

FEMA's Initial Response to the 2014 Mudslide near Oso, Washington





DHS OIG HIGHLIGHTS

FEMA's Initial Response to the 2014 Mudslide near Oso, Washington

June 10, 2015

Why We Did This

Without warning, on the morning of March 22, 2014, a mudslide engulfed a small community near Oso, Washington. The disaster injured 13 and killed 44, and dammed the Stillaguamish River causing flooding.

Following a major disaster, the Federal Emergency Management Agency (FEMA) officials must take decisive actions responding to the event and initiating recovery efforts. However, FEMA's actions must also protect taxpayer dollars. To assist FEMA in this challenge, we deploy staff to disasters to evaluate FEMA's operations and to help prevent fraud, waste, and abuse of Federal funds.

What We Recommend

The report contains no recommendations.

For Further Information:

Contact our Office of Public Affairs at (202) 254-4100, or email us at DHS-OIG.OfficePublicAffairs@oig.dhs.gov

What We Found

FEMA officials quickly and effectively responded to the disaster; were resourceful in overcoming significant challenges; implemented a variety of disaster-specific policies; obtained needed resources; and effectively coordinated with its disaster response partners. Importantly, FEMA's response effectively addressed the unique characteristics of this disaster.

In addition, by deploying staff to assess FEMA's disaster response and recovery activities while they happen, we better position ourselves to identify potential problems before they occur. It also improves the quality of the recommendations we make in other reports designed to improve the disaster assistance program's integrity by preventing applicants from misspending disaster assistance funds.

FEMA Response

FEMA officials agreed with our findings and observations. Because we are making no recommendations, we consider this report closed.



OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Washington DC, 20528 / www.oig.dhs.gov

JUN 10 2015

MEMORANDUM FOR: Kenneth Murphy
Regional Administrator, Region X
Federal Emergency Management Agency

FROM: John V. Kelly 
Assistant Inspector General
Office of Emergency Management Oversight

SUBJECT: *FEMA's Initial Response to the
2014 Mudslide near Oso, Washington*
Audit Report Number OIG-15-102-D

We audited the Federal Emergency Management Agency's (FEMA) initial response to the mudslide that occurred near Oso, Washington on March 22, 2014. Our independent assessment of FEMA's response focuses on FEMA's activities just before and after the major disaster declaration. We inquired into FEMA's most pressing challenges, identified significant resource shortfalls, examined how FEMA made disaster-sourcing decisions, and assessed how well FEMA coordinated its activities with its Federal, Washington Emergency Management Division (State), and local partners. We also assisted FEMA officials by attending meetings and providing them documents to inform Federal, State, and local officials of Federal procurement and accounting requirements that come with accepting disaster assistance from FEMA.

Background

On March 22, 2014, without warning, a mudslide fell on a community from a steep, 600-foot-high terrace located adjacent to the Stillaguamish River near the town of Oso, Washington in Snohomish County. The President declared an Emergency Declaration (EM-3370) on March 24, 2014, and a major Disaster Declaration (4168-DR-WA) on April 2, 2014. FEMA senior leadership told us that this event was unique and complex for several reasons: it produced a significant amount of destruction, death, and trauma in a small area, generated substantial debris (having similar characteristics to the World Trade Center sites after the September 11 attacks), and required large-scale and lengthy use of Urban Search and Rescue.



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

Figure 1: Recovery Operations – Search and Rescue Teams and Special K9 Units



Source: FEMA.

FEMA indicated that the mudslide traveled at about 200 miles per hour, generating an estimated 10 million cubic yards of material covering approximately 318 acres. The mudslide's debris crossed the mile-wide valley and temporarily blocked the upper part of the river. A pool of water formed behind the debris, which flooded several houses and other structures, in addition to the 37 structures the mudslide destroyed. The inundation rendered State Route 530—the road that runs through the town of Oso and the primary thoroughfare connecting the adjoining communities of Arlington and Darrington—impassable. The disaster resulted in at least 13 injuries and 44 fatalities.

Results of Audit

FEMA officials responded effectively and timely to the disaster by quickly deploying personnel and equipment, overcoming significant challenges, implementing disaster-specific policies, providing financial assistance, and coordinating effectively with their disaster-response partners. FEMA's response also effectively addressed the unique characteristics of this disaster.

