

MOBILE EMERGENCY WATER TREATMENT

WOWcart™

Water on Wheels. A compact, modular treatment system that turns almost any fresh water source into safe water in under two hours.

600 gph

MAXIMUM
CAPACITY

<2 hrs

SETUP TO
FIRST POUR



CERTIFIED TO
NSF/ANSI/CAN 61

4 stage treatment

CUSTOMIZABLE
TREATMENT OPTIONS



Disasters are unpredictable. Safe water shouldn't be.

SAFE WATER. ANYWHERE. AT SCALE.

Access to safe drinking water during a disaster or municipal water system failure is essential for survival. It helps maintain basic hygiene and prevents the spread of disease. When water infrastructure is knocked offline

or becomes compromised, people rely on costly bottled water that's tough to transport when roads are impassable and can't be used to prepare food, shower, or do laundry – and then ends up in a landfill.



That's why WaterStep created a mobile water treatment system to supply communities with enough safe water until municipal systems come back online. **It starts with the WOWCart, a mobile water treatment plant.** WaterStep also custom designs prefilter carts that are designed for customers based on their on-site water contamination profiles.



Why is WaterStep different

WaterStep has spent 30 years solving some of the most technical and complex safe water problems in the toughest places in the world. Over 5,000 projects in 72 countries have been completed, impacting the lives of more than 15 million people. We're driven by innovation because we want to save lives. ***Sales of WaterStep equipment fund our mission.***

Since 1995, WaterStep has evolved from a small service organization to a global leader in safe water solutions. WaterStep develops and manufactures simple tools, patented technology, and effective training to empower people and communities to solve their own water and sanitation needs. ***WaterStep combines safe water and disinfectant technology, and health and hygiene education so unsafe water doesn't become the second disaster.***

THE WATERSTEP WAY

For communities responding to a disaster or municipal water disruption, medical assistance, potable water, and disinfectant are the highest priority. WaterStep helps communities and agencies - such as Emergency Management Agencies and Rural Water Associations - ***develop a plan to implement our technology and training before disaster strikes.***

Most disaster responses are chaotic, disjointed, and inefficient, with every organization doing its own thing - people setting up where they can and often depleting the few local resources available when they arrive.

WaterStep believes a pre-planned, organized approach better serves communities until traditional infrastructure can be restored. WaterStep's emergency response efforts focus on immediate access to safe water and disinfectant that can be produced on-site.



BleachMaker™

**Portable on-site
disinfectant.**

- 5L of disinfectant in 75 minutes
- Bleach solution exceeds WHO standards of 5,000ppm
- Disinfects/kills blood-borne pathogens, fecal matter, viruses
- Requires only salt, water, and a 12V DC power source (battery, grid, solar)



We don't compromise.

PERSON		WATER NEEDED (MINIMUM)
	ADULT	1  GALLON PER DAY
	CHILD (3-12)	3/4  GALLON PER DAY
	CHILD (UNDER 3)	1/2  GALLON PER DAY
	STORE AT LEAST 3 DAYS' SUPPLY PER PERSON	
		

The Centers for Disease Control and Prevention recommends storing at least one gallon of water per person, per day. This amount is for drinking, hygiene, and food preparation. The WOWCart™ can produce up to 600 gallons of safe water per hour.

WaterStep's bottom line is to save lives and keep people healthy with safe drinking water during disasters. That's why we're committed to uncompromising standards. We provide high-quality drinking water, high output, and high energy efficiency with equipment certified to NSF/ANSI/CAN 61 that uses filtration, UV light, and chlorination.

