

# KENTUCKY DIVISION OF EMERGENCY MANAGEMENT MITIGATION COST AVOIDANCE REPORT



## POST-DISASTER ASSESSMENT OF PREVIOUSLY MITIGATED PROJECTS **FEMA DR-1746, DR-1757, DR-1802, DR-1818, DR-1841, DR-1855 & DR-1912**

Kentucky Division of Emergency Management  
Hazard Mitigation Grant Program  
100 Airport Road • 3rd Floor  
Frankfort, KY 40601  
(877) 634-8175  
[KYEMrecovery@ng.army.mil](mailto:KYEMrecovery@ng.army.mil)

Steve Beshear, Governor

John W. Heltzel, Director

Leslie Mahoney, State Hazard Mitigation Officer

## **Cost Avoidance Reports**

Since the last State Hazard Mitigation Plan, Kentucky has experienced eight presidentially declared disasters. Kentucky Emergency Management (KYEM) has provided Cost Avoidance Reports for disasters DR-1746, DR-1757, DR-1802, DR-1818, DR-1841, DR-1855, and DR-1912 (DR-1925 is too recent to be completed). These reports include disaster information and cost avoidance of projects that were completed in the declared counties prior to the event. The following page includes a chart summarizing the total costs that have been avoided since the 2007 State Hazard Mitigation Plan was approved.

**Mitigation Results for  
DR 1746, 1757, 1802, 1818, 1841, 1855 1912**

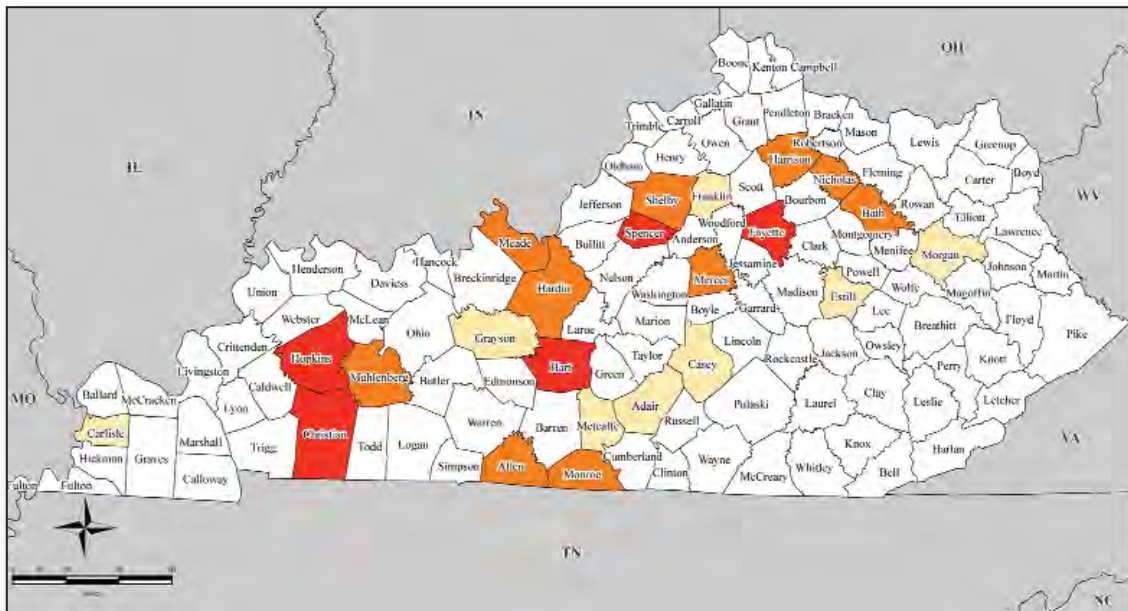
<b>FEMA Disaster #</b>	<b>Proj. #</b>	<b>Sub Applicant</b>	<b>Project Type</b>	<b>Cost</b>	<b>Benefit</b>
<b>1746</b>	1475-0006	City of Hopkinsville	Acquisition	\$732,300.00	\$1,599,006.00
	1617-0002	City of Hopkinsville	Acquisition	\$56,300.00	\$225,200.00
<b>1757</b>	1454-0008	Fleming County Fiscal Court	Acquisition	\$131,000.00	\$138,210.00
	1454-0009	Woodford County Fiscal Court	Acquisition	\$322,305.00	\$924,732.00
	1454-0004	Lewis County	Landslide Buyout	\$147,200.00	\$246,480.00
	1454-0012	City of Wickliffe	Sewer Lift Station	\$439,536.00	\$695,512.00
<b>1802</b>	1207-0010	Louisville Metro	Acquisition	\$833,504.00	\$3,334,016.00
	1216-0017	Louisville Metro	Acquisition	\$647,098.00	\$2,588,392.00
	1388-0004	Louisville Metro	Acquisition	\$2,139,372.00	\$2,933,228.00
	1454-0011	Louisville MSD	Acquisition	\$728,731.00	\$2,914,924.00
	1454-0012	City of Wickliffe	Sewer Lift Station	\$439,536.00	\$695,512.00
	1523-0005	Louisville MSD	Landslide Buyout	\$178,785.00	\$223,219.00
	<b>1818</b>	1207-0010	Louisville Metro	Acquisition	\$833,504.00
1216-0017		Louisville Metro	Acquisition	\$647,098.00	\$2,588,392.00
1407-0010		Boyd County Fiscal Court	Acquisition	\$543,000.00	\$1,095,226.00
1388-0004		Louisville Metro	Acquisition	\$2,139,372.00	\$2,933,228.00
1454-0008		Fleming County Fiscal Court	Acquisition	\$131,000.00	\$138,210.00
1454-0009		Woodford County Fiscal Court	Acquisition	\$322,305.00	\$924,732.00
1310-0006		Warren County	Safe Rooms (10)	\$471,000.00	\$505,100.00
1407-0002		Harlan County	Acquisition	\$1,040,960.00	\$4,163,840.00
1454-0004		Lewis County	Landslide Buyout	\$147,200.00	\$246,480.00
1454-0011		Louisville MSD	Acquisition	\$728,731.00	\$2,914,924.00
1454-0012		City of Wickliffe	Sewer Lift Station	\$439,536.00	\$695,512.00
1475-0005		Lincoln County	Acquisition	\$445,000.00	\$1,780,000.00
1475-0006		City of Hopkinsville	Acquisition	\$732,300.00	\$1,599,006.00
1523-0004		Nelson County	Landslide Buyout	\$154,650.00	\$195,770.00
1523-0005		Louisville MSD	Landslide Buyout	\$178,785.00	\$223,219.00
1523-0006		Rowan County	Acquisition	\$162,736.00	\$650,944.00
1523-0010		Martin County	Acquisition	\$262,800.00	\$1,180,601.00
1578-0005		City of Paintsville	Acquisition	\$138,757.00	\$148,888.00
1617-0002		City of Hopkinsville	Acquisition	\$56,300.00	\$225,200.00
<b>1841</b>		1454-0012	City of Wickliffe	Sewer Lift Station	\$439,536.00
<b>1855</b>	1207-0010	Louisville MSD	Acquisition	\$833,504.00	\$3,334,016.00
	1216-0017	Louisville MSD	Acquisition	\$647,098.00	\$2,588,392.00
	1388-0004	Louisville MSD	Acquisition	\$2,139,372.00	\$2,933,228.00
	1454-0011	Louisville MSD	Acquisition	\$728,731.00	\$2,914,924.00
	1523-0005	Louisville MDS	Landslide Buyout	\$178,785.00	\$223,219.00
<b>1912</b>	1310-0006	Warren County	Safe Rooms (10)	\$471,000.00	\$505,100.00
	1454-0009	Woodford County Fiscal Court	Acquisition	\$322,305.00	\$924,732.00
	1454-0012	City of Wickliffe	Sewer Lift Station	\$439,536.00	\$695,512.00
	1475-0005	Lincoln County	Acquisition	\$445,000.00	\$1,780,000.00
	1523-0004	Nelson County	Landslide Buyout	\$154,650.00	\$195,770.00
	1523-0006	Rowan County	Acquisition	\$162,736.00	\$650,944.00
				\$23,332,954.00	\$59,503,068.00
<b>Total Cost Avoidance</b>					<b>\$36,170,114.00</b>



# KENTUCKY DIVISION OF EMERGENCY MANAGEMENT

## STORMS, FLOODING & STRAIGHT LINE WINDS FEBRUARY 2008

### POST-DISASTER ASSESSMENT OF PREVIOUSLY MITIGATED PROJECTS **FEMA - DR - 1746 - KY**



# MITIGATION COST AVOIDANCE REPORT

Kentucky Division of Emergency Management  
Hazard Mitigation Grant Program  
100 Airport Road • 3rd Floor  
Frankfort, KY 40601  
(877) 634-8175  
KYEMrecovery@ng.army.mil

Steve Beshear, Governor  
John W. Heltzel, Director  
Leslie Mahoney, State Hazard Mitigation Officer

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## Introduction

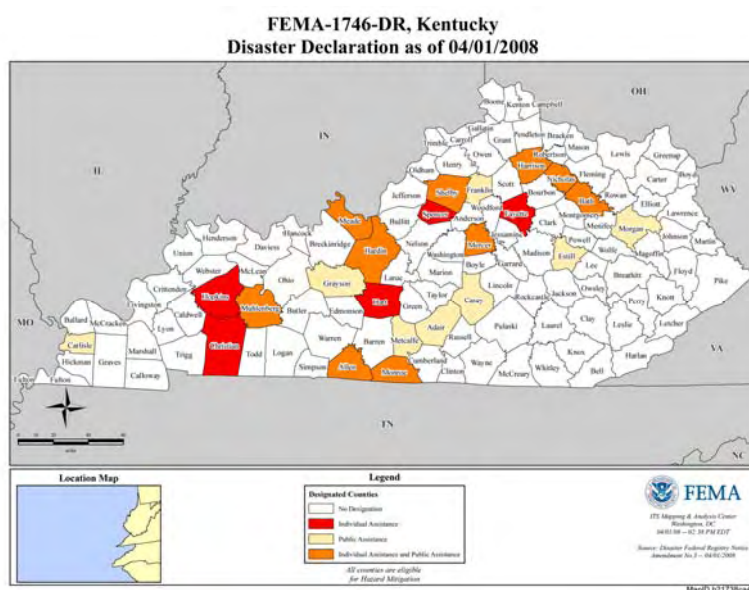
Since the last Kentucky State Hazard Mitigation Plan (2007), Kentucky has experienced 8 Presidential declared disasters. These disasters have increased the State's commitment to mitigation efforts across the Commonwealth.

Mitigation is any action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. There is a nationwide effort by federal, state, and local government, private industry, and homeowners to end the cycle of repetitive natural disaster damage. Under the provisions of the Stafford Act, FEMA has funded numerous mitigation projects to lesson damage to property and alleviate the suffering of residents in disaster-impacted communities.

The statewide impacts of the eight presidentially declared disasters served to remind the state of its vulnerability natural disasters. Cost avoidance analysis is one way to fully understand whether mitigation actions are, in fact, reducing disaster damage. This report presents the results of a post-disaster costs avoided analysis of previously mitigated projects within the State of Kentucky.

The State of Kentucky is repeatedly impacted by severe storms; 40 of all 63 Federal Emergency Management Agency (FEMA) declared disasters in Kentucky involved flooding. Many other declarations were winter storms, tornadoes and hurricanes that also included significant amounts of rain and high water. The entire State of Kentucky is particularly susceptible to flooding due to its inland river, lake and creek coastlines and accompanying population, significant development with impervious surface & drainage systems.

The terms flood and flooding refer to conditions of partial or complete inundation of normally dry land areas with surface water runoff from any source. Floodplains are defined as land areas susceptible to being inundated by water from any flooding source. Although storm surge presents a great potential for loss of life, in a study conducted from 1970-1999 by the National Hurricane Center, freshwater flooding accounts for more than 59% of the tropical cyclone deaths in the United States.



## **History and Statistics**

Kentucky Severe Storms, Tornadoes, Straight-line Winds, and Flooding

**Declaration Date:** February 21, 2008

**Incident Type:** Severe Storms, Straight-line Winds, and Flooding

**Incident Period:** February 5-6, 2008

**Public Assistance Program Eligible Counties:**

Adair, Allen, Bath, Carlisle, Casey, Estill, Franklin, Grayson, Hardin, Meade, Metcalfe, Mercer, Monroe, Morgan, Muhlenberg, and Shelby

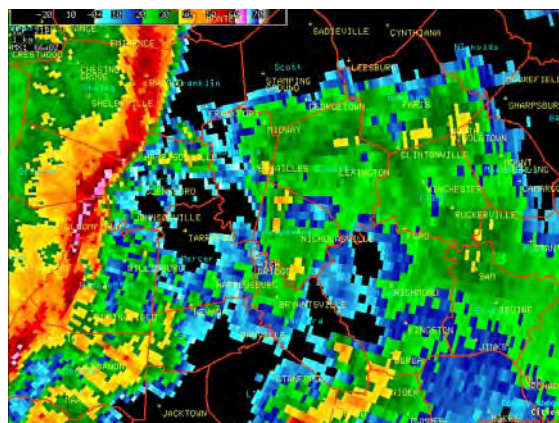
**Hazard Mitigation Grant Program Eligible Counties:**

All counties in the Commonwealth of Kentucky are eligible to apply for assistance under the Hazard Mitigation Grant Program.

## Overview:

Beginning on Tuesday, February 5, 2008 and through Wednesday, February 6, 2008, the Commonwealth of Kentucky was impacted by a series of intense thunderstorms and tornadoes. More than \$4.5 million in federal disaster public assistance was approved in association with these tornadoes and severe storms. The intense thunderstorms and tornadoes resulted in seven (7) fatalities, widespread damages to public and private property, power outages, and road closures. This line of severe weather moved the southwest to the northeast, spawning 22 tornadoes in 17 counties across western and central Kentucky. In addition to the mitigation program funding and public assistance grants made available to governmental units and qualifying non-profit entities, this declaration provided assistance to individuals and households in the amount of \$1.4 million dollars.

In addition to the execution of the Emergency Operation Plan and the activation of the Emergency Operations Center by the Kentucky Division of Emergency Management, the Adjutant General authorized active duty orders for more than 697 man days to mobilize Kentucky National Guard personnel and equipment to conduct search and rescue activities, protect lives and safety, restore and continue essential public services, remove debris, and prevent undue loss and suffering. Other state agencies activated in response to this disaster included the Kentucky Transportation Cabinet, The Kentucky State Police, The Environmental and Public Protection Agency, and the Department of Forestry.



Crisis counseling was provided by the Kentucky community Crisis Response Board and the American Red Cross opened six (6) shelters in five (5) counties. Four (4) feeding locations provided meals to relief workers, volunteers, and citizens in the affected areas.



## Methodology

To complete this report we researched previous mitigation projects that have been completed in the disaster declared areas. We compiled important information from the project files and FEMA's project tracking system, NEMIS. Some projects used in this report lack the necessary information to determine mitigation success.

Kentucky Emergency Management and FEMA compiled a list of completed mitigation projects in the impacted areas. This list was reviewed to exclude projects that were initiative type projects, projects that had been withdrawn, and management cost. As a result, two projects were remaining.

Of the two projects, both were acquisition/demolition type projects. One project did not include benefit cost information because the structure was substantially damaged. For that project, we used the NIBS methodology (For every \$1 invested in mitigation yields \$4 in returns).

A Benefit-Cost Ratio (BCR) is determined for every project application. FEMA provides the software to determine BCR as well as approves the number before the project is awarded. For the purposes of this post-disaster mitigation assessment of previously-mitigated projects, Kentucky uses the dollar amount of the benefit determined at the time of project application. There are some assumptions made in this process:

1. The projects in this report were located in the declared areas. Therefore, it is assumed that these projects would have some level of impact by the event.
2. The cost avoided for the mitigation projects in this report may be at least the cost of the mitigation due to FEMA BCA calculations.

The costs avoided are likely greater than the dollars contained in this report due to the impact of the recent multiple disasters.

## Data and Results

Cost avoidance was completed on both of the identified projects which included close to seven structures. Of these assessments, both projects were found to have met mitigation expectations during the DR-1746 Severe Storm and Flooding event.

Project #	Sub Applicant	Project Type	Cost	Benefit
1475-0006	City of Hopkinsville	Acquisition	\$732,300.00	\$1,599,006.00
1617-0002	City of Hopkinsville	Acquisition	\$56,300.00	\$225,200.00
			\$788,600.00	\$1,824,266.00
<b>Total Cost Avoidance=</b>				<b>\$1,035,666.00</b>

The results of this cost avoidance assessment indicate that the hazard mitigation activities funded by the Hazard Mitigation Grant Program (HMGP):

- Were cost-effective and reduced future losses from flood events
- Resulted in significant net benefits against future events

Kentucky will continue to refine the cost avoidance process to include project data in the future.

### Example Projects

The following projects provide local governments and non-profit agencies an excellent example of the goal of mitigation programs, whereby a local community, assisted by state and federal agencies, works to reduce or eliminate risk from future hazards.

Cherokee Park Subdivision, Acquisition, Hopkinsville, KY

Flooding from the Little River has caused 18 major flood events in Hopkinsville in the last 100 years. In March 1997, after major flooding caused over \$75 million in damages and devastated 450 homes, officials knew it was time to pursue ways to lessen the impact flooding was repeatedly having on their town. The initial acquisition and demolition project involved 38 properties at a cost of approximately 1.11 million in HMGP funds. To date, Hopkinsville has acquired and demolished 66 homes in the subdivision utilizing a variety of funding. The city chose to use the green space land as a recreational vehicle park to connect with the adjacent Trail of Tears Park.



Falmouth Flood of 1997, Acquisition, Falmouth, KY

On the night of March 1, 1997, heavy rains caused the Licking River to rise over 24 feet above its flood stage, sending a wall of water into the town. The flood, which reached 50 feet at its height, was the worst in the town’s history. The City received a \$3 million grant through HMGP to acquire 83 properties. City officials were able to obtain a Community Development Block Grant to cover the 13 percent local share required for participation. Participants in the acquisition project were given fair market pre-disaster value for their homes. The houses were demolished, and the land will remain open space in perpetuity in order to mitigate future flood losses.



Middlesboro Storm Sewer System, Flood Control Project, Middlesboro, KY

In February 1994, Middlesboro experienced its worst flood since 1977. Major transportation routes in the area became paralyzed; nearly 56 homes and 16 businesses were flooded with up to two and a half feet of water. Because of its nearly century old undersized drainage system, the City could not handle flash flooding caused by large amount of rainfall. Many of the system’s drains collapsed and were so full of debris that floodwaters were not able to pass through quickly enough. The estimated damages to businesses and homes over the eight year period of flooding from 1990 to 1998 totaled more than \$5 million. In September, 1999 the City was awarded \$244,893 to replace a portion of its downtown storm sewer system. The project was completed in 2000, and its effectiveness inspired the City to expand the storm sewer update.



COWS and CALVES, Warning Systems, Warren County, KY

Warren County and the surrounding cities within the county, have a history of tornadoes and other severe weather. In 1997 Warren County was awarded a grant through HMGP to install twelve Community Outdoor Warning Sirens (COWS). The sirens have a capacity to warn 100% of the residents of Bowling Green and 80% of the residents in the entire county. The County recognized, however, that an outdoor warning system was not sufficient. In 1999, the County received HMGP funds to install 250 Community Activated Lifesaving Voice Emergency Systems (CALVES), The system is designed to warn people who are indoors or not close to a siren site. CALVES were placed in every school, medical facility, church, indoor sporting facility, and emergency responder's office. The county implemented an extensive public awareness campaign to educate residents about the new warning systems. "When you hear the COWS mooove indoors. When you hear the CALVES protect your heard!" The COWS are credited with saving lives on April 16, 1998 when a tornado touched down in the county's biggest outdoor shopping mall. No lives were lost even though property damage totaled over \$2 million.

**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1475-006  
Subgrantee Name: City of Hopkinsville

Project Name: Givens Addition Residential Buyout

Total Approved Project Cost: \$732,300  
Approved Federal Share: \$549,225  
Approved State Share: \$87,876  
Approved Subgrantee Share: \$95,199  
Approved Administrative Share: \$26,944

Final Project Cost: \$610,921.91  
Final Federal Share: \$458,191.43  
Final State Share: \$73,310.63  
Final Subgrantee Share: \$79,419.85  
Final Administrative Share: \$13,218.44

Project Cost  Overrun or  Underrun: \$121,378.09

Project Completion Date: 3-01-2006

Final Site Visit Date: 3-29-2006

Final Site Visit Completed by: II. Camille Crain (Ky SHMO), Brian Gathy, and Chris Cross  
(UK Mitigation Office)

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1475-006. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

Chris Cross

Signature of Project Manager

Date

4-20-06

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

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*Project Number:* 1475-006

*Project Title:* Givens Addition Residential Buyout

*Subgrantee:* City of Hopkinsville

*Project Objective:*

**To acquire and demolish 6 homes and their surrounding lots to eliminate future flood damages to these structures.**

*Scope of Work:*

**The City of Hopkinsville will acquire and demolish up to 6 residential structures and their surrounding lots to eliminate future flood damages to these structures. After acquiring these structures and their lots, the City of Hopkinsville will maintain the parcels as greenspace in perpetuity.**

*Final Site Visit Report:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 6  
Site Address: 211 James Drive

GPS Coordinates: Please place in decimal format.  
 Latitude: 36.83587  
 Longitude: 87.48470

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: 169,200.00

Date Actual Amount Paid: 10-14-05

Flood zone designation: AE



### HAZARD MITIGATION GRANT PROGRAM Form #3 NEMIS CLOSEOUT CHECKLIST

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 3  
Site Address: 408 James Drive

GPS Coordinates: Please place in decimal format.  
Latitude: 36.83337  
Longitude: 87.48444

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$162,000.00

Date Actual Amount Paid: 10-24-05

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 4  
Site Address: 410 James Drive

GPS Coordinates: Please place in decimal format.  
 Latitude: 36.83308  
 Longitude: 87.48483

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$114,300.00

Date Actual Amount Paid: 10-14-05

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 5  
Site Address: 411 James Drive

GPS Coordinates: Please place in decimal format.  
Latitude: 36.83321  
Longitude: 87.48553

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$123,600.00

Date Actual Amount Paid: 10-14-05

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantec: City of Hopkinsville

Site Number: 1  
Site Address: 508 South Riverwood Drive

GPS Coordinates: Please place in decimal format.  
 Latitude: 36.83300  
 Longitude: 87.48752

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$115,100.00

Date Actual Amount Paid: 10-18-05

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 2  
Site Address: 2917 Old Clarksville Pike

GPS Coordinates: Please place in decimal format.  
Latitude: 36.836942  
Longitude: 87.480058

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid:

Date Actual Amount Paid:

Flood zone designation: AE



0008 0611 57 60 15 38

2008-03-18  
2008-03-18  
2008-03-18  
2008-03-18  
2008-03-18

### HAZARD MITIGATION GRANT PROGRAM FORM #1 PROJECT CLOSEOUT CHECKLIST

Project Number: 1617 - 002  
Subgrantee Name: City of Hopkinsville

Project Name: Acquisition of Floodway Home

Total Approved Project Cost: \$56,300  
Approved Federal Share: \$38,780  
Approved State Share: \$6,756  
Approved Subgrantee Share: \$10,764  
Approved Administrative Share: \$1,689

Final Project Cost: \$54,933.62  
Final Federal Share: \$38,780 ✓  
Final State Share: \$6,756 ✓  
Final Subgrantee Share: \$9,397.62  
Final Administrative Share: \$1,689 1,648.00

Project Cost  Overrun or  Underrun: \$1,366.38

Project Completion Date: 3-03-2008

Final Site Visit Date: 3-18-2008

Final Site Visit Completed by: Brian Gathy, and Christine Upton (City of Hopkinsville)

#### ITEM CHECKLIST

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1617 - 002. This project is ready for closeout.

Brian D Gathy  
Type Name of Project Manager

  
Signature of Project Manager

10-18-08  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

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*Project Number:* 1617 - 002

*Project Title:* Acquisition of Floodway Home

*Subgrantee:* City of Hopkinsville

*Project Objective:*

**To acquire and demolish 1 home at 1661 Mohawk Trail in Hopkinsville, Ky.**

*Scope of Work:*

**The City of Hopkinsville will acquire and demolish 1 residential structure to eliminate future flood damage to this structure. After acquiring this structure and its lot, the City of Hopkinsville will maintain the parcel as greenspace in perpetuity.**

*Final Site Visit Report:*

**Acquired the flood-prone property and returned the land to open green space.**

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1617 - 002  
Project Title: Acquisition of Floodway Home  
Subgrantee: City of Hopkinsville

Site Number: 1  
Site Address: 1661 Mohawk Trail, Hopkinsville, KY 42240

GPS Coordinates: Please place in decimal format.  
Latitude: 36.8546  
Longitude: 87.474

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$50,000

Date Actual Amount Paid: 8/16/2007

Flood zone designation: AE





# KENTUCKY DIVISION OF EMERGENCY MANAGEMENT

## STORMS, TORNADOES, MUD & LAND SLIDES SPRING 2008

### POST-DISASTER ASSESSMENT OF PREVIOUSLY MITIGATED PROJECTS FEMA - DR - 1757 - KY



# MITIGATION COST AVOIDANCE REPORT

Kentucky Division of Emergency Management  
Hazard Mitigation Grant Program  
100 Airport Road • 3rd Floor  
Frankfort, KY 40601  
(877) 634-8175  
KYEMrecovery@ng.army.mil

Steve Beshear, Governor  
John W. Heltzel, Director  
Leslie Mahoney, State Hazard Mitigation Officer



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## Introduction

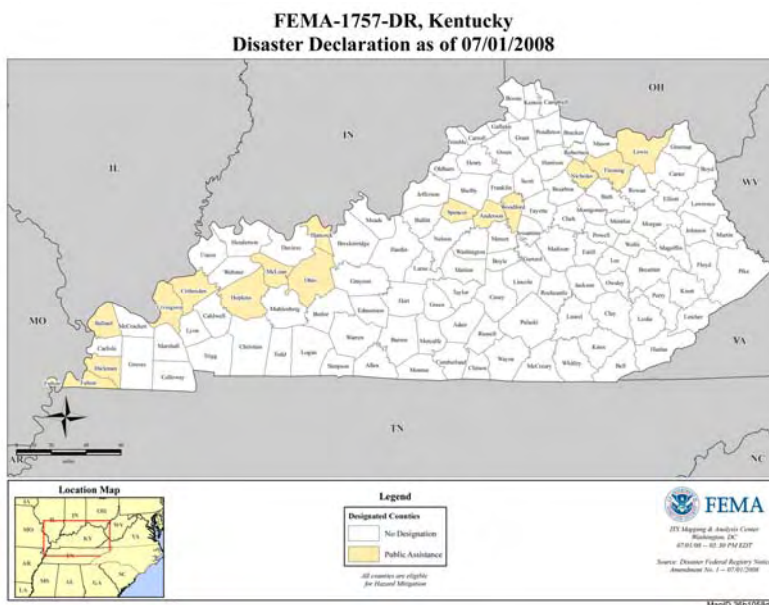
Since the last Kentucky State Hazard Mitigation Plan (2007), Kentucky has experienced 8 Presidential declared disasters. These disasters have increased the State's commitment to mitigation efforts across the Commonwealth.

Mitigation is any action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. There is a nationwide effort by federal, state, and local government, private industry, and homeowners to end the cycle of repetitive natural disaster damage. Under the provisions of the Stafford Act, FEMA has funded numerous mitigation projects to lesson damage to property and alleviate the suffering of residents in disaster-impacted communities.

The statewide impacts of the eight presidentially declared disasters served to remind the state of its vulnerability natural disasters. Cost avoidance analysis is one way to fully understand whether mitigation actions are, in fact, reducing disaster damage. This report presents the results of a post-disaster costs avoided analysis of previously mitigated projects within the State of Kentucky.

The State of Kentucky is repeatedly impacted by severe storms; 40 of all 63 Federal Emergency Management Agency (FEMA) declared disasters in Kentucky involved flooding. Many other declarations were winter storms, tornadoes and hurricanes that also included significant amounts of rain and high water. The entire State of Kentucky is particularly susceptible to flooding due to its inland river, lake and creek coastlines and accompanying population, significant development with impervious surface & drainage systems.

The terms flood and flooding refer to conditions of partial or complete inundation of normally dry land areas with surface water runoff from any source. Floodplains are defined as land areas susceptible to being inundated by water from any flooding source. Although storm surge presents a great potential for loss of life, in a study conducted from 1970-1999 by the National Hurricane Center, freshwater flooding accounts for more than 59% of the tropical cyclone deaths in the United States.



## **History and Statistics**

### Kentucky Severe Storms, Tornadoes, Mudslides, and Landslides

**Declaration Date:** May 19, 2008

**Incident Type:** Severe Storms, Tornadoes, Mudslides, and Landslides

**Incident Period:** April 3-4, 2008

**Public Assistance Program Eligible Counties:**

Anderson, Crittenden, Fleming, Fulton, Hancock, Hopkins, Lewis, Livingston, McLean, Nicholas, Ohio, Spencer, and Woodford

**Hazard Mitigation Grant Program Eligible Counties:**

All counties in the Commonwealth of Kentucky are eligible to apply for assistance under the Hazard Mitigation Grant Program.

**Overview:**

Beginning on Friday, April 4, 2008 and through Saturday, April 5, 2008 the Commonwealth of Kentucky was impacted by severe thunderstorms which produced tornadoes floods, flash floods, hail, mudslides, and landslides. This line of severe weather resulted in loss of life and personal injury, power outages, downed trees, road closures, and widespread damage to public and private property. Records show that four (4) to six (6) inches of rain fell in a 24-hour period, with some locally higher observations exceeding eight (8) inches. The heavy rains caused widespread flash flooding, road closures, evacuations, stranded motorists, vehicle-related water rescues, and mudslides. In Crittenden Count, a 2-year old died when her mother lost control of a vehicle while driving through high water. Power outages were reported throughout the Commonwealth for several days due to damages or power being shut off as a safety measure. Waters remained high along rivers through mid-April. A number of communities resorted to sandbagging to protect homes and schools from flooding and the continuing rising waters.



*Photo By: Rachel Matthews-Cross/Chris Allen WBKO*

## Methodology

To complete this report we researched previous mitigation projects that have been completed in the disaster declared areas. We compiled important information from the project files and FEMA's project tracking system, NEMIS. Some projects used in this report lack the necessary information to determine mitigation success.

Kentucky Emergency Management and FEMA compiled a list of completed mitigation projects in the impacted areas. This list was reviewed to exclude projects that were initiative type projects, projects that had been withdrawn, and management cost. As a result, four (4) projects were remaining.

Of the 4 projects, 3 were acquisitions and 1 sewer lift station project. All 4 projects included benefit cost information. For projects that did not include benefit cost information, we used the NIBS methodology (For every \$1 invested in mitigation yields \$4 in returns).

A Benefit-Cost Ratio (BCR) is determined for every project application. FEMA provides the software to determine BCR as well as approves the number before the project is awarded. For the purposes of this post-disaster mitigation assessment of previously-mitigated projects, Kentucky uses the dollar amount of the benefit determined at the time of project application. There are some assumptions made in this process:

1. The projects in this report were located in the declared areas. Therefore, it is assumed that these projects would have some level of impact by the event.
2. The cost avoided for the mitigation projects in this report may be at least the cost of the mitigation due to FEMA BCA calculations.

The costs avoided are likely greater than the dollars contained in this report due to the impact of the recent multiple disasters.

## Data and Results

Cost avoidance was completed on the four (4) identified projects which included close to 20 structures. Of these assessments, all 4 projects were found to have met mitigation expectations during the DR-1757 Severe Storm and Flooding event.

Project #	Sub Applicant	Project Type	Cost	Benefit
1454-0008	Fleming County Fiscal Court	Acquisition	\$131,000.00	\$ 138,210.00
1454-0009	Woodford County Fiscal Court	Acquisition	\$322,305.00	\$924,732.00
1454-0004	Lewis County	Landslide Buyout	\$147,200.00	\$246,480.00
1454-0012	City of Wickliffe	Sewer Lift Station	\$439,536.00	\$695,512.00
			<b>\$1,040,041.00</b>	<b>\$2,004,934.00</b>
<b>Total Cost Avoidance =</b>				<b>\$954,893.00</b>

The results of this cost avoidance assessment indicate that the hazard mitigation activities funded by the Hazard Mitigation Grant Program (HMGP):

- Were cost-effective and reduced future losses from flood events
- Resulted in significant net benefits against future events

Kentucky will continue to refine the cost avoidance process to include project data in the future.

### Example Projects

The following projects provide local governments and non-profit agencies an excellent example of the goal of mitigation programs, whereby a local community, assisted by state and federal agencies, works to reduce or eliminate risk from future hazards.

#### Cherokee Park Subdivision, Acquisition, Hopkinsville, KY

Flooding from the Little River has caused 18 major flood events in Hopkinsville in the last 100 years. In March 1997, after major flooding caused over \$75 million in damages and devastated 450 homes, officials knew it was time to pursue ways to lessen the impact flooding was repeatedly having on their town. The initial acquisition and demolition project involved 38 properties at a cost of approximately 1.11 million in HMGP funds. To date, Hopkinsville has acquired and demolished 66 homes in the subdivision utilizing a variety of funding. The city chose to use the green space land as a recreational vehicle park to connect with the adjacent Trail of Tears Park.



