



## WaterStep Addresses Water, Sanitation, & Hygiene (WASH) Head-On

Far too many people in the world lack reliable access to safe water, sanitation, and hygiene (WASH). WaterStep aims to improve that access wherever possible – and in a comprehensive way. Below, we set out the problems we address, our goals in solving them, our support of the UN’s Sustainable Development Goals, our strategies for reaching those goals, our specific capabilities, what we’ve accomplished so far, and what we plan to accomplish before the end of 2028.

### The Problem

Current estimates are shocking: With 8.1 billion people on the planet, one in five lack basic water service, almost one in ten have no improved toilets, and more than two in five lack basic hygiene. At the United Nations’ 2023 Water Conference, global WASH initiatives were described as fragmented and ineffective. Not surprisingly, WASH deficits are far worse in the least-developed countries.

Around the world, WASH deficits are preventing healthcare facilities and their workers from delivering health services effectively. According to the World Health Organization, “Without sufficient safe water, sanitation, and hygiene services in health care facilities, countries will not achieve the targets set out in UN Sustainable Development Goal 3 (ensure healthy lives and promote health and well-being for all ages) and Goal 6 (ensure availability and sustainable management of water and sanitation for all).”

WASH challenges are not limited to developing countries. As natural and man-made disasters continue to increase, and water emergencies related to climate change and infrastructure arise, we are seeing the WASH problems that were endemic in the developing world increasing in the United States.

### WaterStep’s Goals

We believe that access to safe drinking water is a human right – but today 1.7 billion people still don’t have it. WaterStep’s mission is to provide that access – combined with training and tools for proper sanitation and hygiene – to as many people as possible, as quickly as possible. Our tested system of training, patented technology, and innovation is simple and scalable. It enables communities to provide safe water and disinfection for themselves affordably and sustainably.

When health facilities and communities implement WASH programs designed on a foundation of sustainable safe water and quality disinfectant, they reduce the risk of infection for patients, caregivers, health workers, and whole communities. They enable the effective, timely prevention of cholera, diarrhea, and other water-borne diseases that fill too many scarce hospital beds. Further, community leaders and staff at health facilities are equipped to reach *out* with WASH into the broader community to improve life and opportunity, contributing to UN Sustainable Development Goals 1 (end poverty in all forms everywhere) and 11 (make cities and human settlements inclusive, safe, resilient, and sustainable). “WASH in health care facilities is a ‘best buy,’ producing a 50% return on investment.” – WHO.

Preparing communities everywhere with the training, technology, and support to manage their own water and sanitation challenges, both ongoing and in emergencies, is key to creating sustainable, resilient solutions. This is precisely the work that WaterStep does.

## WaterStep Supports Four UN Sustainable Development Goals

[The 2030 Agenda for Sustainable Development](#), adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are 17 Sustainable Development Goals, which are an urgent call for action by all countries – developed and developing – in a global partnership. They recognize that ending poverty and other deprivations must go hand in hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

WaterStep’s programs directly support four of the UN’s 2030 Sustainable Development Goals:

- **Goal 1:** End poverty in all forms everywhere.
- **Goal 3:** Ensure healthy lives and promote health and well-being for all ages.
- **Goal 6:** Ensure availability and sustainable management of water and sanitation for all.
- **Goal 11:** Make cities and human settlements inclusive, safe, resilient, and sustainable.



## WaterStep’s Strategies for Reaching These Goals

Over decades, WaterStep teams have learned much about the need for safe water and disinfection worldwide and during natural and man-made disasters at home and abroad. Applying that knowledge, we have developed holistic, simple, sustainable, scalable solutions for safe water and disinfectant – the building blocks for a community’s life, health, hope, and realizing its full potential.

The United Nations, sovereign governments, and many other NGOs very sensibly focus on centralized, “top down” solutions to address infrastructure, policy, and best practices. By contrast, WaterStep focuses on a decentralized, “bottom up” solution that all people and communities can use. We then connect these decentralized teams to work together, learn from each other, and support each other during shared crises.