To enhance accountability and transparency for the use of disaster relief funds, we deployed to the disaster site to assess independently FEMA's response, focusing on FEMA's activities just before and after the major disaster declaration. We also assisted FEMA officials by attending meetings and providing them documents to inform Federal, State, and local officials of



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

Federal procurement and accounting requirements that come with accepting disaster assistance from FEMA.

FEMA Quickly Responded to the Disaster

FEMA officials quickly responded to the disaster following the President's Emergency Declaration by rapidly deploying response personnel and opening an Interim Operating Facility. FEMA quickly established a Joint Field Office, responded to requests for financial assistance, and provided stakeholders critical technical assistance and scientific expertise. For example, FEMA—

- Provided disaster management personnel and opened disaster response and recovery facilities. FEMA deployed an Incident Management Assistance Team on the same day the President issued the Emergency Declaration. The following day, the team established an Interim Operating Facility co-located with FEMA Region X officials, and staffed the Emergency Operations Center. Within 10 days of the major disaster declaration, the team opened a Joint Field Office and coordinated the opening of three Disaster Recovery Centers.
- Deployed personnel to help search for, rescue, and recover disaster survivors and victims. FEMA deployed its Incident Support Team 2 days after the disaster to manage the State's Urban Search and Rescue Task Force and coordinate search efforts with the local Incident Management Team. By April 2, these search efforts resulted in the recovery of 29 of the 44 total fatalities. FEMA subsequently deployed additional resources and, by July 22, 2014, recovered all 44 victims.
- Activated its Mobile Emergency Response Support Detachment 2 days after the disaster to support field activities using mobile communications equipment and vehicles. At the height of the response, the detachment deployed 29 personnel, 16 vehicles, and extensive communications equipment to support response and recovery efforts.
- Responded to requests for Individual Assistance through outreach activities, establishing recovery centers, and providing funding for those with increased commuting costs. By June 5, 2014, FEMA had (1) provided 1,240 individuals one-on-one consultations; (2) registered approximately 1,028 individuals for assistance; (3) notified hundreds of residents of FEMA's new commuting costs policy; (4) completed 115 housing inspections; (5) provided \$1,685,592 through the Individuals



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

and Household Program; (6) distributed \$1,323,439 for Other Needs Assistance; and (7) provided \$362,153 for Housing Assistance.

- Responded to requests for Public Assistance by providing information, accepting applications, and obligating funding.¹ By June 5, 2014, FEMA (1) provided extensive technical information to various stakeholders; (2) received 30 requests for Public Assistance from potential applicants; (3) participated in 3 applicant briefings; (4) completed 29 kick-off meetings; and (5) obligated about \$7.6 million for emergency protective measures to address damages to various utilities, buildings, and equipment. As of March 17, 2015, FEMA had obligated \$19,015,269 for 35 projects.
- Provided technical assistance and scientific expertise to assist its Federal, State, and local partners. FEMA's *Slide Assessment Team*, formed 8 days after the disaster, assessed the mudslide and identified key geologic, hydrologic, and environmental issues.

FEMA Overcame Response Challenges

FEMA responded effectively to the challenges of this disaster. For example, FEMA effectively—

- Overcame challenges of recovering disaster victims by implementing new search methodologies that yielded an 85-95 percent success rate. The mudslide generated an estimated 10 million cubic yards of material covering approximately 318 acres, making identifying the locations of victims difficult.
- Addressed challenges to the County's and State's timeliness of debris removal by (1) allowing debris removal to begin at the start of the debris removal contracts rather than at the start of the incident period (to allow time for the discovery and removal of human remains); and (2) excluding idle time from the official duration of the debris removal period if human remains were discovered. FEMA wanted to ensure that its applicants for assistance could participate in receiving additional funding provided by its Public Assistance Alternative Procedures despite delays.

¹ FEMA provides grant assistance through its Public Assistance Program for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities, facilities of certain private non-profit organizations, and hazard mitigation measures during the recovery process.