#### Falmouth Flood of 1997, Acquisition, Falmouth, KY

On the night of March 1, 1997, heavy rains caused the Licking River to rise over 24 feet above its flood stage, sending a wall of water into the town. The flood, which reached 50 feet at its height, was the worst in the town's history. The City received a \$3 million grant through HMGP to acquire 83 properties. City officials were able to obtain a Community Development Block Grant to cover the 13 percent local share required for participation. Participants in the acquisition project were given fair market pre-disaster value for their homes. The houses were demolished, and the land will remain open space in perpetuity in order to mitigate future flood losses.



#### Middlesboro Storm Sewer System, Flood Control Project, Middlesboro, KY

In February 1994, Middlesboro experienced its worst flood since 1977. Major transportation routes in the area became paralyzed; nearly 56 homes and 16 businesses were flooded with up to two and a half feet of water. Because of its nearly century old undersized drainage system, the City could not handle flash flooding caused by large amount of rainfall. Many of the system's drains collapsed and were so full of debris that floodwaters were not able to pass through quickly enough. The estimated damages to businesses and homes over the eight year period of flooding from 1990 to 1998 totaled more than \$5 million. In September, 1999 the City was awarded \$244,893 to replace a portion of its downtown storm sewer system. The project was completed in 2000, and its effectiveness inspired the City to expand the storm sewer update.



COWS and CALVES, Warning Systems, Warren County, KY

Warren County and the surrounding cities within the county, have a history of tornadoes and other severe weather. In 1997 Warren County was awarded a grant through HMGP to install twelve Community Outdoor Warning Sirens (COWS). The sirens have a capacity to warn 100% of the residents of Bowling Green and 80% of the residents in the entire county. The County recognized, however, that an outdoor warning system was not sufficient. In 1999, the County received HMGP funds to install 250 Community Activated Lifesaving Voice Emergency Systems (CALVES). The system is designed to warn people who are indoors or not close to a siren site. CALVES were placed in every school, medical facility, church, indoor sporting facility, and emergency responder's office. The county implemented an extensive public awareness campaign to educate residents about the new warning systems. "When you hear the COWS mooove indoors. When you hear the CALVES protect your heard!" The COWS are credited with saving lives on April 16, 1998 when a tornado touched down in the county's biggest outdoor shopping mall. No lives were lost even though property damage totaled over \$2 million.



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1454-004

Project Name: Lewis County Landslide Buyout

Subgrantee Name: Lewis County

Total Approved Project Cost: \$ 147,200.00  
Approved Federal Share: \$ 110,400.00  
Approved State Share: \$ 17,664.00  
Approved Subgrantee Share: \$ 19,136.00  
Approved Administrative Share: \$ 3,944.00

Final Project Cost: \$ 145,274.54  
Final Federal Share: \$ 108,955.91  
Final State Share: \$ 17,432.94  
Final Subgrantee Share: \$ 18,885.69  
Final Administrative Share: \$ 3,905.49

Project Cost  Overrun or  Underrun: \$ 1,925.46 TOTAL PROJECT COST

Project Completion Date: 6/30/05

Final Site Visit Date: 7/22/05

Final Site Visit Completed by: Camille Crain KyEM and Chris Cross UK

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-004. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

1-17-06  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1454-004

*Project Title:* Lewis County Landslide Buyout Project

*Subgrantee:* Lewis County

*Project Objective:* To alleviate further problems and damages to associated with the landslide

*Scope of Work:* The acquisition, demolition, and clearance of 4 homes built on a landslide in Lewis County.

*Final Site Visit Report:* All approved homes had been acquired and demolished. The vacant lots had been restored to open green space areas.

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-004

Project Title: Lewis County Landslide Buyout Project

Subgrantee: Lewis County

Site Number: 1

Site Address: Rt. 59, Vanceburg, KY 41179  
James & Alice Bond

GPS Coordinates: Please place in decimal format:

Latitude: 38.57076

Longitude: 83.32690

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Lewis County

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Open Green Space

Repetitive Loss #:

Actual Amount Paid: \$32,000.00

Date Actual Amount Paid: 8-9-2004

Flood zone designation: C or X



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-004

Project Title: Lewis County Landslide Buyout Project

Subgrantee: Lewis County

Site Number: 2

Site Address: Rt. 59, Vanceburg, KY 41179

Jeanette Butler

GPS Coordinates: Please place in decimal format.

Latitude: 38.56894

Longitude: 83.32814

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Lewis County

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

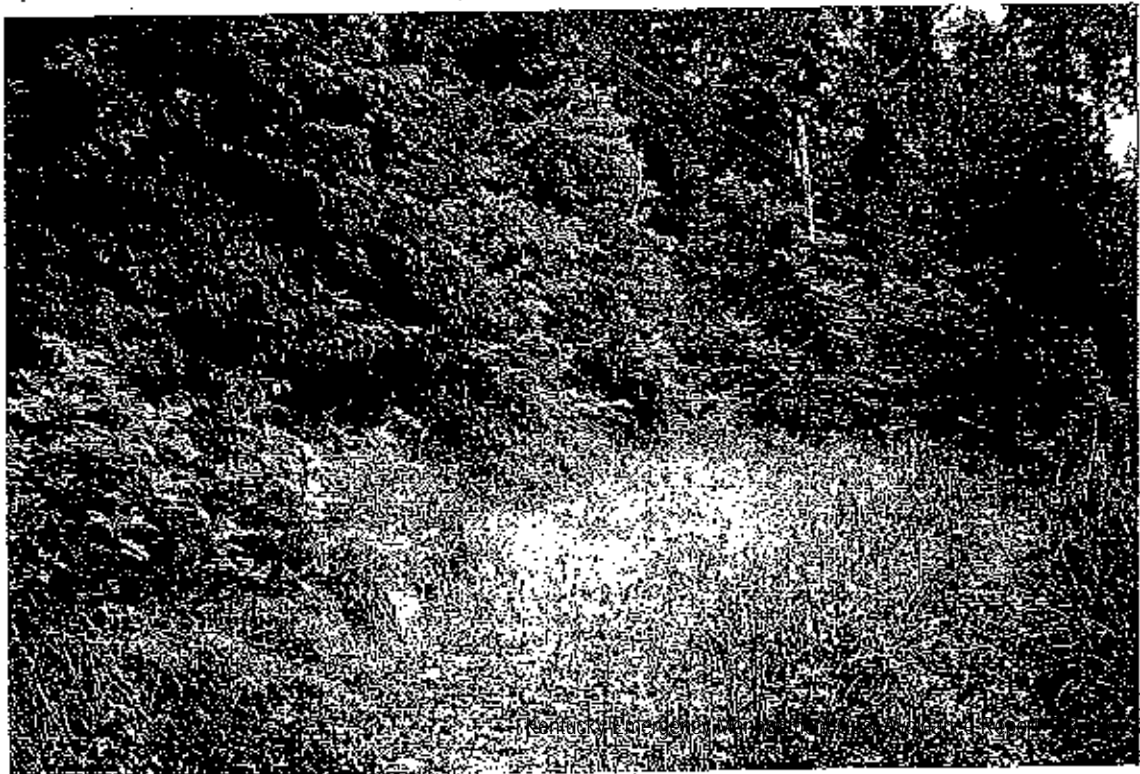
Post Mitigation Property Use: Open Green Space

Repetitive Loss #:

Actual Amount Paid: \$18,000

Date Actual Amount Paid: 8-9-2004

Flood zone designation: C or X



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-004

Project Title: Lewis County Landslide Buyout Project

Subgrantee: Lewis County

Site Number: 3

Site Address: Rt. 59, Vanceburg, KY 41179

Tonya Carpenter

GPS Coordinates: Please place in decimal format.

Latitude: 38.56988

Longitude: 83.32758

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Lewis County

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Open Green Space

Repetitive Loss #:

Actual Amount Paid: \$7,500

Date Actual Amount Paid: 8-9-2004

Flood zone designation: C or X



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-004

Project Title: Lewis County Landslide Buyout Project

Subgrantee: Lewis County

Site Number: 4

Site Address: Rt. 59, Vanceburg, KY 41179  
James & Becky Carpenter

GPS Coordinates: Please place in decimal format.

Latitude: 38.57014

Longitude: 83.32751

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Lewis County

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Open Green Space

Repetitive Loss #:

Actual Amount Paid: \$66,000

Date Actual Amount Paid: 8-9-2004

Flood zone designation: C or X



# HAZARD MITIGATION GRANT PROGRAM FORM #1 PROJECT CLOSEOUT CHECKLIST

Project Number: 1454-008  
Subgrantee Name: Fleming County

Project Name: Muses Mill Fire Dept. Acq/Dem

Total Approved Project Cost: \$131,000 ✓  
Approved Federal Share: \$98,250 ✓  
Approved State Share: \$15,720 ✓  
Approved Subgrantee Share: \$17,030 ✓  
Approved Administrative Share: \$3,620 ✓

Final Project Cost: ~~\$125,078~~ 129,027  
Final Federal Share: ~~\$93,808.50~~ 96,770.12  
Final State Share: ~~\$15,009.36~~ 15,403.37  
Final Subgrantee Share: ~~\$16,260.14~~ 16,773.61  
Final Administrative Share: ~~\$3,501.56~~ 3,580.54

750.00

32254

Project Cost Underrun: ~~\$5,922.00~~ 1973.00

Project Completion Date: 2-28-08

Final Site Visit Date: 5-5-08

Final Site Visit Completed by: Brian Gathy & Esther White, UK  
Kevin Cornette, BTADD

### ITEM CHECKLIST

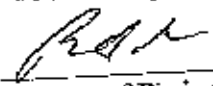
Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- X Application
- X Approval Letter from FRMA
- X Master Agreement
- Delivery Order
- X Master Agreement Invoice(s)
- X Documentation in support of amount of reimbursement claimed.
- X EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- X For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: Project is complete and should be closed.

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-008. This project is ready for closeout.

Brian Gathy  
Type Name of Project Manager

  
Signature of Project Manager

5-12-08  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number: 1454-008*

*Project Title: Fleming County Muses Mill Fire Department Acquisition/Demolition*

*Subgrantee: Fleming County*

*Project Objective: Purchase and Demolish one (1) flood prone property.*

*Scope of Work: To purchase and demolish one (1) flood prone property.*

*Final Site Visit Report: The structure which formerly housed the Muses Mill Fire Department has been acquired and demolished.*

*Recommendation: To close the project.*



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-008

Project Title: Fleming Co. Acquisition/Demolition of Muscs Mill Fire Department

Subgrantee: Fleming Co.

Site Number: 1

Site Address: Muses Mill VFD  
 Ryan Road  
 Muscs Mill KY

GPS Coordinates: Please place in decimal format.

Latitude: 38.35109

Longitude: 83.52424

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Fleming

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

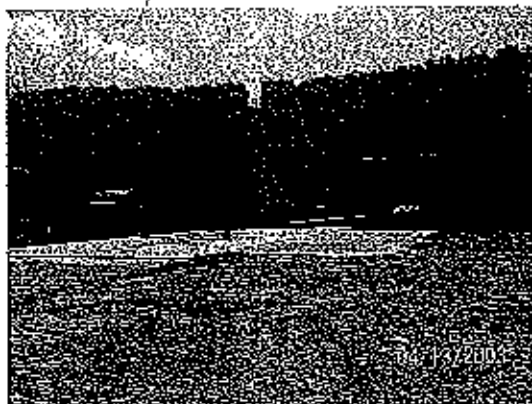
Post Mitigation Parcel use: Open Space

Is Property on FEMA's Repetitive Loss List? No.

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$124,293.00

Flood Zone Designation:



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1454 - 009

Project Name: Woodford Co. Acquisition

Subgrantee Name: Woodford County Fiscal Court

Total Approved Project Cost: 405,625.00

Final Project Cost: 166,448.38

Approved Federal Share: 304,219.00

Final Federal Share: 124,836.29

Approved State Share: 48,675.00

Final State Share: 19,973.81

Approved Subgrantee Share: 52,731.00

Final Subgrantee Share: 21,638.29

Approved Administrative Share: 9,113.00

Final Administrative Share: 4,301.97

Project Cost  Overrun or  Underrun: \$239,176.62

Project Completion Date: 5/4/2007

Final Site Visit Date: 8/10/2007

Final Site Visit Completed by: Camille Crain (SHMO); Brian D Gathy (UK Office)

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FHMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-009. This project is ready for closeout.

Brian D. Gathy

Type Name of Project Manager

  
Signature of Project Manager

Date

8-10-07

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-009

Project Title: Woodford Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Woodford County

Site Number: 1

Site Address: Jim Young  
2040 Shore Acres Rd  
Frankfort, KY 40601

GPS Coordinates: Please place in decimal format.

Latitude: 38.12488

Longitude: 84.86440

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Woodford

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use: Open Space

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$140,000.00

Flood Zone Designation: AE or A130



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-009

Project Title: Woodford Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Woodford County

Site Number: 2

Site Address: Blanch Murphey  
265 Lower Clifton Rd  
Versailles, KY 40383

GPS Coordinates: Please place in decimal format.

Latitude: 38.09848

Longitude: 84.83428

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? no

County: Woodford

Mitigation Offer Applicable: no

Mitigation Action: none

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$

Flood Zone Designation: AE or A130

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-009

Project Title: Woodford Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Woodford County

Site Number: 3

Site Address: Geza & Beverly Bruckner

785 Buck Run Rd

Versailles, KY 40383

GPS Coordinates: Please place in decimal format.

Latitude: 38.07625

Longitude: 84.83397

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? no

County: Woodford

Mitigation Offer Applicable: no

Mitigation Action: none

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$

Flood Zone Designation: AE or A130

**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: DR1454-012

Project Name: City of Wickliffe Sewer Lift Station

Subgrantee Name: City of Wickliffe

Total Approved Project Cost: 439,686.31  
Approved Federal Share: 329,765.25  
Approved State Share: 52,761.75  
Approved Subgrantee Share: 57,159.31  
Approved Administrative Share: 9,794.00

Final Project Cost: 439,687.00  
Final Federal Share: ~~329,765.25~~ 329,738.28  
Final State Share: ~~52,761.75~~ 52,788.72  
Final Subgrantee Share: ~~57,159.31~~ 57,160.00  
Final Administrative Share: 9,794.00

Project Cost  Overrun or  Underrun:

Project Completion Date: December 2008

Final Site Visit Date: March 25, 2009

Final Site Visit Completed by: Esther White & Brian Gathy, UK HMGP

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-012. This project is ready for closeout.

Esther White  
Type Name of Project Manager

Esther White  
Signature of Project Manager

3-30-09  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* DR1454-012

*Project Title:* City of Wickliffe Sewer Lift Station

*Subgrantee:* City of Wickliffe KY

*Project Objective:* To mitigate against the flooding of the City of Wickliffe's Main Sewer Lift Station during high water events.

*Scope of Work:* The design and construction of the City of Wickliffe Main Lift Station and the replacement and extension of 1000 linear feet of sanitary sewer line and force mains. Also included the installation of a Muffin Monster type grinder system and the demolition of the existing lift station.

*Final Site Visit Report:* The lift station is completed as proposed and is now out of the floodprone area. The City of Wickliffe is closing the station in with walls at its own expense.

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR1454-012  
Project Title: City of Wickliffe Sewer Lift Station  
Subgrantee: City of Wickliffe KY

Site Number: 1  
Site Address: Court Street, between 4<sup>th</sup> and 6<sup>th</sup> Streets  
 Wickliffe KY 42087

GPS Coordinates: Please place in decimal format.  
 Latitude: N 36.96368  
 Longitude: W -89.08692

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Ballard

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: **Demolition/Relocation of Main Sewer Lift Station**

Post Mitigation Property Use:

Is property on FEMA's Repetitive Loss List?  Yes or  No

If yes, what is the Repetitive Loss # ?

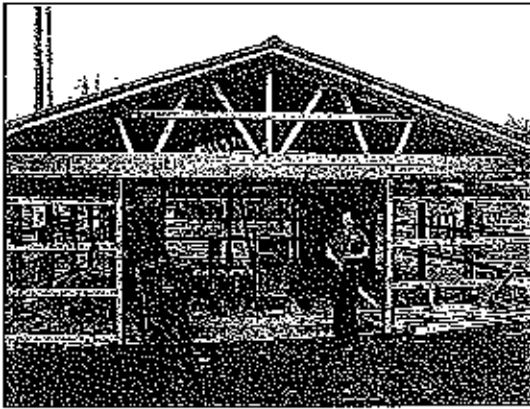
Actual Amount Paid:

Date Actual Amount Paid:

Flood zone designation:









# KENTUCKY DIVISION OF EMERGENCY MANAGEMENT

## SEVERE WIND STORM ASSOCIATED WITH TROPICAL DEPRESSION IKE - FALL 2008

### POST-DISASTER ASSESSMENT OF PREVIOUSLY MITIGATED PROJECTS FEMA - DR - 1802 - KY



# MITIGATION COST AVOIDANCE REPORT

Kentucky Division of Emergency Management  
Hazard Mitigation Grant Program  
100 Airport Road • 3rd Floor  
Frankfort, KY 40601  
(877) 634-8175  
KYEMrecovery@ng.army.mil

Steve Beshear, Governor

John W. Heltzel, Director

Leslie Mahoney, State Hazard Mitigation Officer

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## Introduction

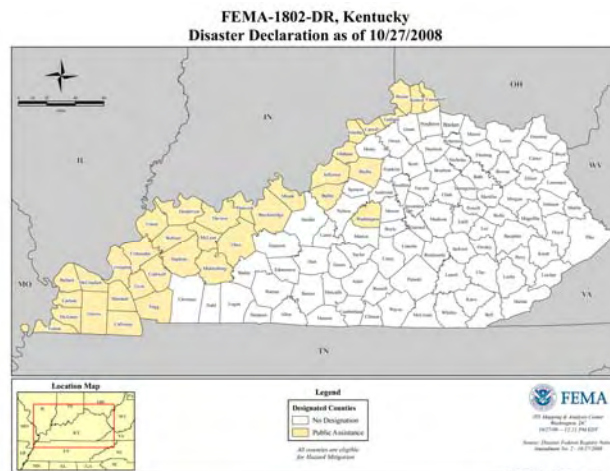
Since the last Kentucky State Hazard Mitigation Plan (2007), Kentucky has experienced 8 Presidential declared disasters. These disasters have increased the State's commitment to mitigation efforts across the Commonwealth.

Mitigation is any action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. There is a nationwide effort by federal, state, and local government, private industry, and homeowners to end the cycle of repetitive natural disaster damage. Under the provisions of the Stafford Act, FEMA has funded numerous mitigation projects to lesson damage to property and alleviate the suffering of residents in disaster-impacted communities.

The statewide impacts of the 2009 Kentucky severe winter storm & flooding served to remind the state of its vulnerability natural disasters. Cost avoidance analysis is one way to fully understand whether mitigation actions are, in fact, reducing disaster damage. This report presents the results of a post-disaster costs avoided analysis of previously mitigated projects within the State of Kentucky.

The State of Kentucky is repeatedly impacted by severe storms; 40 of all 63 Federal Emergency Management Agency (FEMA) declared disasters in Kentucky involved flooding. Many other declarations were winter storms, tornadoes and hurricanes that also included significant amounts of rain and high water. The entire State of Kentucky is particularly susceptible to flooding due to its inland river, lake and creek coastlines and accompanying population, significant development with impervious surface & drainage systems.

The terms flood and flooding refer to conditions of partial or complete inundation of normally dry land areas with surface water runoff from any source. Floodplains are defined as land areas susceptible to being inundated by water from any flooding source. Although storm surge presents a great potential for loss of life, in a study conducted from 1970-1999 by the National Hurricane Center, freshwater flooding accounts for more than 59% of the tropical cyclone deaths in the United States.



## **History and Statistics**

Kentucky Severe Wind Storm associated with Tropical Depression Ike

**Declaration Date:** October 9, 2008

**Incident Type:** Severe Wind

**Incident Period:** September 14-15, 2008

**Declared Counties Include:**

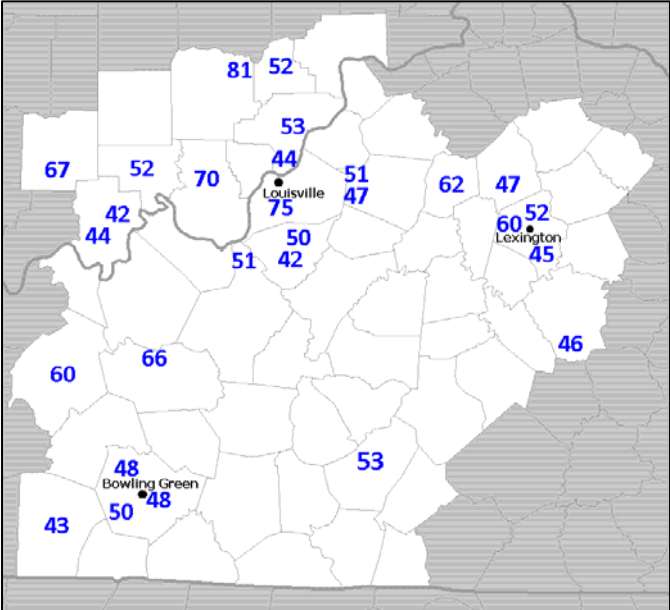
The counties of Ballard, Boone, Breckenridge, Bullitt, Caldwell, Calloway, Campbell, Carlisle, Carroll, Crittenden, Daviess, Fulton, Gallatin, Graves, Hancock, Henderson, Hickman, Hopkins, Jefferson, Kenton, Livingston, Lyon, Marshall, McCracken, McLean, Meade, Muhlenberg, Ohio, Oldham, Shelby, Trigg, Trimble, Union, and Webster.

All counties in the Commonwealth of Kentucky are eligible to apply for assistance under the Hazard Mitigation Grant Program.

### Overview

On September 14, 2008, the remnants of Hurricane Ike combined with a cold front crossing the Ohio Valley to cause extremely strong surface winds to blow through the region. Hurricane-force wind gusts in Louisville felled countless trees and power lines. At one point, 60% of LG&E customers in the Louisville area were without power, with some folks expected to remain in the dark for up to a week. Minor damage occurred at Valhalla Golf Club just 2 days before the Ryder Cup was to begin, but it was expected to be taken care of before the first tee-off. Sadly, four fatalities occurred due to falling trees and limbs.

Scientifically, this phenomenon resulted from very strong winds around 3000-6000 feet above the ground (50-80 mph), i.e., a low-level jet associated with and ahead of the remnants of Ike, being directed downward to the surface as surface heating (due to some sunshine) resulted in steep low-level lapse rates (temperatures decreasing rapidly with height from the surface to the level of these maximum winds). Such lapse rates allowed winds aloft to mix down to the surface causing the strong, damaging wind gusts. This phenomenon typically is common with severe thunderstorms, although in this case, there were no thunderstorms at all associated with the strong winds.



## Methodology

To complete this report we researched previous mitigation projects that have been completed in the disaster declared areas. We compiled important information from the project files and FEMA's project tracking system, NEMIS. Some projects used in this report lack the necessary information to determine mitigation success.

Kentucky Emergency Management and FEMA compiled a list of completed mitigation projects in the impacted areas. This list was reviewed to exclude projects that were initiative type projects, projects that had been withdrawn, and management cost. As a result, 6 projects were remaining.

Of the 6 projects, 5 were acquisitions and 1 sewer lift station project. Three projects did not include benefit cost information. For those projects, we used the NIBS methodology (For every \$1 invested in mitigation yields \$4 in returns).

A Benefit-Cost Ratio (BCR) is determined for every project application. FEMA provides the software to determine BCR as well as approves the number before the project is awarded. For the purposes of this post-disaster mitigation assessment of previously-mitigated projects, Kentucky uses the dollar amount of the benefit determined at the time of project application. There are some assumptions made in this process:

1. The projects in this report were located in the declared areas. Therefore, it is assumed that these projects would have some level of impact by the event.
2. The cost avoided for the mitigation projects in this report may be at least the cost of the mitigation due to FEMA BCA calculations.

The costs avoided are likely greater than the dollars contained in this report due to the impact of the recent multiple disasters.

## Data and Results

Cost avoidance was completed on the six identified projects which included close to 40 structures. Of these assessments, all six projects were found to have met mitigation expectations during the DR-1802 Severe Wind Storm event.

Project #	Sub Applicant	Project Type	Cost	Benefit
1207-0010	Louisville Metro	Acquisition	\$833,504.00	\$3,334,016.00
1216-0017	Louisville Metro	Acquisition	\$647,098.00	\$2,588,392.00
1388-0004	Louisville Metro	Acquisition	\$2,139,372.00	\$2,933,228.00
1454-0011	Louisville MSD	Acquisition	\$728,731.00	\$2,914,924.00
1454-0012	City of Wickliffe	Sewer Lift Station	\$439,536.00	\$695,512.00
1523-0005	Louisville MSD	Landslide Buyout	\$178,785.00	\$223,219.00
			<b>\$4,967,026.00</b>	<b>\$12,689,291.00</b>
<b>Total Cost Avoidance =</b>				<b>\$7,722,265.00</b>

The results of this cost avoidance assessment indicate that the hazard mitigation activities funded by the Hazard Mitigation Grant Program (HMGP):

- Were cost-effective and reduced future losses from flooding & wind events
- Resulted in significant net benefits against future events

Kentucky will continue to refine the cost avoidance process to include project data in the future.



### Example Projects

The following projects provide local governments and non-profit agencies an excellent example of the goal of mitigation programs, whereby a local community, assisted by state and federal agencies, works to reduce or eliminate risk from future hazards.

#### Cherokee Park Subdivision, Acquisition, Hopkinsville, KY

Flooding from the Little River has caused 18 major flood events in Hopkinsville in the last 100 years. In March 1997, after major flooding caused over \$75 million in damages and devastated 450 homes, officials knew it was time to pursue ways to lessen the impact flooding was repeatedly having on their town. The initial acquisition and demolition project involved 38 properties at a cost of approximately 1.11 million in HMGP funds. To date, Hopkinsville has acquired and demolished 66 homes in the subdivision utilizing a variety of funding. The city chose to use the green space land as a recreational vehicle park to connect with the adjacent Trail of Tears Park.



#### Falmouth Flood of 1997, Acquisition, Falmouth, KY

On the night of March 1, 1997, heavy rains caused the Licking River to rise over 24 feet above its flood stage, sending a wall of water into the town. The flood, which reached 50 feet at its height, was the worst in the town's history. The City received a \$3 million grant through HMGP to acquire 83 properties. City officials were able to obtain a Community Development Block Grant to cover the 13 percent local share required for participation. Participants in the acquisition project were given fair market pre-disaster value for their homes. The houses were demolished, and the land will remain open space in perpetuity in order to mitigate future flood losses.



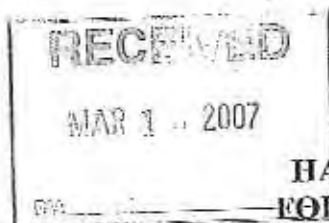
#### Middlesboro Storm Sewer System, Flood Control Project, Middlesboro, KY

In February 1994, Middlesboro experienced its worst flood since 1977. Major transportation routes in the area became paralyzed; nearly 56 homes and 16 businesses were flooded with up to two and a half feet of water. Because of its nearly century old undersized drainage system, the City could not handle flash flooding caused by large amount of rainfall. Many of the system's drains collapsed and were so full of debris that floodwaters were not able to pass through quickly enough. The estimated damages to businesses and homes over the eight year period of flooding from 1990 to 1998 totaled more than \$5 million. In September, 1999 the City was awarded \$244,893 to replace a portion of its downtown storm sewer system. The project was completed in 2000, and its effectiveness inspired the City to expand the storm sewer update.



COWS and CALVES, Warning Systems, Warren County, KY

Warren County and the surrounding cities within the county, have a history of tornadoes and other severe weather. In 1997 Warren County was awarded a grant through HMGP to install twelve Community Outdoor Warning Sirens (COWS). The sirens have a capacity to warn 100% of the residents of Bowling Green and 80% of the residents in the entire county. The County recognized, however, that an outdoor warning system was not sufficient. In 1999, the County received HMGP funds to install 250 Community Activated Lifesaving Voice Emergency Systems (CALVES). The system is designed to warn people who are indoors or not close to a siren site. CALVES were placed in every school, medical facility, church, indoor sporting facility, and emergency responder's office. The county implemented an extensive public awareness campaign to educate residents about the new warning systems. "When you hear the COWS mooove indoors. When you hear the CALVES protect your heard!" The COWS are credited with saving lives on April 16, 1998 when a tornado touched down in the county's biggest outdoor shopping mall. No lives were lost even though property damage totaled over \$2 million.



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1207-010

Project Name: Acquisition

Subgrantee Name: Louisville MSD

Total Approved Project Cost: \$1,097,526.00  
 Approved Federal Share: \$823,145.00  
 Approved State Share: \$131,703.00  
 Approved Subgrantee Share: \$142,678.00  
 Approved Administrative Share: \$21,239.00

Final Project Cost: \$958,050.86  
 Final Federal Share: \$718,538.15  
 Final State Share: \$114,966.10  
 Final Subgrantee Share: \$124,546.61  
 Final Administrative Share: \$20,161.02

Project Cost  Overrun or  Underrun: \$139,475.14

Project Completion Date: April 1, 2006

Final Site Visit Date: March 14, 2006

Final Site Visit Completed by:

II. Camille Crain SIIMO  
 Brian Gathy UK Program Coordinator,  
 Chris Cross Grants Manager  
 Jerry Ross FEMA DAE

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (2-3-03)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- FFY payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: \_\_\_\_\_

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1207-010. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

Chris Cross

Signature of Project Manager

3-9-07

Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

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*Project Number:* **1207-010**

*Project Title:* **Acquisition**

*Subgrantee:* **Lou. MSD**

*Project Objective:*

**The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties located in Louisville Metro using federal HMGF disaster funding provided by FEMA and the associated state and local matching funds.**

*Scope of Work:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Final Site Visit Report:*

**Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with H. Camille Crain, the SHMO. Site was cleared and residential structure was returned to green space.**

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 3  
Site Address: 503 Fergusson Fife

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12479  
Longitude: 85.75865

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$52,500.00

Date Actual Amount Paid: 12/19/05

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 4  
Site Address: 505 Fergusson Fife

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12474  
Longitude: 85.75861

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$101,000.00

Date Actual Amount Paid: 6/24/03

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 5  
Site Address: 300 Glengarry

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12462  
Longitude: 85.75908

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$100,000.00

Date Actual Amount Paid: March 11, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 6  
Site Address: 302 Glengarry

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12447  
Longitude: 85.75915

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$100,000.00

Date Actual Amount Paid: August 4, 2004

Flood zone designation: Floodway





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 7  
Site Address: 304 Glengarry

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12429  
Longitude: 85.75920

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$97,000.00

Date Actual Amount Paid: April 7, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 9  
Site Address: 7206 Arnoldtown Rd.

GPS Coordinates: Please place in decimal format.  
Latitude: 38.14824  
Longitude: 85.82407

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green space  
Repetitive Loss #:  
Actual Amount Paid: \$186,000.00  
Date Actual Amount Paid: April 29, 2004  
Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 12  
Site Address: 4107 S. Pope Lick

GPS Coordinates: Please place in decimal format.  
Latitude: 38.17815  
Longitude: 85.48505

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$77,000.00

Date Actual Amount Paid: April 5, 2004

Flood zone designation: AE, Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 13  
Site Address: 4111 S. Popc Lick

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.17920  
 Longitude: 85.48592

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$79,000.00

Date Actual Amount Paid: April 15, 2004

Flood zone designation: AE, Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 14  
Site Address: 4203 S. Pope Lick

GPS Coordinates: Please place in decimal format.  
Latitude: 38.17776  
Longitude: 85.48592

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$75,000.00

Date Actual Amount Paid: April 15, 2004

Flood zone designation: AE, Floodway





HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST

Project Number: 1216-017  
Subgrantee Name: Louisville MSD

Project Name: Acquisition

Total Approved Project Cost: \$647,098.00  
Approved Federal Share: \$485,324.00  
Approved State Share: \$77,651.00  
Approved Subgrantee Share: \$84,123.00  
Approved Administrative Share: \$13,942.00

Final Project Cost: \$647,098.00  
Final Federal Share: ~~\$485,323.50~~ 485320.19  
Final State Share: ~~\$77,650.54~~ 77654.81  
Final Subgrantee Share: ~~\$84,122.76~~ 84123.00  
Final Administrative Share: \$13,941.96

Project Cost  Overrun or  Underrun: ~~\$1.20~~

Project Completion Date: April 1, 2006  
Final Site Visit Date: March 14, 2006  
Final Site Visit Completed by:

H. Camille Crain SIIMO  
Brian Gathy UK Program Coordinator,  
Chris Cross Grants Manager  
Jerry Ross FEMA DAE

ITEM CHECKLIST

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (2-3-03)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EIT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1216-017. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

3-9-07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1216-017

*Project Title:* Acquisition and Elevation

*Subgrantee:* Lou. MSD

*Project Objective:*

The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties and the elevation of one (1) flood-prone property located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.

*Scope of Work:*

Acquired the flood-prone properties and returned the land to open green space and elevated the one (1) flood-prone property.

*Final Site Visit Report:*

Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with H. Camille Crain, the SHMO. Sites that were acquired were cleared and residential structures were returned to green space. House elevation project was complete as well, and house was elevated.