DAILY WATER NEEDS

Source: CDC-Emergency Water Supply Guidelines:
cdc.gov/water-emergency

WOWCart™ Quick Facts



CERTIFIED TO
NSF/ANSI/CAN 61

The WOWCart™ is a patented, NSF/ANSI/CAN 61-certified mobile water treatment plant on wheels:

Multi-Source Safe Water

Connects to municipal water lines or pulls from local streams, rivers, and lakes to reduce traffic and waste from tankers and plastic bottles

Produces up to 600 GPH of safe water

On-site, filling water bladders (two 1,250 collapsible bladders included with purchase), tanks, or tankers

Four stage treatment

Includes carbon and micron filtration, chlorine gas generation, and UV disinfectant (additional filtration options available)

Power source flexibility

Operates on a dual-fuel generator (included with purchase) or 110V AC standard wall outlet.

Multiple applications

Can be used with laundry and shower trailers, and food trucks

Fits into the bed of a pickup truck

Can be transported and deployed by two individuals, producing safe water within two hours of setup

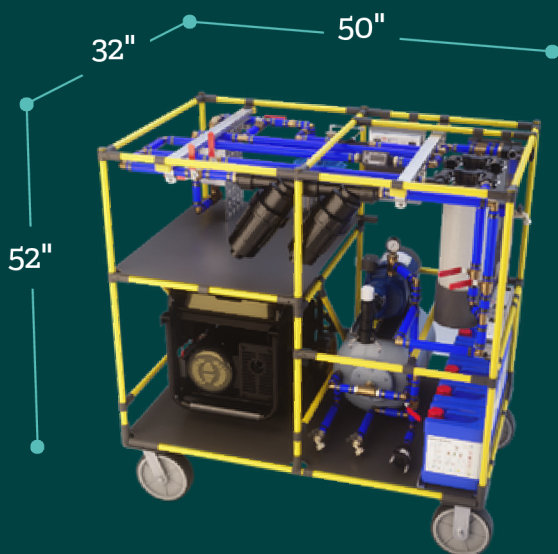
WaterStep offers flexible solutions

WaterStep has created a mobile water treatment system that is NSF/ANSI 61 certified and approved for drinking water.

Each disaster has a unique water contamination profile. The WOWCart™ is capable of purifying boil-advisory or tanker water from 15 NTU to 1 NTU. When paired with our prefilter accessory, it can treat open-source water from 100 NTU to 1 NTU.

The prefilter accessory can include additional filtration media and can be customized to treat water with complex contaminants and high turbidity levels to meet NSF/ANSI 419 standards.

The system is easy to transport, set up, and operate with in-person and remote WaterStep training options available. The system fits in the bed of a pickup truck.



TRANSPORT & STAGING

**Fits in a pickup truck bed.
Rolls through doorways.
Ready when you are.**

The cart fits in the bed of a pickup truck, rides on a single pallet, and can be positioned by two people.

LENGTH
50" (127cm)

WIDTH
32" (81cm)

HEIGHT
52" (132cm)

In the Field

KENTUCKY DEPARTMENT OF CORRECTIONS

In 2012, the city of Louisville, Ky., experienced a series of massive watermain breaks that disrupted a large portion of the city. The county jailer was 24 hours away from having to move inmates to motels. Work crews fixed the substantial leaks, but the city knew it could never again be that close to having to move inmates en masse. So, city officials contacted WaterStep and asked experts to create a mobile emergency water treatment system. Thus, the WOWCart™ was born.

Today, 14 prisons in Kentucky each have two WOWCarts™ and trained staff to use them in case of a boil advisory or natural disaster.



KENTUCKY DEPARTMENT OF HEALTH

WaterStep equipped first responders to assist with water access through the Kentucky Department of Health after tornadoes hit Western Kentucky in 2021 and floods devastated Eastern Kentucky in 2022. The department now has five WOWCarts™ to deploy across the commonwealth during disasters and has included the equipment in its state emergency operations plan. With WaterStep's help, the department is leading the nation in a new approach to disaster response.

“WaterStep worked with four state agencies/organizations to operate the WOWCart for potable water distribution. WaterStep is a proven partner in disaster response efforts.”

ANDY BESHEAR • GOVERNOR OF KENTUCKY





1250 gal collapsible bladder tanks (2)

IBC Demo Test Tanks
(Not Included, or required)

Dual Fuel Generator

WOWCart

PreFilter

Floating Water Intake

IN THE FIELD

Real World Solutions.

