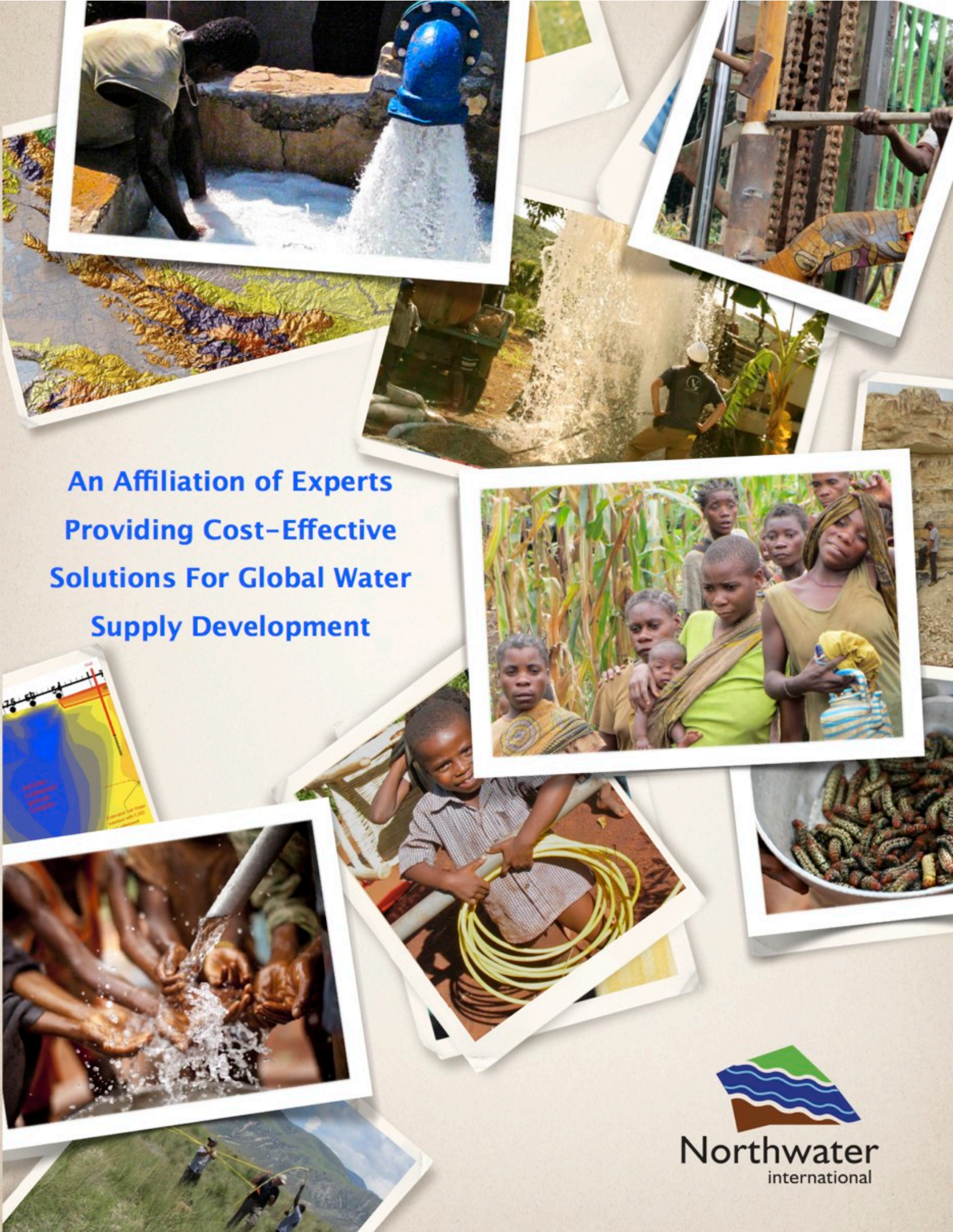


**An Affiliation of Experts
Providing Cost-Effective
Solutions For Global Water
Supply Development**





CASE STUDIES

Why Northwater?