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 1  
Site Address: 13002 Seatonville Road

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13216  
Longitude: 85.52289

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Elevation of a home

Post Mitigation Property Use: Residential use

Repetitive Loss #: 0087512

Actual Amount Paid: \$80,750.00

Date Actual Amount Paid: 3/21/06

Flood zone designation: AE, 100 Yr. Floodplain





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 2  
Site Address: 8305 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12201  
Longitude: 85.80109

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$95,000

Date Actual Amount Paid: March 8, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 3  
Site Address: 8307 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format:  
Latitude: 38.12182  
Longitude: 85.80141

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green Space  
Repetitive Loss #: 0107526  
Actual Amount Paid: \$100,000  
Date Actual Amount Paid: March 16, 2004  
Flood zone designation: Flood Zone



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 5  
Site Address: 8311 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format:  
Latitude: 38.12160  
Longitude: 85.80207

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green Space  
Repetitive Loss #:  
Actual Amount Paid: \$115,000  
Date Actual Amount Paid: April 29, 2004  
Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantcc: Louisville MSD

Site Number: 6  
Site Address: 8313 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.12152  
 Longitude: 85.80252

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$113,000

Date Actual Amount Paid: March 1, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 7  
Site Address: 8315 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12138  
Longitude: 85.80258

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$93,000

Date Actual Amount Paid: January 30, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1388-004

Project Name: Acquisition

Subgrantee Name: Lou. MSD

Total Approved Project Cost: \$2,345,238.00

Final Project Cost: \$2,304,172.10

Approved Federal Share: \$1,758,929.00

Final Federal Share: \$1,728,129.06

Approved State Share: \$281,428.00

Final State Share: \$276,500.66

Approved Subgrantee Share: \$304,881.00

Final Subgrantee Share: \$299,542.38

Approved Administrative Share: \$34,425.00

Final Administrative Share: \$34,041.72

Project Cost  Overrun or  Underrun: \$41,065.90

Project Completion Date: 10/31/2005

Final Site Visit Date: 03/13/2006

Final Site Visit Completed by: H. Camille Crain (KY SHMO), Jerry Ross (FEMA DAE),  
Brian Gathy (UK Martin School), Chris Cross (UK Martin School)

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (2-3-03)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- N/A  EFT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1388-004. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

Chris Cross

Signature of Project Manager

Date

4-20-06

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1388-004

*Project Title:* Acquisition

*Subgrantee:* Lou. MSD

*Project Objective:*

**The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.**

*Scope of Work:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Final Site Visit Report:*

**All flood-prone properties have been purchased, demolished, and have been returned to green space.**

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantee: Louisville MSD

Site Number: #1

Site Address: 8300 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13072

Longitude: 85.70061

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$120,000.00

Date Actual Amount Paid: 10/24/2003

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantee: Louisville MSD

Site Number: #2

Site Address: 8301 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13098

Longitude: 85.70054

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$136,000.00

Date Actual Amount Paid: 10/24/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #3  
Site Address: 8302 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13057  
Longitude: 85.70055

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$125,000.00

Date Actual Amount Paid: 10/29/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantee: Louisville MSD

Site Number: #5

Site Address: 8304 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13055

Longitude: 85.70038

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$142,000.00

Date Actual Amount Paid: 12/18/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #7  
Site Address: 8311 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13060  
Longitude: 85.69943

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$149,000.00

Date Actual Amount Paid: 10/20/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #8  
Site Address: 8315 Woodsman Court  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13054  
Longitude: 85.69924

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$130,000.00

Date Actual Amount Paid: 09/29/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantee: Louisville MSD

Site Number: #9

Site Address: 8317 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13036

Longitude: 85.69911

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$142,000.00

Date Actual Amount Paid: 11/03/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #13  
Site Address: 3402 Pinecroft Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13485  
Longitude: 85.70123

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$127,000.00

Date Actual Amount Paid: 10/30/2003

Flood zone designation: AF



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #12  
Site Address: 3400 Pinecroft Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13490  
Longitude: 85.70132

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$129,000.00

Date Actual Amount Paid: 10/30/2003

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #14  
Site Address: 8002 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13419  
Longitude: 85.70049

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$140,000.00

Date Actual Amount Paid: 10/08/2003

Flood zone designation: AF



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #15  
Site Address: 8006 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13391  
Longitude: 85.70109

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$127,000.00

Date Actual Amount Paid: 10/27/2003

Flood zone designation: AH



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #16  
Site Address: 8010 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13366  
Longitude: 85.70094

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$123,000.00

Date Actual Amount Paid: 09/30/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #17  
Site Address: 8012 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13346  
Longitude: 85.70091

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$115,000.00

Date Actual Amount Paid: 10/20/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #18  
Site Address: 8014 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13324  
Longitude: 85.70092

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$120,000.00

Date Actual Amount Paid: 09/10/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #19  
Site Address: 8016 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13315  
Longitude: 85.70097

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$108,000.00

Date Actual Amount Paid: 01/19/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #20  
Site Address: 8018 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13285  
Longitude: 85.70090

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$113,000.00

Date Actual Amount Paid: 12/17/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #21  
Site Address: 8024 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13241  
Longitude: 85.70104

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$108,000.00

Date Actual Amount Paid: 10/24/2003

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantcc: Louisville MSD

Site Number: #23  
Site Address: 3400 Foreman Lane  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13208  
Longitude: 85.70104

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$133,000.00

Date Actual Amount Paid: 11/14/2004

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

**Project Number: 1454-011**

**Project Name: Acquisition**

**Subgrantee Name: Louisville MSD**

Total Approved Project Cost: \$728,731.00  
 Approved Federal Share: \$546,548.00  
 Approved State Share: \$87,448.00  
 Approved Subgrantee Share: \$94,735.00  
 Approved Administrative Share: \$15,575.00

Final Project Cost: \$726,827.33  
 Final Federal Share: \$545,120.50  
 Final State Share: \$87,219.28  
 Final Subgrantee Share: \$94,487.55  
 Final Administrative Share: \$15,536.55

Project Cost  Overrun or  Underrun: \$1,903.67

Project Completion Date: **October 31, 2006**

Final Site Visit Date: **March 14, 2006**

Final Site Visit Completed by:

H. Camille Crain SIIMO  
 Brian Gathy UK Program Coordinator,  
 Chris Cross Grants Manager  
 Jerry Ross FEMA DAE

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (11-18-05)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number **1454-011**. This project is ready for closeout.

**Chris Cross**

Type Name of Project Manager

*Chris Cross*

Signature of Project Manager

Date

*3-9-07*

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1454-011

*Project Title:* Acquisition

*Subgrantee:* Lou. MSD

*Project Objective:*

**The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.**

*Scope of Work:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Final Site Visit Report:*

**Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with H. Camille Crain, the SHMO. Site was cleared and residential structure was returned to green space.**

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #1

Site Address: 12808 Scatonville Road  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13121

Longitude: 85.52496

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #: 0043882

Actual Amount Paid: \$153,000.00

Date Actual Amount Paid: 1/21/05

Flood zone designation: AF, Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #2

Site Address: 8303 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13113

Longitude: 85.70033

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$115,000

Date Actual Amount Paid: 01/28/2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011  
Project Title: Louisville MSD Acquisition and Demolition  
Subgrantee: Louisville MSD

Site Number: #3  
Site Address: 8305 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13086  
Longitude: 85.70016

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$116,000

Date Actual Amount Paid: 10/03/2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #4

Site Address: 606 Ruben Lane  
Fairdale, KY 40118

GPS Coordinates: Please place in decimal format.

Latitude: 38.12422

Longitude: 85.75346

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$105,000

Date Actual Amount Paid: 03/08/2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #5

Site Address: 704 Ruben Lane  
Fairdale, KY 40118

GPS Coordinates: Please place in decimal format.

Latitude: 38.12422

Longitude: 85.75346

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$81,000

Date Actual Amount Paid: 05/12/2004

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #6

Site Address: 8026 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13229

Longitude: 85.70094

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$122,000

Date Actual Amount Paid: 10/30/2003

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: **DR1454-012**

Project Name: **City of Wickliffe Sewer Lift Station**

Subgrantee Name: **City of Wickliffe**

Total Approved Project Cost: 439,686.31  
Approved Federal Share: 329,765.25  
Approved State Share: 52,761.75  
Approved Subgrantee Share: 57,159.31  
Approved Administrative Share: 9,794.00

Final Project Cost: 439,687.00  
Final Federal Share: ~~329,765.25~~ 329,738.28  
Final State Share: ~~52,761.75~~ 52,788.72  
Final Subgrantee Share: ~~57,159.31~~ 57,160.00  
Final Administrative Share: 9,794.00

Project Cost  Overrun or  Underrun:

Project Completion Date: December 2008

Final Site Visit Date: March 25, 2009

Final Site Visit Completed by: Esther White & Brian Gathy, UK HMGP

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file: Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-012. This project is ready for closeout.

Esther White  
Type Name of Project Manager

Esther White  
Signature of Project Manager

3-30-09  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* DR1454-012

*Project Title:* City of Wickliffe Sewer Lift Station

*Subgrantee:* **City of Wickliffe KY**

*Project Objective:* To mitigate against the flooding of the City of Wickliffe's Main Sewer Lift Station during high water events.

*Scope of Work:* The design and construction of the City of Wickliffe Main Lift Station and the replacement and extension of 1000 linear feet of sanitary sewer line and force mains. Also included the installation of a Muffin Monster type grinder system and the demolition of the existing lift station.

*Final Site Visit Report:* The lift station is completed as proposed and is now out of the floodprone area. The City of Wickliffe is closing the station in with walls at its own expense.

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR1454-012  
Project Title: City of Wickliffe Sewer Lift Station  
Subgrantee: City of Wickliffe KY

Site Number: 1  
Site Address: Court Street, between 4<sup>th</sup> and 6<sup>th</sup> Streets  
 Wickliffe KY 42087

GPS Coordinates: Please place in decimal format.  
Latitude: N 36.96368  
Longitude: W -89.08692

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Ballard

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: **Demolition/Relocation of Main Sewer Lift Station**

Post Mitigation Property Use:

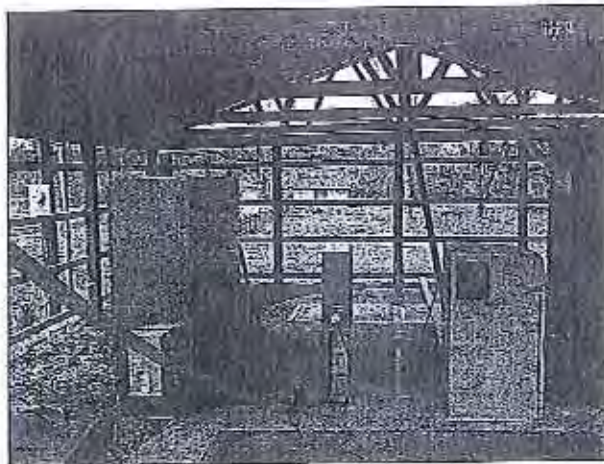
Is property on FEMA's Repetitive Loss List?  Yes or  No

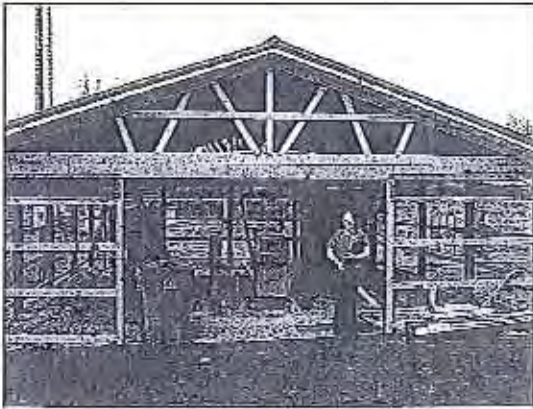
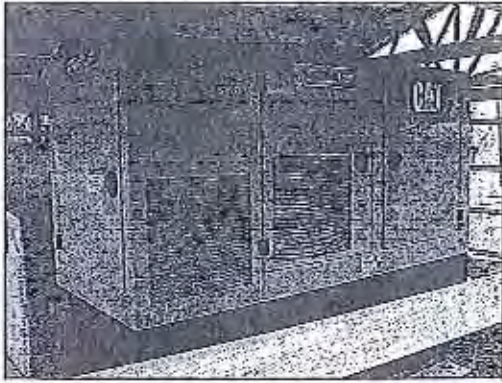
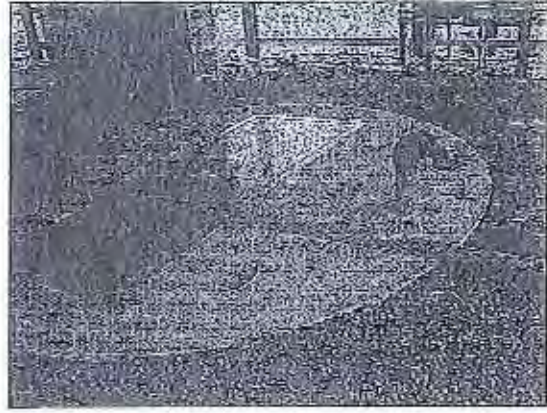
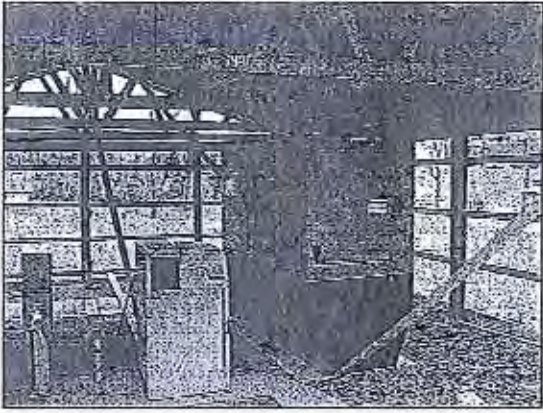
If yes, what is the Repetitive Loss # ?

Actual Amount Paid:

Date Actual Amount Paid:

Flood zone designation:





**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

**Project Number:** 1523-005      **Project Name:** Landslide Acquisition of Residential Structure  
**Subgrantee Name:** Louisville Metro Emergency Management

Total Approved Project Cost: \$178,785	Final Project Cost: \$138,355.49
Approved Federal Share: \$134,089	Final Federal Share: \$103,766.62
Approved State Share: \$21,454	Final State Share: \$16,602.66
Approved Subgrantee Share: \$23,242	Final Subgrantee Share: \$17,986.21
Approved Administrative Share: \$4,576	Final Administrative Share: \$3,767.10

Project Cost  Overrun or  Underrun: \$40,429.51

Project Completion Date: 2-5-07

Final Site Visit Date: 3-28-07

Final Site Visit Completed by: H. Camille Crain, KY SIIMO  
Brian Gathy, UK  
Chris Cross, UK

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Decds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1523-005. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

*Chris Cross*  
Signature of Project Manager

5-22-07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1523-005

*Project Title:* Landslide Acquisition of Residential Structure

*Subgrantee:* Louisville Metro Emergency Management Agency

*Project Objective:* Acquisition and Demolition of Landslide Home

*Scope of Work:* This project encompassed the acquisition and demolition of the structure located at 5607 Brinson Drive.

*Final Site Visit Report:* The house located at 5607 Brinson Drive in Louisville, KY was completely demolished. The land was returned to its natural state and will now allow the slide to progress naturally.

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-005

Project Title: Landslide Acquisition of Residential Structure

Subgrantee: Louisville Metro Emergency Management Agency

Site Number: 1

Site Address: 5607 Brinson Drive  
Louisville, KY 40216

GPS Coordinates: Please place in decimal format.

Latitude: 38.16979

Longitude: 85.81721

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Is property on FEMA's Repetitive Loss List?  Yes or  No

If yes, what is the Repetitive Loss # ?

Actual Amount Paid: \$112,000.00

Date Actual Amount Paid: 12-07-06

Flood zone designation: C







# KENTUCKY DIVISION OF EMERGENCY MANAGEMENT

## JANUARY 2009 ICE STORM

### POST-DISASTER ASSESSMENT OF PREVIOUSLY MITIGATED PROJECTS **FEMA - DR - 1818 - KY**



# MITIGATION COST AVOIDANCE REPORT

Kentucky Division of Emergency Management  
Hazard Mitigation Grant Program  
100 Airport Road • 3rd Floor  
Frankfort, KY 40601  
(877) 634-8175  
KYEMrecovery@ng.army.mil

Steve Beshear, Governor

John W. Heltzel, Director

Leslie Mahoney, State Hazard Mitigation Officer

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## Introduction

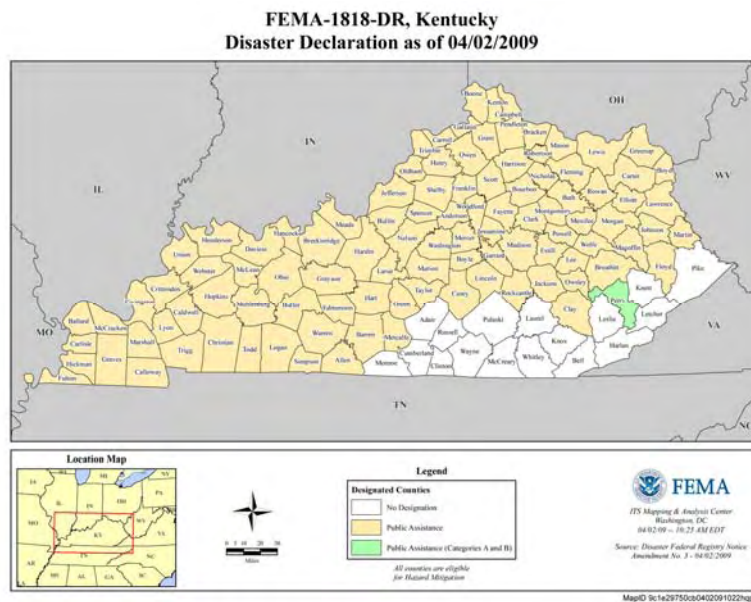
Since the last Kentucky State Hazard Mitigation Plan (2007), Kentucky has experienced 8 Presidential declared disasters. These disasters have increased the State's commitment to mitigation efforts across the Commonwealth.

Mitigation is any action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. There is a nationwide effort by federal, state, and local government, private industry, and homeowners to end the cycle of repetitive natural disaster damage. Under the provisions of the Stafford Act, FEMA has funded numerous mitigation projects to lesson damage to property and alleviate the suffering of residents in disaster-impacted communities.

The statewide impacts of the 2009 Kentucky severe winter storm & flooding served to remind the state of its vulnerability natural disasters. Cost avoidance analysis is one way to fully understand whether mitigation actions are, in fact, reducing disaster damage. This report presents the results of a post-disaster costs avoided analysis of previously mitigated projects within the State of Kentucky.

The State of Kentucky is repeatedly impacted by severe storms; 40 of all 63 Federal Emergency Management Agency (FEMA) declared disasters in Kentucky involved flooding. Many other declarations were winter storms, tornadoes and hurricanes that also included significant amounts of rain and high water. The entire State of Kentucky is particularly susceptible to flooding due to its inland river, lake and creek coastlines and accompanying population, significant development with impervious surface & drainage systems.

The terms flood and flooding refer to conditions of partial or complete inundation of normally dry land areas with surface water runoff from any source. Floodplains are defined as land areas susceptible to being inundated by water from any flooding source. Although storm surge presents a great potential for loss of life, in a study conducted from 1970-1999 by the National Hurricane Center, freshwater flooding accounts for more than 59% of the tropical cyclone deaths in the United States.



## History and Statistics

### Kentucky Severe Winter Storm and Flooding

**Declaration Date:** February 5, 2009

**Incident Type:** Severe Winter Storm and Flooding

**Incident Period:** January 26, 2009 – February 13, 2009

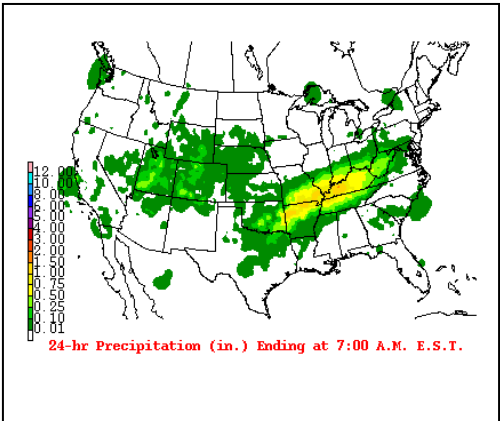
**Declared Counties Include:**

The counties of Allen, Anderson, Ballard, Barren, Bath, Boone, Bourbon, Boyd, Boyle, Breathitt, Breckinridge, Bracken, Bullitt, Butler, Caldwell, Calloway, Campbell, Carlisle, Carroll, Carter, Casey, Christian, Clark, Clay, Crittenden, Daviess, Edmonson, Elliott, Estill, Fayette, Fleming, Floyd, Franklin, Fulton, Gallatin, Garrard, Grant, Graves, Grayson, Green, Greenup, Hancock, Hardin, Harrison, Hart, Henderson, Henry, Hickman, Hopkins, Jackson, Jefferson, Jessamine, Johnson, Kenton, Larue, Lawrence, Lee, Lewis, Lincoln, Livingston, Logan, Lyon, Madison, Magoffin, Marion, Marshall, Martin, Mason, McCracken, McLean, Meade, Menifee, Mercer, Metcalfe, Montgomery, Morgan, Muhlenberg, Nelson, Nicholas, Ohio, Oldham, Owen, Owsley, Perry, Powell, Pendleton, Robertson, Rockcastle, Rowan, Scott, Shelby, Simpson, Spencer, Taylor, Todd, Trigg, Trimble, Union, Warren, Washington, Webster, Wolfe and Woodford

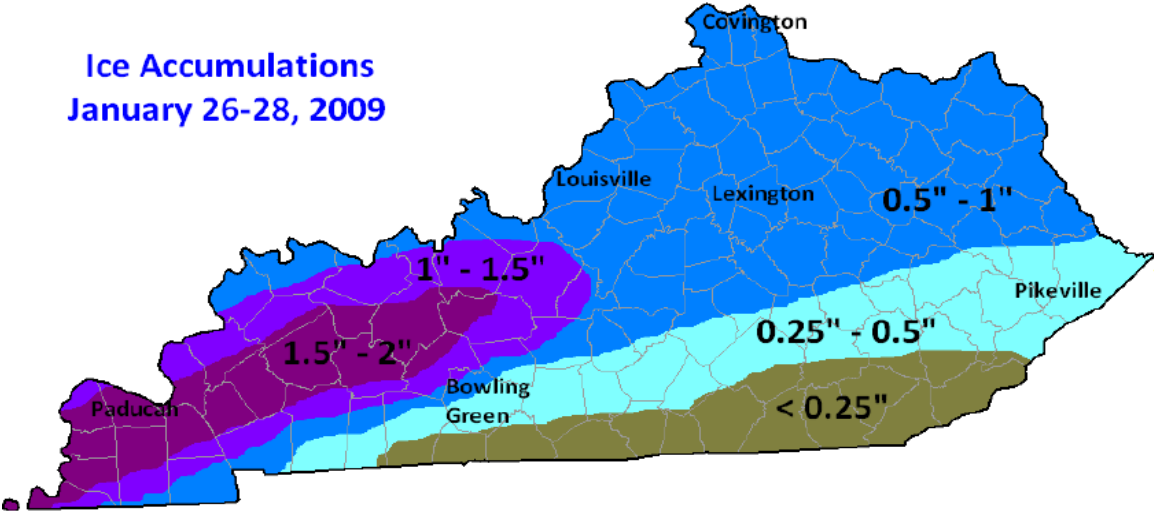
All counties in the Commonwealth of Kentucky are eligible to apply for assistance under the Hazard Mitigation Grant Program.

### Overview

A wintery mix of severe storms and flooding moved across most of central Kentucky on Monday, January 26, 2009. Precipitation began as light freezing drizzle and freezing rain over the entire area, but changed to sleet and then snow overnight in to the early morning hours of Tuesday across northern Kentucky. Freezing rain continued over southern Kentucky. On Tuesday the 27<sup>th</sup>, precipitation changed to freezing rain over northern Kentucky and rain over southern Kentucky. Ice over an inch thick was reported in many locations from the freezing rain. Tuesday night freezing rain and sleet continued. River flooding developed in some spots by Wednesday from the steady rain. On the morning of Wednesday, January 28, precipitation changed over to snow from northwest to southeast across the area. About an additional 3 to 4 inches of additional snow accumulation piled up in the north.



This storm caused Kentucky’s largest power outage on record, with 609,000 homes and businesses without power across the state. Property damage was widespread, with the damage due to falling trees, large tree limbs and power lines weighed down by ice. In the Louisville metropolitan area, 205,000 lost power and it took up to 10 days to everyone hooked back up. Several emergency shelters were set up across the affected region.



## Methodology

To complete this report we researched previous mitigation projects that have been completed in the disaster declared areas. We compiled important information from the project files and FEMA's project tracking system, NEMIS. Some projects used in this report lack the necessary information to determine mitigation success.

Kentucky Emergency Management and FEMA compiled a list of completed mitigation projects in the impacted areas. This list was reviewed to exclude projects that were initiative type projects, projects that had been withdrawn, and management cost. As a result, 19 projects were remaining.

Of the 19 projects, 17 were acquisitions, 1 safe room, and 1 sewer lift station project. Seven projects did not include benefit cost information. For those projects, we used the NIBS methodology (For every \$1 invested in mitigation yields \$4 in returns).

A Benefit-Cost Ratio (BCR) is determined for every project application. FEMA provides the software to determine BCR as well as approves the number before the project is awarded. For the purposes of this post-disaster mitigation assessment of previously-mitigated projects, Kentucky uses the dollar amount of the benefit determined at the time of project application. There are some assumptions made in this process:

1. The projects in this report were located in the declared areas. Therefore, it is assumed that these projects would have some level of impact by the event.
2. The cost avoided for the mitigation projects in this report may be at least the cost of the mitigation due to FEMA BCA calculations.

The costs avoided are likely greater than the dollars contained in this report due to the impact of the recent multiple disasters.

## Data and Results

Cost avoidance was completed on the nineteen (19) identified projects which included close to 100 structures. Of these assessments, all 19 projects were found to have met mitigation expectations during the DR-1818 Severe Winter Storm and Flooding event.

Project #	Sub Applicant	Project Type	Cost	Benefit
1207-0010	Louisville Metro	Acquisition	\$833,504.00	\$3,334,016.00
1216-0017	Louisville Metro	Acquisition	\$647,098.00	\$2,588,392.00
1407-0010	Boyd County Fiscal Court	Acquisition	\$543,000.00	\$1,095,226.00
1388-0004	Louisville Metro	Acquisition	\$2,139,372.00	\$2,933,228.00
1454-0008	Fleming County Fiscal Court	Acquisition	\$131,000.00	\$ 138,210.00
1454-0009	Woodford County Fiscal Court	Acquisition	\$322,305.00	\$924,732.00
1310-0006	Warren County	Safe Rooms (10)	\$471,000.00	\$505,100.00
1407-0002	Harlan County	Acquisition	\$1,040,960.00	\$4,163,840.00
1454-0004	Lewis County	Landslide Buyout	\$147,200.00	\$246,480.00
1454-0011	Louisville MSD	Acquisition	\$728,731.00	\$2,914,924.00
1454-0012	City of Wickliffe	Sewer Lift Station	\$439,536.00	\$695,512.00
1475-0005	Lincoln County	Acquisition	\$445,000.00	\$1,780,000.00
1475-0006	City of Hopkinsville	Acquisition	\$732,300.00	\$1,599,006.00
1523-0004	Nelson County	Landslide Buyout	\$154,650.00	\$195,770.00
1523-0005	Louisville MSD	Landslide Buyout	\$178,785.00	\$223,219.00
1523-0006	Rowan County	Acquisition	\$162,736.00	\$650,944.00
1523-0010	Martin County	Acquisition	\$262,800.00	\$1,180,601.00
1578-0005	City of Paintsville	Acquisition	\$138,757.00	\$148,888.00
1617-0002	City of Hopkinsville	Acquisition	\$56,300.00	\$225,200.00
			<b>\$9,575,034.00</b>	<b>\$25,543,288.00</b>
<b>Total Cost Avoidance =</b>				<b>\$15,968,254</b>

The results of this cost avoidance assessment indicate that the hazard mitigation activities funded by the Hazard Mitigation Grant Program (HMGP):

- Were cost-effective and reduced future losses from flood events
- Resulted in significant net benefits against future events

Kentucky will continue to refine the cost avoidance process to include project data in the future.

### Example Projects

The following projects provide local governments and non-profit agencies an excellent example of the goal of mitigation programs, whereby a local community, assisted by state and federal agencies, works to reduce or eliminate risk from future hazards.

#### Cherokee Park Subdivision, Acquisition, Hopkinsville, KY

Flooding from the Little River has caused 18 major flood events in Hopkinsville in the last 100 years. In March 1997, after major flooding caused over \$75 million in damages and devastated 450 homes, officials knew it was time to pursue ways to lessen the impact flooding was repeatedly having on their town. The initial acquisition and demolition project involved 38 properties at a cost of approximately 1.11 million in HMGP funds. To date, Hopkinsville has acquired and demolished 66 homes in the subdivision utilizing a variety of funding. The city chose to use the green space land as a recreational vehicle park to connect with the adjacent Trail of Tears Park.



#### Falmouth Flood of 1997, Acquisition, Falmouth, KY

On the night of March 1, 1997, heavy rains caused the Licking River to rise over 24 feet above its flood stage, sending a wall of water into the town. The flood, which reached 50 feet at its height, was the worst in the town's history. The City received a \$3 million grant through HMGP to acquire 83 properties. City officials were able to obtain a Community Development Block Grant to cover the 13 percent local share required for participation. Participants in the acquisition project were given fair market pre-disaster value for their homes. The houses were demolished, and the land will remain open space in perpetuity in order to mitigate future flood losses.



#### Middlesboro Storm Sewer System, Flood Control Project, Middlesboro, KY

In February 1994, Middlesboro experienced its worst flood since 1977. Major transportation routes in the area became paralyzed; nearly 56 homes and 16 businesses were flooded with up to two and a half feet of water. Because of its nearly century old undersized drainage system, the City could not handle flash flooding caused by large amount of rainfall. Many of the system's drains collapsed and were so full of debris that floodwaters were not able to pass through quickly enough. The estimated damages to businesses and homes over the eight year period of flooding from 1990 to 1998 totaled more than \$5 million. In September, 1999 the City was awarded \$244,893 to replace a portion of its downtown storm sewer system. The project was completed in 2000, and its effectiveness inspired the City to expand the storm sewer update.





COWS and CALVES, Warning Systems, Warren County, KY

Warren County and the surrounding cities within the county, have a history of tornadoes and other severe weather. In 1997 Warren County was awarded a grant through HMGP to install twelve Community Outdoor Warning Sirens (COWS). The sirens have a capacity to warn 100% of the residents of Bowling Green and 80% of the residents in the entire county. The County recognized, however, that an outdoor warning system was not sufficient. In 1999, the County received HMGP funds to install 250 Community Activated Lifesaving Voice Emergency Systems (CALVES), The system is designed to warn people who are indoors or not close to a siren site. CALVES were placed in every school, medical facility, church, indoor sporting facility, and emergency responder's office. The county implemented an extensive public awareness campaign to educate residents about the new warning systems. "When you hear the COWS mooove indoors. When you hear the CALVES protect your heard!" The COWS are credited with saving lives on April 16, 1998 when a tornado touched down in the county's biggest outdoor shopping mall. No lives were lost even though property damage totaled over \$2 million.



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: **1207-010**

Project Name: **Acquisition**

Subgrantee Name: **Louisville MSD**

Total Approved Project Cost: **\$1,097,526.00**

Final Project Cost: **\$958,050.86**

Approved Federal Share: **\$823,145.00**

Final Federal Share: **\$718,538.15**

Approved State Share: **\$131,703.00**

Final State Share: **\$114,966.10**

Approved Subgrantee Share: **\$142,678.00**

Final Subgrantee Share: **\$124,546.61**

Approved Administrative Share: **\$21,239.00**

Final Administrative Share: **\$20,161.02**

Project Cost  Overrun or  Underrun: **\$139,475.14**

Project Completion Date: **April 1, 2006**

Final Site Visit Date: **March 14, 2006**

Final Site Visit Completed by:

H. Camille Crain SHMO

Brian Gathy UK Program Coordinator,

Chris Cross Grants Manager

Jerry Ross FEMA DAF

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

Application

Approval Letter from FEMA (2-3-03)

Master Agreement

Delivery Order

Master Agreement Invoice(s)

Documentation in support of amount of reimbursement claimed.

EFT payment screen(s) and receipt(s)

Copies of any necessary permits

For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification

For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions

For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number **1207-010**. This project is ready for closeout.

**Chris Cross**

Type Name of Project Manager

*Chris Cross*

Signature of Project Manager

*3-9-07*

Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* **1207-010**

*Project Title:* **Acquisition**

*Subgrantee:* **Lou. MSD**

*Project Objective:*

**The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.**

*Scope of Work:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Final Site Visit Report:*

**Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with II. Camille Crain, the SIMO. Site was cleared and residential structure was returned to green space.**

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantec: Louisville MSD

Site Number: 3  
Site Address: 503 Fergusson Life

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12479  
Longitude: 85.75865

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$52,500.00

Date Actual Amount Paid: 12/19/05

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 4  
Site Address: 505 Fergusson Life

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.12474  
 Longitude: 85.75861

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$101,000.00

Date Actual Amount Paid: 6/24/03

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 5  
Site Address: 300 Glengarry

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.12462  
 Longitude: 85.75908

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$100,000.00

Date Actual Amount Paid: March 11, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 6  
Site Address: 302 Glengarry

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.12447  
 Longitude: 85.75915

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$100,000.00

Date Actual Amount Paid: August 4, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 7  
Site Address: 304 Glengarry

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12429  
Longitude: 85.75920

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green space  
Repetitive Loss #:  
Actual Amount Paid: \$97,000.00  
Date Actual Amount Paid: April 7, 2004  
Flood zone designation: Floodway





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 9  
Site Address: 7206 Arnoldtown Rd.

