or indirectly to financial gain for the Rotarian, a business colleague, or his or her family, or give improper advantage to others to the detriment of TRF.

All Authorizations & Legal Agreements Summary

Primary contact authorizations

Name	Club	District	Status	
Magarette Georges	Cap-Haitien	7020	Authorized	Authorized on 21/07/2021
Sherry Chamberlain	Kamloops West	5060	Authorized	Authorized on 15/07/2021

District Rotary Foundation chair authorization

Name	Club	District	Status	
Pete Erickson	Moses Lake	5060	Authorized	Authorized on 15/07/2021
Patrick Adizua	Mandeville	7020	Authorized	Authorized on 20/07/2021

DDF authorization

Name	Club	District	Status	
Pete Erickson	Moses Lake	5060	Authorized	Authorized on 15/07/2021
Richard DeRock	Wenatchee Confluence	5060	Authorized	Authorized on 10/08/2021
K. Prasad Menon	Simsbury-Granby	7890	Authorized	Authorized on 15/07/2021
Joanne Alfieri	Southington	7890	Authorized	Authorized on 15/07/2021
Patricia Meehan	Sharon	7280	Authorized	Authorized on 28/05/2021
Beth Marshall	Zelienople	7280	Authorized	Authorized on 27/05/2021
Patrick Adizua	Mandeville	7020	Authorized	Authorized on 29/05/2021
Charles Sealy	South-East Nassau	7020	Authorized	Authorized on 31/05/2021
Venu Rao	Hollis-Brookline	7870	Authorized	Authorized on 29/05/2021
Steve Puderbaugh	Raymond Area	7870	Authorized	Authorized on 28/05/2021
John Walker	Charlotte-South	7680	Authorized	Authorized on 27/05/2021
Robert Wilson	Huntersville Happy Hour	7680	Authorized	Authorized on 28/05/2021
Jeffrey Klink	Crafton-Ingram	7305	Authorized	Authorized on 31/05/2021
Al DeLucia	McMurray	7305	Authorized	Authorized on 27/05/2021
David Rauch	Mid-Bay Bridge (Choctawhatchee Bay)	6940	Authorized	Authorized on 15/07/2021
Larry Kubiak	Tallahassee	6940	Authorized	Authorized on 11/08/2021
Carol King	Asheville	7670	Authorized	Authorized on 27/05/2021
George Waechter	Lenoir	7670	Authorized	Authorized on 27/05/2021
Jocelyn Chapman	Tarpon Springs	6950	Authorized	Authorized on 17/07/2021
Michael Chapman	Tarpon Springs	6950	Authorized	Authorized on 15/07/2021
Jeanette Loftus	Flagler County	6970	Authorized	Authorized on 09/08/2021
Richard Cooper	Ormond Beach	6970	Authorized	Authorized on 15/07/2021

B. Burkett	Merritt Island	6930	Authorized	Authorized on 31/05/2021
Els van Engelenburg	Titusville-Sunrise	6930	Authorized	Authorized on 31/05/2021
Vivian Crymble	Tri-Cities (Blountville)	7570	Authorized	Authorized on 30/05/2021
Nancy Whitlock	Waynesboro	7570	Authorized	Authorized on 27/05/2021
Stephen Beer	Innsbrook (Richmond)	7600	Authorized	Authorized on 28/05/2021
Judith Cocherell	Cape Henry	7600	Authorized	Authorized on 28/05/2021
Paula Matthews	Spring Valley (Columbia)	7770	Authorized	Authorized on 27/05/2021
Pauline Levesque	Myrtle Beach	7770	Authorized	Authorized on 28/05/2021
Andrew Lyman	Sarasota Sunrise	6960	Authorized	Authorized on 22/07/2021
Alfred Current	Englewood	6960	Authorized	Authorized on 21/07/2021

Legal agreement

Name	Club	District	Status	
Pete Erickson	Moses Lake	5060	Accepted	Accepted on 15/07/2021
JeanLouis Philocles	Cap-Haitien	7020	Accepted	Accepted on 01/08/2021