Reduce risk and increase value of drilling and water programs

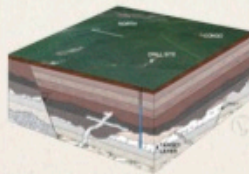
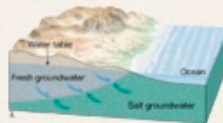
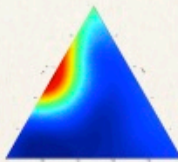
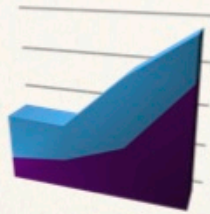
Your "Staff" of world class water experts

Top of the line exploration geophysics equipment

Advanced technology, software and equipment

Efficient organizational model allows for affordable surveys and services

We are passionate about assisting our partners in helping address global water supply challenges



DRILLING SUCCESS

Increased the water well success rate from 30% to 70% on the island of La Gonâve, Haiti; after a week-long geologic reconnaissance and 2-week electromagnetic geophysical survey.

WATER QUALITY

Physical and biologic water quality varies significantly in many areas due to complex hydrogeology. Well siting and drilling specifications/ techniques are often not effectively tailored to the subsurface conditions. One such investigation determined that hazardous concentrations of an anion were causing physiological health problems in numerous villages. The water quality problems were directly linked to particular geologic strata, which was characterized and incorporated into the drilling program.

SUSTAINABILITY

We have a water source! But what are its vulnerabilities, what can affect the resource, how long will it last, how much can we take? One such investigation established maximum groundwater withdrawal rates for a coastal village to avoid sea-water intrusion from destroying a precious and important aquifer. Aquifer pumping tests, and analysis of water geochemistry allowed us to determine the age of the water and the amount of recharge replenishing the system.

FEASIBILITY & ALTERNATIVES

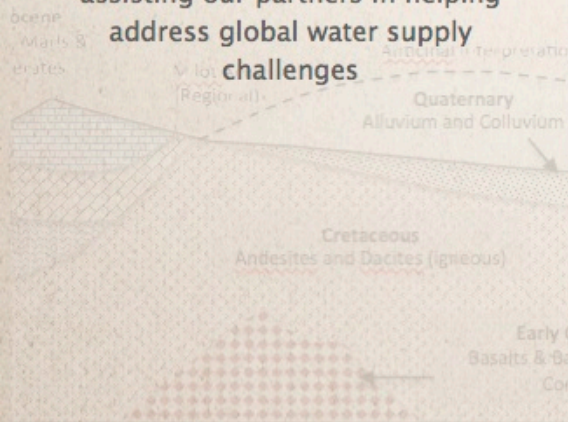
Faced with the prospect of an expensive solar powered treatment system to supply 1,000 gallons/day for an impoverished coastal village, our client engaged us to assist in project development. Within a day, our geologists sited a drilling location nearby with fresh water that did not require desalination. We proposed an alternate water system that would provide 30,000 gallons of potable water/day without significantly increasing the project budget.

BIG WATER

Despite doubts from authorities and experts, our team discovered a large freshwater aquifer in remote and arid northwest Haiti, the aquifer discovery has brought pride to the region as the resource can support potable and irrigation demands. The discovery of the aquifer also led to economic investment in the area. When large quantities of water are required, we can apply an effective investigation to maximize the probabilities of discovering high yield sources.

CAPACITY BUILDING

Our project work focuses on developing capacity and knowledge within the countries that we work. Our 50+ projects have led to developing world-class drillers, new novice geologists, engineering technicians and construction managers. We have also educated government authorities and organizations to support policy development.