U.S. AND GLOBAL DISASTERS

WaterStep's mobile water treatment system has been deployed multiple times across the United States and globally, including after Hurricane Laura in Lake Charles, Louisiana in 2020; to the Kyiv Emergency Services Agency in Ukraine at the start of the war in 2023; to Asheville, North Carolina after Hurricane Helene in 2024; and to Jamaica in 2025 after Hurricane Melissa struck the Caribbean island.



Louisiana, 2020.



Jamaica, 2025.



“The WOWCart fills a void that exists in communities when trying to recover from a water disaster by providing sufficient quantities of safe water for not only drinking but for food preparation, showering, laundry, and general sanitation. The WOWCart can also be the interim, or permanent, solution for disadvantaged communities.”

JIM GOODRICH, PHD. • SR. SCIENCE ADVISOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF RESEARCH & DEVELOPMENT
CENTER FOR ENVIRONMENTAL SOLUTIONS & EMERGENCY RESPONSE

EPA RESEARCH



WEBSITE

EXPLANATION



VIDEO

OPERATION



TUTORIAL

WaterStep

— MOBILE EMERGENCY WATER TREATMENT PLANT

WOWCart™

WOWCart™ delivers municipal-grade potable water in a fully mobile form – field tested with USEPA, state agencies, and emergency responders; and certified to NSF/ANSI/CAN 61 as the safest, most trusted mobile water treatment system available. A compact, modular, and rugged water treatment plant on wheels, WOWCart™ produces up to 600 gallons of safe water per hour.

600 gph

**MAXIMUM
CAPACITY**

<2 hrs

**SETUP TO
FIRST POUR**



**CERTIFIED TO
NSF/ANSI/CAN 61**

4 stage treatment

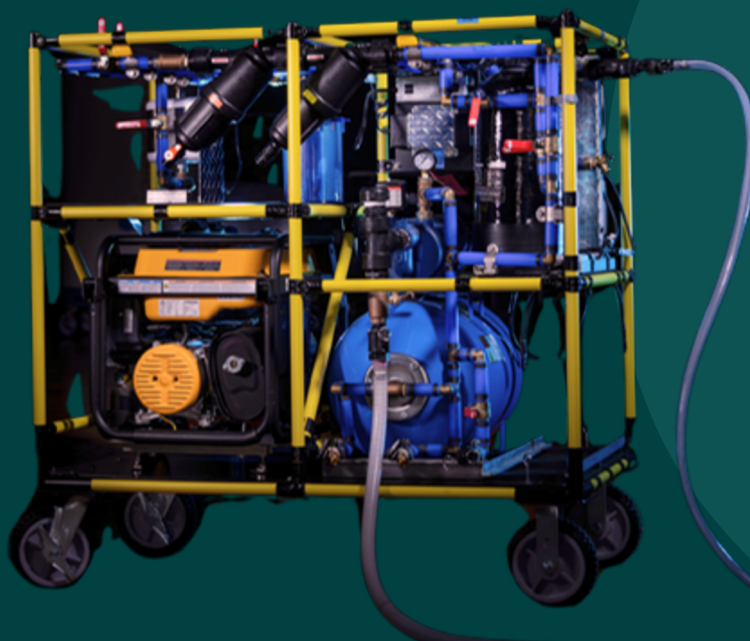
**CUSTOMIZABLE
TREATMENT OPTIONS**

Based on WaterStep's 30 years of experience providing sustainable, safe water solutions under extreme circumstances in some of the toughest places in the world, WOWCart™ is ideal for emergency water supply during disasters, rural and small-system utility augmentation, infrastructure resilience and preparedness programs, and mobile water treatment for field teams in remote operations.

