Water Mission is a Christian engineering nonprofit that designs, builds, and implements safe water, sanitation, and hygiene (WASH) solutions for people in developing countries and disaster areas. Since 2001, Water Mission has used innovative technology and engineering expertise to provide access to safe water for more than 3.2 million people.

With over 300 staff members working around the world in permanent country programs located in Africa, Asia, Latin America, and the Caribbean, Water Mission provides safe water and sanitation solutions in more than 53 countries.

Water Mission by the numbers to date:

- **2,300** safe water and sanitation projects built
- **1,100** solar pumping solutions installed
- **128,000** people provided access to sanitation
- **3,200,000** people provided access to safe water

water builds™ We build safe water solutions that break through the global water crisis.

Water Mission is a trademark of Water Mission.

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Water Mission’s Sustainable Project Model

The manner in which rural safe water supply projects are implemented is critical to sustainability. Three key elements enable ongoing, reliable safe water service (this brochure is primarily focused on the first two):

1. Technical Design – Solutions need to be designed in accordance with engineering standards while also accounting for unique cultural context and supply chain limitations.

2. Onsite Project Management – Reliable project management is required to ensure the system is constructed and processes executed in accordance with the design.

3. Community Development – The people processes and systems necessary to operate and maintain equipment and manage ongoing finances must be planned and cultivated in collaboration with local stakeholders.

With key advantages over traditional power options, solar-powered pumping is Water Mission’s preferred solution for both ground and surface water sources. When desired, back-up power sources are also easily integrated. Water Mission’s strategic partner for back-up power systems is Kohler/SDMO. They offer a full range of diesel solutions.

Our strategic partner for solar pumping solutions is Grundfos. Their systems are direct solar-driven and do not require batteries/charge controllers. They accept a wide range of electrical inputs and have robust protection systems (run-dry and over/under voltage). This allows for minimal maintenance and long-term reliability.

Remote sensors enable authorities to ensure that a rural water supply system continues to provide reliable safe water service. Long distances and fragile in-country infrastructure can make monitoring in remote areas a challenge. Water Mission overcomes this challenge through the use of an equipment-agnostic, satellite transmission-based remote monitoring technology known as SatWater.

- Using the SatWater Communicator, data from water systems worldwide can be transmitted via satellite to an accessible online database.
- The SatWater Communicator is designed to receive and transmit data on a daily basis, including water level, flow, pressure, and quality.

After water is treated, it is stored in an elevated tank and gravity-fed to access points throughout the community. The number and location of access points is determined in the design phase. Design is driven by a goal of providing access to safe water <100m from residences. Access to water at institutions is also prioritized.

The Potable Water Chlorinator is designed to disinfect water from clear water sources (i.e. boreholes, wells, springs, etc.) providing protection against recontamination during collection, transport, and storage. It is easy to operate and requires minimal maintenance. Design flow rate is up to 5m³/hr, and multiple chlorinators can be installed in parallel to allow for higher flow applications.