

Understanding PA: An Overview of Environmental and Historic Preservation & Public Assistance Mitigation

Presented by FEMA's Public Assistance Training Section | 09/2021 V1



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Common Terms Worth Knowing

- BCA – Benefit Cost Analysis
- CRC – Consolidated Resource Center
- DDD – Damage Description and Dimensions
- DI – Damage Inventory
- EC – Exploratory Call
- EHP – Environmental (Planning) and Historic Preservation
- HMP – Hazard Mitigation Proposal
- PA – Public Assistance
- PA Mitigation – Sometimes referred to as 406 because of the Stafford Act Section on Mitigation
- PAPPG – Public Assistance Program and Policy Guide
- PDMG – Program Delivery Manager
- REC – Record of Environmental Considerations
- RSM – Recovery Scoping Meetings
- SHMO/THMO – State, Tribal or Territorial Hazard Mitigation Officer
- SHPO/THPO – State, Tribal or Territorial Historic Preservation Officer
- SI – Site Inspection/ Site Inspector
- SME – Subject Matter Experts
- SOW – Scope of Work



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An aerial photograph of a coastal town, likely in New England, featuring a harbor filled with numerous sailboats and yachts. The town is nestled between dense green forests and the water, with various buildings and a prominent church steeple visible. The entire image is overlaid with a semi-transparent blue filter.

Purpose

Introduce Environmental and Historic Preservation, Public Assistance Mitigation and their roles associated with the Public Assistance process.

Who's Who, What's What

Environmental and Historic Preservation (EHP)

Provides subject matter expertise to grant applicants and the PA Program to ensure that FEMA-funded projects comply with environmental and historic preservation laws, regulations, and executive orders (EOs).

PA Mitigation

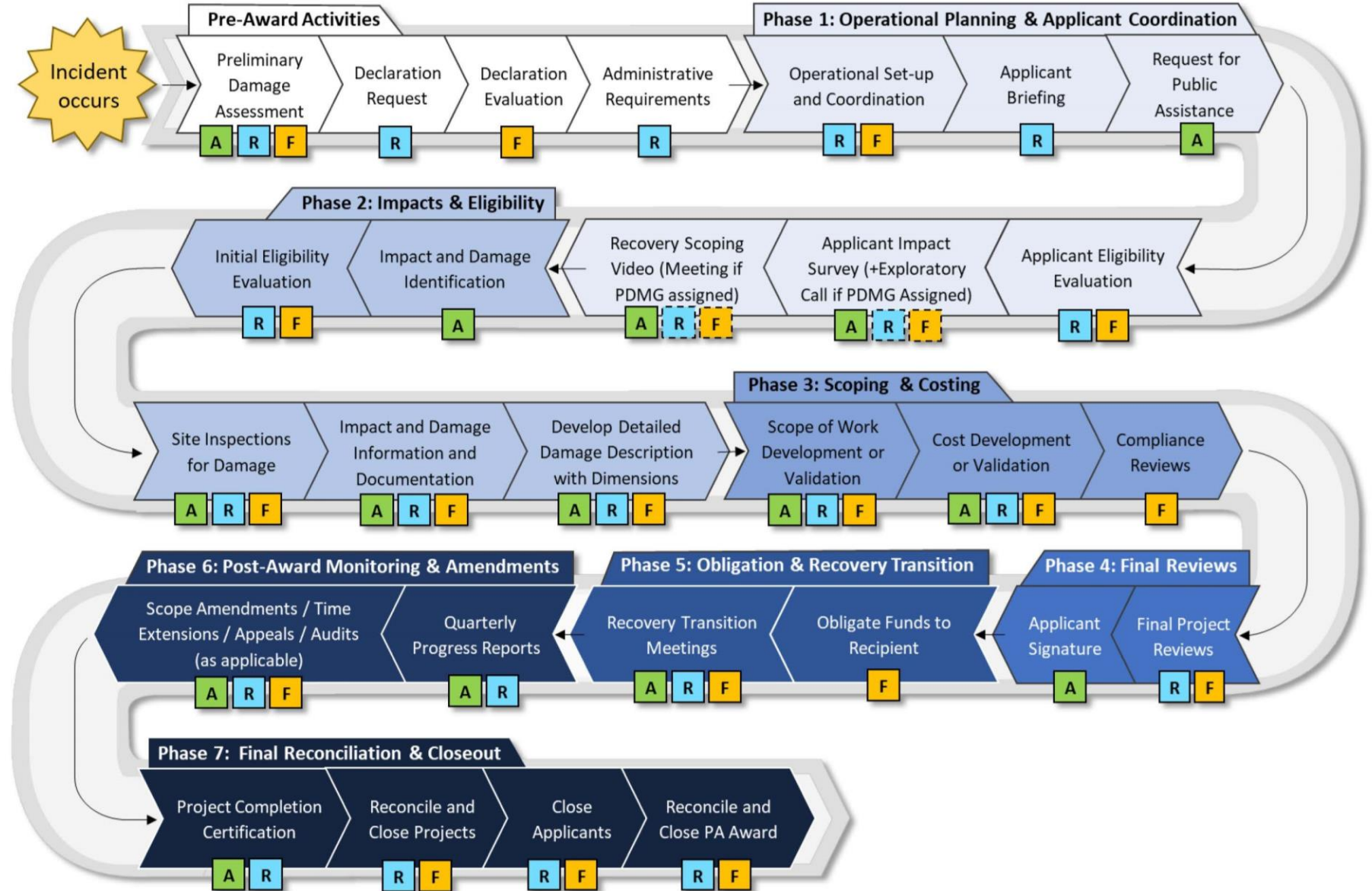
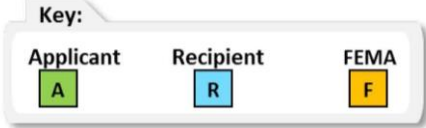
Assists Applicants with identifying protective features that reduce the potential for damage to a facility in the future. Helps incorporate this mitigation into the PA project grant