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

- Helped the Washington Department of Transportation understand FEMA's rules for debris removal through close coordination and information sharing. The Department clears debris from State Route 530 typically using the Federal Highway Administration's funding and procurement rules. However, these rules differ from FEMA's, which understandably created challenges for Department officials. Therefore, FEMA quickly provided them education and oversight to ensure that they could properly account for and expend FEMA funds.
- Deployed specialized personnel trained to be sensitive to the needs of disaster survivors. This disaster caused significant trauma and loss of life in a confined area. One FEMA official described the situation as "so much trauma in such a small community." FEMA personnel who normally complete disaster assistance registrations were not equipped to interact with survivors experiencing so much suffering and trauma. FEMA overcame this challenge by deploying bereavement specialists with disaster survivor assistance teams to work directly with families.
- Addressed emotional challenges of its own personnel by providing them additional support to help them cope with the trauma. A FEMA official at the Joint Field Office concluded that, "Everybody who is deployed to this disaster may be susceptible to mental health issues and potential trauma." Although FEMA has no well-being program for disasters, FEMA officials (1) provided staff with on-site crisis counselors from the Employee Assistance Program; (2) made available Green Cross trauma counselors; (3) offered stress debriefing; and (4) provided staff informal time off on an as-needed basis.
- Accommodated the needs of disaster survivors and families. Many individuals were hesitant or uncertain whether to request FEMA assistance. Further, many did not have the documentation to register for assistance. FEMA managed these challenges by (1) meeting with survivors on a one-on-one basis, at their convenience; (2) allowing individuals to register for assistance before they had attained all the necessary documentation; (3) routing calls from survivors from FEMA's Disaster Assistance Hotline to a dedicated group specifically aware of their situation, rather than through FEMA's general call-in line; (4) determining eligibility of all survivors for disaster assistance through human review instead of using 'auto-determination'; and (5) using FEMA's in-house inspectors to conduct property inspections (as opposed to using contracted services) for a more personal, tailored, and consistent response.



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

- Addressed challenges with its personnel qualifications and deployment systems by obtaining staff through a variety of means other than what these systems dictated. FEMA used valuable time—especially during the initial response period—waiting for staff to accept deployments; and, according to managers we interviewed, many who deployed to the disaster were untrained or lacked the experience to adequately perform their duties. According to FEMA officials at the Joint Field Office, the FEMA Qualification System and Automated Deployment Database were not always efficient and effective in providing properly trained, capable, and adequately experienced staff. Problems with FEMA’s personnel systems are recurring and we are therefore currently conducting a National audit on this topic.
- Lessened challenges with its new travel management system by deploying trainers to the Joint Field Office to provide additional training and technical support.
- Managed challenges with WebEOC, its automated information management system by (1) providing and accepting hardcopy documentation and verbal requests instead of relying on the automated system; (2) obtaining supporting documentation outside the automated system; and (3) manually entering pre-scripted mission assignments.
- Overcame challenges associated with its lack of a single-point ordering system (for personnel, commodities, and mission assignments) by using alternate ordering techniques. This necessitated that FEMA use many different systems (e.g., Automated Deployment Database, WebEOC, eCaps, and individually-maintained spreadsheets). FEMA managed this challenge by directing its Logistics section to (1) take verbal orders from other sections (Operations; Planning; Finance/Administration) during pre-deployment conference calls; and (2) coordinate orders from all sections before placing an order (instead of placing separate orders per section).
- Improved safety at the disaster site for emergency responders and volunteers. The movement of mud and water posed a significant risk at the disaster site. FEMA mitigated some of the risks by directing the U.S. Army Corps of Engineers to install movement sensors in the mudflow and the U.S. Geological Survey to conduct air reconnaissance and install water buoys in the river.



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

FEMA Implemented New Policies

FEMA's Acting Assistant Administrator for Recovery implemented several new disaster-specific policies that provided financial assistance to residents facing increased commuting costs and also increased funding to those responsible for removing disaster-generated debris. FEMA implemented policies that—

- Allowed those outside the disaster area indirectly impacted by the disaster to receive Federal assistance. FEMA provides disaster assistance typically to only those individuals *directly* affected by the disaster (i.e., within the declared disaster area). However, for this disaster, FEMA implemented the *Increased Commuting Cost Policy*. This policy authorized FEMA to provide financial assistance to residents who were *indirectly* impacted by the disaster—those who incurred increased commuting costs because of road closures. The disaster led to the closure of a 3-mile segment of State Route 530, the primary route that runs through the communities of Oso, Arlington, and Darrington. This detour caused a 2-hour delay, and FEMA provided \$1,625,614 to 553 commuters to help defray this additional cost. We have not audited the validity or reasonableness of the \$1.6 million FEMA paid to the commuters.
- Extended the debris removal commencement period to allow applicants to receive additional funding under the Public Assistance Alternative Procedures. FEMA's normal time restrictions were not reasonable in this disaster because the search for missing individuals continued for 38 days after the incident period began.
- Provided an exemption to the Washington Department of Transportation from the FEMA requirement of having a debris management plan before a declared disaster to qualify for additional funding under Public Assistance Alternative Procedures. FEMA allowed the Department to adopt the FEMA-approved debris management plan of Snohomish County because the debris field was entirely within the county and the effort supported the county's recovery objectives.



