



FEMA

Companion piece to *Pilot Activity - Elevated Foundation Systems under the Hazard Mitigation Grant Program (HMGP) for Hurricane Sandy Major Disaster Declarations* (FEMA Policy 205-080-01, dated March 18, 2013)

Elevated Foundation Systems under the Hazard Mitigation Grant Program for Hurricane Sandy Major Disaster Declarations

Frequently Asked Questions

1. What is the Elevated Foundation System pilot activity?

The Elevated Foundation System (EFS) pilot policy sets eligibility parameters for a new mitigation activity type available under the Hazard Mitigation Grant Program (HMGP) for States with hurricane Sandy declarations. The purpose of the EFS activity is to provide local communities another mitigation activity that will assist in the recovery from the devastating effects of hurricane Sandy and help create more resilient and sustainable communities.

2. Why did FEMA develop the EFS pilot activity?

The EFS pilot activity was developed to provide a mitigation activity option for homes that cannot be elevated. Some homeowners of properties in hurricane Sandy affected areas with damages too substantial to undergo an elevation may decide to demolish and rebuild their residence. This policy provides an activity under HMGP to pay part of the cost of elevating the new structure to the base flood elevation or higher. The HMGP funding is limited to the elevated foundation system because the foundation is the portion of the structure providing the majority of the mitigation benefits against future flooding.

3. What is FEMA's authority for the EFS pilot activity?

FEMA has authority to provide funding through the HMGP for hazard mitigation measures that are cost effective and substantially reduce the risk to life and property. This authority is provided by Section 404 of the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* (Stafford Act), 42 U.S.C. §§ 5121 *et seq.*

4. Who is eligible for the EFS activity?

The pilot EFS activity is limited to single family, detached, residential structures that were either substantially damaged or destroyed by Hurricane Sandy or are included on the National Flood Insurance Program (NFIP) validated Severe Repetitive Loss (SRL) list. SRL properties located in a State with HMGP from hurricane Sandy are eligible even if they were not damaged by hurricane Sandy provided the SRL properties are included in a Sandy HMGP application. Additionally, the property owner must have either owned the property at the time of Sandy or be a successor who gained legal title to



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the property as a result of the death or incapacity of the owner at the time of the event. Eligibility parameters regarding property type were determined in order to avoid complex engineering and legal concerns regarding common property in implementing an EFS activity on a multi-family building.

5. How is the EFS activity different from structure elevation?

An HMGP structural elevation project physically raises an existing structure to the base flood elevation or higher. The structure is not required to be substantially damaged in order to be eligible for an elevation project.

The EFS pilot activity is limited to structures substantially damaged by hurricane Sandy or SRL properties located in Sandy declared States. This activity is intended to provide an additional mitigation opportunity for situations where property owners choose to demolish their existing, substantially damaged or SRL property and build a new home rather than elevating their existing, damaged home. An EFS project will result in a new, mitigated foundation elevated to the base flood elevation or higher. The project is required to result in a new structure suitable for occupancy prior to project closeout.

Both EFS and elevation projects must be designed and implemented in conformance with all local, State, and Federal requirements including the NFIP design and performance requirements in 44 CFR Part 60 *Criteria for Land Management and Use* and 44 CFR Part 9 *Floodplain Management and Protection of Wetlands*. The structure's foundation type and elevation height must conform with the minimum requirements for its flood zone as determined by the best available data. Projects may exceed Federal, State and local design and performance criteria provided they meet all applicable requirements including cost effectiveness and technical feasibility.

6. Why is there a size restriction on the EFS activity?

A property mitigated using the EFS activity cannot result in an overall new structure square footage or new footprint square footage more than 10 percent greater than that of the pre-event square footage for the overall structure or pre-event square footage for the footprint. For example, a 2,000 square-foot, two-story home with a 1,000 square footprint, when rebuilt, may not exceed 2,200 square feet for the whole structure and the footprint may not be greater than 1,100 square feet.