GPS Coordinates: Please place in decimal format.  
Latitude: 38.14824  
Longitude: 85.82407

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$186,000.00

Date Actual Amount Paid: April 29, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 12  
Site Address: 4107 S. Pope Lick

GPS Coordinates: Please place in decimal format.  
Latitude: 38.17815  
Longitude: 85.48505

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$77,000.00

Date Actual Amount Paid: April 5, 2004

Flood zone designation: AE, Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010

Project Title: Louisville MSD Acquisition Project

Subgrantee: Louisville MSD

Site Number: 13

Site Address: 4111 S. Pope Lick

GPS Coordinates: Please place in decimal format.

Latitude: 38.17920

Longitude: 85.48592

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$79,000.00

Date Actual Amount Paid: April 15, 2004

Flood zone designation: AE, Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 14  
Site Address: 4203 S. Pope Lick

GPS Coordinates: Please place in decimal format.  
Latitude: 38.17776  
Longitude: 85.48592

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$75,000.00

Date Actual Amount Paid: April 15, 2004

Flood zone designation: AE, Floodway





**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: **1216-017**

Project Name: **Acquisition**

Subgrantee Name: **Louisville MSD**

Total Approved Project Cost: **\$647,098.00**  
 Approved Federal Share: **\$485,324.00**  
 Approved State Share: **\$77,651.00**  
 Approved Subgrantee Share: **\$84,123.00**  
 Approved Administrative Share: **\$13,942.00**

Final Project Cost: **\$647,098.00**  
 Final Federal Share: ~~\$485,323.50~~ **485320.19**  
 Final State Share: ~~\$77,650.54~~ **77654.81**  
 Final Subgrantee Share: ~~\$84,122.76~~ **84123.00**  
 Final Administrative Share: **\$13,941.96**

Project Cost  Overrun or  Underrun: ~~\$1.20~~

Project Completion Date: **April 1, 2006**

Final Site Visit Date: **March 14, 2006**

Final Site Visit Completed by: **II. Camille Crain SHMO  
 Brian Gathy UK Program Coordinator,  
 Chris Cross Grants Manager  
 Jerry Ross FEMA DAE**

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (2-3-03)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EIT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: \_\_\_\_\_

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number **1216-017**. This project is ready for closeout.

**Chris Cross**  
 Type Name of Project Manager

Chris Cross  
 Signature of Project Manager

3-9-07  
 Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1216-017

*Project Title:* Acquisition and Elevation

*Subgrantee:* Lou. MSD

*Project Objective:*

The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties and the elevation of one (1) flood-prone property located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.

*Scope of Work:*

Acquired the flood-prone properties and returned the land to open green space and elevated the one (1) flood-prone property.

*Final Site Visit Report:*

Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with H. Camille Crain, the SHMO. Sites that were acquired were cleared and residential structures were returned to green space. House elevation project was complete as well, and house was elevated.

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 1  
Site Address: 13002 Seatonville Road

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13216  
Longitude: 85.52289

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Elevation of a home

Post Mitigation Property Use: Residential use

Repetitive Loss #: 0087512

Actual Amount Paid: \$80,750.00

Date Actual Amount Paid: 3/21/06

Flood zone designation: AE, 100 Yr. Floodplain



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 2  
Site Address: 8305 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12201  
Longitude: 85.80109

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green Space  
Repetitive Loss #:  
Actual Amount Paid: \$95,000  
Date Actual Amount Paid: March 8, 2004  
Flood zone designation: Floodway





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 3  
Site Address: 8307 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12182  
Longitude: 85.80141

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green Space  
Repetitive Loss #: 0107526  
Actual Amount Paid: \$100,000  
Date Actual Amount Paid: March 16, 2004  
Flood zone designation: Flood Zone



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 5  
Site Address: 8311 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12160  
Longitude: 85.80207

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green Space  
Repetitive Loss #:  
Actual Amount Paid: \$115,000  
Date Actual Amount Paid: April 29, 2004  
Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantcc: Louisville MSD

Site Number: 6  
Site Address: 8313 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12152  
Longitude: 85.80252

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green Space  
Repetitive Loss #:  
Actual Amount Paid: \$113,000  
Date Actual Amount Paid: March 1, 2004  
Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 7  
Site Address: 8315 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12138  
Longitude: 85.80258

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green Space  
Repetitive Loss #:  
Actual Amount Paid: \$93,000  
Date Actual Amount Paid: January 30, 2004  
Flood zone designation: Floodway





HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST

Project Number: 1310-006  
Subgrantee Name: Warren County

Project Name: Tornado Safe Rooms

Total Approved Project Cost: \$140,987.00  
Approved Federal Share: \$105,740.00  
Approved State Share: \$16,918.00  
Approved Subgrantee Share: \$18,328.00  
Approved Administrative Share: \$3,820.00

Final Project Cost: \$140,987.00  
Final Federal Share: \$105,738.89  
Final State Share: \$16,918.22  
Final Subgrantee Share: \$18,328.07  
Final Administrative Share: \$3,820.50

Project Cost  Overrun or  Underrun: \$1,820.32

Project Completion Date: February 16, 2007  
Final Site Visit Date: April 25, 2007  
Final Site Visit Completed by:

II. Camille Crain, KY State Hazard Mitigation Officer  
Brian Gathy, UK Program Coordinator  
Chris Cross, UK Grants Manager

ITEM CHECKLIST

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- N/A  For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Decds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1310-006. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

5/31/07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* **1310-006**  
*Project Title:* **Tornado Safe Shelters**  
*Subgrantee:* **Warren County**

*Project Objective:* **To Construct Tornado Safe Shelters throughout Warren County.**

*Scope of Work:* **To construct Tornado Safe Shelters at 10 fire/rescue facilities throughout the County. These shelters were designed to be used by emergency responders so that they can ride out the severe weather and then be able to respond.**

*Final Site Visit Report:* **All 10 shelters were constructed as predetermined by FEMA. Attached to this closeout report is a copy of the as-built certification for the shelters.**

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006

Project Title: Warren County Shelters

Subgrantee: Warren County

Site Number: 1

Site Address: Bowling Green / Warren County Rcsue Squad  
1125 Lewis Avenue  
Bowling Green, KY 42101

GPS Coordinates: Please place in decimal format.

Latitude: 37.01105

Longitude: 86.44775



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 2  
Site Address: Alvaton Volunteer Fire Department  
9899 Scottsville Rd  
Alvaton, KY 42122

GPS Coordinates: Please place in decimal format.  
Latitude: 36.93913  
Longitude: 86.31367





**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 3  
Site Address: Barron River Volunteer Fire Department  
121 Jenkins Road  
Bowling Green, KY 42101

GPS Coordinates: Please place in decimal format.  
Latitude: 36.98890  
Longitude: 86.50442



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006

Project Title: Warren County Shelters

Subgrantee: Warren County

Site Number: 4

Site Address: Browning Volunteer Fire Department  
3866 Browning Road  
Rockfield, KY 42274

GPS Coordinates: Please place in decimal format.

Latitude: 36.96389

Longitude: 86.52106



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 5  
Site Address: Gott Volunteer Fire Department  
5590 Porter Pike  
Bowling Green, KY 42103

GPS Coordinates: Please place in decimal format.  
Latitude: 36.97277  
Longitude: 86.31377



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 6  
Site Address: Hadley Volunteer Fire Department  
255 Hadley School Road  
Bowling Green, KY 42101

GPS Coordinates: Please place in decimal format.  
Latitude: 37.05859  
Longitude: 86.60652



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 7  
Site Address: Plano Volunteer Fire Department  
3210 Plano Road  
Bowling Green, KY 42103

GPS Coordinates: Please place in decimal format.  
Latitude: 36.84481  
Longitude: 86.42870



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 8  
Site Address: Richardsville Volunteer Fire Department  
1185 Richardsville Road  
Bowling Green, KY 42101

GPS Coordinates: Please place in decimal format.  
Latitude: 37.09620  
Longitude: 86.46439



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 9  
Site Address: Smiths Grove Volunteer Fire Department  
120 South Main Street  
Smiths Grove, KY 42171

GPS Coordinates: Please place in decimal format.  
Latitude: 36.97419  
Longitude: 86.19327



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 10  
Site Address: Woodburn Volunteer Fire Department  
900 Woodburn Allen Springs Rd  
Woodburn, KY 42170

GPS Coordinates: Please place in decimal format.  
Latitude: 36.84250  
Longitude: 86.5254





April 30, 2007

Ronnie Pearson  
Warren County Emergency Management  
429 1/2 East Tenth Street  
Bowling Green, KY 42101

RE: Tornado Shelters certification -- Warren County.

Mr. Pearson

The 10 storm shelters, which were built in Warren County, were designed and built in Accordance with the NSSA. The NSSA is the NSSAD Design, Construction and Performance of storm shelters. The doors for the shelters have been changed to the Republic FEMA 320 doors. This was verified by Chris Cross M.P.A. and Camille Craine KyEM hazard Mitigation Officer during a site visit.

Sincerely,



Bryan Dyer  
Dyer and Associates



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1388-004  
Subgrantee Name: Lou. MSD

Project Name: Acquisition

Total Approved Project Cost: \$2,345,238.00	Final Project Cost: \$2,304,172.10
Approved Federal Share: \$1,758,929.00	Final Federal Share: \$1,728,129.06
Approved State Share: \$281,428.00	Final State Share: \$276,500.66
Approved Subgrantee Share: \$304,881.00	Final Subgrantee Share: \$299,542.38
Approved Administrative Share: \$34,425.00	Final Administrative Share: \$34,041.72

Project Cost  Overrun or  Underrun: \$41,065.90

Project Completion Date: 10/31/2005

Final Site Visit Date: 03/13/2006

Final Site Visit Completed by: H. Camille Crain (KY SHMO), Jerry Ross (FEMA DAL),  
Brian Gathy (UK Martin School), Chris Cross (UK Martin School)

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (2-3-03)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- N/A  EFT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: \_\_\_\_\_

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1388-004. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

4-20-06  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1388-004

*Project Title:* Acquisition

*Subgrantee:* Lou. MSD

*Project Objective:*

**The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.**

*Scope of Work:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Final Site Visit Report:*

**All flood-prone properties have been purchased, demolished, and have been returned to green space.**

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantee: Louisville MSD

Site Number: #1

Site Address: 8300 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13072

Longitude: 85.70061

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$120,000.00

Date Actual Amount Paid: 10/24/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantcc: Louisville MSD

Site Number: #2

Site Address: 8301 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13098

Longitude: 85.70054

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$136,000.00

Date Actual Amount Paid: 10/24/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantee: Louisville MSD

Site Number: #3

Site Address: 8302 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13057

Longitude: 85.70055

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$125,000.00

Date Actual Amount Paid: 10/29/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #5  
Site Address: 8304 Woodsman Court  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13055  
Longitude: 85.70038

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$142,000.00

Date Actual Amount Paid: 12/18/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #7  
Site Address: 8311 Woodsman Court  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13060  
Longitude: 85.69943

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$149,000.00

Date Actual Amount Paid: 10/20/2003

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #8  
Site Address: 8315 Woodsman Court  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13054  
Longitude: 85.69924

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$130,000.00

Date Actual Amount Paid: 09/29/2003

Flood zone designation: AF



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantee: Louisville MSD

Site Number: #9

Site Address: 8317 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13036

Longitude: 85.69911

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$142,000.00

Date Actual Amount Paid: 11/03/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #13  
Site Address: 3402 Pinecroft Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13485  
Longitude: 85.70123

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$127,000.00

Date Actual Amount Paid: 10/30/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #12  
Site Address: 3400 Pinecroft Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13490  
Longitude: 85.70132

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$129,000.00

Date Actual Amount Paid: 10/30/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantce: Louisville MSD

Site Number: #14

Site Address: 8002 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13419

Longitude: 85.70049

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$140,000.00

Date Actual Amount Paid: 10/08/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #15  
Site Address: 8006 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13391  
Longitude: 85.70109

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$127,000.00

Date Actual Amount Paid: 10/27/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #16  
Site Address: 8010 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13366  
Longitude: 85.70094

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$123,000.00

Date Actual Amount Paid: 09/30/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantee: Louisville MSD

Site Number: #17

Site Address: 8012 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13346

Longitude: 85.70091

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$115,000.00

Date Actual Amount Paid: 10/20/2004

Flood zone designation: AF





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #18  
Site Address: 8014 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13324  
Longitude: 85.70092

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$120,000.00

Date Actual Amount Paid: 09/10/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #19  
Site Address: 8016 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13315  
Longitude: 85.70097

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$108,000.00

Date Actual Amount Paid: 01/19/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantcc: Louisville MSD

Site Number: #20  
Site Address: 8018 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13285  
Longitude: 85.70090

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$113,000.00

Date Actual Amount Paid: 12/17/2003

Flood zone designation: AF



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004

Project Title: Louisville MSD Acquisition/ Demolition

Subgrantee: Louisville MSD

Site Number: #21

Site Address: 8024 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13241

Longitude: 85.70104

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$108,000.00

Date Actual Amount Paid: 10/24/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #23  
Site Address: 3400 Foreman Lane  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13208  
Longitude: 85.70104

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$133,000.00

Date Actual Amount Paid: 11/14/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1407-002      Project Name: Harlan County Flood Mitigation Project  
Subgrantee Name: Harlan County

Total Approved Project Cost: \$ 1,040,960.00	Final Project Cost: \$ 928,894.72
Approved Federal Share: \$ 780,720.00	Final Federal Share: \$ 696,671.03
Approved State Share: \$ 124,915.00	Final State Share: \$ 111,467.37
Approved Subgrantee Share: \$ 135,324.00	Final Subgrantee Share: \$ 120,756.32
Approved Administrative Share: \$ 21,410.00	Final Administrative Share: \$ 19,577.89

Project Cost  Overrun or  Underrun: \$ 112,065.28 Total Project Cost

Project Completion Date: 12-22-04  
 Final Site Visit Date: 03-28-05  
 Final Site Visit Completed by: Camille Crain KyEM and Chris Ford UK

ITEM CHECKLIST

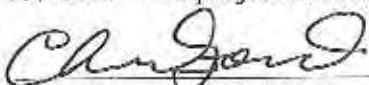
Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order → *not in UK file - In State File, H. Camille Crain, SHHO 1-13-05*
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Decds, Withdrawal Letters if applicable

N/A  
N/A  
N/A

Comments: Please see attached memo dated 11-18-05.

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1407-002. This project is ready for closeout.

<u>Chris Ford</u>		<u>11-18-05</u>
Type Name of Project Manager	Signature of Project Manager	Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

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*Project Number:* 1407-002

*Project Title:* Harlan County Flood Mitigation Project—Acquisition

*Subgrantee:* Harlan County

*Project Objective:* To eliminate the potential flooding, critical health and safety problems for 20 households in Harlan County.

*Scope of Work:* The acquisition, demolition, and clearance of 20 flood prone homes in Harlan County.

*Final Site Visit Report:* All approved homes had been acquired and demolished. The vacant lots had been restored to open green space areas.

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 1  
Site Address: 5 Brown Ln.

GPS Coordinates: Please place in decimal format.  
Latitude: 36.80254 N  
Longitude: 83.34092 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$24,500

Date Actual Amount Paid: 3/31/04

Flood zone designation: Floodway





① 2005 3 28

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002

Project Title: Harlan Co. Acquisitions

Subgrantee: Harlan Co. Fiscal Court

Site Number: 2

Site Address: 9 Brown Ln.

GPS Coordinates: Please place in decimal format.

Latitude: 36.80144 N

Longitude: 83.34015 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$72,000

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 3 28

2

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 3  
Site Address: 21 Brown Ln.

GPS Coordinates: Please place in decimal format.  
Latitude: 36.80120 N  
Longitude: 83.34026 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Harlan

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$67,500

Date Actual Amount Paid: 3/31/04

Flood zone designation: Floodway



2005 3 28

3

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 4  
Site Address: 13 Brown Ln.

GPS Coordinates: Please place in decimal format.

Latitude: 36.80103 N

Longitude: 83.33974 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$16,500

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 3 28

4

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002

Project Title: Harlan Co. Acquisitions

Subgrantcc: Harlan Co. Fiscal Court

Site Number: 5

Site Address: 31 Brown Ln.

GPS Coordinates: Please place in decimal format.

Latitude: 36.80125 N

Longitude: 83.33977 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$16,000

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway





2005 3 28

5

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 6  
Site Address: 47 Brown Ln.

GPS Coordinates: Please place in decimal format.  
Latitude: 36.80101 N  
Longitude: 83.33988 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$76,500

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 3 28

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**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 7  
Site Address: 53 Brown Ln.

GPS Coordinates: Please place in decimal format.  
Latitude: 36.80079 N  
Longitude: 83.33986 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$59,500

Date Actual Amount Paid: 5/10/04

Flood zone designation: Floodway



2005 3 28

7

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 8  
Site Address: 10114 S. Hwy 421

GPS Coordinates: Please place in decimal format.  
Latitude: 36.78363 N  
Longitude: 83.23305 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$34,000

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 3 28

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 9  
Site Address: 10130 S. Hwy 421

GPS Coordinates: Please place in decimal format.  
Latitude: 36.78342 N  
Longitude: 83.23262 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$32,500

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway





2005 3 29

701

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 10  
Site Address: 10156 S. Hwy 421

GPS Coordinates: Please place in decimal format.

Latitude: 36.78301 N

Longitude: 83.23227 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$42,000

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 3 29

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 11  
Site Address: 10176 S. Hwy 421

GPS Coordinates: Please place in decimal format.  
Latitude: 36.78282 N  
Longitude: 83.23221 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$34,500

Date Actual Amount Paid: 5/10/04

Flood zone designation: Floodway



2005 9 28

711

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 12  
Site Address: 10186 S. Hwy 421

GPS Coordinates: Please place in decimal format.  
Latitude: 36.78268 N  
Longitude: 83.23217 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$35,000

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 3 28

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 13  
Site Address: 10208 S. Hwy 421

GPS Coordinates: Please place in decimal format.  
Latitude: 36.78258 N  
Longitude: 83.23179 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Harlan

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$67,500

Date Actual Amount Paid: 5/10/04

Flood zone designation: Floodway





2005 3 28

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 14  
Site Address: 10216 S. Hwy 421

GPS Coordinates: Please place in decimal format.

Latitude: 36.78245 N

Longitude: 83.23162 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$56,500

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 3 28

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**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 15  
Site Address: 10222S. Hwy 421

GPS Coordinates: Please place in decimal format.

Latitude: 36.78245 N  
 Longitude: 83.23135 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$61,500

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 16  
Site Address: 12815 S. Hwy 119

GPS Coordinates: Please place in decimal format.  
Latitude: 36.81585 N  
Longitude: 83.50218 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Harlan

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acq.

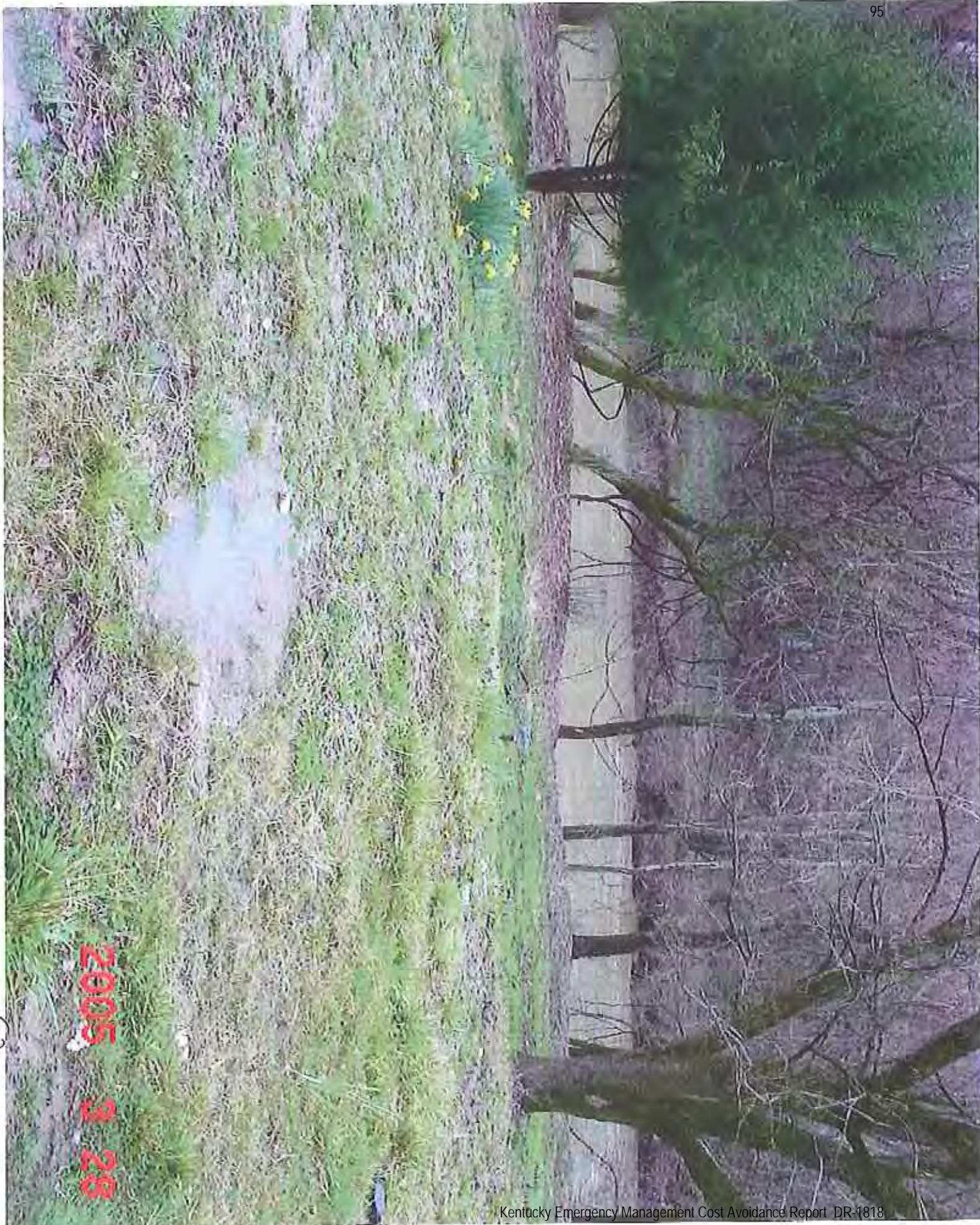
Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$47,500

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 3 28

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 17  
Site Address: 12803 S. Hwy 119

GPS Coordinates: Please place in decimal format.  
Latitude: 36.81580 N  
Longitude: 83.50228 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$18,500

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway





2005 3 28

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 18  
Site Address: 12961 S. Hwy 119

GPS Coordinates: Please place in decimal format.  
Latitude: 36.81670 N  
Longitude: 83.50398 W

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Harlan

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$30,000

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 21  
Site Address: 10122 S. Hwy 421

GPS Coordinates: Please place in decimal format.

Latitude: 36.782546  
Longitude: 83.233035

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Harlan

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$35,000

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 3 28

(5)

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1402-002  
Project Title: Harlan Co. Acquisitions  
Subgrantee: Harlan Co. Fiscal Court

Site Number: 22  
Site Address: 10188 S. Hwy 421

GPS Coordinates: Please place in decimal format.  
Latitude: 36.782544  
Longitude: 83.232961

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project? x Yes or  No

County: Harlan

Mitigation Offer Applicable: x Yes or  No

Mitigation Action: Acq.

Post Mitigation Property Use: Greenspace

Repetitive Loss #:

Actual Amount Paid: \$12,500

Date Actual Amount Paid: 3/3/04

Flood zone designation: Floodway



2005 9 28

**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

---

Project Number: 1407-010

Project Name: Boyd County Acquisition/Demolition

Subgrantee Name: Boyd County

Total Approved Project Cost: **\$543,000.00**  
 Approved Federal Share: **\$407,250.00**  
 Approved State Share: **\$65,160.00**  
 Approved Subgrantee Share: **\$70,590.00**  
 Approved Administrative Share: **\$11,680.00**

Final Project Cost: **\$448,899.43**  
 Final Federal Share: **\$336,674.57** 97  
 Final State Share: **\$53,867.93**  
 Final Subgrantee Share: **\$58,356.93**  
 Final Administrative Share: **\$9,977.99**

Project Cost  Overrun or  Underrun: **\$94,100.57**

Project Completion Date: 11-30-05

Final Site Visit Date: 12-13-05

Final Site Visit Completed by: Chris Cross, UK Grants Manager

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

---

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1407-010. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

Chris Cross

Signature of Project Manager

3/15/06

Date



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* **1407-010**

*Project Title:* **Boyd County Acquisition/Demolition Project**

*Subgrantee:* **Boyd County**

*Project Objective:*

**To acquire and demolish 6 flood prone residential structures in Boyd County in order to permanently alleviate the hazards to those structures.**

*Scope of Work:*

**Acquire, demolition, and maintain as open green space 6 flood prone properties.**

*Final Site Visit Report:*

**The final site visit was conducted on December 13, 2005 by Chris Cross of the UK Hazard Mitigation Grant Office. Photos and GPS coordinates were taken of all the homes that were acquired and demolished. FEMA approved to purchase 6 homes but the County was only able to acquire 5 of the 6. The 6<sup>th</sup> home did not accept the County's offer and withdrew from the project. The UK office has copies of that withdraw.**

*Recommendation:*

**To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1407-010  
Project Title: Boyd County Acquisition/Demolition Project  
Subgrantee: Boyd County

Site Number: 01  
Site Address: 2524 Baltimore Ave

GPS Coordinates: Please place in decimal format.  
Latitude: 38.47977  
Longitude: 82.68749

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Boyd

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquire and Demolish

Post Mitigation Property Use: Open Space

Repetitive Loss #:

Actual Amount Paid: \$143,665.43

Date Actual Amount Paid: 8-25-05

Flood zone designation: Zone AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1407-010  
Project Title: Boyd County Acquisition/Demolition Project  
Subgrantcc: Boyd County

Site Number: 02  
Site Address: 2526 Baltimore Ave

GPS Coordinates: Please place in decimal format.

Latitude: 38.47970  
 Longitude: 82.68700

Property Site Inventory (acquisition, clevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Boyd

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquire and Demolish

Post Mitigation Property Use: Open Space

Repetitive Loss #:

Actual Amount Paid: \$69,973.95

Date Actual Amount Paid: 9-9-05

Flood zone designation: Zone AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1407-010  
Project Title: Boyd County Acquisition/Demolition Project  
Subgrantee: Boyd County

Site Number: 03  
Site Address: 701 Hamilton Ave

GPS Coordinates: Please place in decimal format.  
Latitude: 38.47934  
Longitude: 82.68488

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Boyd

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquire and Demolish

Post Mitigation Property Use: Open Space

Repetitive Loss #:

Actual Amount Paid: \$72,720.76

Date Actual Amount Paid: 8-23-05

Flood zone designation: Zone X



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1407-010  
Project Title: Boyd County Acquisition/Demolition Project  
Subgrantee: Boyd County

Site Number: 04  
Site Address: 703 Hamilton Ave

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.47920  
 Longitude: 82.68477

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Boyd

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquire and Demolish

Post Mitigation Property Use: Open Space

Repetitive Loss #:

Actual Amount Paid: \$72,769.76

Date Actual Amount Paid: 9-9-05

Flood zone designation: Zone X



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1407-010  
Project Title: Boyd County Acquisition/Demolition Project  
Subgrantee: Boyd County

Site Number: 05  
Site Address: 6901 Hatchery Rd

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.42958  
 Longitude: 82.70841

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Boyd

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquire and Demolish

Post Mitigation Property Use: Open Space

Repetitive Loss #:

Actual Amount Paid: \$89,244.02

Date Actual Amount Paid: 9-9-05

Flood zone designation: Zone X



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1454-004  
Subgrantee Name: Lewis County

Project Name: Lewis County Landslide Buyout

Total Approved Project Cost: \$ 147,200.00  
Approved Federal Share: \$ 110,400.00  
Approved State Share: \$ 17,664.00  
Approved Subgrantee Share: \$ 19,136.00  
Approved Administrative Share: \$ 3,944.00

Final Project Cost: \$ 145,274.54  
Final Federal Share: \$ 108,955.91  
Final State Share: \$ 17,432.94  
Final Subgrantee Share: \$ 18,885.69  
Final Administrative Share: \$ 3,905.49

Project Cost  Overrun or  Underrun: \$ 1,925.46 TOTAL PROJECT COST

Project Completion Date: 6/30/05

Final Site Visit Date: 7/22/05

Final Site Visit Completed by: Camille Crain KyEM and Chris Cross UK

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-004. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

1-17-06  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1454-004

*Project Title:* Lewis County Landslide Buyout Project

*Subgrantee:* Lewis County

*Project Objective:* To alleviate further problems and damages to associated with the landslide

*Scope of Work:* The acquisition, demolition, and clearance of 4 homes built on a landslide in Lewis County.

*Final Site Visit Report:* All approved homes had been acquired and demolished. The vacant lots had been restored to open green space areas.

*Recommendation:* To close the project.



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-004

Project Title: Lewis County Landslide Buyout Project

Subgrantee: Lewis County

Site Number: 1

Site Address: Rt. 59, Vanceburg, KY 41179  
James & Alice Bond

GPS Coordinates: Please place in decimal format.

Latitude: 38.57076

Longitude: 83.32690

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Lewis County

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Open Green Space

Repetitive Loss #:

Actual Amount Paid: \$32,000.00

Date Actual Amount Paid: 8-9-2004

Flood zone designation: C or X



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-004

Project Title: Lewis County Landslide Buyout Project

Subgrantee: Lewis County

Site Number: 2

Site Address: Rt. 59, Vanceburg, KY 41179  
Jeanette Butler

GPS Coordinates: Please place in decimal format.

Latitude: 38.56894

Longitude: 83.32814

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Lewis County

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

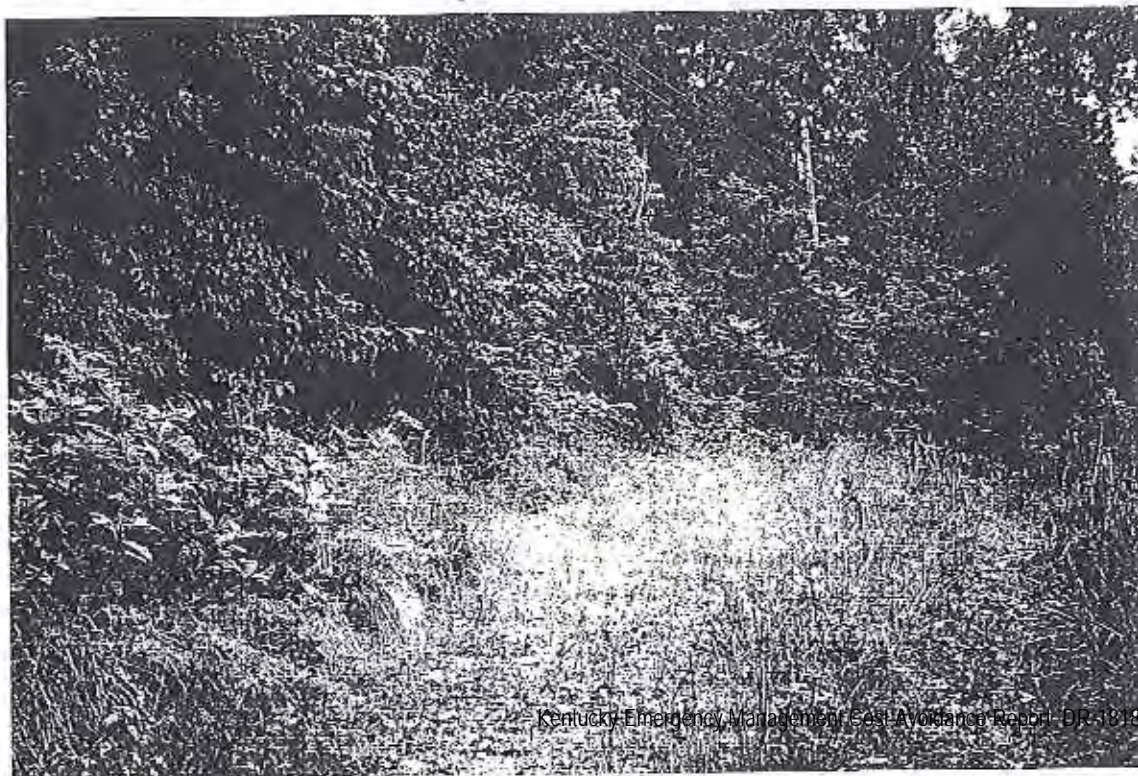
Post Mitigation Property Use: Open Green Space

Repetitive Loss #:

Actual Amount Paid: \$18,000

Date Actual Amount Paid: 8-9-2004

Flood zone designation: C or X



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-004

Project Title: Lewis County Landslide Buyout Project

Subgrantee: Lewis County

Site Number: 3

Site Address: Rt. 59, Vanceburg, KY 41179  
Tonya Carpenter

GPS Coordinates: Please place in decimal format.

