

FISCAL YEAR (FY) 2018

# WATER, SANITATION, AND HYGIENE SECTOR UPDATE



USAID partner the UN Children's Fund (UNICEF) delivers safe drinking water in Dominica after Hurricane Maria damaged the island's water distribution network. Photo by Trevor White/USAID.

## Providing Safe Drinking Water to Hurricane-Affected Households

Successive hurricanes tracked through the Caribbean in September 2017, bringing destructive winds, heavy rainfall, and dangerous storm surges to affected islands, leading to at least 52 fatalities and causing significant infrastructure damage across the region. Hurricane Maria—the strongest Atlantic hurricane on record—passed over Dominica as a Category 5 storm on the Saffir-Simpson Hurricane Wind Scale, severely damaging or destroying more than 90 percent of buildings and severely damaging nearly all of the island's piped water systems.

In response, USAID/OFDA partnered with non-governmental organization (NGO) Samaritan's Purse to operate four portable water filtration and chlorination units, establish water distribution points, and transport safe drinking water to communities across Dominica without access to treated water. USAID/OFDA also supported Samaritan's Purse to procure replacement pipes and other materials required to repair Dominica's severely damaged water distribution systems. Additionally, USAID/OFDA partnered with UNICEF to conduct water trucking operations to hurricane-affected areas where water supply networks were non-functional.

## USAID/OFDA WASH Activities

### FY 2018 FUNDING

Standalone Global and Regional WASH Programs	\$3,028,447
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WASH Interventions Worldwide	\$320,514,810
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**\$323,543,257<sup>1</sup>**

## Sector Overview

Water, sanitation, and hygiene (WASH) programs represent vital components of USAID Office of U.S. Foreign Disaster Assistance (USAID/OFDA) responses, as disaster-affected populations are more susceptible to illness and death from waterborne diseases. WASH interventions in emergencies often include construction or repair of latrines, hygiene support, solid waste removal, and the provision of safe drinking water. USAID/OFDA also links emergency WASH activities with transition and development programs funded by other USAID offices and involves institutional partners—such as local governments—to promote the sustainability of water- and hygiene-focused projects. USAID/OFDA support to operational research also enables the development and testing of improved emergency sanitation options for challenging environments, such as densely populated or flood-prone areas.

<sup>1</sup> USAID/OFDA FY 2018 WASH sector funding supported activities in 39 countries, including Burma, Haiti, Nigeria, and Yemen.

USAID/OFDA also provided emergency WASH assistance to populations affected by Hurricane Irma in Saint-Martin. The hurricane, which made landfall as a Category 5 storm on the Saffir-Simpson Hurricane Wind Scale, caused at least 12 fatalities, more than 110 injuries, and widespread, catastrophic damage to property and critical infrastructure. The storm also rendered the island's sole water desalination plant inoperable, leaving Saint-Martin's estimated 40,000 residents without a reliable source of safe drinking water. After establishing temporary water treatment plants on the island, USAID/OFDA partnered with the French Red Cross in Saint-Martin to establish water distribution points, as well as procure and distribute emergency hygiene kits, ensuring access to safe drinking water and basic hygiene supplies for many vulnerable communities.

## Delivering Emergency Water Assistance to Ar Raqqa City

Following the recapture of Syria's Ar Raqqa city from the Islamic State of Iraq and Syria in late October 2017, civilians returning to Ar Raqqa found severe damage to the city's infrastructure, including Ar Raqqa's water treatment stations, water distribution network, and electrical grid. In the absence of an operational public water system, privately operated water tankers began supplying returnees to Ar Raqqa with untreated water from the Euphrates River, increasing the risk of waterborne illness transmission. To improve access to safe drinking water, USAID/OFDA partnered with an organization to post technicians at strategic points along the Euphrates River to disinfect river water carried by the tankers. By mid-March 2018, USAID/OFDA was supporting the treatment of an average of 2,800 cubic meters of river water per day—sufficient to provide approximately 70,000 people with 40 liters of safe drinking water per person each day.

USAID/OFDA partners also prioritized the rehabilitation of one of Ar Raqqa's main water stations, including repairing the station's electrical control panels, generator, pumps, valves, and other infrastructure damaged by conflict. In addition to repairs, USAID/OFDA partners installed new equipment to chlorinate and disinfect water and provided local station managers with long-term supplies of chlorine, fuel, and oil. By January 2018, the rehabilitated station was providing 6,000 cubic meters of safe drinking water per day to residents of eastern Ar Raqqa, as well as to six water collection points used by public and private water tankers, reaching an estimated 75,000 people with 40 liters of safe drinking water per person per day.

## USAID/OFDA Support for Hygiene Behavior Change Research

Poor hygiene behaviors increase the risk of diarrheal diseases—a major cause of morbidity and mortality in humanitarian emergencies. While there has been considerable research on motivations to change hygiene behaviors in development contexts, similar research has been limited in humanitarian settings. Since FY 2016, USAID/OFDA has funded the NGO Action Against Hunger, the Centre for Affordable Water and Sanitation Technology, and the London School of Hygiene and Tropical Medicine to implement WASH 'Em—a program that adapts evidence-based research on handwashing from the development sector to emergency contexts. For example, USAID/OFDA-funded research in the Democratic Republic of the Congo and Iraq identified changes to handwashing behaviors as populations experienced different phases of displacement—important evidence to support the design of more effective humanitarian WASH programs. Using findings like these, WASH 'Em researchers are providing evidence-based tools and recommendations to support the design of more effective behavior change programs to promote handwashing.

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