The size restriction is in place to reduce risks presented by increased development in the floodplain. By limiting the potential size increase for the footprint, the potential risk for future flooding damages is minimized. Additionally, the size restriction helps minimize



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the potential for adverse impacts to environmental and historic resources in proximity to the structure.

7. What is the benefit of the new, mitigated footprint overlapping the pre-event footprint?

The new foundation must be placed on the same lot as the original structure. It is not required to remain within the footprint of the original structure. The application review process may be streamlined if the new footprint overlaps the pre-event footprint by at least 50 percent. This approach will help minimize potential impacts to environmental, archeological, and historic resources in proximity to the original building. If the new footprint does not meet this overlap, the application review may take longer. Further documentation may be required in order to evaluate the potential for impacts to environmental and/or historic resources. In all cases, if the new structure is relocated within the lot, the new location cannot result in an increased risk to the structure or adjacent structures.

8. Are there any special considerations for historic structures?

All HMA projects must be reviewed to identify any historic resources impacted by the project. EFS projects will be reviewed in a consistent manner as other HMA activity types. If a historic resource is identified in the project area, the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) must be consulted. If an adverse impact on an historic resource is identified, the project is required to avoid, minimize, or mitigate the adverse effect.

If archeological resources are discovered during project implementation, work must be stopped immediately and notice sent to the SHPO/THPO and FEMA. Work may be approved to begin again only after a consultation is complete, impacts are identified, and steps to minimize an adverse impact are implemented, if necessary.

9. Why aren't EFS projects allowed in the V-Zone or regulatory floodway?

HMGP funds cannot be used to fund new construction or substantial improvement in a floodway or new construction in a coastal high hazard zone. The EFS activity is both new construction and a substantial improvement (costs that equal or exceed 50% or more of the pre-event market value of the property) and therefore cannot be allowed in either a regulatory floodway or a V-Zone in accordance with 44 CFR Part 9 *Floodplain Management and Protection of Wetlands*.



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Structure elevation projects *may* be considered for HMA funding in V-Zones or floodways if they do not meet the definition for new construction or substantial improvement. However, FEMA encourages communities to strictly limit development in high risk areas such as coastal zones or floodways.

10. Why is there a limit on the Federal share of the construction costs? How was this limit determined?

The foundation system of a structure accounts for the majority of mitigation benefits to protect against future flood damage. The cost cap on the Federal share of the construction costs is intended to focus the Hazard Mitigation Assistance on the mitigation action.

The cap on the HMA portion of the construction costs was determined using industry accepted national average costs for standard grade construction of a 2,000 square foot, two-story, wood-framed home. These costs were validated against the 2012 edition of the RS Means Residential Repair & Remodeling Costs. The costs for the foundation system components were identified and accounted for 20% of the total structure reconstruction or \$45,000 for the national average. These costs assumed a new, mitigated foundation height of 10 feet.

FEMA will allow the Federal construction cost cap to be adjusted to account for local market conditions. Adjustments must be made using an industry accepted locality adjustment factor such as RS Means, Standard & Poor, or similar, acceptable industry standard.

11. What project costs are not limited by the construction cap?

Eligible non-construction costs, such as survey, design fees and permits, associated with an EFS project are not deducted from the construction cap. Additionally, if the approved project is comprised of mixed mitigation actions such as above code wind mitigation, the additional non-foundation mitigation activities will not be deducted from the cap on the Federal share of construction costs.

12. What happens if I start work on my EFS project before FEMA approves the HMGP application?

Any costs associated with the implementation of the project activity but incurred prior to grant award or final approval are not eligible in conformance with 2 CFR Part 225 *Cost Principles for State, Local, and Indian Tribal Governments*.