We do this through two primary initiatives: **WASHUp** and **WaterRelief**. They are built on the same fundamental ideas – bring the tools, training, and support to individuals and communities where they are; empower them to address their own unique needs; and connect them with others who are doing the same work in their own communities for learning, support, and partnership.

### **WASHUp:**

WaterStep has been implementing WASH technology, health & hygiene education, and water/disinfectant programs across the world for over 25 years, designing and implementing comprehensive, resilient, and sustainable WASH programs at every level, and gathering data on outcomes for refining best practices. We have integrated all our technology, education, and resources, and we are partnering with other providers to implement a 360-degree WASHUp Program. WASHUp, when implemented in a facility or community, will provide a detailed, collaborative plan of action comprising customizable solutions for all WASH activities (including sustainable safe water, quality disinfectant, water transportation, water source maintenance, latrine sanitation, women’s special

health needs, education, training, and more). The WASHUp program's iterative methodology continually improves the quality of life and care.

The WASHUp model begins with WaterStep's proven, proprietary, simple, sustainable, scalable technology to empower communities and facilities to produce safe water and chlorine-based disinfectant. WaterStep then works with each facility or community to develop a comprehensive WASH solution for their specific problems. Then we provide ongoing support, education, and follow-up to improve WASH outcomes continuously.

**The Model** – WaterStep's WASHUp model has four components:

- 1. Onboarding** – The WASHUp program begins with a comprehensive onboarding questionnaire to establish a baseline WASHUp score. The scoring is based on facility outputs toward WASH objectives and on the World Health Organization/[UNICEF WASH FIT](#) model. We evaluate facilities in the areas of Water, Sanitation/Disinfection, Healthcare Waste, Hand Hygiene, Environmental Cleaning, Energy & Environment, and Management & Workforce.
- 2. Implementation** – WaterStep uses the resulting baseline information to develop an action plan and implementation timeline that is shared with the facility for collaboration, input, and final plan development. Once agreed upon, WaterStep follows a Train the Trainer model with facility staff, who conduct the actual implementation to meet the facility's objectives.
- 3. Monitoring & Evaluation** – Throughout the implementation and beyond, WaterStep staff work with facility staff for ongoing monitoring and evaluation. This includes regular follow-up surveys on the facility outputs to improve the facility's WASHUp score, outcomes surveys, and studies to document changes in health, economic, and other variables over at least two years to track the program's sustainability.
- 4. Support** – Beyond the implementation program, WaterStep provides ongoing, value-added support and services to enhance the facility's WASH programs. This will include training in additional services, including programs such as Hand Pump Repair, Disaster Response, and Community Health Education.

#### **WaterRelief:**

WaterStep's WaterRelief program helps communities both in and outside of the United States to address disaster management. WaterRelief provides a sustainability plan for disaster preparedness, response, and recovery to ensure that immediate and urgent water and disinfectant needs can be met quickly, safely, and efficiently when emergencies arise. We believe that the WaterRelief is the first program of its kind in the United States, providing advance training and technology, pre-positioned in communities, for emergency response solutions for safe water and disinfectant as a foundation for all other essential services.

The WaterRelief program centers around easy-to-operate, sustainable solutions with WaterStep's patented Water-On-Wheels (WOW) Cart to quickly provide volumes of safe water where needed – filling the gap between limited-use, environmentally harmful plastic water bottles and expensive, complicated reverse osmosis equipment. By partnering with other disaster responders and pre-emptively positioning equipment and trained teams, resilient communities will be more prepared

to address people’s health and well-being when crises occur, accelerating their return to self-sufficiency.

Collective responses to disasters are often disjointed and chaotic. We are not aware of any other program like the WaterRelief concept of comprehensive emergency preparedness and response capabilities. We hope it will serve as a collaborative model that can be replicated across the United States, dramatically improving how emergency services are coordinated at disaster sites.

