

**FEMA Needs to Ensure the
Cost Effectiveness of
\$945,640 that Los
Angeles County,
California Spent for
Hazard Mitigation Under
the Public Assistance
Program**





HIGHLIGHTS

FEMA Needs to Ensure the Cost Effectiveness of \$945,640 that Los Angeles County, California Spent for Hazard Mitigation Under the Public Assistance Program

March 3, 2015

Why We Did This

We reviewed \$1,726,151 of costs the County claimed for one large project (Project 3095). This amount was \$945,640 more than the \$780,511 that FEMA initially authorized and obligated for the project.

What We Recommend

FEMA should either disallow \$945,640 in ineligible costs the County claimed for Project 3095; or retroactively approve the additional funding as mitigation subject to Federal requirements that include a benefit/cost analysis.

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

The County improperly claimed \$945,640 more than the \$780,511 that FEMA Region IX initially authorized to construct a wall to stabilize a damaged section of road. The County incurred the additional costs because, rather than adhere to the scope of work that FEMA authorized, it built a superior wall to lessen the susceptibility of damage that anticipated wildfires might cause in that location. FEMA Headquarters ultimately approved this funding and awarded the County both the initial \$780,511 and an *additional* \$945,640 for the already-completed project. However, FEMA Headquarters did not provide a reasonable justification for its decision and did not perform a benefit/cost analysis as required to fund mitigation measures. As a result, FEMA and taxpayers had no assurance that the mitigations work was cost effective, as Federal regulations and FEMA guidelines require.

FEMA Response

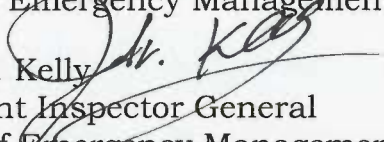
Although FEMA officials said they do not concur with our recommendation as written, they did provide a benefit/cost analysis that shows that the project in question was cost effective, which was the goal of our recommendation. Therefore, we consider our recommendation and this report to be resolved and closed, and no further action is necessary.



OFFICE OF INSPECTOR GENERAL
Department of Homeland Security
Washington, DC 20528

MAR 3 2015

MEMORANDUM FOR: Alex Amparo
Assistant Administrator, Recovery Directorate
Federal Emergency Management Agency

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

SUBJECT: *FEMA Needs to Ensure the Cost Effectiveness of \$945,640 that Los Angeles County, California Spent for Hazard Mitigation Under the Public Assistance Program*
Audit Report Number OIG-15-40-D

We audited Federal Emergency Management Agency (FEMA) Public Assistance grant funds awarded to Los Angeles County, California (County). The California Governor's Office of Emergency Services (California), a FEMA grantee, awarded the County \$54.9 million for damages resulting from storms, flooding, debris flows, and mudslides during the period December 27, 2004, through January 11, 2005. Because of the size of the award and number of projects, we divided this audit into segments, which has resulted in five previous Office of Inspector General (OIG) audit reports.¹ In this sixth segment of the audit, we reviewed \$1,726,151 of costs the County claimed for one large project (Project 3095). This amount was \$945,640 more than the \$780,511 that FEMA initially authorized and obligated for the project.

Results of Audit

The County improperly claimed \$945,640 more than the \$780,511 FEMA initially authorized to construct a wall to stabilize a damaged section of road. The County incurred the additional costs because, rather than adhere to the authorized scope of work, it built a superior wall to lessen the susceptibility of damage that anticipated wildfires might cause in that location. FEMA Region IX denied the County's request for additional funding on the basis that the work was for unauthorized improvements. County officials appealed the Region's denial to FEMA Headquarters, stating that the enhanced (and much more

