



U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL

Ensuring clean and safe water

EPA Region 6 Quickly Assessed Water Infrastructure after Hurricane Harvey but Can Improve Emergency Outreach to Disadvantaged Communities

Report No. 19-P-0236

July 16, 2019



Report Contributors:

Stacey Banks
Kathlene Butler
Timothy Roach
Nirvair Stein
Khadija Walker

Abbreviations

EPA U.S. Environmental Protection Agency
ESF Emergency Support Function
FEMA Federal Emergency Management Agency
OIG Office of Inspector General
TCEQ Texas Commission on Environmental Quality

Cover Image: Flood waters from Hurricane Harvey overwhelm a wastewater treatment plant in Vidor, Texas. (Photo courtesy of Orange County Water Control and Improvement District No. 1)

Are you aware of fraud, waste or abuse in an EPA program?

EPA Inspector General Hotline
1200 Pennsylvania Avenue, NW (2431T)
Washington, DC 20460
(888) 546-8740
(202) 566-2599 (fax)
OIG_Hotline@epa.gov

Learn more about our [OIG Hotline](#).

EPA Office of Inspector General
1200 Pennsylvania Avenue, NW (2410T)
Washington, DC 20460
(202) 566-2391
www.epa.gov/oig

Subscribe to our [Email Updates](#)
Follow us on Twitter [@EPAoig](#)
Send us your [Project Suggestions](#)



At a Glance

Why We Did This Project

We conducted this audit to determine how the U.S. Environmental Protection Agency's (EPA's) preparedness and response efforts for the three major hurricanes of calendar year 2017—specifically, hurricanes Harvey, Irma and Maria—protected human health and water resources from storm-related drinking water and surface water contamination. This report addresses the Region 6 response to the drinking water and wastewater facilities impacted by Hurricane Harvey.

Hurricane Harvey made landfall as a Category 4 storm on August 25, 2017. In Texas alone, Hurricane Harvey claimed 68 lives, dropped approximately 19 trillion gallons of rainwater and caused damages estimated at \$125 billion.

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.gov.

List of [OIG reports](#).

EPA Region 6 Quickly Assessed Water Infrastructure after Hurricane Harvey but Can Improve Emergency Outreach to Disadvantaged Communities

What We Found

The EPA Region 6 water-related response focused on determining the operational status of drinking water and wastewater facilities over a 3-week period in the aftermath of Hurricane Harvey. Extensive preparation activities and close working relationships with state emergency response partners enabled Region 6 to protect human health and water sector resources as part of its Hurricane Harvey mission assignment. The Region 6 Superfund and Water Quality divisions coordinated with the Texas Commission on Environmental Quality (TCEQ) to conduct drinking water and wastewater facility reviews, as well as to perform limited on-site technical assistance. These reviews enabled EPA and TCEQ response staff to successfully determine and track the operational status of facilities.

Enhancements to environmental justice outreach efforts during emergencies could improve the public health protections of communities impacted by hurricanes or other disasters.

While Region 6 successfully fulfilled its water sector mission assignment in the aftermath of Hurricane Harvey, we identified one area for improvement—staff outreach to residents of vulnerable communities—that would further enhance the region's emergency response capabilities.

Recommendations and Planned Agency Corrective Actions

We recommend that the EPA Region 6 Regional Administrator (1) include environmental justice outreach in planning and pre-landfall preparation exercises by gathering data to determine the population, unique needs and challenges of vulnerable communities; (2) revise the Region 6 pre-landfall hurricane plan to incorporate environmental justice outreach; (3) implement the recommendations to improve environmental justice outreach identified at a June 2018 environmental justice forum; and (4) prepare and produce all outreach materials in advance, in sufficient quantities and in the region's prevalent languages, and post all translated materials online.