**Disasters are
unpredictable.
Safe water
shouldn't be.**

Features and Benefits

- Connects to municipal water lines, or pulls from local streams, rivers and lakes
- Produces up to 10 GPM/600 GPH of safe water on-site, filling water bladders (2 x 1,250 gallon collapsible bladders included with purchase), tanks, or tanker trucks
- Includes carbon and micron filtration, chlorine gas generation, and UV treatment (additional filtration and treatment options available)
- Produces medical-grade bleach on-site
- Operates on a dual fuel generator (included with purchase), 110V AC standard wall outlet, or battery-based generators
- Can be used with laundry, shower, and food trailers
- Fits into the bed of a standard pickup truck, and can be transported and deployed by just two individuals – producing safe water within 2-hours

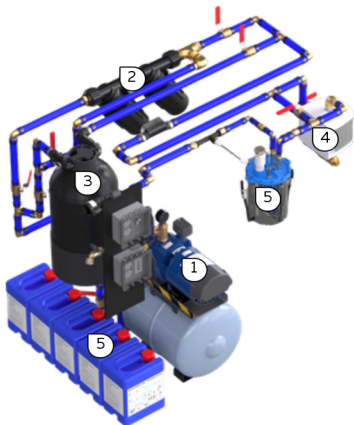


waterstep.org

**WOWCART
PARTNERS**



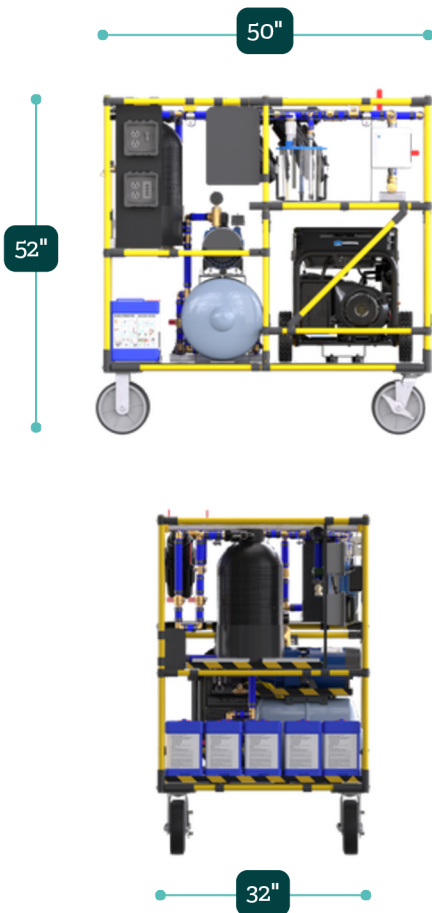
Co-developed by WaterStep and the U.S. EPA through a Cooperative Research and Development Agreement, WaterStep's WOWCart™ is American-made in Louisville, Kentucky.



- 1. Jet pump and compressor tank:** Pulls water from source into the WOWCart and stores pressurized water.
- 2. Micron filtration:** 100-micron filter traps large debris like coarse sand, heavy rust, large, suspended solids, while 50-micron filter traps fine sand, larger silt, algae, fibrous impurities.
- 3. Granular Activated Carbon (GAC) filtration:** Highly effective at removing volatile organic compounds (VOCs), pesticides, and substances that cause bad tastes and odors.
- 4. UV-C LED treatment unit:** Disinfects water using short-wavelength ultraviolet light to destroy DNA or RNA of harmful pathogens. Renders bacteria, viruses, and mold spores unable to reproduce or survive, neutralizing them without the use of chemicals or harsh byproducts.
- 5. Chlorine gas generator:** Produces chlorine gas on-site and on-demand, eliminating the need to transport or store hazardous liquid bleach and pressurized gas cylinders.
- 6. BleachMakers:** Each portable unit produces 5 liters of .0.6% sodium hypochlorite (NaOCl) solution, exceeding WHO recommendations, in 70 minutes using only iodized salt and water.