¹ These reports include (1) *Interim Report on FEMA Public Assistance Grant Funds Awarded to Los Angeles County, California* (DS-12-06; March 2012), (2) *LA County Charges FEMA for Unauthorized Fringe Benefits Costs* (DS-13-07; April 2013), (3) *Unneeded Funding and Management Challenges Associated with the FEMA Grant Awarded to Los Angeles County, California* (DS-13-10; June 2013), (4) *Los Angeles County, California, Did Not Properly Account For and Expend \$3.9 Million in FEMA Grant Funds for Debris-Related Costs* (DS-13-11; July 2013), and (5) *Los Angeles County, California, Did Not Properly Account for or Expend About \$14,000 in FEMA Grant Funds* (DS-13-12; September 2013).



expensive) wall design would mitigate against damages from anticipated wildfires and did not constitute an improvement. The County's appeal also asserted that the County's engineer and geotechnical report supported the wall design, which was not entirely true because the geotechnical report recommended a different wall than what the County actually built.

FEMA Headquarters approved this (second) appeal and awarded the County both the initial \$780,511 and an *additional* \$945,640 for the already-completed project. However, FEMA Headquarters did not provide a reasonable justification for its decision and did not perform a benefit/cost analysis as required to fund mitigation measures. As a result, FEMA and taxpayers have no assurance that the mitigation work was cost effective, as Federal regulations and FEMA guidelines require. While we recognize its authority to overturn Regional decisions, FEMA Headquarters should not reverse valid, lawful decisions without reasonable justification. Reasonable justification for approving and funding mitigation work should, at minimum, include evidence that the benefits outweigh the cost. Therefore, FEMA should either disallow the \$945,640 or provide evidence that the mitigation work was cost effective.

FEMA Region IX Properly Denied the County's Request for Additional Funding

FEMA initially authorized \$780,511 under Project 3095 for the County to construct a soldier pile wall with timber lagging to stabilize a 188-foot section of road. However, the County claimed \$1,726,151 for the work, which was \$945,640 more than FEMA authorized. The County incurred the additional costs because, rather than adhere to the authorized scope of work, it built a superior wall to mitigate the susceptibility of damage that anticipated wildfires might cause in that location. These additional costs are ineligible because the County did not: (1) obtain prior approval from FEMA to deviate from the authorized scope of work; or (2) follow the requirements necessary to apply hazard mitigation measures. Federal regulations and FEMA guidelines stipulate that—

- A subgrantee must obtain *prior* approval from FEMA when it anticipates revisions to a project scope or project objective, regardless of whether there is an associated budget revision requiring prior approval (44 Code of Federal Regulations (CFR) 13.30(d)(1)).
- To be eligible for Federal funding, "an item of work must [b]e required as the result of the major disaster event" (44 CFR 206.223(a)(1)). The work must also correspond directly to the cause of damage and derive from the project's FEMA-approved scope (*Public Assistance Guide*, FEMA 322, October 1999, pp 73 and 115–116; and *Applicant Handbook*, FEMA 323, September 1999, pp 21–22, 32, and 52).



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- FEMA must determine mitigation measures to be cost effective. For 406 mitigation measures that exceed the cost of eligible repair work on the project, the grantee or subgrantee must demonstrate through an acceptable benefit/cost analysis methodology that the measures are cost effective (Section 406 of the Stafford Act;² 44 CFR 206.201(f) and 206.226(e); and *Public Assistance Guide*, FEMA 322, pp. 98–101).

At the time of the disaster (December 27, 2004, through January 11, 2005), the County's damaged road did not include a stabilizing wall, and it collapsed as a result of a slope failure caused by heavy rains. In March 2006, County officials requested approval from FEMA's Regional office for \$945,640 in additional funding to construct a different type of wall based on a geotechnical report. This report, which the County commissioned, presented information on a soldier pile wall with *concrete* lagging, but did not provide any information to dispute the sufficiency of the *timber* lagging wall FEMA had approved. The County ultimately built a wall that was different from what FEMA approved (a soldier pile wall with timber lagging) and different from what the geotechnical report recommended (a soldier pile wall with concrete lagging). Instead, it constructed a superior wall with engineering enhancements and mitigation properties—a cast-in-place, reinforced concrete soldier pile wall with a concrete face. According to its records, the County built the superior wall to lessen the susceptibility of damage that anticipated wildfires might cause in that location.