Latitude: 38.56988

Longitude: 83.32758

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Lewis County

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

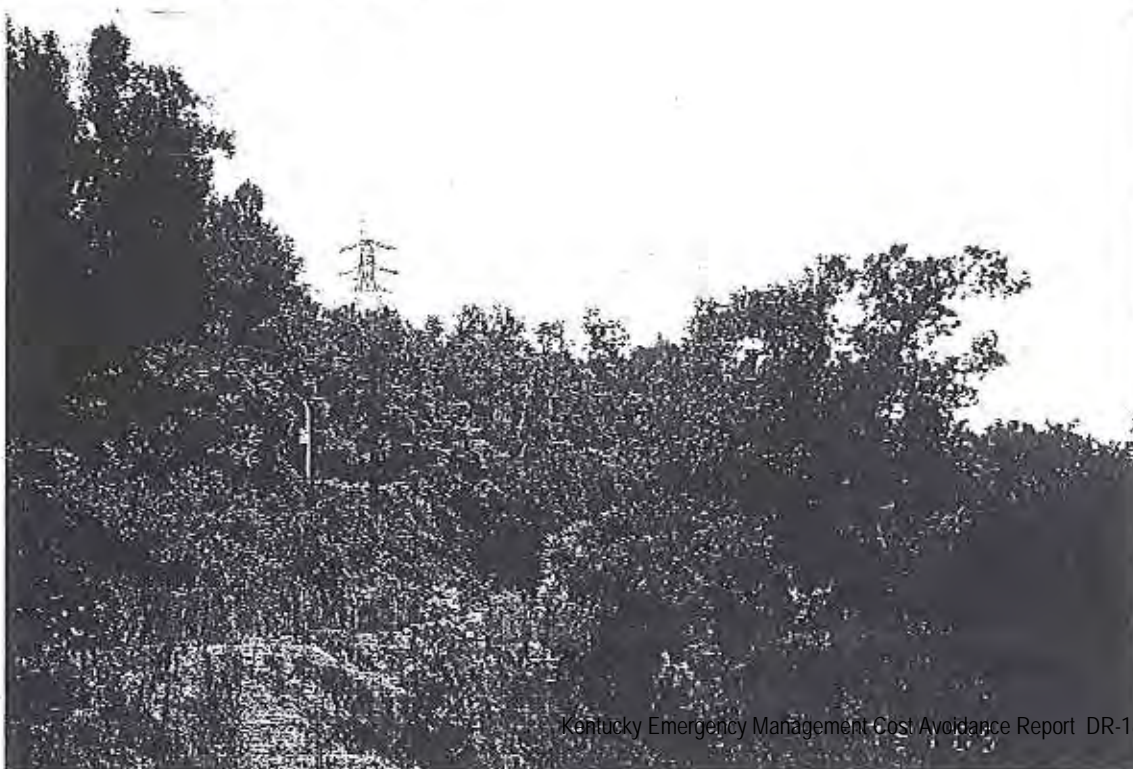
Post Mitigation Property Use: Open Green Space

Repetitive Loss #:

Actual Amount Paid: \$7,500

Date Actual Amount Paid: 8-9-2004

Flood zone designation: C or X



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-004

Project Title: Lewis County Landslide Buyout Project

Subgrantee: Lewis County

Site Number: 4

Site Address: Rt. 59, Vanceburg, KY 41179  
James & Becky Carpenter

GPS Coordinates: Please place in decimal format.

Latitude: 38.57014

Longitude: 83.32751

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Lewis County

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

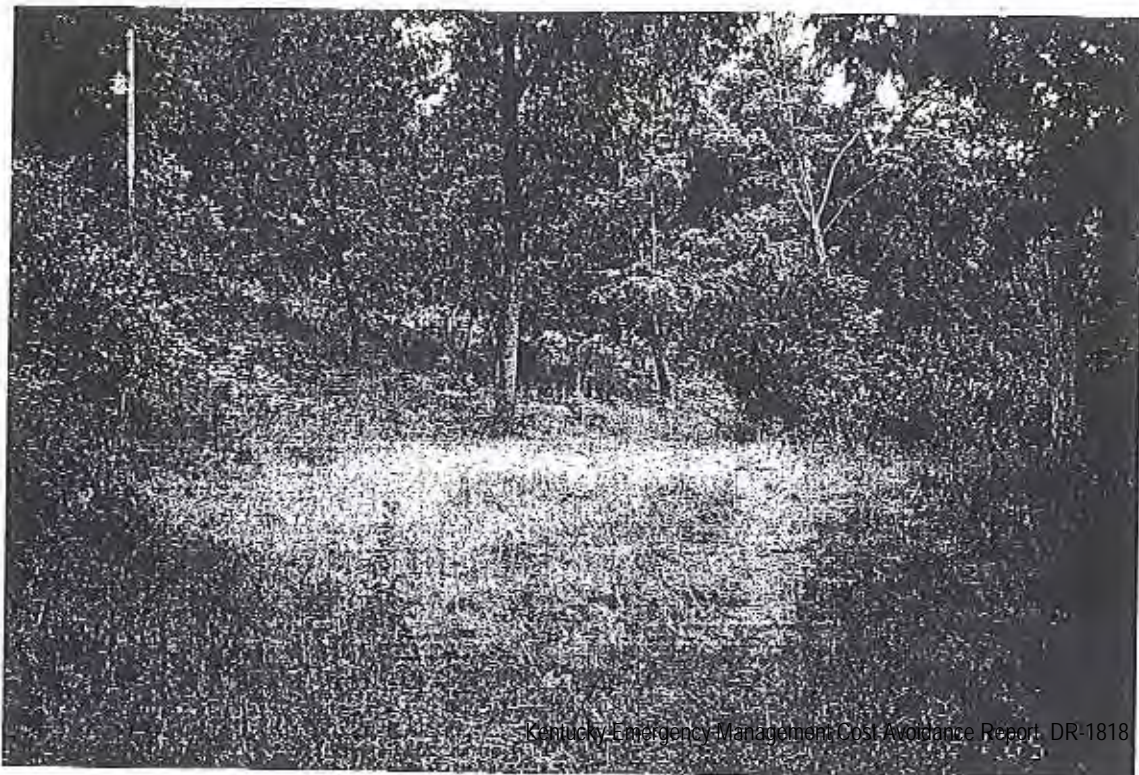
Post Mitigation Property Use: Open Green Space

Repetitive Loss #:

Actual Amount Paid: \$66,000

Date Actual Amount Paid: 8-9-2004

Flood zone designation: C or X



### HAZARD MITIGATION GRANT PROGRAM FORM #1 PROJECT CLOSEOUT CHECKLIST

Project Number: 1454-008  
Subgrantee Name: Fleming County

Project Name: Muses Mill Fire Dept. Acq/Dem

750.00

Total Approved Project Cost: \$131,000 ✓  
Approved Federal Share: \$98,250 ✓  
Approved State Share: \$15,720 ✓  
Approved Subgrantee Share: \$17,030 ✓  
Approved Administrative Share: \$3,620 ✓

Final Project Cost: ~~\$125,078~~ 129,027  
Final Federal Share: ~~\$93,808.50~~ 96,770.12  
Final State Share: ~~\$15,009.36~~ 15,483.37  
Final Subgrantee Share: ~~\$16,260.14~~ 16,773.51  
Final Administrative Share: ~~\$3,501.56~~ 3,580.54

32,256  
98

Project Cost Underrun: ~~\$5,922.00~~ 1,973.00

Project Completion Date: 2-28-08

Final Site Visit Date: 5-5-08

Final Site Visit Completed by: Brian Gathy & Esther White, UK  
Kevin Cornette, BTADD

#### ITEM CHECKLIST

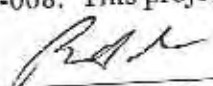
Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- X Application
- X Approval Letter from FEMA
- X Master Agreement
- Delivery Order
- X Master Agreement Invoice(s)
- X Documentation in support of amount of reimbursement claimed.
- X EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- X For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: Project is complete and should be closed.

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-008. This project is ready for closeout.

Brian Gathy  
Type Name of Project Manager

  
Signature of Project Manager

5-12-08  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number: 1454-008*

*Project Title: Fleming County Muses Mill Fire Department Acquisition/Demolition*

*Subgrantee: Fleming County*

*Project Objective: Purchase and Demolish one (1) flood prone property.*

*Scope of Work: To purchase and demolish one (1) flood prone property.*

*Final Site Visit Report: The structure which formerly housed the Muses Mill Fire Department has been acquired and demolished.*

*Recommendation: To close the project.*

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-008

Project Title: Fleming Co. Acquisition/Demolition of Muses Mill Fire Department

Subgrantcc: Fleming Co.

Site Number: 1

Site Address: Muses Mill VFD  
Ryan Road  
Muses Mill KY

GPS Coordinates: Please place in decimal format.

Latitude: 38.35109

Longitude: 83.52424

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Fleming

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use: Open Space

Is Property on FEMA's Repetitive Loss List? No.

If yes, what is the Repetitive Loss #?

Actual Amount Paid:\$124,293.00

Flood Zone Designation:



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1454 - 009

Project Name: Woodford Co. Acquisition

Subgrantee Name: Woodford County Fiscal Court

Total Approved Project Cost: **405,625.00**  
Approved Federal Share: **304,219.00**  
Approved State Share: **48,675.00**  
Approved Subgrantee Share: **52,731.00**  
Approved Administrative Share: **9,113.00**

Final Project Cost: **166,448.38**  
Final Federal Share: **124,836.29**  
Final State Share: **19,973.81**  
Final Subgrantee Share: **21,638.29**  
Final Administrative Share: **4,301.97**

Project Cost  Overrun or  Underrun: \$239,176.62

Project Completion Date: 5/4/2007

Final Site Visit Date: 8/10/2007

Final Site Visit Completed by: **Camille Crain (SHMO); Brian D Gathy (UK Office)**

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

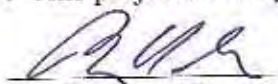
- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- LFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number **1454-009**. This project is ready for closeout.

Brian D Gathy

Type Name of Project Manager

  
Signature of Project Manager

Date

8-10-07



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-009

Project Title: Woodford Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Woodford County

Site Number: 1

Site Address: Jim Young  
2040 Shore Acres Rd  
Frankfort, KY 40601

GPS Coordinates: Please place in decimal format.

Latitude: 38.12488

Longitude: 84.86440

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Woodford

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use: Open Space

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$140,000.00

Flood Zone Designation: AE or A130



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-009

Project Title: Woodford Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Woodford County

Site Number: 2

Site Address: Blanch Murphey  
265 Lower Clifton Rd  
Versailles, KY 40383

GPS Coordinates: Please place in decimal format.

Latitude: 38.09848

Longitude: 84.83428

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? no

County: Woodford

Mitigation Offer Applicable: no

Mitigation Action: none

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$

Flood Zone Designation: AE or A130

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-009

Project Title: Woodford Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Woodford County

Site Number: 3

Site Address: Geza & Beverly Bruckner  
785 Buck Run Rd  
Versailles, KY 40383

GPS Coordinates: Please place in decimal format.

Latitude: 38.07625

Longitude: 84.83397

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? no

County: Woodford

Mitigation Offer Applicable: no

Mitigation Action: none

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$

Flood Zone Designation: AE or A130



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1454-011

Project Name: Acquisition

Subgrantee Name: Louisville MSD

Total Approved Project Cost: \$728,731.00

Final Project Cost: \$726,827.33

Approved Federal Share: \$546,548.00

Final Federal Share: \$545,120.50

Approved State Share: \$87,448.00

Final State Share: \$87,219.28

Approved Subgrantee Share: \$94,735.00

Final Subgrantee Share: \$94,487.55

Approved Administrative Share: \$15,575.00

Final Administrative Share: \$15,536.55

Project Cost  Overrun or  Underrun: \$1,903.67

Project Completion Date: **October 31, 2006**

Final Site Visit Date: **March 14, 2006**

Final Site Visit Completed by:

H. Camille Crain SIIMO  
Brian Gathy UK Program Coordinator,  
Chris Cross Grants Manager  
Jerry Ross FEMA DAE

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (11-18-05)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-011. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

Chris Cross

Signature of Project Manager

Date

3-9-07

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* **1454-011**

*Project Title:* **Acquisition**

*Subgrantee:* **Lou. MSD**

*Project Objective:*

**The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.**

*Scope of Work:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Final Site Visit Report:*

**Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with II. Camille Crain, the SHMO. Site was cleared and residential structure was returned to green space.**

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #1

Site Address: 12808 Seatonville Road  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13121

Longitude: 85.52496

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #: 0043882

Actual Amount Paid: \$153,000.00

Date Actual Amount Paid: 1/21/05

Flood zone designation: AE, Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #2

Site Address: 8303 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13113

Longitude: 85.70033

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$115,000

Date Actual Amount Paid: 01/28/2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #3

Site Address: 8305 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13086

Longitude: 85.70016

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$116,000

Date Actual Amount Paid: 10/03/2004

Flood zone designation: Floodway





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #4

Site Address: 606 Ruben Lane  
Fairdale, KY 40118

GPS Coordinates: Please place in decimal format.

Latitude: 38.12422

Longitude: 85.75346

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$105,000

Date Actual Amount Paid: 03/08/2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #5

Site Address: 704 Ruben Lane

Fairdale, KY 40118

GPS Coordinates: Please place in decimal format.

Latitude: 38.12422

Longitude: 85.75346

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$81,000

Date Actual Amount Paid: 05/12/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #6

Site Address: 8026 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13229

Longitude: 85.70094

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$122,000

Date Actual Amount Paid: 10/30/2003

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: DR1454-012

Project Name: City of Wickliffe Sewer Lift Station

Subgrantee Name: City of Wickliffe

Total Approved Project Cost: 439,686.31  
Approved Federal Share: 329,765.25  
Approved State Share: 52,761.75  
Approved Subgrantee Share: 57,159.31  
Approved Administrative Share: 9,794.00

Final Project Cost: 439,687.00  
Final Federal Share: ~~329,765.25~~ 329,738.28  
Final State Share: ~~52,761.75~~ 52,788.72  
Final Subgrantee Share: ~~57,159.31~~ 57,160.00  
Final Administrative Share: 9,794.00

Project Cost  Overrun or  Underrun:

Project Completion Date: December 2008

Final Site Visit Date: March 25, 2009

Final Site Visit Completed by: Esther White & Brian Gathy, UK HMGP

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-012. This project is ready for closeout.

Esther White  
Type Name of Project Manager

Esther White  
Signature of Project Manager

3-30-09  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* DR1454-012

*Project Title:* City of Wickliffe Sewer Lift Station

*Subgrantee:* **City of Wickliffe KY**

*Project Objective:* To mitigate against the flooding of the City of Wickliffe's Main Sewer Lift Station during high water events.

*Scope of Work:* The design and construction of the City of Wickliffe Main Lift Station and the replacement and extension of 1000 linear feet of sanitary sewer line and force mains. Also included the installation of a Muffin Monster type grinder system and the demolition of the existing lift station.

*Final Site Visit Report:* The lift station is completed as proposed and is now out of the floodprone area. The City of Wickliffe is closing the station in with walls at its own expense.

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

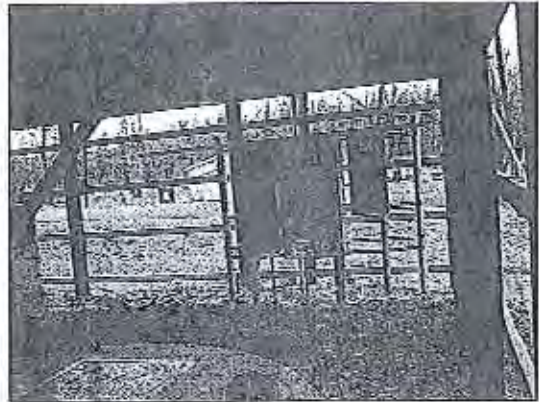
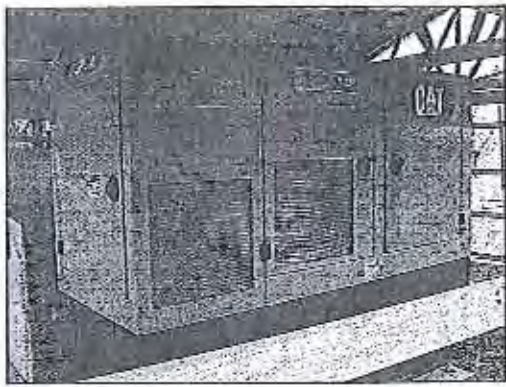
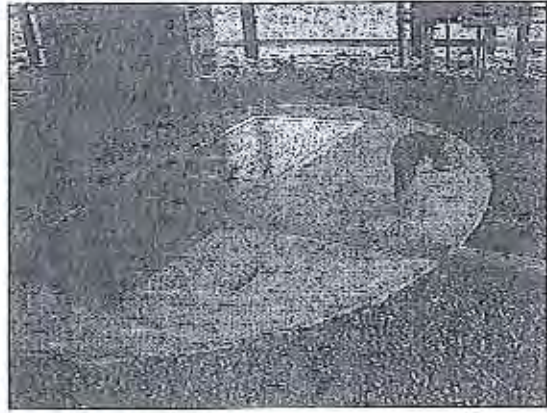
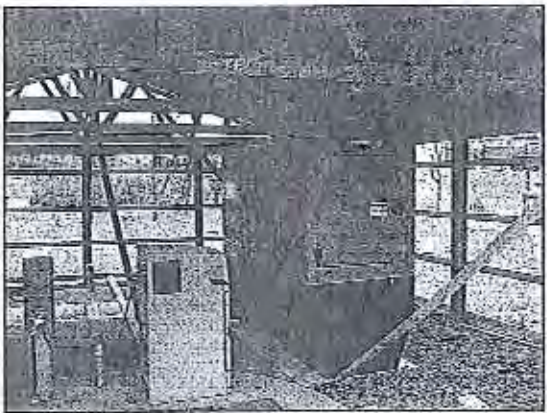
Project Number: DR1454-012  
Project Title: City of Wickliffe Sewer Lift Station  
Subgrantee: City of Wickliffe KY

Site Number: 1  
Site Address: Court Street, between 4<sup>th</sup> and 6<sup>th</sup> Streets  
 Wickliffe KY 42087

GPS Coordinates: Please place in decimal format.  
Latitude: N 36.96368  
Longitude: W -89.08692

Property Site Inventory (acquisition, elevation or relocation projects):  
 Was parcel part of final project?  Yes or  No  
 County: Ballard  
 Mitigation Offer Applicable:  Yes or  No  
 Mitigation Action: **Demolition/Relocation of Main Sewer Lift Station**  
 Post Mitigation Property Use:  
 Is property on FEMA's Repetitive Loss List?  Yes or  No  
 If yes, what is the Repetitive Loss # ?  
 Actual Amount Paid:  
 Date Actual Amount Paid:  
 Flood zone designation:





**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

---

Project Number: 1475 - 005      Project Name: Lincoln Co. Acquisition/Demolition Project  
Subgrantee Name: Lincoln County

Total Approved Project Cost: \$445,500	Final Project Cost: \$153,550.45
Approved Federal Share: \$334,125	Final Federal Share: \$115,162.84
Approved State Share: \$53,460	Final State Share: \$18,426.05
Approved Subgrantee Share: \$57,915	Final Subgrantee Share: \$19,961.56
Approved Administrative Share: \$9,910.00	Final Administrative Share: \$4,071.01

Project Cost Underrun: \$291,949.55

Project Completion Date: 8/1/2007

Final Site Visit Date: 10/30/2007

Final Site Visit Completed by:      Brian Gathy, UK Program Coordinator  
Nick Grinstead, UK Graduate Assistant

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

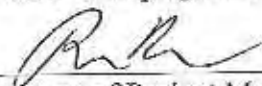
- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EIT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: Project is complete and should be closed.

---

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1523-003. This project is ready for closeout.

Brian D Gathy  
Type Name of Project Manager

  
Signature of Project Manager

10-07  
Date



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number: 1475 - 005*

*Project Title: Lincoln Co. Acquisition/Demolition Project*

*Subgrantee: Lincoln County*

*Project Objective: Purchase & Clear three (3) properties.*

*Scope of Work: Purchase & Clear three (3) properties.*

*Final Site Visit Report: Two (2) properties were purchased and cleared. The remaining property could not be purchased.*

*Recommendation: To close the project.*

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-005  
Project Title: Lincoln Co. Acquisition/Demolition Project  
Subgrantee: Lincoln County

Site Number: 2  
Site Address: 1405 US Highway 150 East  
Stamford, KY

GPS Coordinates: Please place in decimal format.  
Latitude: 37.52323  
Longitude: 84.63194

Property Site Inventory (acquisition, elevation or relocation projects):  
Was Parcel part of final project? No  
County: Mitigation Offer Applicable: No  
Mitigation Action: Acquisition/Demolition  
Post Mitigation Parcel use:  
Is Property on FEMA's Repetitive Loss List? No  
If yes, what is the Repetitive Loss #?  
Actual Amount Paid: ~~\$20,000~~ \$100,000 *ym*  
Flood Zone Designation:



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-005

Project Title: Lincoln Co. Acquisition/Demolition Project

Subgrantee: Lincoln County

Site Number: 3

Site Address: 6665 Hwy 78  
Stamford, KY

GPS Coordinates: Please place in decimal format.

Latitude: 37.48605

Longitude: 84.76421

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? No

County: Mitigation Offer Applicable: No

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: ~~\$100,000~~ \$20,000 *gr*

Flood Zone Designation:



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1475-006  
Subgrantee Name: City of Hopkinsville

Project Name: Givens Addition Residential Buyout

Total Approved Project Cost: \$732,300  
Approved Federal Share: \$549,225  
Approved State Share: \$87,876  
Approved Subgrantee Share: \$95,199  
Approved Administrative Share: \$26,944

Final Project Cost: \$610,921.91  
Final Federal Share: \$458,191.43  
Final State Share: \$73,310.63  
Final Subgrantee Share: \$79,419.85  
Final Administrative Share: \$13,218.44

Project Cost  Overrun or  Underrun: \$121,378.09

Project Completion Date: 3-01-2006

Final Site Visit Date: 3-29-2006

Final Site Visit Completed by: H. Camille Crain (Ky SIIMO), Brian Gathy, and Chris Cross  
(UK Mitigation Office)

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1475-006. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

Chris Cross  
Signature of Project Manager

Date

4-20-06

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1475-006

*Project Title:* Givens Addition Residential Buyout

*Subgrantee:* City of Hopkinsville

*Project Objective:*

**To acquire and demolish 6 homes and their surrounding lots to eliminate future flood damages to these structures.**

*Scope of Work:*

**The City of Hopkinsville will acquire and demolish up to 6 residential structures and their surrounding lots to eliminate future flood damages to these structures. After acquiring these structures and their lots, the City of Hopkinsville will maintain the parcels as greenspace in perpetuity.**

*Final Site Visit Report:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 6  
Site Address: 211 James Drive

GPS Coordinates: Please place in decimal format.  
 Latitude: 36.83587  
 Longitude: 87.48470

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: 169,200.00

Date Actual Amount Paid: 10-14-05

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 3  
Site Address: 408 James Drive

GPS Coordinates: Please place in decimal format.  
 Latitude: 36.83337  
 Longitude: 87.48444

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$162,000.00

Date Actual Amount Paid: 10-24-05

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 4  
Site Address: 410 James Drive

GPS Coordinates: Please place in decimal format.  
Latitude: 36.83308  
Longitude: 87.48483

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$114,300.00

Date Actual Amount Paid: 10-14-05

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 5  
Site Address: 411 James Drive

GPS Coordinates: Please place in decimal format.  
 Latitude: 36.83321  
 Longitude: 87.48553

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$123,600.00

Date Actual Amount Paid: 10-14-05

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 1  
Site Address: 508 South Riverwood Drive

GPS Coordinates: Please place in decimal format.  
 Latitude: 36.83300  
 Longitude: 87.48752

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$115,100.00

Date Actual Amount Paid: 10-18-05

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-006  
Project Title: Givens Addition Residential Buyout  
Subgrantee: City of Hopkinsville

Site Number: 2  
Site Address: 2917 Old Clarksville Pike

GPS Coordinates: Please place in decimal format.  
Latitude: 36.836942  
Longitude: 87.480058

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid:

Date Actual Amount Paid:

Flood zone designation: AE



5000 0000 500 0000 30



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1471-005      Project Name: Acquisition/Demolition of Flood Prone Homes  
Subgrantee Name: Bell County

Total Approved Project Cost: \$365,815  
Approved Federal Share: \$274,361  
Approved State Share: \$43,898  
Approved Subgrantee Share: \$47,556  
Approved Administrative Share: \$8,316

Final Project Cost: \$215,549  
Final Federal Share: \$161,661.75  
Final State Share: \$25,865.88  
Final Subgrantee Share: \$28,021.37  
Final Administrative Share: \$5,310.98

Project Cost  Overrun or  Underrun: \$150,266

Project Completion Date: 11-01-2007

Final Site Visit Date: 1-25-2008

Final Site Visit Completed by:

Brian Gathy, UK Program Coordinator  
Lena Datko, C&ED Associate

**ITEM CHECKLIST**

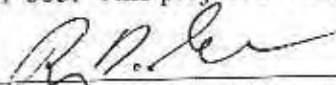
Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: Project is complete and should be closed.

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1471-005. This project is ready for closeout.

Brian D Gathy  
Type Name of Project Manager

  
Signature of Project Manager

1-28-08  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number: 1471-005*

*Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties*

*Subgrantee: Bell County*

*Project Objective: Purchase and Demolish Nine(9) flood prone properties.*

*Scope of Work: To purchase and demolish nine (9) flood prone properties.*

*Final Site Visit Report: Six (6) of the nine (9) properties were purchased with the land cleared on each site. The three (3) remaining property owners declined participation in the project and file is noted.*

*Recommendation: To close the project.*

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1471-005

Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Bell County

Site Number: 12

Site Address: Eva Taylor  
Four Mile, KY 40939

GPS Coordinates: Please place in decimal format.

Latitude: 36.7919

Longitude: 83.74055

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? No

County: Bell

Mitigation Offer Applicable: No

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List?

If yes, what is the Repetitive Loss #?

Actual Amount Paid:

Flood Zone Designation:

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1471-005

Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Bell County

Site Number: 12a

Site Address: Eva Taylor  
 Four Mile, KY 40939

GPS Coordinates: Please place in decimal format.

Latitude: 36.7904

Longitude: 83.74047

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? No

County: Bell

Mitigation Offer Applicable: No

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List?

If yes, what is the Repetitive Loss #?

Actual Amount Paid:

Flood Zone Designation:

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1471-005

Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Bell County

Site Number: 13

Site Address: Effie Miller  
 Four Mile, KY 40939

GPS Coordinates: Please place in decimal format.

Latitude: 36.7345

Longitude: 83.74321

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? No

County: Bell

Mitigation Offer Applicable: No

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List?

If yes, what is the Repetitive Loss #?

Actual Amount Paid:

Flood Zone Designation:



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1471-005  
Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties  
Subgrantee: Bell County

Site Number: 14  
Site Address: Larry & Glenda Baird  
Goodin Subdivision  
Four Mile, KY 40939

GPS Coordinates: Please place in decimal format.  
Latitude: 36.79154  
Longitude: 83.74001

Property Site Inventory (acquisition, elevation or relocation projects):  
Was Parcel part of final project? Yes  
County: Bell  
Mitigation Offer Applicable: Yes  
Mitigation Action: Acquisition/Demolition  
Post Mitigation Parcel use: Open Space  
Is Property on FEMA's Repetitive Loss List? No  
If yes, what is the Repetitive Loss #?  
Actual Amount Paid: \$51,000.00  
Flood Zone Designation: AE or A130



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1471-005

Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Bell County

Site Number: 15

Site Address: Roger 7 Arnold West  
Goodin Subdivision  
Four Mile, KY 40939

GPS Coordinates: Please place in decimal format.

Latitude: 36.79118

Longitude: 83.73977

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Bell

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use: Open Space

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$28,000

Flood Zone Designation: AE or A-130



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1471-005

Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Bell County

Site Number: 16

Site Address: Mae Grubbs

Ky 2015

Four Mile, KY 40939

GPS Coordinates: Please place in decimal format.

Latitude: 36.79071

Longitude: 83.73958

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Bell

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use: Open Space

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$23,000.00

Flood Zone Designation: AE A-130



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1471-005  
Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties  
Subgrantee: Bell County

Site Number: 17  
Site Address: Delores Duncan  
Ky 2015  
Four Mile, KY 40939

GPS Coordinates: Please place in decimal format.  
Latitude: 36.79071  
Longitude: 83.73958

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Bell

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use: Open Space

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$17,500.00

Flood Zone Designation: AE or A-130



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1471-005

Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Bell County

Site Number: 18

Site Address: Herbert & Peggy Champlin  
Goodin Subdivision  
Four Mile, KY 40939

GPS Coordinates: Please place in decimal format.

Latitude: 36.79071

Longitude: 83.73958

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Bell

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use: Open Space

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$31,000.00

Flood Zone Designation: AE or A-130



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1471-005

Project Title: Bell Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Bell County

Site Number: 19

Site Address: Abraham & Christine Miracle  
KY 2015  
Four Mile, KY 40939

GPS Coordinates: Please place in decimal format.

Latitude: 36.79029

Longitude: 83.73933

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Bell

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use: Open Space

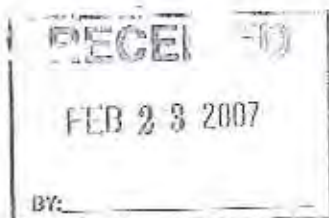
Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$34,000.00

Flood Zone Designation: AE or A-130





**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

**Project Number:** 1523-004

**Project Name:** Nelson County Landslide

**Subgrantee Name:** Nelson County

Total Approved Project Cost: **\$154,650.00**

Final Project Cost: **\$145,369.00**

Approved Federal Share: **\$115,988.00**

Final Federal Share: **\$109,026.75**

Approved State Share: **\$18,558.00**

Final State Share: **\$17,444.28**

Approved Subgrantee Share: **\$20,105.00**

Final Subgrantee Share: **\$18,897.97**

Approved Administrative Share: **\$4,093.00**

Final Administrative Share: **\$3,907.38**

Project Cost  Overrun or  Underrun: **\$9,281.00**

Project Completion Date: 11/14/06

Final Site Visit Date: 11/28/06

Final Site Visit Completed by:

Brian Gathy UK Program Coordinator,  
Chris Cross Grants Manager

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number **1523-004**. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

Chris Cross

Signature of Project Manager

2-19-07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1523-004

*Project Title:* Nelson County Landslide Acquisition and Demolition

*Subgrantee:* Nelson County

*Project Objective:* To acquire and demolish one (1) structure at risk for landslide failure.

*Scope of Work:* Nelson County will acquire and demolish one (1) residential structure and its surrounding lot to eliminate future landslide damage to this structure.

*Final Site Visit Report:*

Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with County Judge-Executive. Site was cleared and residential structure was returned to green space.

*Recommendation:* To close the project.



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-004

Project Title: Nelson County Landslide Acquisition / Demolition

Subgrantee: Nelson County Fiscal Court

Site Number: 1

Site Address: 2065 Holt Ridge Rd, Bloomfield, KY 40008

GPS Coordinates: Please place in decimal format.

Latitude: 37.86345

Longitude: 85.20677

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Nelson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$145,000.00

Date Actual Amount Paid: 8/9/06

Flood zone designation: C



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1523-005      Project Name: Landslide Acquisition of Residential Structure  
Subgrantee Name: Louisville Metro Emergency Management

Total Approved Project Cost: \$178,785	Final Project Cost: \$138,355.49
Approved Federal Share: \$134,089	Final Federal Share: \$103,766.62
Approved State Share: \$21,454	Final State Share: \$16,602.66
Approved Subgrantee Share: \$23,242	Final Subgrantee Share: \$17,986.21
Approved Administrative Share: \$4,576	Final Administrative Share: \$3,767.10

Project Cost  Overrun or  Underrun: \$40,429.51

Project Completion Date: 2-5-07

Final Site Visit Date: 3-28-07

Final Site Visit Completed by: H. Camille Crain, KY SIIMO  
Brian Gathy, UK  
Chris Cross, UK

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- LFI payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1523-005. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

5-22-07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1523-005

*Project Title:* Landslide Acquisition of Residential Structure

*Subgrantee:* Louisville Metro Emergency Management Agency

*Project Objective:* Acquisition and Demolition of Landslide Home

*Scope of Work:* This project encompassed the acquisition and demolition of the structure located at 5607 Brinson Drive.

*Final Site Visit Report:* The house located at 5607 Brinson Drive in Louisville, KY was completely demolished. The land was returned to its natural state and will now allow the slide to progress naturally.

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-005

Project Title: Landslide Acquisition of Residential Structure

Subgrantee: Louisville Metro Emergency Management Agency

Site Number: 1

Site Address: 5607 Brinson Drive  
Louisville, KY 40216

GPS Coordinates: Please place in decimal format.

Latitude: 38.16979

Longitude: 85.81721

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Is property on FEMA's Repetitive Loss List?  Yes or  No

If yes, what is the Repetitive Loss # ?