### WaterStep’s Capabilities

WaterStep has been implementing WASH technology, health & hygiene education, and water/disinfectant programs across the world for over 25 years. We design and implement comprehensive, resilient, sustainable WASH programs at every level, and gather data on outcomes for ongoing best practices.

At WaterStep, we are creative problem solvers. We provide solutions based on what people in a community say *they* need. We tailor our solutions to country, community, climate, and culture. We work at every level – from small villages still collecting water from far away to governments that use our patented technology to pipe in safe water to entire communities.

WaterStep provides comprehensive, end-to-end support from project conception through long-term sustainability based on proprietary technology we develop and manufacture in our own facility. Our designs are driven by feedback from people who use the systems across the world. No other safe-water NGO does that.

We have the technology, the data, and the dedication to give communities what they need to live healthier lives for good.

In short, we never abandon those we help.

Our work centers around three key areas:

#### 1. **Practical WASH Technology:**

- *Water treatment* – Our ChlorineGenerator treats water, generating up to 10,000 gallons of safe drinking water daily. Its only inputs are all local – water, salt, and a supply of electricity.
- *Water transport and storage* – Our nimble WaterBall replaces hauling 40-pound jerrycans; handwashing stations enable proper hygiene; and storage solutions protect water once it’s made safe.
- *Disinfectant Production* – The BleachMaker makes chlorine bleach, perfect for home or health-care sanitation. As with our Chlorine Generator, it requires only water, salt, and a supply of electricity.

#### 2. **Education and Training** – We develop “teachers” in every community through Train-the-Trainer programs.

- *Comprehensive WASHUp Program* – safe water, sanitation, and hygiene & health for communities and facilities
- *Hand Pump Repair* – training to put broken wells back in service, thus increasing water access

3. **Emergency Response** – We support the needs of people and communities during crises to bring comfort, dignity, and health.
- We have responded to disasters in Haiti, Columbia, India, Puerto Rico, El Salvador, Kentucky, Louisiana, and other sites.
  - WaterStep’s Water-On-Wheels (WOW) Cart provides mobile flexibility to allow water treatment under difficult circumstances.

### **What We’ve Done So Far, and What We Plan to Do**

To date, WaterStep has served over **12 million people**, with 3.3 million of these added in 2023 alone. This impact is possible because of the dedicated global team that includes more than 160 team members in 72 countries, all of whom are unpaid volunteers seeking to bring hope, health, and opportunity to their own communities. We have done this one team member, one community, and one project at a time, with just over **5,000 projects** completed internationally to date. As our volunteer team continues to expand internationally, word is spreading of the impact these simple solutions can make, and innovative ideas have blossomed. WaterStep team members began to ask, *“If our technology and training work in so many settings, what would it take to bring them to scale and help more people?”*

In response to this simple question, WaterStep embarked on a bold initiative in 2023 to expand our reach exponentially by scaling our programs to serve facilities that enhance the health of entire communities. Our focus for growth now includes complete programming for hospitals, prisons, schools, orphanages, and other facilities with our safe water and disinfection solutions. We have partnered with large health NGOs, national governments, and others internationally to bring our comprehensive solutions alongside their programs. When they do what they do best and WaterStep does what we do best, we can dramatically expand the number of people whose lives can be improved with WASH access. We believe that this strategy is something BIG, something that will multiply, something that can accelerate the way WASH is implemented around the world.

Our five-year plan, through 2028, focuses on exponential, strategic growth in five specific countries – Colombia, the Democratic Republic of Congo, Kenya, Uganda, and Zambia. Collaborating with local partners in these countries, we have developed detailed country plans that will allow us to reach 130 million people at a cost of \$65M. In 2024, we will launch a global campaign to build awareness, funding, and additional collaborations to meet this ambitious goal.