As such, FEMA Region IX officials denied the County's request (via appeal) on August 16, 2006, on the basis that the County performed unauthorized improvements. Nevertheless, by August 31, 2006, the County had already completed all work on the enhanced wall. County officials appealed the Region's denial to FEMA Headquarters on September 26, 2006, for project approval and funding of the already-completed wall. In its appeal to FEMA Headquarters, the County stated that the County's engineer and geotechnical report supported the wall design, which, as we discuss above, was not entirely true. The appeal also stated that the enhanced (and much more expensive) wall would mitigate against future wildfires and did not constitute an improvement.

County officials told us that it was the County's customary practice—irrespective of wildfire risks in the area—to build cast-in-place reinforced concrete walls with concrete faces. However, these officials did not provide documentation (in response to our request) corroborating this assertion. They also could not explain why all of the documentation on this project indicated that mitigating against wildfires in that specific location influenced the design of the wall, or why the County deviated from the design presented in its own geotechnical report.

² *Robert T. Stafford Disaster Relief and Emergency Act*, Public Law 93-288, 42 U.S.C §5172, as amended, (Stafford Act).



On October 23, 2007, FEMA Headquarters' officials approved the County's (second) appeal. They awarded the County both the initial \$780,511 that the Region authorized and the additional \$945,640 the County claimed for the already-completed project.

FEMA Headquarters Needs to Ensure that Mitigation Work Was Cost Effective

The County asserted that the superior wall design would mitigate against damages from anticipated wildfires. However, FEMA Headquarters approved the additional \$945,640 for the work without fully complying with Federal regulations and FEMA guidelines that included performing a benefit/cost analysis. As a result, FEMA and taxpayers had no assurance that the mitigations work was cost effective. Federal law, regulations, and guidelines require FEMA to evaluate hazard mitigation projects for cost effectiveness, technical feasibility, and compliance with statutory, regulatory, and executive order requirements before it approves funding.³

FEMA Headquarters officials generally did not agree with our findings. They acknowledged that the increase in costs resulted from a revision to the original scope of work to reduce risks to the facility associated with potential wildfires (as well as comport with sound engineering practices). However, they told us that the increased costs were associated with neither an improved project nor a Section 406 hazard mitigation measure. It is their opinion, therefore, that determining the eligibility of this project does not require a Section 406 benefit-cost analysis.

We disagree that FEMA Headquarters (and County officials) complied with applicable Federal regulations and FEMA rules, particularly because:

- The geotechnical report did not dispute that the soldier pile wall with timber lagging that FEMA authorized was sufficient to stabilize the road. Further, the County deviated from the design presented in its own geotechnical report.
- All of the existing documentation justifying the additional costs associated with the changes in the wall design specifically relate to mitigation purposes—lessening the impact of wildfires prevalent in that area (a point with which FEMA agrees).

However, our principal goal in conducting this segment of the audit was for FEMA to either recover the excessive costs or to provide assurance to the

³ Per section 406 of the Stafford Act; 44 CFR 206.201(f) and 206.226(e); and *Public Assistance Guide*, FEMA 322, pp. 98–101.



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taxpayer that the work was cost-effective. We therefore asked FEMA to either: (1) restrict the project costs to the original estimate and authorized scope (and thereby disallow \$945,640 in costs); or (2) ensure (and document) that the mitigation measures were cost effective.

Recommendation

We recommend that the Assistant Administrator, FEMA Recovery Directorate, either:

- Disallow \$945,640 (Federal share \$709,230) in ineligible costs the County claimed for Project 3095; or
- Retroactively approve the additional funding under Section 406 Hazard Mitigation, limited to the results of a benefit/cost analysis and assurance that the work performed complied with statutory, regulatory, and executive order requirements.