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

FEMA Funded Needed Resources

At the Joint Field Office, three different sections—Operations, Logistics, and Administration and Finance—were responsible for disaster-related sourcing. The primary sourcing methods FEMA used included—

- Mission Assignments – FEMA obligated nearly \$5.6 million in mission assignments to 11 Federal agencies to support the disaster response and recovery efforts (as of June 19, 2014, the last day the Joint Field Office was open). These mission assignments provided resources such as aviation support, analyses and technical support for Geospatial Information Systems, and heavy equipment.
- Requisitions – FEMA purchased \$760,517 of supplies and services, including office equipment, security officers, and power generators for Disaster Recovery Centers (as of August 14, 2014).
- Acquisitions – The Procurement Unit at the Joint Field Office awarded 21 contracts, totaling \$749,159 (as of August 14, 2014).

FEMA Effectively Coordinated with its Response Partners

FEMA effectively coordinated with its Federal, State, and local partners. For example, FEMA effectively—

- Coordinated Federal, Washington State, and local task forces for the search, rescue, and recovery of disaster survivors and victims. This resulted in the recovery of all disaster victims.
- Integrated the operations of its Regional and National components with the State. FEMA's Regional Incident Management Assistance Team quickly coordinated with the National team to establish an Interim Operating Facility. The Federal Coordinating Officer helped transition State officials into the Joint Field Office. FEMA and its State counterparts worked side-by-side, and in some cases, shared the same office space. FEMA and State officials told us that the FEMA Region X Administrator's presence at the Joint Field Office enhanced the effectiveness of disaster response; he assumed a variety of roles, including acting as liaison to the tribal communities and advisor to the Governor.



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

- Deployed response and recovery liaisons to enhance communication and coordination with the State and Snohomish County. These liaisons (1) facilitated the coordination for the Incident Support Team's resource requests from the county to the State and to FEMA; and (2) coordinated disaster-related planning with State and local representatives.
- Coordinated Geospatial Information Systems with the State and its Federal partners. The Washington Department of Transportation collected and processed data necessary for creating terrain imagery for damage assessments and debris estimates.
- Coordinated with the State, local, non-profit, and other Federal agencies to assist disaster survivors and impacted communities. For example, FEMA (1) established three multiagency Disaster Recovery Centers; (2) incorporated the State into its Disaster Survivor Assistance teams; (3) coordinated with local businesses, the private sector, and the City of Everett to help establish the Joint Field Office; and (4) worked with the State and Snohomish County to disseminate geospatial data.
- Partnered with us to help increase FEMA and the State's awareness of key audit issues. Of particular importance are those issues related to how FEMA Public Assistance Program applicants account for and expend grant funds according to Federal regulations and FEMA guidelines. FEMA distributed our *Audit Tips for Managing Disaster-Related Project Costs Guide* during applicant briefings and kickoff meetings. The State also updated its website to include the latest version of the guide and distributed it during training.
- Deployed as many as 41 FEMA Corps members to the disaster through its partnership with the Corporation for National and Community Service. These members worked across a variety of FEMA's functions, including Disaster Survivor Assistance, Logistics, Individual Assistance, External Affairs, and Planning. Many helped prepare the Joint Field Office for occupancy.

Emergency Management Oversight Team's Deployment Activities

To provide the Department, FEMA, and the Congress information on the effectiveness of FEMA's initial disaster response and recovery activities, we deployed an Emergency Management Oversight Team to evaluate FEMA's actions proactively, and help prevent fraud, waste, and abuse. Traditional



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

audits typically assess an organization's financial and operational activities after they happen. By deploying staff to assess FEMA's disaster response and recovery activities while they happen, we better position ourselves to identify potential problems before they occur.