Companion piece to *Pilot Activity - Elevated Foundation Systems under the Hazard Mitigation Grant Program (HMGP) for Hurricane Sandy Major Disaster Declarations* (FEMA Policy 205-080-01, dated March 18, 2013)

In addition, projects for which actual physical work such as groundbreaking, demolition, or construction of an elevated foundation has occurred prior to FEMA project approval are not eligible for HMGP funding. All FEMA funded projects must undergo a review process prior to work being initiated in order to ensure the compliance with all environmental and historic preservation (EHP) laws, implementing regulations and Executive Orders. The EHP requirements ensure that reasonable alternative activities, the project's impact on the human environment, and activities to mitigate any impact on the environment or historic integrity are taken into consideration prior to work being initiated. Applicable laws, implementing regulations, and Executive Orders for EHP requirements include but are not limited to the *National Environmental Policy Act*, the *National Historic Preservation Act*, the *Endangered Species Act*, Executive Order 11988 *Floodplain Management*, and Executive Order 11990 *Protection of Wetlands*.

In some cases, FEMA's Public Assistance program may have funded demolition or debris removal and the work was initiated or completed prior to an approved HMGP application. In these circumstances, the work may be considered eligible if it was funded under the FEMA Public Assistance program to alleviate a health or safety hazard. This work must be in compliance with all Federal, State and local requirements. The costs for the work funded by Public Assistance will not be eligible under the HMGP grant award.

13. How does an ICC payment work with the EFS project application?

If available, the Increased Cost of Compliance (ICC) funding from the National Flood Insurance Program (NFIP) may be used to meet the non-Federal cost share. ICC funds used for the cost match must be used for activities that meet the eligibility criteria of both HMGP and ICC. In cases where the available ICC funds exceed the required non-Federal cost match, the HMGP Federal share will be reduced accordingly which may result in a non-Federal cost match greater than 25%.

14. Why does a deed restriction need to be filed for the mitigated property?

A requirement of the HMGP grant for this activity is to ensure flood insurance is maintained on buildings that remain in the Special Flood Hazard Area for the life of the mitigated building. The flood insurance must cover an amount at least equal to the mitigation project cost or the maximum flood insurance coverage available, whichever is less. Maintaining adequate flood insurance will protect the investment in the residence of both current and future homeowners and the Federal government. This requirement conveys with the property during ownership transfers.



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15. What is the best available flood hazard data? Where can I find it?

The best available flood hazard data will vary for each community and project site. Typically, the FEMA issued Flood Insurance Rate Maps (FIRM) can provide the best available flood data to determine the flood zone and Base Flood Elevation (BFE) for your home. The BFE uses historical flood levels to determine the level of flooding typically experienced in a given area for the 100 year flood event (1% annual chance of occurrence). In some cases, the best available data can be found on the FEMA Advisory Base Flood Elevation (ABFE) maps or the preliminary FIRMs (pre-FIRM) released for a community. In April 2013, a single, government-wide, uniform flood risk reduction standard was adopted for the hurricane Sandy affected States. This standard established that all Federal funded projects must use the minimum required elevation based on the best available date plus at least one foot of additional elevation (aka freeboard).

Utilizing the best available flood hazard data will help to ensure a stronger recovery from Hurricane Sandy as homeowners and communities rebuild and repair. It will also help reduce future flood insurance costs for those who go beyond current minimum federal requirements. Questions regarding the best available flood hazard data for your community should be referred to your local floodplain management or emergency management officials, the State Floodplain Manager, the State Hazard Mitigation Officer, or the FEMA Region Office for your state.

FEMA recommends consulting your local jurisdiction or State government for additional resources specific to your community. Some Federal sources of flood hazard information may be found on www.fema.gov, www.ready.gov, www.floodsmart.gov, www.region2coastal.com.

16. How do I run the BCA for my EFS application?

The full data flood module should be used to calculate the Benefit Cost Analysis (BCA) for an EFS application. The user should select elevation as the activity. Flood history and other data for the building as well as the pre-event elevation and post-mitigation new elevation heights will be needed to run the module. This module is available in the BCA Toolkit located on www.fema.gov.

17. What activity code should I use when I submit my application in NEMIS?

The following activity code is available in NEMIS and must be used for EFS applications: 202.5 Elevated Foundation System-Pilot (P205-080-01).



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