Management Comments, OIG Analysis, and Audit Follow-Up

We provided a final draft report for comment to FEMA on November 18, 2014, and received FEMA's response on January 15, 2015 (see appendix B). Although FEMA officials said they do not concur with our recommendation as written, they did provide a benefit/cost analysis that shows that the project in question was cost effective, which was the goal of our recommendation.

Our concern was not that FEMA Headquarters officials acted improperly in reversing the Region's decisions, but rather that they had done so without providing reasonable justification. Reasonable justification for approving and funding mitigation work, at minimum, should include evidence that the benefits outweigh the cost. Therefore, we asked FEMA to demonstrate the cost-effectiveness of the project that it funded. FEMA ultimately complied, demonstrating that the benefits of the mitigation work outweighed the costs. Consequently, we consider our recommendation and this report to be resolved and closed, and no further action is necessary.

Major contributors to this report are Humberto Melara, Director; Devin Polster, Audit Manager; and Ravinder Anand, Senior Auditor.

Please call me with any questions at (202) 254-4100, or your staff may contact Tonda L. Hadley, Deputy Assistant Inspector General for Audit Services, Office of Emergency Management Oversight, at 214-436-5200.



Appendix A

Objective, Scope, and Methodology

We conducted this segment of this audit between January 2013 and May 2014 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. We conducted this audit by applying the statutes, regulations, and FEMA policies and guidelines in effect at the time of the Disaster.

We audited FEMA Public Assistance Program grant funds awarded to the County, Public Assistance Identification Number 037-99037-00. Our audit objective was to determine whether the County accounted for and expended FEMA Public Assistance grant funds according to Federal regulations and FEMA guidelines for FEMA Disaster Number 1577-DR-CA. California awarded the County \$54.9 million for damages resulting from storms, flooding, debris flows, and mudslides during the period December 27, 2004, through January 11, 2005. The award provided 75 percent FEMA funding for 143 large projects and 35 small projects.⁴

Our audit covered the period from December 27, 2004, to May 1, 2013. In this sixth segment of the audit, we reviewed \$1,726,151 of costs the County claimed for one large project (Project 3095).

We interviewed FEMA, California, and County officials; reviewed judgmentally selected project costs (generally based on dollar value); evaluated applicable Federal regulations and FEMA guidelines; reviewed cost documentation; and performed other procedures considered necessary to accomplish our audit objective. As part of our standard audit procedures, we also notified the Recovery Accountability and Transparency Board of all contracts the subgrantee awarded under the grant that we reviewed to determine whether the contractors were debarred or whether there were any indications of other issues related to those contractors that would indicate fraud, waste, or abuse. As of the date of this report, the Recovery Accountability and Transparency Board's analysis of contracts was ongoing. When it is complete, we will review the results and determine whether additional action is necessary. We did not perform a detailed assessment of the County's internal controls over its grant activities because it was not necessary to accomplish our audit objective.

⁴ Federal regulations in effect at the time of the disaster set the large project threshold at \$55,500.



Appendix B

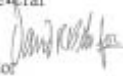
FEMA Management Comments to the Draft Report

U.S. Department of Homeland Security
Washington, D.C. 20472



January 15, 2015

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

FROM: David J. Kaufman 
Associate Administrator
Office of Policy, Program Analysis and International Affairs

SUBJECT: Federal Emergency Management Agency (FEMA) Response to
OIG Project 12-010-EMO-FEMA Draft Report: "FEMA
Needs to Ensure the Cost Effectiveness of \$945,640 that
Los Angeles County, California, Spent for Hazard
Mitigation Under the Public Assistance Program"

Thank you for the opportunity to review and comment on the Office of Inspector General's (OIG) Draft Report, "FEMA Needs to Ensure the Cost Effectiveness of \$945,640 that Los Angeles County (County), California, Spent for Hazard Mitigation Under the Public Assistance Program". FEMA appreciated the opportunity to meet with the OIG to discuss the draft report and FEMA's responses to the recommendation. This memorandum addresses FEMA's response to the recommendation in the report, of which FEMA non-concurred.