Specifications

Cart Frame Dimensions	50" L (4.25ft) x 32" W (2.66ft) x 52" H (4.25ft)
Cart Frame Material	Wrapped Steel
Cart Weight	<500lbs (739lbs with included generator/two bladder tanks)
Treated Water Production Flow	Up to 10 GPM/600 GPH
Source Water Turbidity (standard cart)	<15 NTU
Source Water Turbidity (with prefilter cart)	<100 NTU
Treated Water Turbidity	<1 NTU
Microbial Pathogen Removal Rate	*7-log reduction using the USEPA "log reduction scale = 99.99999% pathogens eliminated / 1 in 10,000,000 survival rate.*
Micron Filtration	100-micron and 50-micron screen filters
Carbon Filtration	Granular Activated Carbon (GAC)
UV-C LED Treatment Unit	16 mj/cm ² dose at 12 GPM, 5-year lamp life, mercury-free, no fragile sleeves, 280nm wavelength
Chlorine Gas Generator	Onboard chlorine gas generation
Jet Pump & Compression Tank	50hz flint and walling, ½ HP jet pump, capacity up to 1,200 GPH and pressures up to 50 PSI, suction lift 0' to 17'
BleachMaker™	Portable and detachable bleach-making units produce 0.7% sodium hypochlorite disinfectant solution on-site.
Pillow Bladder Tanks	2x 1,250 gal foldable bladder tanks
Water inlet and outlet fittings	1.5" in/0.75" out internal thread
Cleaning Process	Chlorine liquid soak and air purge. Carbon media replacement.
Portable Generator	On-board 4,500W dual-fuel generator (gasoline/propane)
Power Source Input	110V plug-in to standard outlet (220V converter included)



*The U.S. EPA used three distinct contamination challenges – each representing a different disaster scenario – to test WOWCart's pathogen removal ability:

1. *Bacillus globigii* (BG) – an anthrax surrogate, representing a bioterrorism event or catastrophic source water contamination.
 2. *E.coli* & Total Coliforms – representing post-flood fecal contamination of source water.
 3. *E.coli* & Diesel Fuel Simultaneously – representing flood water after a pipeline break, fuel tank breach, or infrastructure failure
- Source: EPA/600 R-19/078 | June 2019. www.epa.gov/homeland-security-research

For more information visit us at WaterStep.org. For sales, lease or rental information, and service and maintenance related support email Sales@WaterStep.org or call +1-502-568-6342, Ext. 5.

Dual Fuel Generator

1250 gal collapsible
bladder tanks (2)

UV Disinfectant

Chlorine Generator

Carbon filtration

Micron Filtration

Onboard disinfectant

Intake valve filtration

THE STANDARD SET UP

Emergency Water Made Simple.

REQUEST A DEMO

Safe water. Anywhere.

The WOWCart was co-developed by WaterStep and the U.S. Environmental Protection Agency through a Cooperative Research and Development Agreement. American-made in Louisville, KY. Covered by Patent US 11,731,894 B2.

“It brings together possibilities. It brings together some security. And it brings the opportunity that I can operate this with my team — and my team can teach others how to operate it as well.”

— MARK HOGG • FOUNDER & CEO

GET IN TOUCH

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PHONE **+1.502.568.6342 Ext. 5**

ONLINE **waterstep.org**

REQUEST A DEMO →

NEXT GEN

DRIPS

Militarized variant with RO, telemetry, and all-terrain wheels.

IN SERVICE

34 facilities

Prisons, Army Corps, DoD, Ukraine, and Caribbean deployments.

ASK ABOUT

ADD-ONS

A pre-filter cart is available for high turbidity levels.

Specialized filters and custom solutions available.

PARTNERS

R & D

U.S. EPA • DoW • USGC • USACE • GE Appliances • AquiSense • Rural Water Association • Kentucky Public Health • University of Kentucky • University of Louisville

PATENT US 11,731,894 B2

STANDARDS Certified to NSF/ANSI/CAN 61 • U.S. EPA Water Security Test Bed validated

ORIGIN Designed and hand-built in Louisville, KY • Co-developed with the U.S. EPA

Turn thirst into hope.

waterstep.org