EPA Region 6 agreed with three of our recommendations but requested a modification to Recommendation 3. However, we determined a modification was not needed, since the region's proposed corrective actions address the intent of Recommendation 3. We therefore consider all four of our recommendations resolved with corrective actions pending. Region 6 officials have agreed to complete corrective actions by March 31, 2021.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
INSPECTOR GENERAL

July 16, 2019

MEMORANDUM

SUBJECT: EPA Region 6 Quickly Assessed Water Infrastructure after Hurricane Harvey but Can Improve Emergency Outreach to Disadvantaged Communities
Report No. 19-P-0236

FROM: Charles J. Sheehan, Deputy Inspector General

A handwritten signature in blue ink that reads "Charles J. Sheehan".

TO: David Gray, Acting Regional Administrator
Region 6

This is our report on the subject assignment conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). The project number for this audit was OPE-FY18-0005. This report contains findings that describe the problems that the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

The EPA Region 6 Regional Administrator is responsible for the issues discussed in this report.

In accordance with EPA Manual 2750, your office provided acceptable corrective actions and milestone dates in response to OIG recommendations. All recommendations are resolved with corrective actions pending, and no final response to this report is required. However, if you submit a response, it will be posted on the OIG's website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal along with corresponding justification.

We will post this report to our website at www.epa.gov/oig.

Table of Contents

Purpose	1
Background	1
Scope and Methodology	2
Results	2
Region 6 Tracked Facility Status	3
Region 6 Staff Conducted Outreach to Vulnerable Communities	3
Region 6 Successfully Completed Mission Assignment	3
Area for Improvement.....	4
Recommendations	6
Agency Response and OIG Evaluation	6
Status of Recommendations and Potential Monetary Benefits	8

Appendices

A Initial Agency Response	9
B Supplemental Agency Response	13
C Distribution	16

Purpose

The Office of Inspector General (OIG) conducted this audit to determine how the U.S. Environmental Protection Agency’s (EPA’s) preparedness and response efforts for the three major hurricanes of calendar year 2017—specifically, hurricanes Harvey, Irma and Maria—protected human health and water resources from storm-related drinking water and surface water contamination. This report contains our findings and recommendations related to the EPA Region 6 emergency response activities for drinking water and wastewater facilities impacted by Hurricane Harvey. Subsequent reports will address the response in Regions 4 and 2 for hurricanes Irma and Maria, respectively.

Background

Hurricane Harvey made landfall in parts of Texas on August 25, 2017. The National Hurricane Center rated the hurricane as a Category 4 storm.¹ In Texas alone, Hurricane Harvey claimed 68 lives, dropped approximately 19 trillion gallons of rainwater and caused damages estimated at \$125 billion.

With a few exceptions, the EPA responds to a disaster under the direction of the Federal Emergency Management Agency (FEMA) and at the request of the states experiencing the disaster. To facilitate an integrated approach, federal agencies responding to a disaster adhere to the National Response Framework. The National Response Framework contains 15 emergency support functions (ESFs) to coordinate the resources and capabilities most needed in a national response (Table 1). In response to the Hurricane Harvey federal disaster declaration, FEMA activated EPA Region 6 under ESF #10—Oil and Hazardous Materials Response—from August 25 through November 13, 2017. ESF #10 provides federal support in response to an actual or potential discharge and/or release of oil or hazardous materials.

Table 1: National Response Framework ESFs

#	Resource/capability	#	Resource/capability
1	Transportation	9	Search and Rescue
2	Communications	10	Oil and Hazardous Materials *
3	Public Works and Engineering	11	Agriculture and Natural Resources
4	Firefighting	12	Energy
5	Information and Planning	13	Public Safety and Security
6	Mass Care, Emergency Assistance, Temporary Housing and Human Services	14	Superseded by the National Disaster Recovery Framework
7	Logistics	15	External Affairs/Standard Operating Procedures
8	Public Health and Medical Services		

Source: OIG analysis of U.S. Department of Homeland Security data.

** EPA-led ESF in response to Hurricane Harvey.*

¹ Per the National Hurricane Center’s “Saffir-Simpson Hurricane Wind Scale” [webpage](#), Category 4 hurricanes are major storms in which catastrophic damage occurs and windspeeds can reach up to 156 miles per hour.