Actual Amount Paid: \$112,000.00

Date Actual Amount Paid: 12-07-06

Flood zone designation: C



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: DR-1523-006      Project Name: Rowan County Floodway Acquisition  
Subgrantee Name: Rowan County

Total Approved Project Cost: \$162,736  
Approved Federal Share: \$122,052  
Approved State Share: \$19,528  
Approved Subgrantee Share: \$21,156  
Approved Administrative Share: \$4,255

Final Project Cost: \$162,736  
Final Federal Share: ~~\$122,052~~ 122,041.96  
Final State Share: ~~\$19,528~~ 19,538.04  
Final Subgrantee Share: \$21,156 21,154  
Administrative Share: \$4,255

Project Cost  Overrun or  Underrun:

Project Completion Date: 1-26-07  
Final Site Visit Date: 3-29-07  
Final Site Visit Completed by:

II. Camille Crain, KY SIIMO  
Brian Gathy, UK Program Coordinator  
Chris Cross, UK Grants Manager

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1523-006. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

*Chris Cross*  
Signature of Project Manager

4/26/07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1523-006

*Project Title:* Mitigation of Floodprone Home

*Subgrantee:* Rowan County

*Project Objective:* Acquire and Demolish 1 home

*Scope of Work:* Acquire and demolish 1 home located in the floodway.

*Final Site Visit Report:* House and debris completely removed. Returned to Green Space.

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-006  
Project Title: Mitigation of Floodprone Home  
Subgrantee: Rowan County

Site Number: 1  
Site Address: 255 Old Kentucky Highway 801  
Morehead, KY 40351

GPS Coordinates: Please place in decimal format.

Latitude: 38.14528

Longitude: 83.54588

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Rowan

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Is property on FEMA's Repetitive Loss List?  Yes or  No

If yes, what is the Repetitive Loss # ?

Actual Amount Paid: \$141,580

Date Actual Amount Paid: 1-3-07

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1523-010

Project Name: Martin County  
Acquisition/Demolition

Subgrantee Name: Martin County

Total Approved Project Cost: \$262,800.00 ✓  
Approved Federal Share: \$197,100.00 ✓  
Approved State Share: \$31,536.00 ✓  
Approved Subgrantee Share: \$34,164.00 ✓  
Approved Administrative Share: ~~\$7,884.00~~  
\$6,256.00

Final Project Cost: \$186,750.16 -- 182,108.00  
Final Federal Share: \$136,581.00  
Final State Share: \$21,852.96  
Final Subgrantee Share: \$23,674.04  
Final Administrative Share: \$4,642.16

Project Cost  Overrun or  Underrun: \$80,692.00

Project Completion Date: 6/13/2008

Final Site Visit Date: 7/23/2008

Final Site Visit Completed by:

Brian Gathy UK Program Coordinator,  
Esther White Grants Manager

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1523-010. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

*Chris Cross*  
Signature of Project Manager

11-2-08  
Date



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1523-010

*Project Title:* Martin County Acquisition/Demolition

*Subgrantee:* Martin County

*Project Objective:* To acquire and demolish one (6) structures to mitigate flood damage.

*Scope of Work:* Martin County will acquire and demolish six (6) residential structures and surrounding lots to eliminate future Flood damage to these properties.

*Final Site Visit Report:*

Esther White and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with Eric Ratliff of the Big Sandy ADD. The two (2) Sites of the six (6) that participated in the project were cleared and residential structures were returned to green space.

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-010

Project Title: Martin County Acquisition / Demolition

Subgrantee: Martin County Fiscal Court

Site Number: 1

Site Address: HC 67 BOX 440, Pilgrim, KY 41250

GPS Coordinates: Please place in decimal format.

Latitude: 37.67828

Longitude: 82.48698

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  No

County: Martin

Mitigation Offer Applicable:  No

Mitigation Action: None

Post Mitigation Property Use: N/A

Repetitive Loss #:

Actual Amount Paid: \$0.00

Date Actual Amount Paid: N/A

Flood zone designation: C

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-010

Project Title: Martin County Acquisition / Demolition

Subgrantee: Martin County Fiscal Court

Site Number: 2

Site Address: 115 Stepp Bottom, Inez, KY 41224

GPS Coordinates: Please place in decimal format.

Latitude: 37.8509

Longitude: 82.52052

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes

County: Martin

Mitigation Offer Applicable:  Yes

Mitigation Action: Property purchased/Structures Demolished

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$116,000.00

Date Actual Amount Paid: 5/28/2008

Flood zone designation: C



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-010

Project Title: Martin County Acquisition / Demolition

Subgrantee: Martin County Fiscal Court

Site Number: 3

Site Address: KY Route 3, Inez, KY 41224

GPS Coordinates: Please place in decimal format.

Latitude: 37.88758

Longitude: 82.55501

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  No

County: Martin

Mitigation Offer Applicable:  No

Mitigation Action: None

Post Mitigation Property Use: N/A

Repetitive Loss #:

Actual Amount Paid: \$0.00

Date Actual Amount Paid: N/A

Flood zone designation: C

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-010

Project Title: Martin County Acquisition / Demolition

Subgrantee: Martin County Fiscal Court

Site Number: 4

Site Address: KY Route 3, Inez, KY 41224

GPS Coordinates: Please place in decimal format.

Latitude: 37.88723

Longitude: 82.55492

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  No

County: Martin

Mitigation Offer Applicable:  No

Mitigation Action: None

Post Mitigation Property Use: N/A

Repetitive Loss #:

Actual Amount Paid: \$0.00

Date Actual Amount Paid: N/A

Flood zone designation: C

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-010

Project Title: Martin County Acquisition / Demolition

Subgrantee: Martin County Fiscal Court

Site Number: 5

Site Address: KY Route 3, Inez, KY 41224

GPS Coordinates: Please place in decimal format.

Latitude: 37.88747

Longitude: 82.55502

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  No

County: Martin

Mitigation Offer Applicable:  No

Mitigation Action: None

Post Mitigation Property Use: N/A

Repetitive Loss #:

Actual Amount Paid: \$0.00

Date Actual Amount Paid: N/A

Flood zone designation: C

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-010

Project Title: Martin County Acquisition / Demolition

Subgrantec: Martin County Fiscal Court

Site Number: 6

Site Address: Stepp Bottom Road, KY 41224

GPS Coordinates: Please place in decimal format.

Latitude: 37.85218

Longitude: 82.5176

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes

County: Martin

Mitigation Offer Applicable:  Yes

Mitigation Action: Property purchased/Structures Demolished

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$46,900.00

Date Actual Amount Paid: 6/12/2008

Flood zone designation: C



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1578 – 005

Project Name: City of Paintsville Landslide  
Acquisition/Demolition

Subgrantee Name: City of Paintsville

Total Approved Project Cost: \$138,757  
Approved Federal Share: \$104,068  
Approved State Share: \$16,651  
Approved Subgrantee Share: \$18,038  
Approved Administrative Share: \$3,775

Final Project Cost: \$129,557  
Final Federal Share: \$97,167.75 97159.98  
Final State Share: \$15,546.84 15546.61  
Final Subgrantee Share: \$16,842.41 16850.41  
Final Administrative Share: \$3,591.14 3590.93

Project Cost  Overrun or  Underrun: \$9,200.00

Project Completion Date: 3-03-2008

Final Site Visit Date: 05-22-2008

Final Site Visit Completed by: Brian Gathy, Emily Frank and Eric Ratliff (Big Sandy ADID).

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

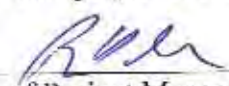
- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: \_\_\_\_\_

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1578 - 005. This project is ready for closeout.

Brian D Gathy

Type Name of Project Manager

  
Signature of Project Manager

Date

10-12-08



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1578 - 005

*Project Title:* City of Paintsville Landslide Acquisition/Demolition

*Subgrantee:* City of Paintsville

*Project Objective:*

**To acquire and demolish 1 home at 105 Eighth Street, Paintsville, Kentucky 41240.**

*Scope of Work:*

**The City of Paintsville will acquire and demolish 1 residential structure to eliminate future landslide damage to this structure. The lot will be maintained as green space in perpetuity.**

*Final Site Visit Report:*

**Acquired the landslide property and returned the land to open green space.**

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1578 - 005  
Project Title: City of Paintsville Landslide Acquisition/Demolition project  
Subgrantcc: City of Paintsville

Site Number: 1  
Site Address: 105 Eighth Street, Paintsville, Kentucky 41240  
GPS Coordinates: Please place in decimal format.  
 Latitude: 37.81282  
 Longitude: 82.80361

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Johnson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$119,500

Date Actual Amount Paid: 5/21/2007

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

*9/22/08  
11/11/08  
12/22/08  
1/22/09  
2/22/09  
3/22/09*

Project Number: 1617 - 002  
Subgrantee Name: City of Hopkinsville

Project Name: Acquisition of Floodway Home

Total Approved Project Cost: \$56,300  
Approved Federal Share: \$38,780  
Approved State Share: \$6,756  
Approved Subgrantee Share: \$10,764  
Approved Administrative Share: \$1,689

Final Project Cost: \$54,933.62  
Final Federal Share: \$38,780 ✓  
Final State Share: \$6,756 ✓  
Final Subgrantee Share: \$9,397.62  
Final Administrative Share: \$1,689 *1,648.00*

Project Cost  Overrun or  Underrun: \$1,366.38

Project Completion Date: 3-03-2008  
Final Site Visit Date: 3-18-2008  
Final Site Visit Completed by: Brian Gathy, and Christine Upton (City of Hopkinsville)

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1617 - 002. This project is ready for closeout.

Brian D Gathy  
Type Name of Project Manager

  
Signature of Project Manager

3-18-08  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1617 - 002

*Project Title:* Acquisition of Floodway Home

*Subgrantee:* City of Hopkinsville

*Project Objective:*

**To acquire and demolish 1 home at 1661 Mohawk Trail in Hopkinsville, Ky.**

*Scope of Work:*

**The City of Hopkinsville will acquire and demolish 1 residential structure to eliminate future flood damage to this structure. After acquiring this structure and its lot, the City of Hopkinsville will maintain the parcel as greenspace in perpetuity.**

*Final Site Visit Report:*

**Acquired the flood-prone property and returned the land to open green space.**

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1617 - 002  
Project Title: Acquisition of Floodway Home  
Subgrantee: City of Hopkinsville

Site Number: 1  
Site Address: 1661 Mohawk Trail, HJopkinsville, KY 42240

GPS Coordinates: Please place in decimal format.  
Latitude: 36.8546  
Longitude: 87.474

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Christian

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$50,000

Date Actual Amount Paid: 8/16/2007

Flood zone designation: AE





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**Section 2: Projects**

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### Introduction

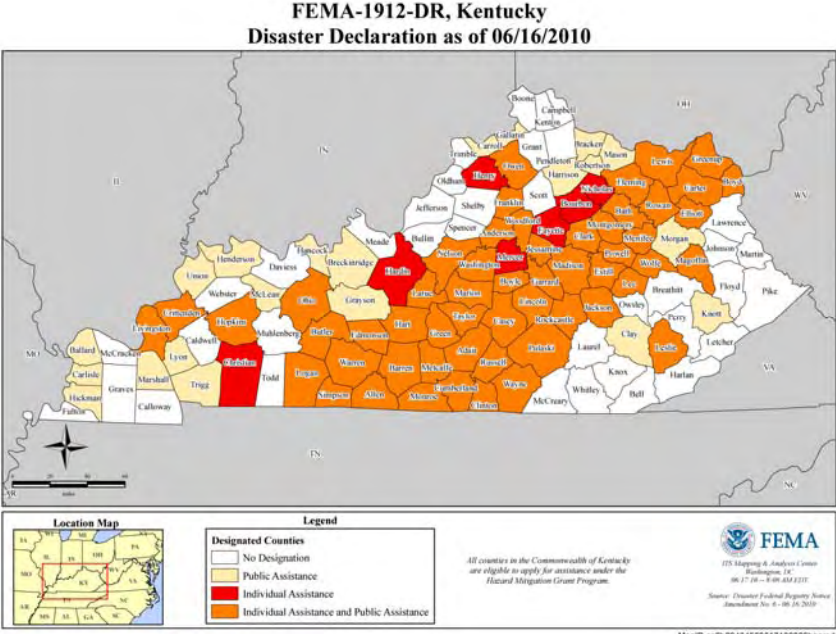
Since the last Kentucky State Hazard Mitigation Plan (2007), Kentucky has experienced 8 Presidential declared disasters. These disasters have increased the State's commitment to mitigation efforts across the Commonwealth.

Mitigation is any action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. There is a nationwide effort by federal, state, and local government, private industry, and homeowners to end the cycle of repetitive natural disaster damage. Under the provisions of the Stafford Act, FEMA has funded numerous mitigation projects to lesson damage to property and alleviate the suffering of residents in disaster-impacted communities.

The statewide impacts of the eight presidentially declared disasters served to remind the state of its vulnerability natural disasters. Cost avoidance analysis is one way to fully understand whether mitigation actions are, in fact, reducing disaster damage. This report presents the results of a post-disaster costs avoided analysis of previously mitigated projects within the State of Kentucky.

The State of Kentucky is repeatedly impacted by severe storms; 40 of all 63 Federal Emergency Management Agency (FEMA) declared disasters in Kentucky involved flooding. Many other declarations were winter storms, tornadoes and hurricanes that also included significant amounts of rain and high water. The entire State of Kentucky is particularly susceptible to flooding due to its inland river, lake and creek coastlines and accompanying population, significant development with impervious surface & drainage systems.

The terms flood and flooding refer to conditions of partial or complete inundation of normally dry land areas with surface water runoff from any source. Floodplains are defined as land areas susceptible to being inundated by water from any flooding source. Although storm surge presents a great potential for loss of life, in a study conducted from 1970-1999 by the National Hurricane Center, freshwater flooding accounts for more than 59% of the tropical cyclone deaths in the United States.





## **History and Statistics**

Kentucky Severe Storms, Tornadoes, Mudslides, and Landslides

**Declaration Date:** May 29, 2009

**Incident Type:** Severe Storms, Tornadoes, Flooding, and Mudslides

**Incident Period:** May 3-20, 2009

### **Public Assistance Program Eligible Counties:**

Ballard, Breathitt, Carlisle, Clay, Crittenden, Floyd, Grayson, Hickman, Jackson, Knott, Lawrence, Lee, Leslie, Letcher, Madison, Magoffin, Marshal, Owsley, Perry, Pike, Russell, and Trigg

### **Hazard Mitigation Grant Program Eligible Counties:**

All Counties in the Commonwealth are eligible to apply for assistance under the Hazard Mitigation Grant Program

### **Individual and Households Assistance Program Eligible Counties:**

Breathitt, Floyd, Owsley, and Pike

**Overview:**

Starting on May 3, 2009, strong storms producing tornadoes, severe thunderstorms, heavy rainfall, flash flooding, and generalized flooding moved across the central and eastern parts of the Commonwealth resulting loss of live and private property and road closures and these conditions endangered public health and safety and threatened public and private property. There were over half a million citizens impacted by this event. FEMA estimates that total public assistance for this event will exceed \$44 million. Over 5,543 applicants in four (4) counties were awarded approximately \$15 million in individual and household assistance.

**Methodology**

To complete this report we researched previous mitigation projects that have been completed in the disaster declared areas. We compiled important information from the project files and FEMA's project tracking system, NEMIS. Some projects used in this report lack the necessary information to determine mitigation success.

Kentucky Emergency Management and FEMA compiled a list of completed mitigation projects in the impacted areas. This list was reviewed to exclude projects that were initiative type projects, projects that had been withdrawn, and management cost. As a result, one project was remaining

The project that avoided loss was the City of Wickliffe sewer lift station project. This project did include benefit cost information.

A Benefit-Cost Ratio (BCR) is determined for every project application. FEMA provides the software to determine BCR as well as approves the number before the project is awarded. For the purposes of this post-disaster mitigation assessment of previously-mitigated projects, Kentucky uses the dollar amount of the benefit determined at the time of project application. There are some assumptions made in this process:

1. The projects in this report were located in the declared areas. Therefore, it is assumed that these projects would have some level of impact by the event.
2. The cost avoided for the mitigation projects in this report may be at least the cost of the mitigation due to FEMA BCA calculations.

The costs avoided are likely greater than the dollars contained in this report due to the impact of the recent multiple disasters.

### Data and Results

Cost avoidance was completed on the sewer lift station project . This project did meet mitigation expectations during the DR-1841 Severe Storm and Flooding event.

Project #	Sub Applicant	Project Type	Cost	Benefit
1454-0012	City of Wickliffe	Sewer Lift Station	\$439,536.00	\$695,512.00
			\$439,536.00	\$695,512.00
<b>Total Cost Avoidance =</b>				<b>\$255,976.00</b>

The results of this cost avoidance assessment indicate that the hazard mitigation activities funded by the Hazard Mitigation Grant Program (HMGP):

- Were cost-effective and reduced future losses from flood events
- Resulted in significant net benefits against future events

Kentucky will continue to refine the cost avoidance process to include project data in the future.

### Example Projects

The following projects provide local governments and non-profit agencies an excellent example of the goal of mitigation programs, whereby a local community, assisted by state and federal agencies, works to reduce or eliminate risk from future hazards.

#### Cherokee Park Subdivision, Acquisition, Hopkinsville, KY

Flooding from the Little River has caused 18 major flood events in Hopkinsville in the last 100 years. In March 1997, after major flooding caused over \$75 million in damages and devastated 450 homes, officials knew it was time to pursue ways to lessen the impact flooding was repeatedly having on their town. The initial acquisition and demolition project involved 38 properties at a cost of approximately 1.11 million in HMGP funds. To date, Hopkinsville has acquired and demolished 66 homes in the subdivision utilizing a variety of funding. The city chose to use the green space land as a recreational vehicle park to connect with the adjacent Trail of Tears Park.



#### Falmouth Flood of 1997, Acquisition, Falmouth, KY

On the night of March 1, 1997, heavy rains caused the Licking River to rise over 24 feet above its flood stage, sending a wall of water into the town. The flood, which reached 50 feet at its height, was the worst in the town's history. The City received a \$3 million grant through HMGP to acquire 83 properties. City officials were able to obtain a Community Development Block Grant to cover the 13 percent local share required for participation. Participants in the acquisition project were given fair market pre-disaster value for their homes. The houses were demolished, and the land will remain open space in perpetuity in order to mitigate future flood losses.



#### Middlesboro Storm Sewer System, Flood Control Project, Middlesboro, KY

In February 1994, Middlesboro experienced its worst flood since 1977. Major transportation routes in the area became paralyzed; nearly 56 homes and 16 businesses were flooded with up to two and a half feet of water. Because of its nearly century old undersized drainage system, the City could not handle flash flooding caused by large amount of rainfall. Many of the system's drains collapsed and were so full of debris that floodwaters were not able to pass through quickly enough. The estimated damages to businesses and homes over the eight year period of flooding from 1990 to 1998 totaled more than \$5 million. In September, 1999 the City was awarded \$244,893 to replace a portion of its downtown storm sewer system. The project was completed in 2000, and its effectiveness inspired the City to expand the storm sewer update.



COWS and CALVES, Warning Systems, Warren County, KY

Warren County and the surrounding cities within the county, have a history of tornadoes and other severe weather. In 1997 Warren County was awarded a grant through HMGP to install twelve Community Outdoor Warning Sirens (COWS). The sirens have a capacity to warn 100% of the residents of Bowling Green and 80% of the residents in the entire county. The County recognized, however, that an outdoor warning system was not sufficient. In 1999, the County received HMGP funds to install 250 Community Activated Lifesaving Voice Emergency Systems (CALVES). The system is designed to warn people who are indoors or not close to a siren site. CALVES were placed in every school, medical facility, church, indoor sporting facility, and emergency responder's office. The county implemented an extensive public awareness campaign to educate residents about the new warning systems. "When you hear the COWS mooove indoors. When you hear the CALVES protect your heard!" The COWS are credited with saving lives on April 16, 1998 when a tornado touched down in the county's biggest outdoor shopping mall. No lives were lost even though property damage totaled over \$2 million.

**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: DR1454-012

Project Name: City of Wickliffe Sewer Lift Station

Subgrantee Name: City of Wickliffe

Total Approved Project Cost: 439,686.31  
Approved Federal Share: 329,765.25  
Approved State Share: 52,761.75  
Approved Subgrantee Share: 57,159.31  
Approved Administrative Share: 9,794.00

Final Project Cost: 439,687.00  
Final Federal Share: ~~329,765.25~~ 329,738.28  
Final State Share: ~~52,761.75~~ 52,788.72  
Final Subgrantee Share: ~~57,159.31~~ 57,160.00  
Final Administrative Share: 9,794.00

Project Cost  Overrun or  Underrun:

Project Completion Date: December 2008

Final Site Visit Date: March 25, 2009

Final Site Visit Completed by: Esther White & Brian Gathy, UK HMGP

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file: Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-012. This project is ready for closeout.

Esther White  
Type Name of Project Manager

Esther White  
Signature of Project Manager

3-30-09  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* DR1454-012

*Project Title:* City of Wickliffe Sewer Lift Station

*Subgrantee:* **City of Wickliffe KY**

*Project Objective:* To mitigate against the flooding of the City of Wickliffe's Main Sewer Lift Station during high water events.

*Scope of Work:* The design and construction of the City of Wickliffe Main Lift Station and the replacement and extension of 1000 linear feet of sanitary sewer line and force mains. Also included the installation of a Muffin Monster type grinder system and the demolition of the existing lift station.

*Final Site Visit Report:* The lift station is completed as proposed and is now out of the floodprone area. The City of Wickliffe is closing the station in with walls at its own expense.

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR1454-012  
Project Title: City of Wickliffe Sewer Lift Station  
Subgrantee: City of Wickliffe KY

Site Number: 1  
Site Address: Court Street, between 4<sup>th</sup> and 6<sup>th</sup> Streets  
Wickliffe KY 42087

GPS Coordinates: Please place in decimal format.  
Latitude: N 36.96368  
Longitude: W -89.08692

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Ballard

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: **Demolition/Relocation of Main Sewer Lift Station**

Post Mitigation Property Use:

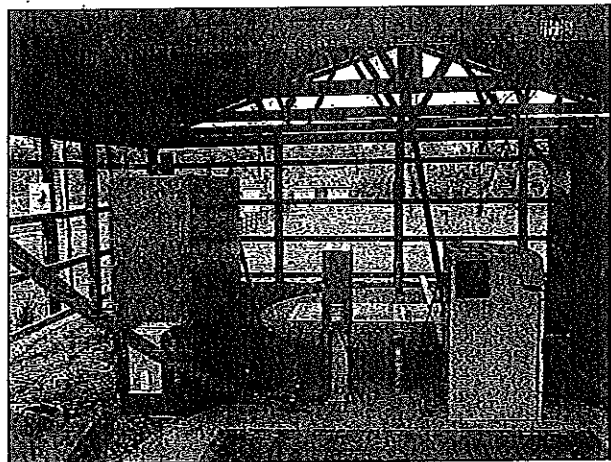
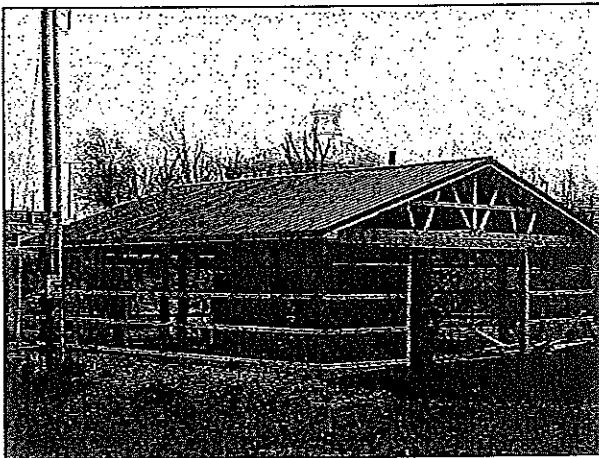
Is property on FEMA's Repetitive Loss List?  Yes or  No

If yes, what is the Repetitive Loss # ?

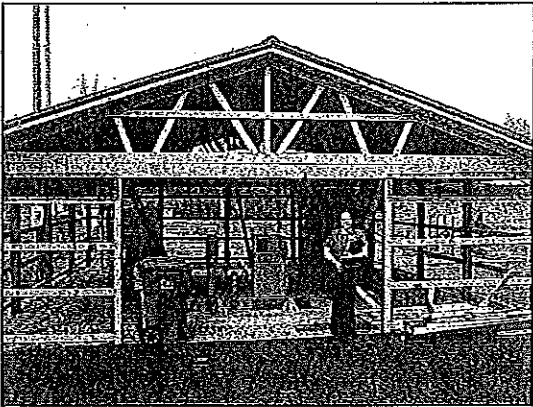
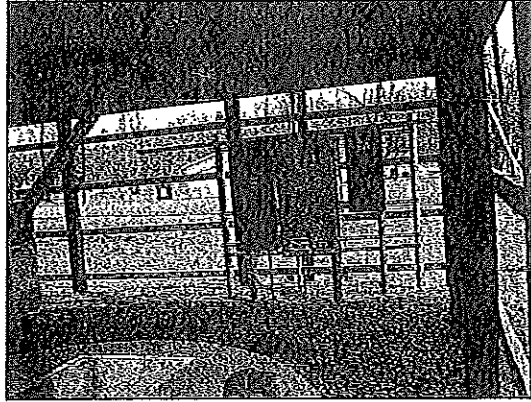
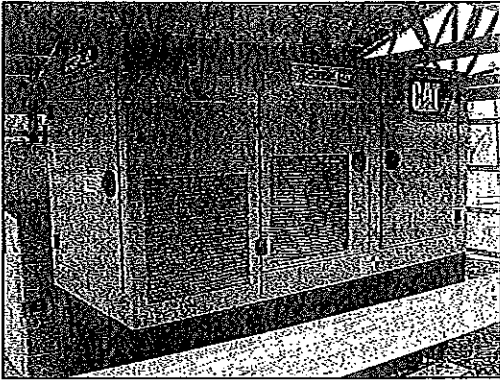
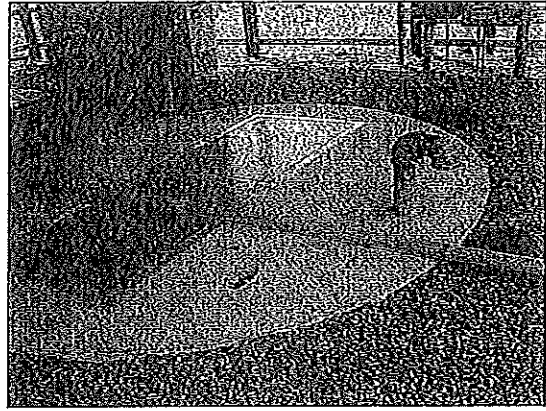
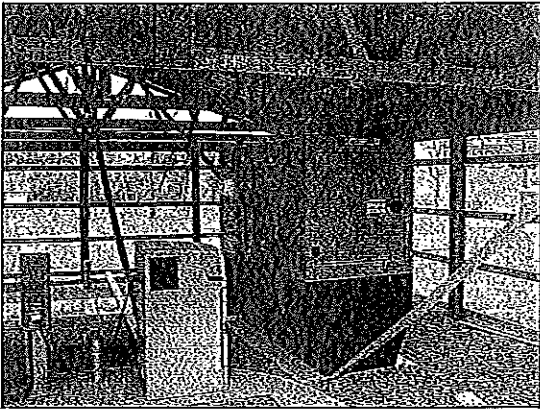
Actual Amount Paid:

Date Actual Amount Paid:

Flood zone designation:









# KENTUCKY DIVISION OF EMERGENCY MANAGEMENT

## FALL 2009 FLOODING

### POST-DISASTER ASSESSMENT OF PREVIOUSLY MITIGATED PROJECTS **FEMA - DR - 1855 - KY**



# MITIGATION COST AVOIDANCE REPORT

Kentucky Division of Emergency Management  
Hazard Mitigation Grant Program  
100 Airport Road • 3rd Floor  
Frankfort, KY 40601  
(877) 634-8175  
KYEMrecovery@ng.army.mil

Steve Beshear, Governor

John W. Heltzel, Director

Leslie Mahoney, State Hazard Mitigation Officer

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### Introduction

Since the last Kentucky State Hazard Mitigation Plan (2007), Kentucky has experienced 8 Presidential declared disasters. These disasters have increased the State’s commitment to mitigation efforts across the Commonwealth.



Mitigation is any action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. There is a nationwide effort by federal, state, and local government, private industry, and homeowners to end the cycle of repetitive natural disaster damage. Under the provisions of the Stafford Act, FEMA has funded numerous mitigation projects to lesson damage to property and alleviate the suffering of residents in disaster-impacted communities.

The statewide impacts of the eight Presidential declared disasters served to remind the state of its vulnerability natural disasters. Cost avoidance analysis is one way to fully understand whether mitigation actions are, in fact, reducing damage from an event. This report presents the results of a post-disaster costs avoided analysis of previously mitigated projects within the State of Kentucky.

The State of Kentucky is repeatedly impacted by severe storms; 40 of all 63 Federal Emergency Management Agency (FEMA) declared disasters in Kentucky involved flooding. Many other declarations were winter storms, tornadoes and hurricanes that also included significant amounts of rain and high water. The entire State of Kentucky is particularly susceptible to flooding due to its inland river, lake and creek coastlines and accompanying population, significant development with impervious surface & drainage systems.

The terms flood and flooding refer to conditions of partial or complete inundation of normally dry land areas with surface water runoff from any source. Floodplains are defined as land areas susceptible to being inundated by water from any flooding source. Although storm surge presents a great potential for loss of life, in a study conducted from 1970-1999 by the National Hurricane Center, freshwater flooding accounts for more than 59% of the tropical cyclone deaths in the United States.

## **History and Statistics**

### Kentucky Severe Storms, Straight-line Winds, and Flooding

**Declaration Date:** August 14, 2009

**Incident Type:** Severe Storms, Straight-line Winds, and Flooding

**Incident Period:** August 4, 2009

#### **Declared Counties Include:**

Jefferson and Trimble Counties

#### **Hazard Mitigation Grant Program**

All counties in the Commonwealth of Kentucky are eligible to apply for assistance under the Hazard Mitigation Grant Program.

## Overview

Flash Flooding impacted north central Kentucky on August 4<sup>th</sup>. Among the hardest hit areas were the Louisville Metro Area and parts of Indiana. Several roads were closed due to flood waters including I-65, several buildings in downtown Louisville flooded, major flooding occurred around Churchill Downs and on the University of Louisville campus, and numerous residential basements flooded across the area. Also there was one lightning related fire on Hurstbourne Lane near in I-64 in the Louisville Metro Area.

Another round of thunderstorms and heavy rain moved through the area in the afternoon and additional flooding occurred in the Bluegrass Region, including the Lexington Metro area.

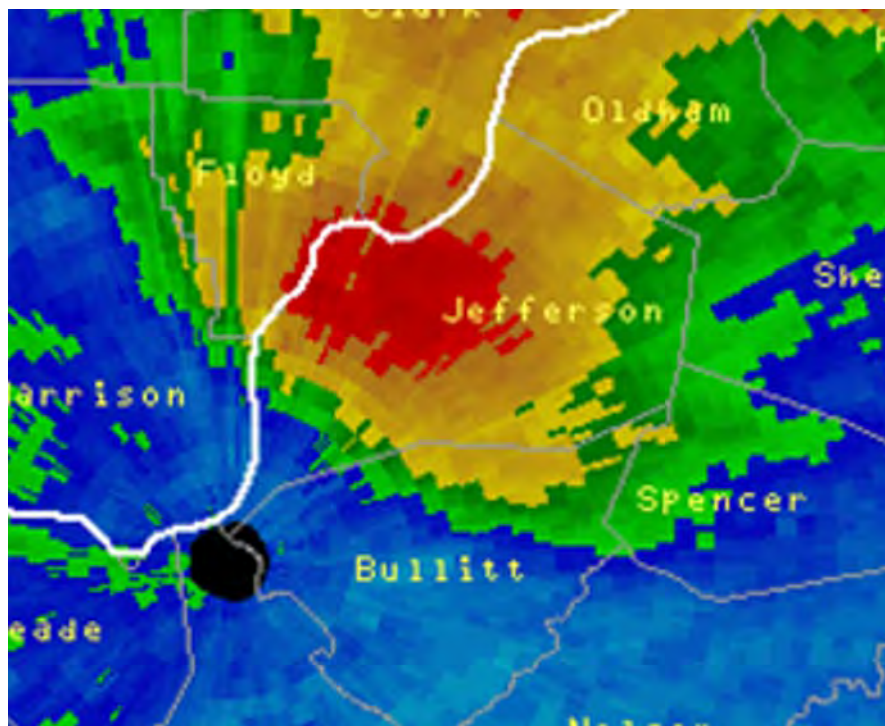
Below is an unofficial rainfall estimate from the radar from Tuesday.

Greens: 1.0-2.5 inches

Light Yellow: 2.5-3.5 inches

Dark Yellow: 3.5-5.0 inches

Reds: 5.0-7.0 inches



## Methodology

To complete this report we researched previous mitigation projects that have been completed in the disaster declared areas. We compiled important information from the project files and FEMA's project tracking system, NEMIS. Some projects used in this report lack the necessary information to determine mitigation success.

Kentucky Emergency Management and FEMA compiled a list of completed mitigation projects in the impacted areas. This list was reviewed to exclude projects that were initiative type projects, projects that had been withdrawn, and management cost. As a result, five (5) projects were remaining.