We also help educate State and local officials at applicant briefings and kickoff meetings about typical audit findings and the Federal regulations and FEMA guidelines that they need to follow to avoid improperly spending disaster assistance funds. Our involvement also improves the quality of the recommendations we make in other reports because we experienced the unique challenges that exist early in the disaster response and recovery phase. In addition, our visibility and availability to FEMA, State and local officials, and others affected by disasters provide an effective deterrent to potential fraud, waste, and abuse. Finally, Emergency Management Oversight Team deployments provide opportunities to identify problems that may be systemic and require additional research or audit work.

Recommendation

The report contains no recommendations.

Discussion with FEMA and Audit Follow-Up

We discussed the results of this audit with FEMA and Washington officials during our audit and included their comments in this report, as appropriate. We also provided a draft report in advance to FEMA officials, and discussed it with them at an exit conference on May 8, 2015. The report contains no recommendations; therefore, we consider it closed.

The Office of Emergency Management Oversight major contributors to this report are Humberto Melara, Director; Devin Polster, Audit Manager; Renee Gradin, Senior Auditor, and Victor Du, Auditor.

Please call me with any questions at (202) 254-4100, or your staff may contact Humberto Melara, Director, Western Regional Office, at (510) 637-1463.



OFFICE OF INSPECTOR GENERAL

Department of Homeland Security

Appendix A

Objective, Scope, and Methodology

Our overall audit objective was to determine whether FEMA's response to the 2014 mudslide near Oso, Washington was effective and to evaluate FEMA's actions, resources, and authorities according to Federal regulations and FEMA guidelines in effect at the time of our fieldwork. To accomplish our objective, we focused on answering the following questions:

1. What activities did FEMA perform before the major disaster declaration?
2. What were the most pressing challenges FEMA faced in this disaster?
3. What disaster-sourcing decisions did FEMA make?
4. To what extent did FEMA coordinate its activities with State and local officials?

This audit covered FEMA's response and recovery activities and financial and disaster data for Disaster Number 4168-DR-WA for the period March 22, 2014, through March 17, 2015.² To accomplish our objective, we deployed to the disaster site 14 days after the disaster declaration.

We interviewed FEMA and State officials. We conducted fieldwork activities at the Joint Field Office; the Incident Command Post; the Forward Operating Base; the disaster site; the Oso Disaster Recovery Center; and the communities of Oso, Arlington, and Darrington. We reviewed FEMA Headquarters-, Joint Field Office-, and field-based data. We also performed other procedures considered necessary to accomplish our objectives. We did not assess the adequacy of FEMA's internal controls applicable to disaster response and recovery operations because it was not necessary to accomplish our audit objective.

We conducted this performance audit from April 2014 to May 2015, pursuant to the *Inspector General Act of 1978*, as amended, and according to 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 upon our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based upon our audit objective. In conducting this audit, we applied the statutes, regulations, and FEMA policies and guidelines in effect at the time of the disaster.

² The official incident period for this disaster is March 22, 2014, through April 28, 2014.



OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Appendix B
Report Distribution

Department of Homeland Security

Secretary
Chief of Staff
Chief Financial Officer
Under Secretary for Management
Chief Privacy Officer
Audit Liaison, DHS

Federal Emergency Management Agency

Administrator
Chief Counsel
Chief of Staff
Chief Financial Officer
Deputy Associate Administrator, Response and Recovery
Director, Risk Management and Compliance
Audit Liaison, FEMA (Job Code 14-115-EMO-FEMA)
Audit Liaison, FEMA Region X

Recovery Accountability and Transparency Board

Director, Investigations

Office of Management and Budget

Chief, Homeland Security Branch
DHS OIG Budget Examiner

Congress

Congressional Oversight and Appropriations Committees

External

Director, Emergency Management Division, Washington Military Department
Liaisons, Emergency Management Division, Washington Military Department
State Auditor

ADDITIONAL INFORMATION AND COPIES

To view this and any of our other reports, please visit our website at: www.oig.dhs.gov.

For further information or questions, please contact Office of Inspector General Public Affairs at: DHS-OIG.OfficePublicAffairs@oig.dhs.gov. Follow us on Twitter at: @dhsoig.



OIG HOTLINE

To report fraud, waste, or abuse, visit our website at www.oig.dhs.gov and click on the red "Hotline" tab. If you cannot access our website, call our hotline at (800) 323-8603, fax our hotline at (202) 254-4297, or write to us at:

Department of Homeland Security
Office of Inspector General, Mail Stop 0305
Attention: Hotline
245 Murray Drive, SW
Washington, DC 20528-0305