Under each ESF, FEMA issues mission assignments to federal agencies for specific tasks, such as the cleanup of hazardous waste or the inspection of water utilities. For Hurricane Harvey, part of the EPA's mission assignment under ESF #10 focused on the water sector and included identifying affected drinking water and wastewater systems, verifying their operational status, and offering additional assistance necessary to restore services as quickly as possible.

When federal agencies respond to a mission assignment, the National Incident Management System and the Incident Command System detail how the federal government implements the National Response Framework. The National Incident Management System is a systematic, proactive approach that enables all levels of government, nongovernmental organizations and the private sector to work together to prevent, protect against, mitigate, respond to and recover from incidents. The Incident Command System is designed to enable effective and efficient domestic incident management. It also establishes a chain of command structure.

Scope and Methodology

We conducted our work from January 2018 to May 2019. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

The scope of this audit focused on how well the region accomplished its drinking water and wastewater tasks under ESF #10.² We reviewed ESF #10 mission assignments for Region 6; daily hurricane response activity reports; and documents about federal emergency response, such as the National Response Framework and ESFs. We interviewed Region 6 staff who participated in the Hurricane Harvey response, as well as staff from the state's lead environmental agency, the Texas Commission on Environmental Quality (TCEQ); local environmental and human health nongovernmental organizations; and Houston-area water and wastewater facility operators.

Results

Extensive preparation activities and close working relationships with state emergency response partners enabled Region 6 to protect human health and water sector resources under its Hurricane Harvey ESF #10 mission assignment. The Region 6 Superfund and Water Quality divisions coordinated with the TCEQ to

² EPA Region 6's response included soil, groundwater and surface water monitoring at Superfund sites. We did not include those activities in this audit. See EPA's [Hurricane Harvey website](#) for a summary of EPA reports pertaining to sampling at Superfund sites.

conduct drinking water and wastewater facility reviews as well as to perform limited on-site technical assistance during a 3-week period in the aftermath of the hurricane. These reviews enabled EPA and TCEQ response staff to determine and track the facilities' operational status during the response period.

Region 6 Tracked Facility Status

As part of their Hurricane Harvey response efforts, Region 6 and the TCEQ tracked the operational status of 2,238 drinking water facilities serving 11 million residents and 1,743 wastewater facilities serving 10 million residents. Of these 3,981 facilities, regional and state staff conducted on-site reviews of 625 drinking water and 441 wastewater facilities to verify their operational status.

In addition, EPA and TCEQ response staff performed 6,754 drinking water and 4,639 wastewater phone reviews.³ A total of 61 drinking water and 40 wastewater facilities were deemed inoperable, and 203 boil water notices were issued by drinking water facilities. All inoperable facilities except one wastewater system returned to operations after the emergency response. The wastewater facility was destroyed and not rebuilt.

Region 6 compiled the results of the facility reviews in the EPA's Response Manager database. Management reports at the national headquarters level were developed based upon the water and wastewater reviews data gathered in daily situational awareness reports submitted by the region. Among the data reported were the (1) progress of the EPA's response, (2) water and wastewater systems' ability to provide safe and clean water, and (3) systems needing additional technical assistance to become operational.

Region 6 Staff Conducted Outreach to Vulnerable Communities

In addition to and independent of the ESF #10 mission assignment, regional staff from the Office of Communities, Tribes, and Environmental Assessment conducted outreach to local communities that may be more vulnerable to the impacts of natural disasters, such as immigrant communities where English is not the primary language. For instance, regional staff disseminated informational materials that described how to disinfect drinking water. These materials also addressed concerns about operating private drinking water wells and septic systems after a flood.

Region 6 Successfully Completed Mission Assignment

We identified three factors that contributed to Region 6 successfully completing its mission assignment to assess drinking water and wastewater facilities:

³ Some facilities were reviewed on multiple occasions.

