



# Case Study Aquifer 360 Watermakers in Colombia

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KATADYN GROUP  
SWITZERLAND

**Project:** Water Relief and Local Training in Colombia

**Customer:** World Hope International

**Product:** Aquifer 360 Flight Ready Watermaker

**Date:** December 2020

## Location

Santa Catalina Island, Colombia

## Overview

World Hope International delivered humanitarian aid and trained local technicians on Spectra Aquifer 360 Watermakers in the wake of Hurricane Iota. These Aquifer 360 units remained on the island, producing freshwater while a permanent Spectra landbased desalination solution could be installed.

## The Client

World Hope International

## Project Details

Hurricane Iota impacted much of the Caribbean and Central America in late 2020, making landfall as a Category 5 storm on November 16th, 2020. The small Colombian Island of Santa Catalina was severely impacted by Hurricane Iota. 98% of all infrastructure was destroyed and most structures demolished. World Hope International responded to provide aid to this water-stressed community and train them to operate lifesaving desalination equipment on their own.

The Colombian Military assisted with the delivery of the unit to Santa Catalina, by way of plane and small watercraft. The Aquifer's portability and safety for air travel (due to the lack of volatile fuel tanks) made it much easier to deliver to the isolated area. For this deployment, however, the Aquifer's ease of operation is also a major asset. Local technicians were trained to use the watermakers, as the units would remain on Santa Catalina until a larger Spectra Landbased Desalination System could be installed. The World Hope Waterpoint on Santa Catalina is directly providing residents with fresh water as they work to rebuild and recover from hurricane damage. The Aquifer's solar panels allow the system to produce water without the need for external power, a crucial advantage with the current lack of infrastructure on the island.

The fixed recovery ratio of Spectra's Energy Recovery system is also important, as the system is self-regulating and the operator cannot cause damage by incorrectly operating the watermaker. Only minimal training was required to create a local team of operators that will continue to operate the World Hope's Aquifers in the coming months. Colombian President Iván Duque Márquez visited the waterpoint along with his water and housing ministers and sampled the clean water produced by the Aquifers. He praised the project and expressed support for future use of Spectra's technology to help alleviate Colombia's water issues.



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## About the Watermaker

The Spectra Aquifer 360 Flight Ready utilizes proven reverse osmosis technology that has been used for decades at sea to provide fresh water to sailors with limited power onboard. The rugged simplicity of the Aquifer system means it can easily be operated by volunteers or local operators who have very limited technical training. The Aquifer's self-regulating energy recovery system does not require constant monitoring, in contrast to conventional reverse osmosis systems that can suffer from overpressure and membrane damage when operating unsupervised.



## About World Hope International

World Hope International (WHI) is a Christian relief and development organization working with vulnerable and exploited communities to alleviate poverty, suffering, and injustice. WHI focuses on clean water & energy, global health, protection, and social ventures around the world. Using market-based and community-driven solutions, WHI empowers, protects, and builds resiliency through innovative, environmentally conscious, and transformative projects.



## About the Katadyn Group

The Katadyn Group is a global corporate group specialized in the area of self-sufficient nutrition and drinking water supply. Its brands include Katadyn, Trek'n Eat, Alpine-Aire Foods, Optimus, Pharmavoyage, Micropur, Certisol, Steripen, and Spectra Watermakers. With this broad brand portfolio, the group provides products and solutions for the outdoor and marine industries as well as for industrial and municipal needs. Its diverse product portfolio ranges from freeze-dried specialty meals and outdoor cooking gear to mobile and land-based water desalination systems and specialized disinfection systems for the industry. Indeed, humanitarian aid organizations and the military for years have been regular customers of the Swiss group of companies. With headquarters in Kempththal, the Katadyn Group employs about 200 people at its subsidiaries in Europe, Asia, and the United States.



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