Of the 5 projects, all 5 were Acquisition/Demolition project type. Three projects did not include benefit cost information. For those projects, we used the NIBS methodology (For every \$1 invested in mitigation yields \$4 in returns).

A Benefit-Cost Ratio (BCR) is determined for every project application. FEMA provides the software to determine BCR as well as approves the number before the project is awarded. For the purposes of this post-disaster mitigation assessment of previously-mitigated projects, Kentucky uses the dollar amount of the benefit determined at the time of project application. There are some assumptions made in this process:

1. The projects in this report were located in the declared areas. Therefore, it is assumed that these projects would have some level of impact by the event.
2. The cost avoided for the mitigation projects in this report may be at least the cost of the mitigation due to FEMA BCA calculations.

The costs avoided are likely greater than the dollars contained in this report due to the impact of the recent multiple disasters.

## Data and Results

Cost avoidance was completed on the five (5) identified projects which included close to 40 structures. Of these assessments, all 5 projects were found to have met mitigation expectations during the DR-1855 Severe Storm and Flooding event.

Project #	Sub Applicant	Project Type	Cost	Benefit
1207-0010	Louisville MSD	Acquisition	\$833,504.00	\$3,334,016.00
1216-0017	Louisville MSD	Acquisition	\$647,098.00	\$2,588,392.00
1388-0004	Louisville MSD	Acquisition	\$2,139,372.00	\$2,933,228.00
1454-0011	Louisville MSD	Acquisition	\$728,731.00	\$2,914,924.00
1523-0005	Louisville MDS	Landslide Buyout	\$178,785.00	\$223,219.00
			\$4,527,490.00	\$11,993,779.00
Total Cost Avoidance=				\$7,466,289.00

The results of this cost avoidance assessment indicate that the hazard mitigation activities funded by the Hazard Mitigation Grant Program (HMGP):

- Were cost-effective and reduced future losses from flood events
- Resulted in significant net benefits against future events

Kentucky will continue to refine the cost avoidance process to include project data in the future.



### Example Projects

The following projects provide local governments and non-profit agencies an excellent example of the goal of mitigation programs, whereby a local community, assisted by state and federal agencies, works to reduce or eliminate risk from future hazards.

#### Cherokee Park Subdivision, Acquisition, Hopkinsville, KY

Flooding from the Little River has caused 18 major flood events in Hopkinsville in the last 100 years. In March 1997, after major flooding caused over \$75 million in damages and devastated 450 homes, officials knew it was time to pursue ways to lessen the impact flooding was repeatedly having on their town. The initial acquisition and demolition project involved 38 properties at a cost of approximately 1.11 million in HMGP funds. To date, Hopkinsville has acquired and demolished 66 homes in the subdivision utilizing a variety of funding. The city chose to use the green space land as a recreational vehicle park to connect with the adjacent Trail of Tears Park.



#### Falmouth Flood of 1997, Acquisition, Falmouth, KY

On the night of March 1, 1997, heavy rains caused the Licking River to rise over 24 feet above its flood stage, sending a wall of water into the town. The flood, which reached 50 feet at its height, was the worst in the town's history. The City received a \$3 million grant through HMGP to acquire 83 properties. City officials were able to obtain a Community Development Block Grant to cover the 13 percent local share required for participation. Participants in the acquisition project were given fair market pre-disaster value for their homes. The houses were demolished, and the land will remain open space in perpetuity in order to mitigate future flood losses.



#### Middlesboro Storm Sewer System, Flood Control Project, Middlesboro, KY

In February 1994, Middlesboro experienced its worst flood since 1977. Major transportation routes in the area became paralyzed; nearly 56 homes and 16 businesses were flooded with up to two and a half feet of water. Because of its nearly century old undersized drainage system, the City could not handle flash flooding caused by large amount of rainfall. Many of the system's drains collapsed and were so full of debris that floodwaters were not able to pass through quickly enough. The estimated damages to businesses and homes over the eight year period of flooding from 1990 to 1998 totaled more than \$5 million. In September, 1999 the City was awarded \$244,893 to replace a portion of its downtown storm sewer system. The project was completed in 2000, and its effectiveness inspired the City to expand the storm sewer update.



COWS and CALVES, Warning Systems, Warren County, KY

Warren County and the surrounding cities within the county, have a history of tornadoes and other severe weather. In 1997 Warren County was awarded a grant through HMGP to install twelve Community Outdoor Warning Sirens (COWS). The sirens have a capacity to warn 100% of the residents of Bowling Green and 80% of the residents in the entire county. The County recognized, however, that an outdoor warning system was not sufficient. In 1999, the County received HMGP funds to install 250 Community Activated Lifesaving Voice Emergency Systems (CALVES), The system is designed to warn people who are indoors or not close to a siren site. CALVES were placed in every school, medical facility, church, indoor sporting facility, and emergency responder's office. The county implemented an extensive public awareness campaign to educate residents about the new warning systems. "When you hear the COWS moooove indoors. When you hear the CALVES protect your heard!" The COWS are credited with saving lives on April 16, 1998 when a tornado touched down in the county's biggest outdoor shopping mall. No lives were lost even though property damage totaled over \$2 million.

RECEIVED

MAR 1 2007

**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: **1207-010**Project Name: **Acquisition**Subgrantee Name: **Louisville MSD**Total Approved Project Cost: **\$1,097,526.00**Final Project Cost: **\$958,050.86**Approved Federal Share: **\$823,145.00**Final Federal Share: **\$718,538.15**Approved State Share: **\$131,703.00**Final State Share: **\$114,966.10**Approved Subgrantee Share: **\$142,678.00**Final Subgrantee Share: **\$124,546.61**Approved Administrative Share: **\$21,239.00**Final Administrative Share: **\$20,161.02**Project Cost  Overrun or  Underrun: **\$139,475.14**Project Completion Date: **April 1, 2006**Final Site Visit Date: **March 14, 2006**

Final Site Visit Completed by:

II. Camille Crain SHMO

Brian Gathy UK Program Coordinator,

Chris Cross Grants Manager

Jerry Ross FEMA DAE

## ITEM CHECKLIST

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (2-3-03)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number **1207-010**. This project is ready for closeout.

**Chris Cross**

Type Name of Project Manager

*Chris Cross*  
Signature of Project Manager

*2-9-07*  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* **1207-010**

*Project Title:* **Acquisition**

*Subgrantee:* **Lou. MSD**

*Project Objective:*

**The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.**

*Scope of Work:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Final Site Visit Report:*

**Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with H. Camille Crain, the SLIMO. Site was cleared and residential structure was returned to green space.**

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 3  
Site Address: 503 Fergusson Fife

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.12479  
 Longitude: 85.75865

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$52,500.00

Date Actual Amount Paid: 12/19/05

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 4  
Site Address: 505 Ferguson Fife

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12474  
Longitude: 85.75861

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$101,000.00

Date Actual Amount Paid: 6/24/03

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 5  
Site Address: 300 Glengarry

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12462  
Longitude: 85.75908

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$100,000.00

Date Actual Amount Paid: March 11, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.);*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 6  
Site Address: 302 Glengarry

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12447  
Longitude: 85.75915

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$100,000.00

Date Actual Amount Paid: August 4, 2004

Flood zone designation: Floodway





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantcc: Louisville MSD

Site Number: 7  
Site Address: 304 Glengarry

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12429  
Longitude: 85.75920

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$97,000.00

Date Actual Amount Paid: April 7, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 9  
Site Address: 7206 Arnoldtown Rd.

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.14824  
 Longitude: 85.82407

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$186,000.00

Date Actual Amount Paid: April 29, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 12  
Site Address: 4107 S. Pope Lick

GPS Coordinates: Please place in decimal format.  
Latitude: 38.17815  
Longitude: 85.48505

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$77,000.00

Date Actual Amount Paid: April 5, 2004

Flood zone designation: AE, Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 13  
Site Address: 4111 S. Pope Lick

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.17920  
 Longitude: 85.48592

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$79,000.00

Date Actual Amount Paid: April 15, 2004

Flood zone designation: AF, Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1207-010  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 14  
Site Address: 4203 S. Pope Lick

GPS Coordinates: Please place in decimal format.  
Latitude: 38.17776  
Longitude: 85.48592

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green space

Repetitive Loss #:

Actual Amount Paid: \$75,000.00

Date Actual Amount Paid: April 15, 2004

Flood zone designation: AF, Floodway





**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1216-017

Project Name: Acquisition

Subgrantee Name: Louisville MSD

Total Approved Project Cost: \$647,098.00  
 Approved Federal Share: \$485,324.00  
 Approved State Share: \$77,651.00  
 Approved Subgrantee Share: \$84,123.00  
 Approved Administrative Share: \$13,942.00

Final Project Cost: \$647,098.00  
 Final Federal Share: ~~\$485,323.50~~ 485,320.19  
 Final State Share: ~~\$77,650.54~~ 77,654.81  
 Final Subgrantee Share: ~~\$84,122.76~~ 84,123.00  
 Final Administrative Share: \$13,941.96

Project Cost  Overrun or  Underrun: ~~\$1.20~~

Project Completion Date: April 1, 2006

Final Site Visit Date: March 14, 2006

Final Site Visit Completed by:

H. Camille Crain SHMO  
 Brian Gathy UK Program Coordinator,  
 Chris Cross Grants Manager  
 Jerry Ross FEMA DAE

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (2-3-03)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1216-017. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

Chris Cross

Signature of Project Manager

3-9-07

Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1216-017  
*Project Title:* Acquisition and Elevation  
*Subgrantee:* Lou. MSD

*Project Objective:*

The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties and the elevation of one (1) flood-prone property located in Louisville Metro using federal HMGF disaster funding provided by FEMA and the associated state and local matching funds.

*Scope of Work:*

Acquired the flood-prone properties and returned the land to open green space and elevated the one (1) flood-prone property.

*Final Site Visit Report:*

Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with H. Camille Crain, the SHMO. Sites that were acquired were cleared and residential structures were returned to green space. House elevation project was complete as well, and house was elevated.

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 1  
Site Address: 13002 Scatonville Road

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13216  
Longitude: 85.52289

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Elevation of a home

Post Mitigation Property Use: Residential use

Repetitive Loss #: 0087512

Actual Amount Paid: \$80,750.00

Date Actual Amount Paid: 3/21/06

Flood zone designation: AE, 100 Yr. Floodplain





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 2  
Site Address: 8305 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12201  
Longitude: 85.80109

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$95,000

Date Actual Amount Paid: March 8, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 3  
Site Address: 8307 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format:  
Latitude: 38.12182  
Longitude: 85.80141

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No  
County: Jefferson  
Mitigation Offer Applicable:  Yes or  No  
Mitigation Action: Acquisition and Demolition of a home  
Post Mitigation Property Use: Green Space  
Repetitive Loss #: 0107526  
Actual Amount Paid: \$100,000  
Date Actual Amount Paid: March 16, 2004  
Flood zone designation: Flood Zone



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 5  
Site Address: 8311 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12160  
Longitude: 85.80207

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$115,000

Date Actual Amount Paid: April 29, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 6  
Site Address: 8313 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
Latitude: 38.12152  
Longitude: 85.80252

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$113,000

Date Actual Amount Paid: March 1, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR-KY-1216-017  
Project Title: Louisville MSD Acquisition Project  
Subgrantee: Louisville MSD

Site Number: 7  
Site Address: 8315 3<sup>rd</sup> Street

GPS Coordinates: Please place in decimal format.  
 Latitude: 38.12138  
 Longitude: 85.80258

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition of a home

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$93,000

Date Actual Amount Paid: January 30, 2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1388-004  
Subgrantee Name: Lou. MSD

Project Name: Acquisition

Total Approved Project Cost: \$2,345,238.00  
Approved Federal Share: \$1,758,929.00  
Approved State Share: \$281,428.00  
Approved Subgrantee Share: \$304,881.00  
Approved Administrative Share: \$34,425.00

Final Project Cost: \$2,304,172.10  
Final Federal Share: \$1,728,129.06  
Final State Share: \$276,500.66  
Final Subgrantee Share: \$299,542.38  
Final Administrative Share: \$34,041.72

Project Cost  Overrun or  Underrun: \$41,065.90

Project Completion Date: 10/31/2005

Final Site Visit Date: 03/13/2006

Final Site Visit Completed by: H. Camille Crain (KY SHMO), Jerry Ross (FEMA DAL),  
Brian Gathy (UK Martin School), Chris Cross (UK Martin School)

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (2-3-03)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- N/A  EIT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Decds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1388-004. This project is ready for closeout.

Chris Cross

Type Name of Project Manager

Chris Cross

Signature of Project Manager

Date

4-20-06

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1388-004

*Project Title:* Acquisition

*Subgrantee:* Lou. MSD

*Project Objective:*

The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.

*Scope of Work:*

Acquired the flood-prone properties and returned the land to open green space.

*Final Site Visit Report:*

All flood-prone properties have been purchased, demolished, and have been returned to green space.

*Recommendation:* To close the project.

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #1  
Site Address: 8300 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13072  
Longitude: 85.70061

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$120,000.00

Date Actual Amount Paid: 10/24/2003

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #2  
Site Address: 8301 Woodsman Court  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13098  
Longitude: 85.70054

Property Site Inventory (acquisition, elevation or relocation projects):  
 Was parcel part of final project?  Yes or  No  
 County: Jefferson  
 Mitigation Offer Applicable:  Yes or  No  
 Mitigation Action: Acquisition and Demolition  
 Post Mitigation Property Use: Green Space  
 Repetitive Loss #: \_\_\_\_\_  
 Actual Amount Paid: \$136,000.00  
 Date Actual Amount Paid: 10/24/2003  
 Flood zone designation: AF



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #3  
Site Address: 8302 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13057  
Longitude: 85.70055

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$125,000.00

Date Actual Amount Paid: 10/29/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #5  
Site Address: 8304 Woodsman Court  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13055  
Longitude: 85.70038

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$142,000.00

Date Actual Amount Paid: 12/18/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #7  
Site Address: 8311 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13060  
Longitude: 85.69943

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$149,000.00

Date Actual Amount Paid: 10/20/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #8  
Site Address: 8315 Woodsman Court  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13054  
Longitude: 85.69924

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$130,000.00

Date Actual Amount Paid: 09/29/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #9  
Site Address: 8317 Woodsman Court  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13036  
Longitude: 85.69911

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$142,000.00

Date Actual Amount Paid: 11/03/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #13  
Site Address: 3402 Pinecroft Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13485  
Longitude: 85.70123

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$127,000.00

Date Actual Amount Paid: 10/30/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #12  
Site Address: 3400 Pinecroft Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13490  
Longitude: 85.70132

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$129,000.00

Date Actual Amount Paid: 10/30/2003

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #14  
Site Address: 8002 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13419  
Longitude: 85.70049

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$140,000.00

Date Actual Amount Paid: 10/08/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #15  
Site Address: 8006 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13391  
Longitude: 85.70109

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$127,000.00

Date Actual Amount Paid: 10/27/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #16  
Site Address: 8010 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13366  
Longitude: 85.70094

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$123,000.00

Date Actual Amount Paid: 09/30/2003

Flood zone designation: AF



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #17  
Site Address: 8012 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13346  
Longitude: 85.70091

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$115,000.00

Date Actual Amount Paid: 10/20/2004

Flood zone designation: AF



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #18  
Site Address: 8014 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13324  
Longitude: 85.70092

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$120,000.00

Date Actual Amount Paid: 09/10/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #19  
Site Address: 8016 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13315  
Longitude: 85.70097

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$108,000.00

Date Actual Amount Paid: 01/19/2004

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #20  
Site Address: 8018 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13285  
Longitude: 85.70090

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$113,000.00

Date Actual Amount Paid: 12/17/2003

Flood zone designation: AE



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #21  
Site Address: 8024 Oakmont Drive  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13241  
 Longitude: 85.70104

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$108,000.00

Date Actual Amount Paid: 10/24/2003

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1388-004  
Project Title: Louisville MSD Acquisition/ Demolition  
Subgrantee: Louisville MSD

Site Number: #23  
Site Address: 3400 Foreman Lane  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13208  
Longitude: 85.70104

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

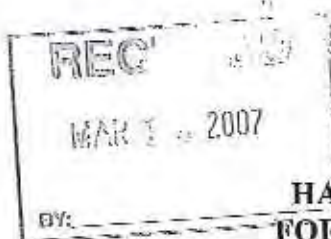
Repetitive Loss #:

Actual Amount Paid: \$133,000.00

Date Actual Amount Paid: 11/14/2004

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

**Project Number: 1454-011**  
**Subgrantee Name: Louisville MSD**

**Project Name: Acquisition**

Total Approved Project Cost: \$728,731.00	Final Project Cost: \$726,827.33
Approved Federal Share: \$546,548.00	Final Federal Share: \$545,120.50
Approved State Share: \$87,448.00	Final State Share: \$87,219.28
Approved Subgrantee Share: \$94,735.00	Final Subgrantee Share: \$94,487.55
Approved Administrative Share: \$15,575.00	Final Administrative Share: \$15,536.55

Project Cost  Overrun or  Underrun: \$1,903.67

Project Completion Date: **October 31, 2006**

Final Site Visit Date: **March 14, 2006**

Final Site Visit Completed by: II. Camille Crain SIIMO  
Brian Gathy UK Program Coordinator,  
Chris Cross Grants Manager  
Jerry Ross FEMA DAE

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA (11-18-05)
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EIT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VIAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number **1454-011**. This project is ready for closeout.

**Chris Cross**

Type Name of Project Manager

*Chris Cross*

Signature of Project Manager

Date

3-9-07

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* **1454-011**

*Project Title:* **Acquisition**

*Subgrantee:* **Lou. MSD**

*Project Objective:*

**The acquisition and demolition by the Metropolitan Sewer District of flood-prone properties located in Louisville Metro using federal HMGP disaster funding provided by FEMA and the associated state and local matching funds.**

*Scope of Work:*

**Acquired the flood-prone properties and returned the land to open green space.**

*Final Site Visit Report:*

**Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with Il. Camille Crain, the SHMO. Site was cleared and residential structure was returned to green space.**

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #1

Site Address: 12808 Scatonville Road  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13121

Longitude: 85.52496

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #: 0043882

Actual Amount Paid: \$153,000.00

Date Actual Amount Paid: 1/21/05

Flood zone designation: AF, Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #2

Site Address: 8303 Woodsman Court  
 Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13113

Longitude: 85.70033

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$115,000

Date Actual Amount Paid: 01/28/2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011  
Project Title: Louisville MSD Acquisition and Demolition  
Subgrantee: Louisville MSD

Site Number: #3  
Site Address: 8305 Woodsman Court  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.  
Latitude: 38.13086  
Longitude: 85.70016

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$116,000

Date Actual Amount Paid: 10/03/2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #4

Site Address: 606 Ruben Lane  
Fairdale, KY 40118

GPS Coordinates: Please place in decimal format.

Latitude: 38.12422

Longitude: 85.75346

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$105,000

Date Actual Amount Paid: 03/08/2004

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #5

Site Address: 704 Ruben Lane  
Fairdale, KY 40118

GPS Coordinates: Please place in decimal format.

Latitude: 38.12422

Longitude: 85.75346

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$81,000

Date Actual Amount Paid: 05/12/2004

Flood zone designation: AE





**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-011

Project Title: Louisville MSD Acquisition and Demolition

Subgrantee: Louisville MSD

Site Number: #6

Site Address: 8026 Oakmont Drive  
Louisville, KY 40219

GPS Coordinates: Please place in decimal format.

Latitude: 38.13229

Longitude: 85.70094

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$122,000

Date Actual Amount Paid: 10/30/2003

Flood zone designation: Floodway



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1523-005      Project Name: Landslide Acquisition of Residential Structure  
Subgrantee Name: Louisville Metro Emergency Management

Total Approved Project Cost: \$178,785	Final Project Cost: \$138,355.49
Approved Federal Share: \$134,089	Final Federal Share: \$103,766.62
Approved State Share: \$21,454	Final State Share: \$16,602.66
Approved Subgrantee Share: \$23,242	Final Subgrantee Share: \$17,986.21
Approved Administrative Share: \$4,576	Final Administrative Share: \$3,767.10

Project Cost  Overrun or  Underrun: \$40,429.51

Project Completion Date: 2-5-07

Final Site Visit Date: 3-28-07

Final Site Visit Completed by:

II. Camille Crain, KY SIIMO

Brian Gathy, UK

Chris Cross, UK

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- N/A  For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1523-005. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

5-22-07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* 1523-005

*Project Title:* Landslide Acquisition of Residential Structure

*Subgrantee:* Louisville Metro Emergency Management Agency

*Project Objective:* Acquisition and Demolition of Landslide Home

*Scope of Work:* This project encompassed the acquisition and demolition of the structure located at 5607 Brinson Drive.

*Final Site Visit Report:* The house located at 5607 Brinson Drive in Louisville, KY was completely demolished. The land was returned to its natural state and will now allow the slide to progress naturally.

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-005

Project Title: Landslide Acquisition of Residential Structure

Subgrantee: Louisville Metro Emergency Management Agency

Site Number: 1

Site Address: 5607 Brinson Drive  
Louisville, KY 40216

GPS Coordinates: Please place in decimal format.

Latitude: 38.16979

Longitude: 85.81721

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Jefferson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Is property on FEMA's Repetitive Loss List?  Yes or  No

If yes, what is the Repetitive Loss # ?

Actual Amount Paid: \$112,000.00

Date Actual Amount Paid: 12-07-06

Flood zone designation: C

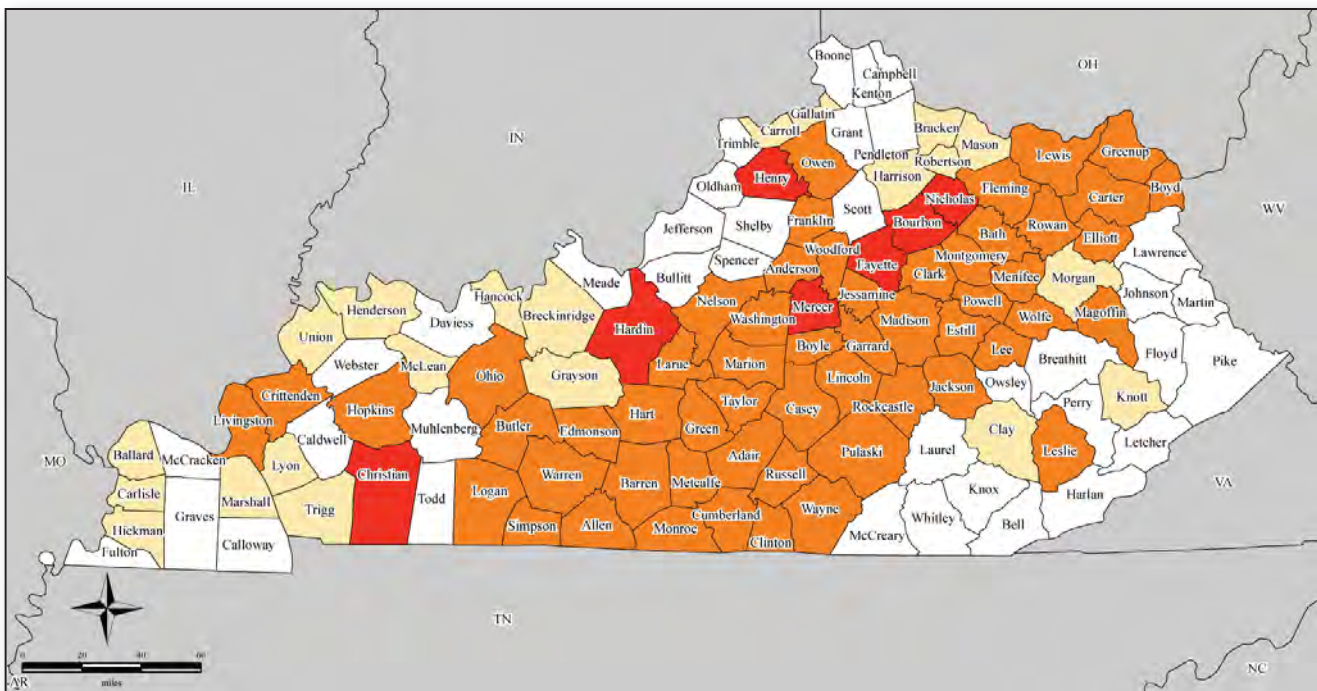




# KENTUCKY DIVISION OF EMERGENCY MANAGEMENT

## SEVERE STORMS, FLOODING, MUD SLIDES & TORNADOES - SPRING 2010

### POST-DISASTER ASSESSMENT OF PREVIOUSLY MITIGATED PROJECTS **FEMA - DR - 1912 - KY**



# MITIGATION COST AVOIDANCE REPORT

<p>Kentucky Division of Emergency Management Hazard Mitigation Grant Program 100 Airport Road • 3rd Floor Frankfort, KY 40601 (877) 634-8175 KYEMrecovery@ng.army.mil</p>	<p>Steve Beshear, Governor</p> <p>John W. Heltzel, Director</p> <p>Leslie Mahoney, State Hazard Mitigation Officer</p>
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## Introduction

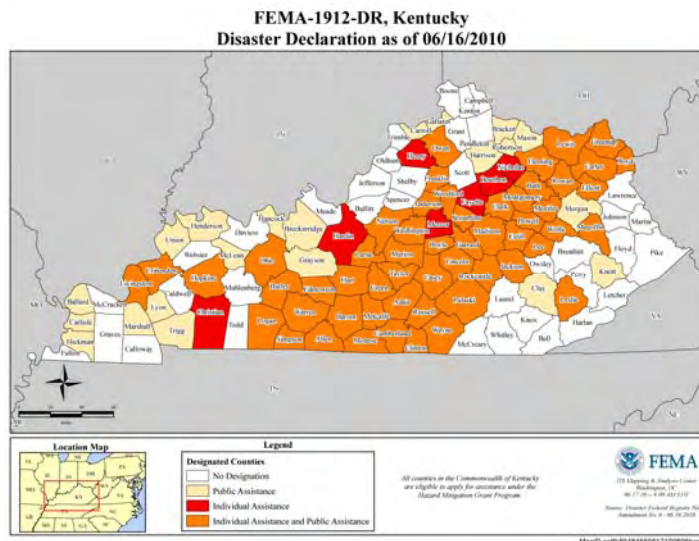
Since the last Kentucky State Hazard Mitigation Plan (2007), Kentucky has experienced 8 Presidential declared disasters. These disasters have increased the State's commitment to mitigation efforts across the Commonwealth.

Mitigation is any action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. There is a nationwide effort by federal, state, and local government, private industry, and homeowners to end the cycle of repetitive natural disaster damage. Under the provisions of the Stafford Act, FEMA has funded numerous mitigation projects to lesson damage to property and alleviate the suffering of residents in disaster-impacted communities.

The statewide impacts of the 2009 Kentucky severe winter storm & flooding served to remind the state of its vulnerability natural disasters. Cost avoidance analysis is one way to fully understand whether mitigation actions are, in fact, reducing disaster damage. This report presents the results of a post-disaster costs avoided analysis of previously mitigated projects within the State of Kentucky.

The State of Kentucky is repeatedly impacted by severe storms; 40 of all 63 Federal Emergency Management Agency (FEMA) declared disasters in Kentucky involved flooding. Many other declarations were winter storms, tornadoes and hurricanes that also included significant amounts of rain and high water. The entire State of Kentucky is particularly susceptible to flooding due to its inland river, lake and creek coastlines and accompanying population, significant development with impervious surface & drainage systems.

The terms flood and flooding refer to conditions of partial or complete inundation of normally dry land areas with surface water runoff from any source. Floodplains are defined as land areas susceptible to being inundated by water from any flooding source. Although storm surge presents a great potential for loss of life, in a study conducted from 1970-1999 by the National Hurricane Center, freshwater flooding accounts for more than 59% of the tropical cyclone deaths in the United States.



**DR-1912****Declaration Date: May 11, 2010****Incident Type: Severe Storms, Flooding, Mudslides, and Tornadoes****Incident Period: May 1-30, 2010****Public Assistance Program Eligible Counties:**

Adair, Allen, Anderson, Ballard, Barren, Bath, Boyd, Boyle, Bracken, Breckinridge, Butler, Carlisle, Carroll, Carter, Casey, Clark, Clay, Clinton, Crittenden, Cumberland, Edmonson, Elliott, Estill, Fleming, Franklin, Gallatin, Garrard, Grayson, Green, Greenup, Hancock, Harrison, Hart, Henderson, Hickman, Hopkins, Jackson, Jessamine, Knott, Larue, Lee, Leslie, Lewis, Lincoln, Livingston, Logan, Lyon, Madison, Magoffin, Marion, Marshall, Mason, McLean, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Nelson, Ohio, Owen, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Simpson, Taylor, Trigg, Union, Warren, Washington, Wayne, Wolfe, and Woodford.

**Hazard Mitigation Grant Program Eligible Counties:**

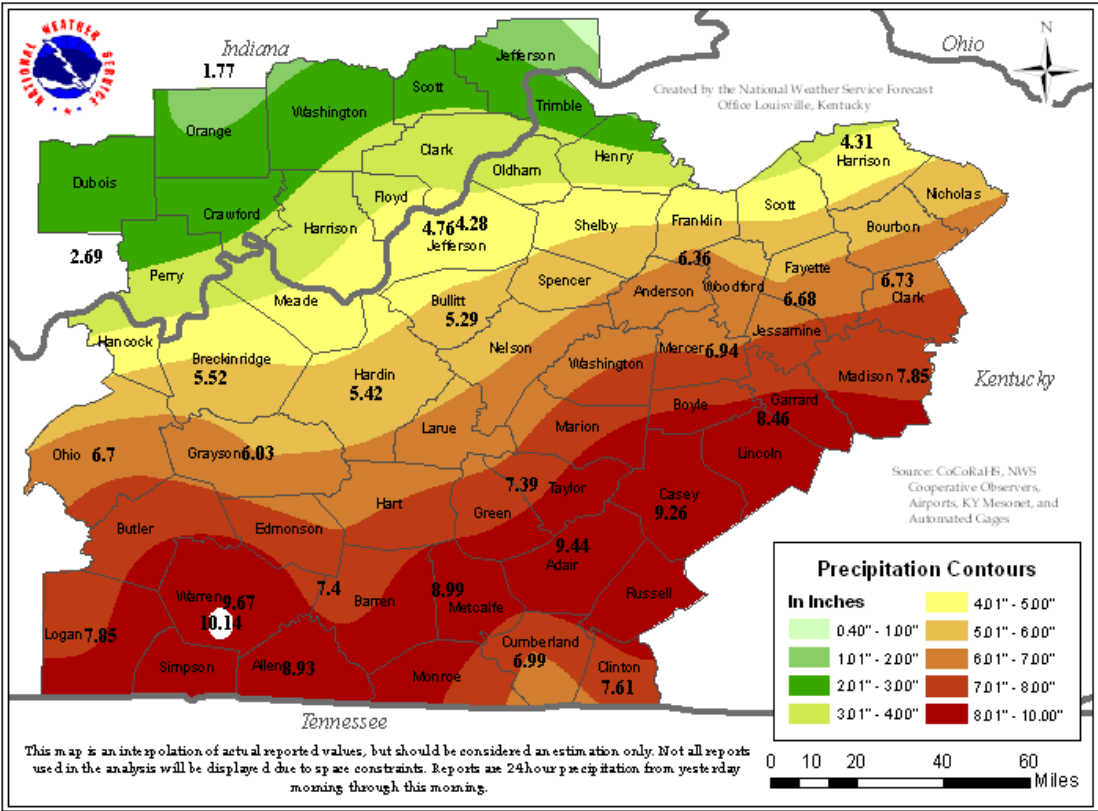
All Counties in the Commonwealth are eligible to apply for assistance under the Hazard Mitigation Grant Program

**Individual and Households Assistance Program Eligible Counties:**

Adair, Allen, Anderson, Barren, Bath, Bourbon, Boyd, Boyle, Butler, Carter, Casey, Christian, Clark, Clinton, Crittenden, Cumberland, Edmonson, Elliott, Estill, Fayette, Fleming, Franklin, Garrard, Green, Greenup, Hardin, Hart, Henry, Hopkins, Jackson, Jessamine, Larue, Lee, Leslie, Lewis, Lincoln, Livingston, Logan, Madison, Magoffin, Marion, Menifee, Mercer, Metcalfe, Monroe, Montgomery, Nelson, Nicholas, Ohio, Owen, Powell, Pulaski, Rockcastle, Rowan, Russell, Simpson, Taylor, Warren, Washington, Wayne, Wolfe, and Woodford.



### Two Day Rainfall Totals - May 1st and 2nd, 2010



**Overview:**

Beginning on May 1, 2010, Severe thunderstorms came across the Commonwealth causing damaging winds, torrential rain, and flooding that paralyzed many counties of the Commonwealth. Fallen trees, debris, and power outages left large groups of people, including the elderly and medically fragile, without essential services. Multiple fatalities occurred which are attributed to this disaster. Heavy rains and swollen streams from these storms overwhelmed the capacity of the commonwealth’s rivers and streams, resulting in widespread sustained flooding.

## Methodology

To complete this report we researched previous mitigation projects that have been completed in the disaster declared areas. We compiled important information from the project files and FEMA's project tracking system, NEMIS. Some projects used in this report lack the necessary information to determine mitigation success.

Kentucky Emergency Management and FEMA compiled a list of completed mitigation projects in the impacted areas. This list was reviewed to exclude projects that were initiative type projects, projects that had been withdrawn, and management cost. As a result, 6 projects were remaining.