1. *Frequent and close communication and working relationships with the state and other federal agencies.* During the 3-week ESF #10 drinking water and wastewater response period, two Region 6 staff members worked at the TCEQ offices in Austin, Texas, to provide expertise and facilitate communication between the two agencies. In addition, Region 6 used established relationships to communicate during the disaster, including relationships solidified in the National Disaster Operational Workgroup. This interagency workgroup comprises federal and state agencies involved in disaster preparedness and response in Texas, and it includes participants from the EPA, U.S. Coast Guard and TCEQ.
2. *Long-term and routine preparation, planning and exercises conducted by the region.* Region 6 participated in a routine tabletop exercise designed for hurricane response in August 2017, just weeks before Hurricane Harvey made landfall.⁴ This exercise increased preparedness because participants learned what their roles would be during a hurricane disaster response event. Region 6 and the TCEQ also relied on a draft pre-landfall hurricane plan, which details when efforts will begin for an approaching hurricane. In addition, Region 6 maintains staff response readiness levels through Incident Command System training on the fundamentals of emergency response. Since 2010, Region 6 has also held annual full-scale exercises with its on-scene coordinators, as well as with other state and federal emergency response staff, to practice skills and improve coordination communications.
3. *Use of lessons learned to build upon and improve operations after previous emergency responses.* Region 6 staff had worked on previous emergency response operations, including for hurricanes. Regional managers said that they have been proactive in taking steps to improve coordination for potential future disasters. After Hurricane Harvey, for example, the region developed actions to track information on the status of water facilities and expanded the emergency response database to include data from facility reviews. The region will use these lessons learned to improve emergency response activities.

Area for Improvement

While Region 6 successfully fulfilled its water sector mission assignment in the aftermath of Hurricane Harvey, we identified one area for improvement—staff outreach to residents of vulnerable communities—that would further enhance the region’s emergency response capabilities.

⁴ A tabletop exercise is an activity in which key personnel who have been assigned emergency management roles and responsibilities gather to discuss, in a nonthreatening environment, various simulated emergency situations.

The Houston area has the country’s third-largest populations of both Vietnamese and Mexican immigrants. For the first time during a hurricane response, Region 6 deployed environmental justice⁵ liaisons to communities impacted by Hurricane Harvey. EPA Region 6 also established a telephone hotline and email account to provide updates on the response and receive environmental justice concerns. The community liaisons discussed residents’ concerns and handed out information pamphlets about a variety of topics, including disposing of hazardous waste, disinfecting drinking water and working with septic systems after a flood. The liaisons distributed storm-related pamphlets written in English, Spanish and Vietnamese.

However, not all residents in Houston-area communities received this information because regional staff did not have sufficient quantities of translated pamphlets. In addition, not all pamphlets were translated into Spanish (Table 2). Further, none of the information pamphlets posted on the Region 6 “Hurricane Harvey 2017” response webpage were available in Vietnamese and only one was available in Spanish.

Table 2: Availability of translated EPA information pamphlets

Pamphlet title	Spanish		Vietnamese	
	Online	Print	Online	Print
<i>Emergency Disinfection of Drinking Water</i>	Yes	Yes	No	Yes
<i>Private Wells - What to Do After a Flood</i>	No	No	No	Yes
<i>Septic Systems - What to Do After a Flood</i>	No	No	No	Yes

Source: OIG analysis of the Region 6 emergency response website and pamphlets provided by the region.

It is not known how many people needed translated materials but did not receive them. The shortage of printed translated pamphlets as well as a lack of translated versions of the pamphlets posted online for Houston communities meant that non-native English speakers may have lacked essential public safety information regarding the risks of floodwaters and how to disinfect drinking water.

In June 2018, Region 6 held an environmental justice forum that included presentations from federal, state and local officials. There were discussions about air monitoring in environmental justice communities, water system lead pipe replacement activities, and Hurricane Harvey preparation and response activities. These discussions included a community service perspective. At the forum, Region 6 identified four recommendations for improving environmental justice outreach for disaster response:

1. Establish an environmental justice staffing and support function within the incident command structure.

⁵ According to the EPA, *environmental justice* is the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

2. Add environmental justice training for the response support corps, Incident Command System and other stakeholders.
3. Communicate the need to address environmental justice concerns to emergency operation centers.
4. Provide printed copies of cleanup and safety literature to impacted communities rather than weblinks.