KEY SERVICES

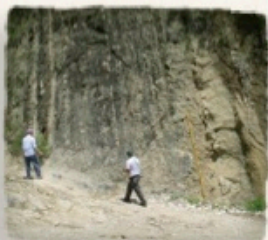
DRILLING & WASH PROGRAM DEVELOPMENT

Northwater reduces risk and increases value of drilling and water programs for NGOs, grant organizations, multi-laterals and private clients. Existing data, field studies, GIS databases, remote sensing and geophysics are integrated into hydrogeologic models and engineering design to mitigate difficult geologic conditions, variable water quality and water system challenges. Northwater works to further maximize the value of program investments by developing custom procedures to retain and interpret earned-data for refining the program and verifying results.



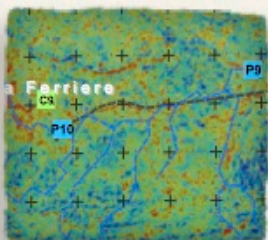
FIELD STUDIES & SITE CHARACTERIZATION

We are applied scientists and engineers that are focused directly on assisting our partners in solving water supply challenges around the world. We are recognized for performing time and cost efficient field studies to characterize geology, hydrogeology and water resource conditions of a project area. Our work leads to short-term and long-term project success and provides maps and deliverables that continue to provide value into the future.



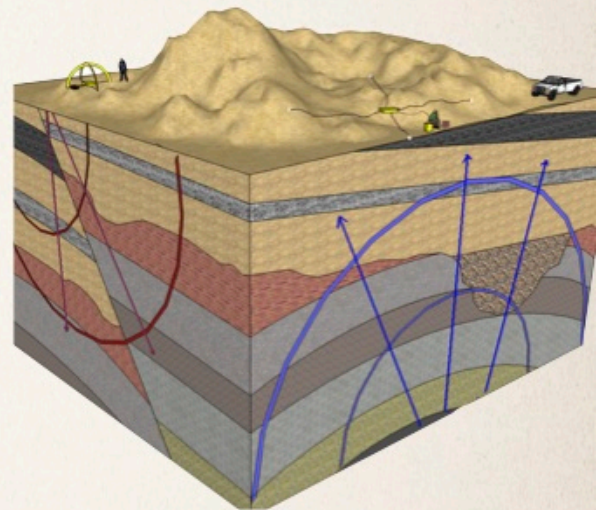
REMOTE SENSING & MAPPING

We apply advanced software and analysis tools to interpret NASA and NAVY satellite and terrain data to evaluate the landscape, terrain and geology that improve well drilling and water supply development efforts. We often make valued recommendations and produce effective mapping deliverables when budget limitations restrict a field visit.



RURAL & VILLAGE WATER SUPPLY - FEASIBILITY, ENGINEERING & DESIGN

We have been involved in developing water supply and distribution systems of various scales in developing countries. Our experience ranges from single wells to systems that reach single or numerous small rural villages; and also systems for towns that exceed 5,000 people. We have designed and implemented gravity-fed and solar powered systems and installed many kilometers of distribution networks. We can support and develop a project from the feasibility stage all the way through construction.



GEOPHYSICS WELL SITING & GROUNDWATER EXPLORATION

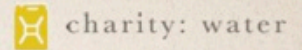
The application of geophysics can significantly improve drilling success and provide integral knowledge of the subsurface to guide drilling a single well or guide an entire drilling program.

We apply a wide range of geophysical methods depending on the geology and field conditions of the study area.

Our organizational model is centered around making this service cost-efficient; and we are able to pass value to our partners by maintaining low overhead and owning some of our own equipment. This is complemented with our passion to assist in solving the world's water challenges.

OUR TEAM HAS WORKED WITH:

This organization was started to associate the best, most passionate experts and keep overhead costs low to provide the most cost effective expertise possible.



GEOLOGY – HYDROGEOLOGY – GEOPHYSICS – WATER/WASTEWATER ENGINEERING

PROJECT MANAGEMENT – PROGRAM DEVELOPMENT



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