Of the 6 projects, 4 were acquisitions, 1 safe room, and 1 sewer lift station project. Two projects did not include benefit cost information. For those projects, we used the NIBS methodology (For every \$1 invested in mitigation yields \$4 in returns).

A Benefit-Cost Ratio (BCR) is determined for every project application. FEMA provides the software to determine BCR as well as approves the number before the project is awarded. For the purposes of this post-disaster mitigation assessment of previously-mitigated projects, Kentucky uses the dollar amount of the benefit determined at the time of project application. There are some assumptions made in this process:

1. The projects in this report were located in the declared areas. Therefore, it is assumed that these projects would have some level of impact by the event.
2. The cost avoided for the mitigation projects in this report may be at least the cost of the mitigation due to FEMA BCA calculations.

The costs avoided are likely greater than the dollars contained in this report due to the impact of the recent multiple disasters.

**Data and Results**

Cost avoidance was completed on the six (6) identified projects which included close to 18 structures. Of these assessments, all 6 projects were found to have met mitigation expectations during the DR-1912 Severe Storms, Flooding, Mudslides, and Tornado event.

<b>Project #</b>	<b>Sub Applicant</b>	<b>Project Type</b>	<b>Cost</b>	<b>Benefit</b>
1310-0006	Warren County	Safe Rooms (10)	\$471,000.00	\$505,100.00
1454-0009	Woodford County Fiscal Court	Acquisition	\$322,305.00	\$924,732.00
1454-0012	City of Wickliffe	Sewer Lift Station	\$439,536.00	\$695,512.00
1475-0005	Lincoln County	Acquisition	\$445,000.00	\$1,780,000.00
1523-0004	Nelson County	Landslide Buyout	\$154,650.00	\$195,770.00
1523-0006	Rowan County	Acquisition	\$162,736.00	\$650,944.00
			<b>\$1,995,227.00</b>	<b>\$4,752,058.00</b>
<b>Total Cost Avoidance =</b>				<b>\$2,756,831.00</b>

The results of this cost avoidance assessment indicate that the hazard mitigation activities funded by the Hazard Mitigation Grant Program (HMGP):

- Were cost-effective and reduced future losses from flood events
- Resulted in significant net benefits against future events

Kentucky will continue to refine the cost avoidance process to include project data in the future.

**Example Projects**

The following projects provide local governments and non-profit agencies an excellent example of the goal of mitigation programs, whereby a local community, assisted by state and federal agencies, works to reduce or eliminate risk from future hazards.

Cherokee Park Subdivision, Acquisition, Hopkinsville, KY

Flooding from the Little River has caused 18 major flood events in Hopkinsville in the last 100 years. In March 1997, after major flooding caused over \$75 million in damages and devastated 450 homes, officials knew it was time to pursue ways to lessen the impact flooding was repeatedly having on their town. The initial acquisition and demolition project involved 38 properties at a cost of approximately 1.11 million in HMGP funds. To date, Hopkinsville has acquired and demolished 66 homes in the subdivision utilizing a variety of funding. The city chose to use the green space land as a recreational vehicle park to connect with the adjacent Trail of Tears Park.



Falmouth Flood of 1997, Acquisition, Falmouth, KY

On the night of March 1, 1997, heavy rains caused the Licking River to rise over 24 feet above its flood stage, sending a wall of water into the town. The flood, which reached 50 feet at its height, was the worst in the town's history. The City received a \$3 million grant through HMGP to acquire 83 properties. City officials were able to obtain a Community Development Block Grant to cover the 13 percent local share required for participation. Participants in the acquisition project were given fair market pre-disaster value for their homes. The houses were demolished, and the land will remain open space in perpetuity in order to mitigate future flood losses.



Middlesboro Storm Sewer System, Flood Control Project, Middlesboro, KY

In February 1994, Middlesboro experienced its worst flood since 1977. Major transportation routes in the area became paralyzed; nearly 56 homes and 16 businesses were flooded with up to two and a half feet of water. Because of its nearly century old undersized drainage system, the City could not handle flash flooding caused by large amount of rainfall. Many of the system's drains collapsed and were so full of debris that floodwaters were not able to pass through quickly enough. The estimated damages to businesses and homes over the eight year period of flooding from 1990 to 1998 totaled more than \$5 million. In September, 1999 the City was awarded \$244,893 to replace a portion of its downtown storm sewer system. The project was completed in 2000, and its effectiveness inspired the City to expand the storm sewer update.



COWS and CALVES, Warning Systems, Warren County, KY

Warren County and the surrounding cities within the county, have a history of tornadoes and other severe weather. In 1997 Warren County was awarded a grant through HMGP to install twelve Community Outdoor Warning Sirens (COWS). The sirens have a capacity to warn 100% of the residents of Bowling Green and 80% of the residents in the entire county. The County recognized, however, that an outdoor warning system was not sufficient. In 1999, the County received HMGP funds to install 250 Community Activated Lifesaving Voice Emergency Systems (CALVES), The system is designed to warn people who are indoors or not close to a siren site. CALVES were placed in every school, medical facility, church, indoor sporting facility, and emergency responder's office. The county implemented an extensive public awareness campaign to educate residents about the new warning systems. "When you hear the COWS mooove indoors. When you hear the CALVES protect your heard!" The COWS are credited with saving lives on April 16, 1998 when a tornado touched down in the county's biggest outdoor shopping mall. No lives were lost even though property damage totaled over \$2 million.

RECEIVED  
JUN 0 8 2007

HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST

BY: \_\_\_\_\_  
Project Number: 1310-006  
Subgrantee Name: Warren County

Project Name: Tornado Safe Rooms

Total Approved Project Cost: \$140,987.00  
Approved Federal Share: \$105,740.25  
Approved State Share: \$16,918.41  
Approved Subgrantee Share: \$18,328.31  
Approved Administrative Share: \$3,820.00

Final Project Cost: \$140,985.18  
Final Federal Share: \$105,738.89  
Final State Share: \$16,918.22  
Final Subgrantee Share: \$18,328.07  
Final Administrative Share: \$3,820.50

Project Cost  Overrun or  Underrun: \$1,829.32

Project Completion Date: February 16, 2007  
Final Site Visit Date: April 25, 2007  
Final Site Visit Completed by:

H. Camille Crain, KY State Hazard Mitigation Officer  
Brian Gathy, UK Program Coordinator  
Chris Cross, UK Grants Manager

ITEM CHECKLIST

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- N/A  Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- N/A  For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- N/A  For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: \_\_\_\_\_

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1310-006. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

5/31/07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* **1310-006**

*Project Title:* **Tornado Safe Shelters**

*Subgrantee:* **Warren County**

*Project Objective:* **To Construct Tornado Safe Shelters throughout Warren County.**

*Scope of Work:* **To construct Tornado Safe Shelters at 10 fire/rescue facilities throughout the County. These shelters were designed to be used by emergency responders so that they can ride out the severe weather and then be able to respond.**

*Final Site Visit Report:* **All 10 shelters were constructed as predetermined by FEMA. Attached to this closeout report is a copy of the as-built certification for the shelters.**

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 1  
Site Address: Bowling Green / Warren County Rescue Squad  
1125 Lewis Avenue  
Bowling Green, KY 42101

GPS Coordinates: Please place in decimal format.  
Latitude: 37.01105  
Longitude: 86.44775





### HAZARD MITIGATION GRANT PROGRAM Form #3 NEMIS CLOSEOUT CHECKLIST

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 2  
Site Address: Alvaton Volunteer Fire Department  
9899 Scottsville Rd  
Alvaton, KY 42122

GPS Coordinates: Please place in decimal format.  
Latitude: 36.93913  
Longitude: 86.31367



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

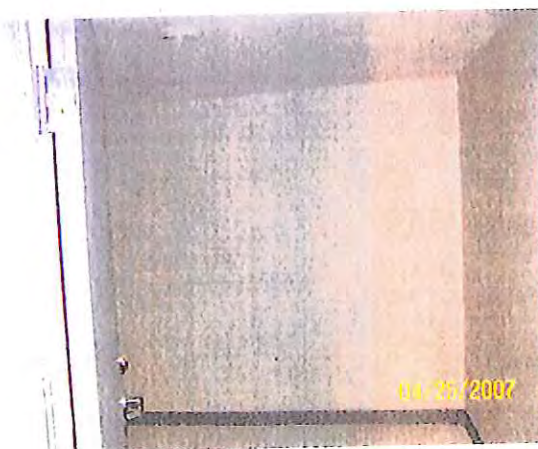
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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 3  
Site Address: Barren River Volunteer Fire Department  
121 Jenkins Road  
Bowling Green, KY 42101

GPS Coordinates: Please place in decimal format.  
Latitude: 36.98890  
Longitude: 86.50442



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 4  
Site Address: Browning Volunteer Fire Department  
3866 Browning Road  
Rockfield, KY 42274

GPS Coordinates: Please place in decimal format.  
Latitude: 36.96389  
Longitude: 86.52106



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

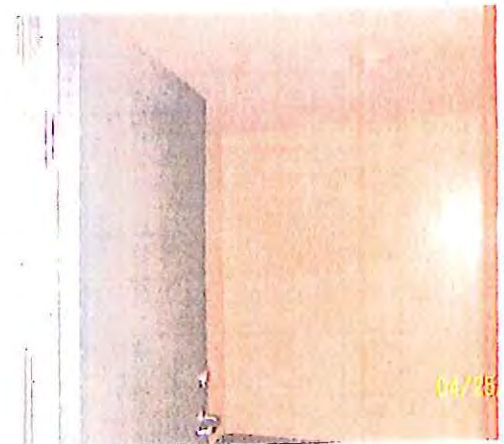
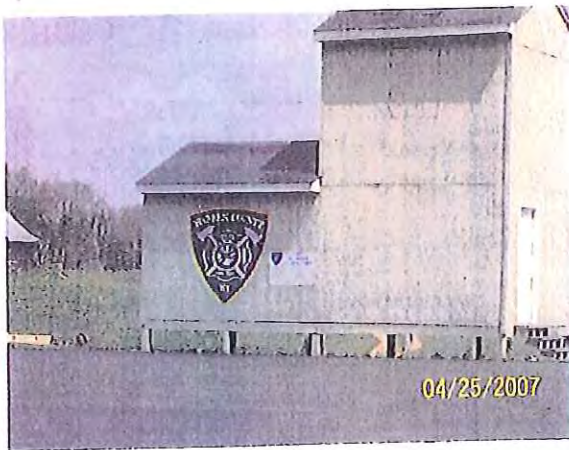
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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 5  
Site Address: Gott Volunteer Fire Department  
5590 Porter Pike  
Bowling Green, KY 42103

GPS Coordinates: Please place in decimal format.  
Latitude: 36.97277  
Longitude: 86.31377



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

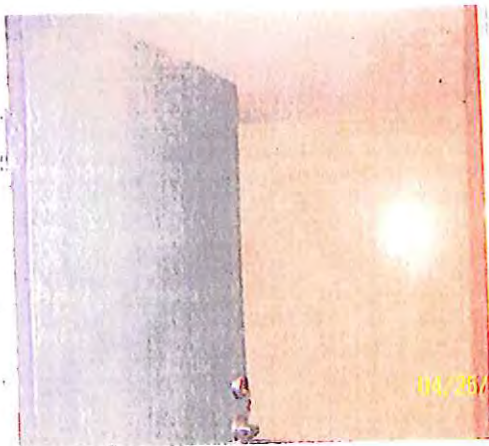
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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 6  
Site Address: Hadley Volunteer Fire Department  
255 Hadley School Road  
Bowling Green, KY 42101

GPS Coordinates: Please place in decimal format.  
Latitude: 37.05859.  
Longitude: 86.60652



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

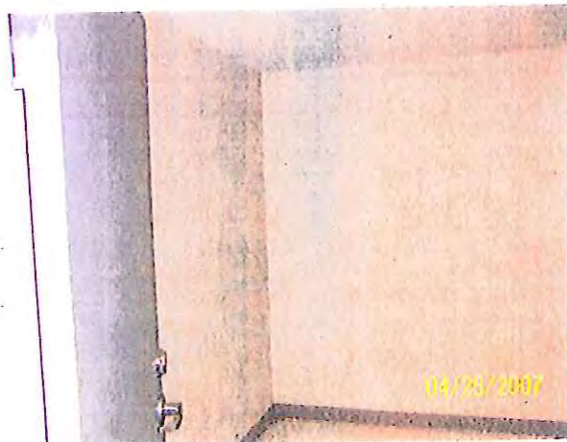
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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 7  
Site Address: Plano Volunteer Fire Department  
3210 Plano Road  
Bowling Green, KY 42103

GPS Coordinates: Please place in decimal format.  
Latitude: 36.84481  
Longitude: 86.42870



### HAZARD MITIGATION GRANT PROGRAM Form #3 NEMIS CLOSEOUT CHECKLIST

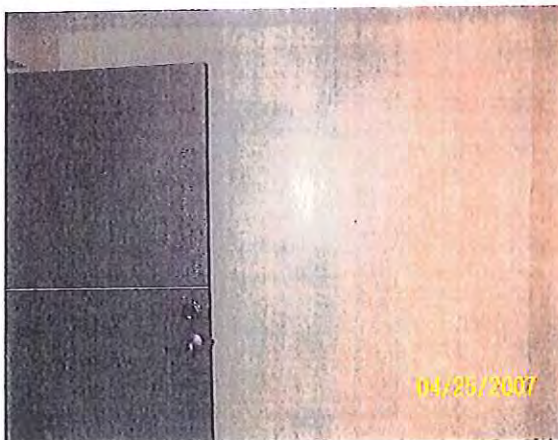
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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 8  
Site Address: Richardsville Volunteer Fire Department  
1185 Richardsville Road  
Bowling Green, KY 42101

GPS Coordinates: Please place in decimal format.  
Latitude: 37.09620  
Longitude: 86.46439



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

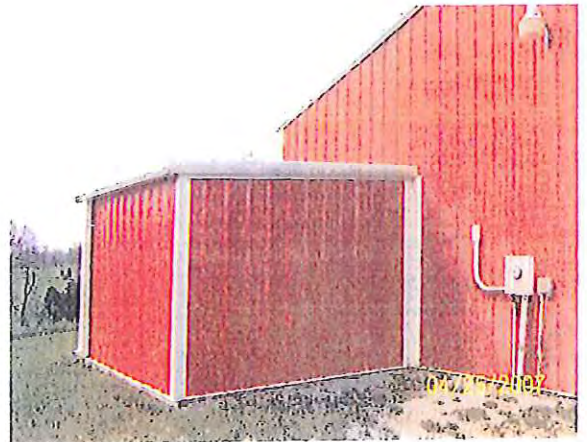
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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006  
Project Title: Warren County Shelters  
Subgrantee: Warren County

Site Number: 9  
Site Address: Smiths Grove Volunteer Fire Department  
120 South Main Street  
Smiths Grove, KY 42171

GPS Coordinates: Please place in decimal format.  
Latitude: 36.97419  
Longitude: 86.19327





**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1310-006

Project Title: Warren County Shelters

Subgrantee: Warren County

Site Number: 10

Site Address: Woodburn Volunteer Fire Department  
900 Woodburn Allen Springs Rd  
Woodburn, KY 42170

GPS Coordinates: Please place in decimal format.

Latitude: 36.84250

Longitude: 86.5254



April 30, 2007

Ronnie Pearson  
Warren County Emergency Management  
429 ½ East Tenth Street  
Bowling Green, KY 42101

RE: Tornado Shelters certification – Warren County.

Mr. Pearson

The 10 storm shelters, which were built in Warren County, were designed and built in Accordance with the NSSA. The NSSA is the NSSAD Design, Construction and Performance of storm shelters. The doors for the shelters have been changed to the Republic FEMA 320 doors. This was verified by Chris Cross M.P.A. and Camille Craine KyEM hazard Mitigation Officer during a site visit.

Sincerely,

  
Bryan Dyer  
Dyer and Associates



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1454 - 009

Project Name: Woodford Co. Acquisition

Subgrantee Name: Woodford County Fiscal Court

Total Approved Project Cost: **405,625.00**  
 Approved Federal Share: **304,219.00**  
 Approved State Share: **48,675.00**  
 Approved Subgrantee Share: **52,731.00**  
 Approved Administrative Share: **9,113.00**

Final Project Cost: **166,448.38**  
 Final Federal Share: **124,836.29**  
 Final State Share: **19,973.81**  
 Final Subgrantee Share: **21,638.29**  
 Final Administrative Share: **4,301.97**

Project Cost  Overrun or  Underrun: **\$239,176.62**

Project Completion Date: **5/4/2007**

Final Site Visit Date: **8/10/2007**

Final Site Visit Completed by: **Camille Crain (SHMO); Brian D Gathy (UK Office)**

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

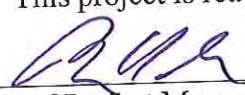
- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number **1454-009**. This project is ready for closeout.

Brian D Gathy

Type Name of Project Manager

  
Signature of Project Manager

Date

8-10-07

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-009

Project Title: Woodford Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Woodford County

Site Number: 1

Site Address: Jim Young  
2040 Shore Acres Rd  
Frankfort, KY 40601

GPS Coordinates: Please place in decimal format.

Latitude: 38.12488

Longitude: 84.86440

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? Yes

County: Woodford

Mitigation Offer Applicable: Yes

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use: Open Space

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$140,000.00

Flood Zone Designation: AE or A130



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-009

Project Title: Woodford Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Woodford County

Site Number: 2

Site Address: Blanch Murphey  
 265 Lower Clifton Rd  
 Versailles, KY 40383

GPS Coordinates: Please place in decimal format.

Latitude: 38.09848

Longitude: 84.83428

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? no

County: Woodford

Mitigation Offer Applicable: no

Mitigation Action: none

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$

Flood Zone Designation: AE or A130

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1454-009

Project Title: Woodford Co. Acquisition/Demolition of Flood Prone Properties

Subgrantee: Woodford County

Site Number: 3

Site Address: Geza & Beverly Bruckner  
785 Buck Run Rd  
Versailles, KY 40383

GPS Coordinates: Please place in decimal format.

Latitude: 38.07625

Longitude: 84.83397

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? no

County: Woodford

Mitigation Offer Applicable: no

Mitigation Action: none

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: \$

Flood Zone Designation: AE or A130

**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: DR1454-012

Project Name: City of Wickliffe Sewer Lift Station

Subgrantee Name: City of Wickliffe

Total Approved Project Cost: 439,686.31  
Approved Federal Share: 329,765.25  
Approved State Share: 52,761.75  
Approved Subgrantee Share: 57,159.31  
Approved Administrative Share: 9,794.00

Final Project Cost: 439,687.00  
Final Federal Share: ~~329,765.25~~ 329,738.28  
Final State Share: ~~52,761.75~~ 52,788.72  
Final Subgrantee Share: ~~57,159.31~~ 57,160.00  
Final Administrative Share: 9,794.00

Project Cost  Overrun or  Underrun:

Project Completion Date: December 2008

Final Site Visit Date: March 25, 2009

Final Site Visit Completed by: Esther White & Brian Gathy, UK HMGP

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1454-012. This project is ready for closeout.

Esther White

Type Name of Project Manager

Esther White

Signature of Project Manager

3-30-09

Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number:* DR1454-012

*Project Title:* City of Wickliffe Sewer Lift Station

*Subgrantee:* **City of Wickliffe KY**

*Project Objective:* To mitigate against the flooding of the City of Wickliffe's Main Sewer Lift Station during high water events.

*Scope of Work:* The design and construction of the City of Wickliffe Main Lift Station and the replacement and extension of 1000 linear feet of sanitary sewer line and force mains. Also included the installation of a Muffin Monster type grinder system and the demolition of the existing lift station.

*Final Site Visit Report:* The lift station is completed as proposed and is now out of the floodprone area. The City of Wickliffe is closing the station in with walls at its own expense.

*Recommendation:* **To close the project.**



**HAZARD MITIGATION GRANT PROGRAM**  
**Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: DR1454-012  
Project Title: City of Wickliffe Sewer Lift Station  
Subgrantee: City of Wickliffe KY

Site Number: 1  
Site Address: Court Street, between 4<sup>th</sup> and 6<sup>th</sup> Streets  
 Wickliffe KY 42087

GPS Coordinates: Please place in decimal format.  
Latitude: N 36.96368  
Longitude: W -89.08692

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Ballard

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: **Demolition/Relocation of Main Sewer Lift Station**

Post Mitigation Property Use:

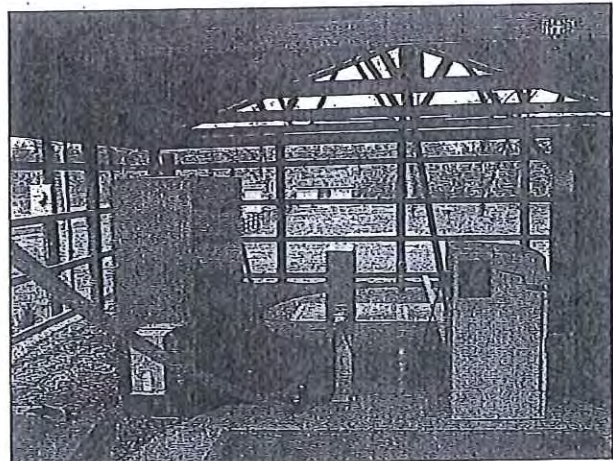
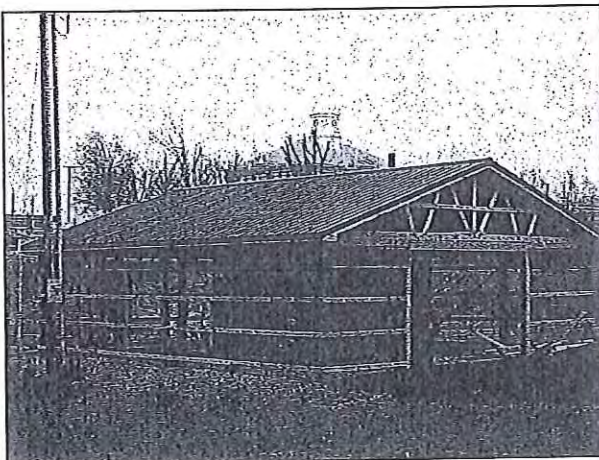
Is property on FEMA's Repetitive Loss List?  Yes or  No

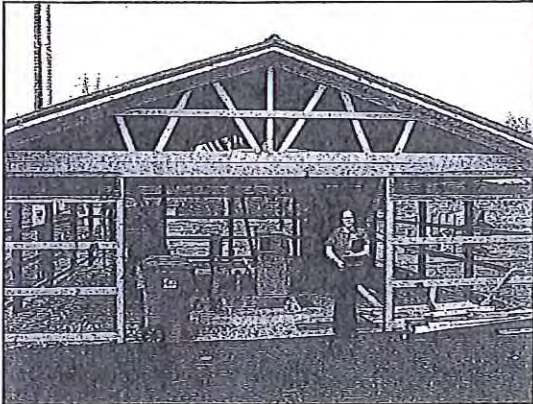
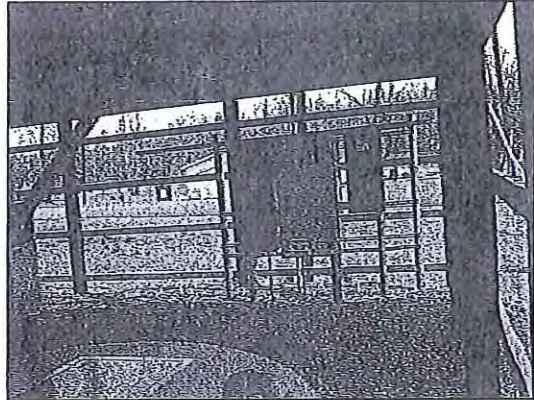
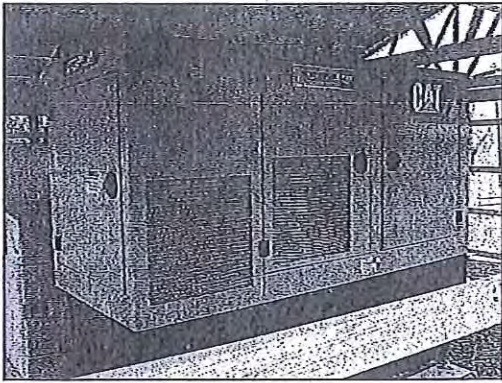
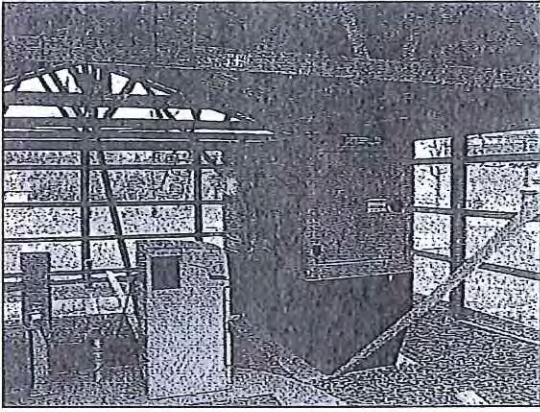
If yes, what is the Repetitive Loss # ?

Actual Amount Paid:

Date Actual Amount Paid:

Flood zone designation:





**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

---

Project Number: 1475 - 005      Project Name: Lincoln Co. Acquisition/Demolition Project  
Subgrantee Name: Lincoln County

Total Approved Project Cost: \$445,500  
Approved Federal Share: \$334,125  
Approved State Share: \$53,460  
Approved Subgrantee Share: \$57,915  
Approved Administrative Share: \$9,910.00

Final Project Cost: \$153,550.45  
Final Federal Share: \$115,162.84  
Final State Share: \$18,426.05  
Final Subgrantee Share: \$19,961.56  
Final Administrative Share: \$4,071.01

Project Cost Underrun: \$291,949.55

Project Completion Date: 8/1/2007

Final Site Visit Date: 10/30/2007

Final Site Visit Completed by: Brian Gathy, UK Program Coordinator  
Nick Grinstead, UK Graduate Assistant

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments: Project is complete and should be closed.

---

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1523-003. This project is ready for closeout.

Brian D Gathy  
Type Name of Project Manager

  
Signature of Project Manager

10-07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

---

*Project Number: 1475 - 005*

*Project Title: Lincoln Co. Acquisition/Demolition Project*

*Subgrantee: Lincoln County*

*Project Objective: Purchase & Clear three (3) properties.*

*Scope of Work: Purchase & Clear three (3) properties.*

*Final Site Visit Report: Two (2) properties were purchased and cleared. The remaining property could not be purchased.*

*Recommendation: To close the project.*

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-005

Project Title: Lincoln Co. Acquisition/Demolition Project

Subgrantee: Lincoln County

Site Number: 2

Site Address: 1405 US Highway 150 East  
Stamford, KY \

GPS Coordinates: Please place in decimal format.

Latitude: 37.52323

Longitude: 84.63194

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? No

County: Mitigation Offer Applicable: No

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use:

Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: ~~\$20,000~~ \$100,000 *ym*

Flood Zone Designation:



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

---

*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1475-005

Project Title: Lincoln Co. Acquisition/Demolition Project

Subgrantee: Lincoln County

Site Number: 3

Site Address: 6665 Hwy 78  
Stamford, KY

GPS Coordinates: Please place in decimal format.

Latitude: 37.48605

Longitude: 84.76421

Property Site Inventory (acquisition, elevation or relocation projects):

Was Parcel part of final project? No

County: Mitigation Offer Applicable: No

Mitigation Action: Acquisition/Demolition

Post Mitigation Parcel use:

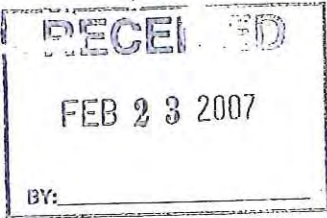
Is Property on FEMA's Repetitive Loss List? No

If yes, what is the Repetitive Loss #?

Actual Amount Paid: ~~\$100,000~~ \$20,000 *yn*

Flood Zone Designation:





**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: 1523-004  
Subgrantee Name: Nelson County

Project Name: Nelson County Landslide

Total Approved Project Cost: **\$154,650.00**  
Approved Federal Share: **\$115,988.00**  
Approved State Share: **\$18,558.00**  
Approved Subgrantee Share: **\$20,105.00**  
Approved Administrative Share: **\$4,093.00**

Final Project Cost: **\$145,369.00**  
Final Federal Share: **\$109,026.75**  
Final State Share: **\$17,444.28**  
Final Subgrantee Share: **\$18,897.97**  
Final Administrative Share: **\$3,907.38**

Project Cost  Overrun or  Underrun: **\$9,281.00**

Project Completion Date: 11/14/06  
Final Site Visit Date: 11/28/06  
Final Site Visit Completed by:

Brian Gathy UK Program Coordinator,  
Chris Cross Grants Manager

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number **1523-004**. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

2-19-07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 PROJECT OVERVIEW**

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*Project Number:* 1523-004

*Project Title:* Nelson County Landslide Acquisition and Demolition

*Subgrantee:* Nelson County

*Project Objective:* To acquire and demolish one (1) structure at risk for landslide failure.

*Scope of Work:* Nelson County will acquire and demolish one (1) residential structure and its surrounding lot to eliminate future landslide damage to this structure.

*Final Site Visit Report:*

Chris Cross and Brian Gathy of the UK Hazard Mitigation Office performed final site visit with County Judge-Executive. Site was cleared and residential structure was returned to green space.

*Recommendation:* To close the project.



**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-004

Project Title: Nelson County Landslide Acquisition / Demolition

Subgrantee: Nelson County Fiscal Court

Site Number: 1

Site Address: 2065 Holt Ridge Rd, Bloomfield, KY 40008

GPS Coordinates: Please place in decimal format.

Latitude: 37.86345

Longitude: 85.20677

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Nelson

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition / Demolition

Post Mitigation Property Use: Green Space

Repetitive Loss #:

Actual Amount Paid: \$145,000.00

Date Actual Amount Paid: 8/9/06

Flood zone designation: C



**HAZARD MITIGATION GRANT PROGRAM  
FORM #1 PROJECT CLOSEOUT CHECKLIST**

Project Number: DR-1523-006      Project Name: Rowan County Floodway Acquisition  
Subgrantee Name: Rowan County

Total Approved Project Cost: \$162,736  
Approved Federal Share: \$122,052  
Approved State Share: \$19,528  
Approved Subgrantee Share: \$21,156  
Approved Administrative Share: \$4,255

Final Project Cost: \$162,736  
Final Federal Share: ~~\$122,052~~ 122,041.96  
Final State Share: ~~\$19,528~~ 19,538.04  
Final Subgrantee Share: \$21,156 21,156  
Administrative Share: \$4,255

Project Cost  Overrun or  Underrun:

Project Completion Date: 1-26-07

Final Site Visit Date: 3-29-07

Final Site Visit Completed by:

H. Camille Crain, KY SHMO  
Brian Gathy, UK Program Coordinator  
Chris Cross, UK Grants Manager

**ITEM CHECKLIST**

Conduct a programmatic and financial audit of the project file. Ensure the following are in the file:

- Application
- Approval Letter from FEMA
- Master Agreement
- Delivery Order
- Master Agreement Invoice(s)
- Documentation in support of amount of reimbursement claimed.
- EFT payment screen(s) and receipt(s)
- Copies of any necessary permits
- For Engineered Projects: Letter of assurance of structure integrity or As-Built Certification
- For Planning Projects: FEMA approval letter, copy of the plan, jurisdictional resolutions
- For Acquisition Projects: appraisals, VTAs, Purchase Closing Worksheets, Payment Checks, Deeds, Withdrawal Letters if applicable

Comments:

I hereby certify that the above information has been received, reviewed for accuracy, and are located in the Project File Number 1523-006. This project is ready for closeout.

Chris Cross  
Type Name of Project Manager

Chris Cross  
Signature of Project Manager

4/26/07  
Date

**HAZARD MITIGATION GRANT PROGRAM**  
**Form #2 .PROJECT OVERVIEW**

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*Project Number:* 1523-006

*Project Title:* Mitigation of Floodprone Home

*Subgrantee:* Rowan County

*Project Objective:* Acquire and Demolish 1 home

*Scope of Work:* Acquire and demolish 1 home located in the floodway.

*Final Site Visit Report:* House and debris completely removed. Returned to Green Space.

*Recommendation:* **To close the project.**

**HAZARD MITIGATION GRANT PROGRAM  
Form #3 NEMIS CLOSEOUT CHECKLIST**

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*Please complete one of these sheets for each mitigation activity (i.e., parcel, siren purchased or construction site, etc.):*

Project Number: 1523-006  
Project Title: Mitigation of Floodprone Home  
Subgrantee: Rowan County

Site Number: 1  
Site Address: 255 Old Kentucky Highway 801  
 Morehead, KY 40351

GPS Coordinates: Please place in decimal format.  
Latitude: 38.14528  
Longitude: 83.54588

Property Site Inventory (acquisition, elevation or relocation projects):

Was parcel part of final project?  Yes or  No

County: Rowan

Mitigation Offer Applicable:  Yes or  No

Mitigation Action: Acquisition and Demolition

Post Mitigation Property Use: Green Space

Is property on FEMA's Repetitive Loss List?  Yes or  No

If yes, what is the Repetitive Loss # ?

Actual Amount Paid: \$141,580

Date Actual Amount Paid: 1-3-07

Flood zone designation: Floodway