These enhancements could improve the public health protections of communities impacted by hurricanes or other disasters.

Recommendations

We recommend that the Regional Administrator, Region 6:

1. Include environmental justice outreach in planning and pre-landfall preparation exercises by gathering data to determine the population, unique needs and challenges of vulnerable communities.
2. Revise the Region 6 pre-landfall hurricane plan to incorporate steps based on the results of outreach conducted during the planning and pre-landfall preparation exercises.
3. Implement the recommendations to improve environmental justice outreach identified at the June 2018 environmental justice forum.
4. Prepare and produce all outreach materials—including the cleanup literature identified in the June 2018 environmental justice forum—in advance, in sufficient quantities and in the region’s prevalent languages, and post all translated materials online.

Agency Response and OIG Evaluation

The acting Regional Administrator provided two responses to this draft report: an initial response covering all recommendations (see Appendix A) and a supplemental response providing additional details on recommendation 1 (see Appendix B). Based on the two responses, Region 6 concurred with Recommendations 1, 2 and 4, and provided acceptable planned corrective actions and planned milestone dates. Recommendations 1, 2 and 4 are resolved with corrective actions pending.

The region requested a modification to Recommendation 3, but we determined that this modification was not needed for the following reasons:

- The region’s planned corrective actions to address Recommendations 1, 2 and 4, when implemented, will address three of the four June 2018

environmental justice forum recommendations: to add environmental justice training for the response support corps, Incident Command System and other stakeholders; to communicate the need to address environmental justice concerns to emergency operation centers; and to provide printed copies of cleanup and safety literature to impacted communities rather than weblinks.

- In its response to our draft report, the region indicated that the remaining June 2018 environmental justice forum recommendation—to establish an environmental justice staffing and support function within the incident command structure—is being modified. That structure is established at a national level and cannot be altered by the EPA. Instead, the region committed to implementing a “Management Objective” during future emergency response events to integrate environmental justice concerns into the entire command structure and the after-action report process.

These planned corrective actions meet the intent of our recommendation, and we therefore consider Recommendation 3 to be resolved with corrective actions pending.

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS

Rec. No.	Page No.	Subject	Status ¹	Action Official	Planned Completion Date	Potential Monetary Benefits (in \$000s)
1	6	Include environmental justice outreach in planning and pre-landfall preparation exercises by gathering data to determine the population, unique needs and challenges of vulnerable communities.	R	Regional Administrator, Region 6	9/30/20	
2	6	Revise the Region 6 pre-landfall hurricane plan to incorporate steps based on the results of outreach conducted during the planning and pre-landfall preparation exercises.	R	Regional Administrator, Region 6	3/31/21	
3	6	Implement the recommendations to improve environmental justice outreach identified at the June 2018 environmental justice forum.	R	Regional Administrator, Region 6	3/31/20	
4	6	Prepare and produce all outreach materials—including the cleanup literature identified in the June 2018 environmental justice forum—in advance, in sufficient quantities and in the region’s prevalent languages, and post all translated materials online.	R	Regional Administrator, Region 6	3/31/20	

¹ C = Corrective action completed.

R = Recommendation resolved with corrective action pending.

U = Recommendation unresolved with resolution efforts in progress.

Initial Agency Response



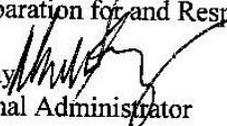
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

June 7, 2019

Office of the Regional Administrator

MEMORANDUM

SUBJECT: Response to the Office of Inspector General Draft Report No. OPE-FY18-0005 "EPA Region 6 Preparation for and Response to Hurricane Harvey," dated May 20, 2019

FROM: David W. Gray 
Acting Regional Administrator

TO: Kevin Christensen
Assistant Inspector General
Office of Audit and Evaluation
Office of Inspector General

Thank you for the opportunity to respond to the issues and recommendations in the subject audit report. Following is the United States Environmental Protection Agency, Regions 6's responses to the report recommendations. For those report recommendations with which the Region agrees, we have provided the intended corrective actions and estimated completion dates. For the report recommendation with which the Region does not agree, we have explained our position and proposed an alternative to recommendations.

