



# At a Glance

## Why We Did This Project

The U.S. Environmental Protection Agency's (EPA's) Office of Inspector General (OIG) is conducting an audit to determine how the EPA's preparedness and response efforts for the three major hurricanes of calendar year 2017—Harvey, Irma and Maria—protected human health and water resources from storm-related drinking water and surface water contamination. This report addresses EPA Region 4 water-related preparedness and response efforts for Hurricane Irma. Hurricanes Harvey and Maria are addressed in separate OIG reports.

Hurricane Irma made landfall in Florida on September 10, 2017. The National Hurricane Center rated the hurricane as a Category 4 storm, with wind speeds of 130 miles per hour when it reached Florida. Over half of the state's residents were left without power and the storm caused \$50 billion in damage to residential and commercial property. In addition, the storm impacted approximately 85 percent of the state's drinking water and wastewater facilities.

## This report addresses the following:

- *Ensuring clean and safe water.*
- *Partnering with states and other stakeholders.*
- *Operating efficiently and effectively.*

Address inquiries to our public affairs office at (202) 566-2391 or [OIG\\_WEBCOMMENTS@epa.oig](mailto:OIG_WEBCOMMENTS@epa.oig).

[List of OIG reports.](#)

## Region 4 Quickly Assessed Water Systems After Hurricane Irma but Can Improve Emergency Preparedness

### What We Found

The EPA completed its Hurricane Irma mission assignment, to assess water systems, within a 15-day period. Region 4's water emergency response team gathered and reported data on the status of drinking and wastewater facilities and response efforts in Florida—the only state where the Federal Emergency Management Agency (FEMA) tasked Region 4 with a mission assignment. The state's drinking water and wastewater facilities returned to service within days or weeks after the hurricane, limiting the public's exposure to contaminated water.

**EPA staff training with state partners and development of standard operating procedures could improve emergency response.**

Region 4's close working relationship with the Florida Department of Environmental Protection and the development of a supplemental database to complement the state's water and wastewater data systems were key factors in protecting human health and water resources in the aftermath of Hurricane Irma. Region 4 developed a draft standard operating procedure for managing an emergency response in 2010, which was revised in 2012, that addresses these issues, but the procedure was never finalized. We found that some EPA staff members were unfamiliar with some of the region's internal emergency response protocols. We also found that the Water Division had not conducted any emergency response training or exercises with its state partners in preparation for Hurricane Irma. By finalizing procedures and conducting regular training, Region 4 can improve the efficiency and effectiveness of its response efforts.

### Recommendations and Planned Agency Corrective Actions

We recommend that the EPA Region 4 Regional Administrator direct the Water Division to finalize its standard operating procedure for disaster response and conduct annual hurricane emergency response exercises with state partners.

Region 4 agreed with the two recommendations and implemented corrective actions for Recommendation 2 by beginning to conduct annual hurricane emergency response exercises with state partners. The corrective actions for Recommendation 2 are complete upon issuance of this report. A corrective action for Recommendation 1—finalizing a standard operating procedure for disaster response—is pending.