OIG Recommendation # 1: FEMA Recovery Directorate, either:

- Disallow \$945,640 (Federal share \$709,230) in ineligible costs the County claimed for Project 3095; or
- Retroactively approve the additional funding under Section 406 Hazard Mitigation, limited to the results of a benefit/cost analysis and assurance that the work performed complied with statutory, regulatory, and executive order requirements.

Response: Non-concur. As noted in OIG's February 2014 discussion draft, and reflected in FEMA's response to it, the OIG did not view the additional \$945,640 the County claimed as eligible under the rules and regulations that apply to improved projects or those that apply to

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Appendix B (continued)

406 hazard mitigation. FEMA believes that the increase in costs was the result of a necessary revision to the original scope of work that was designed to reduce risks to the facility associated with potential wildfires, as well as comport with sound engineering practices for the area. As such, the increased costs are neither associated with an improved project nor a Section 406 hazard mitigation measure. Consequently, a Section 406 benefit-cost analysis is not required for purposes of eligibility for this project.

FEMA initially specified the construction of a soldier pile retaining wall with timber lagging in the scope of work for Project Worksheet 3095. However, the Applicant requested a change in the scope of work in order to meet specific safety factors dictated by the site's propensity to fires. In the Applicant's first appeal, FEMA found that the Applicant did not sufficiently document its position that a reinforced, cast-in-place, concrete wall was necessary. However, in its second appeal, the Applicant provided adequate documentation to support its request for a cast-in-place reinforced concrete wall. FEMA noted that due to extremely steep slopes and other conditions in the canyon, the Applicant's engineering design was a feasible and safe method of restoration, and therefore the changed scope of work was approved.

FEMA also disagrees that the additional \$945,640 was entirely attributable to the change in material from timber lagging to a cast-in-place reinforced concrete wall. For instance, the following items were not components of the original scope of work, but were included within Los Angeles County's Independent Government Cost Estimate (Attachment 1) submitted in its second appeal. These items would have been eligible regardless of the change in scope from timber lagging to cast-in-place reinforced concrete wall:

- Office facilities: \$7,000
- Mobilization: \$100,000
- Oak Tree removal: \$2,750
- Traffic Control: \$8,000
- Fire Patrol Person allowance: \$10,000
- Engineering (7%): \$102,015.63
- Project Management (3%): \$43,720.99

Upon review of the Applicant's independent cost estimate, only \$263,750 was directly associated with the change in material. Even though FEMA does not view this as a Section 406 hazard mitigation measure, the increased cost of \$263,750 would still be reasonable from a cost-benefit perspective applied in such circumstances. The benefit cost analysis (BCA) yields a 1.37; thus, the project is considered to be cost effective since the BCA is 1.0 or greater. The model used in this evaluation does not include the loss of function or repetitive damage as noted in the project worksheet with back-to-back declared events (DR 1577 and DR 1585). If the latter two factors were included, the BCA could be higher than 1.37.

FEMA considers this recommendation resolved and closed. FEMA requests the OIG close this recommendation as part of its issuance of the final audit report.



Appendix B (continued)

Thank you again for the opportunity to comment on the OIG Draft Report OIG Project 12-010-EMO-FEMA, "FEMA Needs to Ensure the Cost Effectiveness of \$945,640 that Los Angeles County, California, Spent for Hazard Mitigation Under the Public Assistance Program". We appreciate the work that you and your team accomplished to inform us of measures to enhance the program's overall effectiveness. Please direct any questions regarding this response to Gary McKeon, FEMA's Audit Liaison Office Director. His contact number is 202-646-1308.

2 Attachments

1. Los Angeles County's Independent Government Cost Estimate
2. FEMA's Mitigation Benefit and Cost Effectiveness Analysis



Appendix C

Report Distribution

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Audit Liaison, Region IX

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Office of Management and Budget

Chief, Homeland Security Branch
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Appendix C (continued)

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