AGENCY'S OVERALL POSITION

The U.S. Environmental Protection Agency, Regions 6 agrees with Recommendations 1, 2, and 4 in the report and partially agrees with Recommendation 3 in the report.

AGENCY’S RESPONSE TO REPORT RECOMMENDATIONS

Agreements

No.	Recommendation	High-level Intended Corrective Actions	Estimated Completion
1.	Include environmental justice outreach in planning and pre-landfall preparation exercises by gathering data to determine the population, unique needs and challenges of vulnerable communities.	1.1 The Region 6 Office of Communities, Tribes and Environmental Assessment (OCTEA) will provide a list of vulnerable communities in Region 6 to the Emergency Management Branch.	1 st Quarter FY 2020 December 31 st
		1.2 The Region 6 Emergency Management Branch will use the list of vulnerable communities to identify ones which are within jurisdictions where it will conduct planning and pre-landfall preparation exercises and ensure these communities are considered during these events.	4 th Quarter FY 2020 September 31 st
2.	Revise the Region 6 pre-landfall hurricane plan to incorporate steps based on the results of outreach conducted during the planning exercises in Recommendation 1.	The Emergency Management Branch will revise pre-landfall hurricane plans based on the results of the planning and pre-landfall activities conducted as part of Recommendation 1.	2 nd Quarter FY 2021 March 31 st
3.	Implement the recommendations to improve environmental justice outreach identified at the June 2018 environmental justice forum.	3.1 During an event, (OCTEA) will hold regular calls with affected vulnerable communities to identify concerns and issues. These concerns and issues will be provided to Incident Command for evaluation and action as needed. For an incident, Region 6 will establish a Management Objective on environmental justice. This will ensure environmental justice is a specific consideration for the entire command structure and the After Action Report process.	N/A
		3.2 The Emergency Management Branch will add the topic of environmental justice to training for Incident Management Teams and Response Support Corps personnel.	2 nd Quarter 2020 March 31 st

		<p>3.3 The Emergency Management Branch will provide a list of Local Emergency Planning Committee (LEPC) contacts to OCTEA. OCTEA will provide the appropriate LEPC contact information to representative(s) of vulnerable communities to facilitate planning and preparedness.</p> <p>Activities under Corrective Action 1.2 will also address this recommendation.</p>	<p>4th Quarter FY 2019 September 31st</p>
		<p>3.4 This is covered in the response to Recommendation 4.</p>	<p>N/A</p>
4.	<p>Prepare and produce all outreach materials—including the cleanup literature identified in the June 2018 environmental justice forum—in advance, in sufficient quantities and in the region’s prevalent languages, and post all translated materials online.</p>	<p>The Region 6 OCTEA will develop a list of existing EPA outreach materials that have been cleared by EPA’s Office of Public Affairs for distribution and will provide this list, including the languages each document needs to be translated into, to the Region 6 Office of External Affairs.</p> <p>The Region 6 Office of External Affairs will have documents translated, ensure there is a link to each document on the EPA webpage, and establish a process to make printed copies available when needed.</p>	<p>4th Quarter FY 2019 September 31st</p> <p>2nd Quarter 2020 March 31st</p>

Disagreements

No.	Recommendation	Agency Explanation/Response	Proposed Alternative
3.	Implement the recommendations to improve environmental justice outreach identified at the June 2018 environmental justice forum: <i>Establish an environmental justice staffing and support function within the incident command structure.</i>	All Incident Command Systems nationwide have the same defined organizational structure to ensure uniform management of decisions, resources, and personnel during an emergency. Region 6 believes establishing a Management Objective rather than establishing a specific environmental justice support function within the Incident Command System structure is a better way to ensure environmental justice concerns are integrated into the entire command structure and the After Action Report process. A Management Objective will better serve the goal of a defined ICS management structure.	Region 6 will establish a Management Objective related to environmental justice.