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FEMA Public Assistance National Workflow

PROGRAM DELIVERY PROCESS STEP



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Environmental & Historic Preservation



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Environmental & Historic Preservation (EHP)

Ensures that FEMA-funded projects are compliant with all environmental and historic preservation laws, statutes, and Executive Orders.

Ensures FEMA considers the impact of its actions on environmental and cultural resources.

Who is EHP?

EHP Specialists are subject matter experts in a variety of fields who work throughout FEMA to support the PA Grant Process.

- EHP works in FEMA Headquarters, in each Region, deployed to disasters, and at each CRC
- EHP has SMEs in environmental, water, archaeology, conservation, fish and wildlife, historic preservation, floodplain management, etc.



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What do EHP Specialists do?

- Assess the effects of a project's activities on the environment and on historic or culturally significant sites
- Identify and address EHP concerns with PA staff and Applicants through the entire PA Grant process
- Ensure PA-funded project comply with EHP laws, regulations and Executive Orders
- Provide technical expertise to Recipients and Applicants on complex projects
- Coordinate and consult with regulatory agencies



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Common Triggers for EHP

- Work in, near, or affecting water
- Ground disturbances and land clearing
- Work on any building or structure 45 years or older
- Staging and disposal of debris, burning debris, and hazardous materials, including hazardous waste
- Work affecting listed species or critical habitat
- Socioeconomic issues
- Hazard Mitigation Proposals (HMPs)
- New construction and upgrades
- Alternate and Improved projects



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EHP Considerations

- Threatened and Endangered Species
- Cultural Resources
- Historic properties
- Air & Water Quality
- Environmental Justice
- Coastal Zones
- Habitat
- Fish & Wildlife
- Floodplains
- Wetlands
- Agricultural Lands
- Land Use
- Geology
- Hazardous Materials



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EHP Laws, Regulations, and Executive Orders

- National Environmental Policy Act
- Endangered Species Act
- Resource Conservation and Recovery Act
- Clean Water Act
- Clean Air Act
- Coastal Barriers Resources Act
- Coastal Zone Management Act
- National Historic Preservation Act
- Executive Order (EO) 11988 Floodplain Management
- EO 11990 Protection of Wetlands
- EO 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (or Environmental Justice)
- EO 13112 Invasive Species

For more information (and additional laws that may apply), refer to Appendix A of the PAPPG

EHP in the PA Process

EHP coordinates with FEMA, Recipient and Applicant partners throughout the PA Process

- Applicant Impact Survey / Exploratory Call
- Recovery Scoping Meeting
- Site Inspections
- Project development
- Requests for Information (RFI)
- Record of Environmental Compliance (REC)