CONTACT INFORMATION

If you have any questions regarding this response, please contact Mr. Arturo Blanco, Director, Office of Communities, Tribes and Environmental Assessment at (214) 665-3182, or Mr. Carl Edlund, Director, Superfund and Emergency Management Division at (214) 665-8124.

Supplemental Agency Response



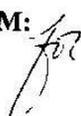
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

July 3, 2019

Office of the Regional Administrator

MEMORANDUM

SUBJECT: Supplemental Response to the Office of Inspector General Draft Report No. OPE-FY18-0005 "EPA Region 6 Preparation for and Response to Hurricane Harvey," dated May 20, 2019

FROM:  David W. Gray
Acting Regional Administrator

TO:  Kevin Christensen
Assistant Inspector General
Office of Audit and Evaluation
Office of Inspector General

Thank you for the opportunity to respond to the issues and recommendations in the subject audit report. The following is to supplement our June 7, 2019 response regarding Recommendation 1.

AGENCY'S OVERALL POSITION

The U.S. Environmental Protection Agency, Regions 6 agrees with Recommendations 1.

AGENCY’S RESPONSE TO REPORT RECOMMENDATIONS

Agreements

No.	Recommendation	High-level Intended Corrective Actions	Estimated Completion
1.	Include environmental justice outreach in planning and pre-landfall preparation exercises by gathering data to determine the population, unique needs and challenges of vulnerable communities.	<p>1.1 The Region 6 Office of Communities, Tribes and Environmental Assessment (OCTEA) will provide a list of vulnerable communities in Region 6 to the Emergency Management Branch.</p> <ul style="list-style-type: none"> • OCTEA in Region 6 uses its EJ network list to develop a list of vulnerable communities. The list includes contacts with locally or regionally focused community interests, working together to help communities with environmental needs in the specific area where those contacts serve, such as areas in Houston, Beaumont and Port Arthur. • The list will include the general service area of each contact on the list, their type of service, and generally known and relevant vulnerabilities in the community they serve. Depending on the location and nature of the anticipated or actual emergency, other tools such as EJScreen may be used to more specifically delineate relevant information. <p>Regional staff will use EJSCREEN to collect relevant information as part of regional emergency preparation activities or during a response. Specifically, staff will query EJSCREEN for population and language data information for a given location and determined radius in the authorized response area. Population and language data query results will be used to estimate the number of people in a given area and identify language requirements in order to determine the amount of materials to have ready for distribution in the impacted area.</p>	1 st Quarter FY 2020 December 31 st

CONTACT INFORMATION

If you have any questions regarding this response, please contact Mr. Arturo Blanco, Director, Office of Communities, Tribes and Environmental Assessment at (214) 665-3182, or Mr. Carl Edlund, Director, Superfund and Emergency Management Division at (214) 665-8124.

Distribution

The Administrator
Associate Deputy Administrator and Chief of Operations
Chief of Staff
Deputy Chief of Staff
Assistant Administrator for Land and Emergency Management
Assistant Administrator for Water
Regional Administrator, Region 6
Agency Follow-Up Official (the CFO)
Agency Follow-Up Coordinator
General Counsel
Associate Administrator for Congressional and Intergovernmental Relations
Associate Administrator for Public Affairs
Deputy Assistant Administrator for Land and Emergency Management
Principal Deputy Assistant Administrator for Land and Emergency Management
Deputy Assistant Administrator for Water
Principal Deputy Assistant Administrator for Water
Deputy Regional Administrator, Region 6
Director, Superfund and Emergency Management Division, Region 6
Director, Water Division, Region 6
Director, Office of Continuous Improvement, Office of the Administrator
Audit Follow-Up Coordinator, Office of the Administrator
Audit Follow-Up Coordinator, Office of Land and Emergency Management
Audit Follow-Up Coordinator, Office of Water
Audit Follow-Up Coordinator, Region 6