EHP in Grants Portal

The screenshot shows the Grants Portal interface. On the left is a sidebar with navigation links: Dashboard, Change Organization, My Organization (with a dropdown arrow), Profile, Personnel, Applicant Event Profiles, Exploratory Calls, Recovery Scoping Meetings, Damages, Work Order Requests, Work Orders, Projects, My Post-Award Ops, My Tasks, Calendar, Utilities, and Intelligence. The main content area is titled 'EHP Profile' and contains three tabs: EHP Information, Damage Inventory, and Documents. The 'EHP Information' tab is active, showing the 'EHP Exploratory Call Questionnaire' section. This section includes three questions with 'Yes' answers and links to 'Hide Additional Information': 'Are any ground-disturbing activities proposed to complete the work?', 'Are any damages flood related?', and 'Is there any work that will occur in or near water?'. Below these is the 'EHP RSM Attendees' section, which states 'EHP has not identified if they did attend the RSM.' and 'EHP has not determined whether or not they will attend the RSM.'

The screenshot shows the 'Applicant Profile Applicant Impact Survey' form. The title is 'Applicant Profile Applicant Impact Survey'. Below the title is the breadcrumb trail: 'User Acceptance Testing Event for CNeal (UAT-28033) / Nevada (000-ULLN4-00) / Applicant Impact Survey'. The form contains a section titled '2. Does the Applicant anticipate work with the following characteristics? *'. This section includes a list of checkboxes for various characteristics: 'Other', 'In a river, lake, or other body of water', 'Within 200 feet of a waterway, body of water, or wetland', 'Ground disturbance activities', 'On facilities over 45 years old', 'Near endangered species', 'Other environmental concerns', and 'None of the above'.



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Streamlined Project Application - EHP Survey

- Applicants without an assigned PDMG can still provide required EHP information through the Streamlined Project Application (SPA)
- The SPA contains an EHP Survey to gather information required for EHP Compliance review
- EHP questions triggered are directly related to the activities claimed

SCHEDULE F – Environmental and Historic Preservation Questions

Instructions: Applicants must complete this schedule if any of the following activities are reported in Section II:

- Staging resources at an undeveloped site–Complete part 1.
- Storage of human remains or mass mortuary services–Complete part 2.
- Medical waste disposal–Complete part 3.
- Decontamination systems–Complete part 4.
- Establishment of temporary facilities–Complete part 5.

For additional information on EHP requirements, see the *Environmental and Historic Preservation (EHP) and Emergency Protective Measures for COVID-19 Fact Sheet*.



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EHP Specialists – What do they do in the PA Process?

- Review Applicant provided information
- Attend Exploratory Call and Recovery Scoping Meeting to provide technical assistance
- Attend Site Inspections and prepare EHP Report documenting site conditions
- Conduct EHP review to ensure compliance with EHP laws
- May follow-up with Requests for Information (RFIs)



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What Can You Do?

(PAPPG V4, p. 143 - 144)

- Identify EHP triggers (work in water, ground disturbance, properties 45 years old or older, burning debris, etc.) early in the process
- Utilize available resources (PDMGs, EHP Specialists)
- Refer to Disaster Greensheet or other EHP guidance
- Document site conditions by taking photographs
- Submit permits and proof of coordination with agencies during project development and at closeout

Applicant EHP Checklist

- ☐ Site map (including geographical coordinates in latitude, longitude in decimal degrees) showing the location of all proposed areas where the Applicant will conduct site work or construction and the extent of ground disturbance (including any staging areas, access roads, parking, landscaping, grading, or utilities)
- ☐ Construction dates and photographs of all facilities in the project area
- ☐ Any known environmental issues or historic preservation concerns, such as, but not limited to, threatened and endangered species including their critical habitat, location in floodplain or wetlands, presence of asbestos within the facility, or facility's location in an archaeologically sensitive area
- ☐ Environmental assessments
- ☐ Historic property designations or surveys, including archaeological surveys; and
- ☐ Copies of permits and correspondence with regulatory agencies



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Common Reasons for Non-Compliance

- Work completed without permits
- Project changes without review/permit updates
- Grant packages without permit documentation or compliance forms
- Work started or completed before EHP review
- Project-specific conditions were not met



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Consequences of Non-Compliance

- Irreversible harm or loss of cultural and natural resources
- Denial or de-obligation of funding
- Project delays
- Negative publicity
- Civil or criminal penalties
- Lawsuits



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Available resources include:

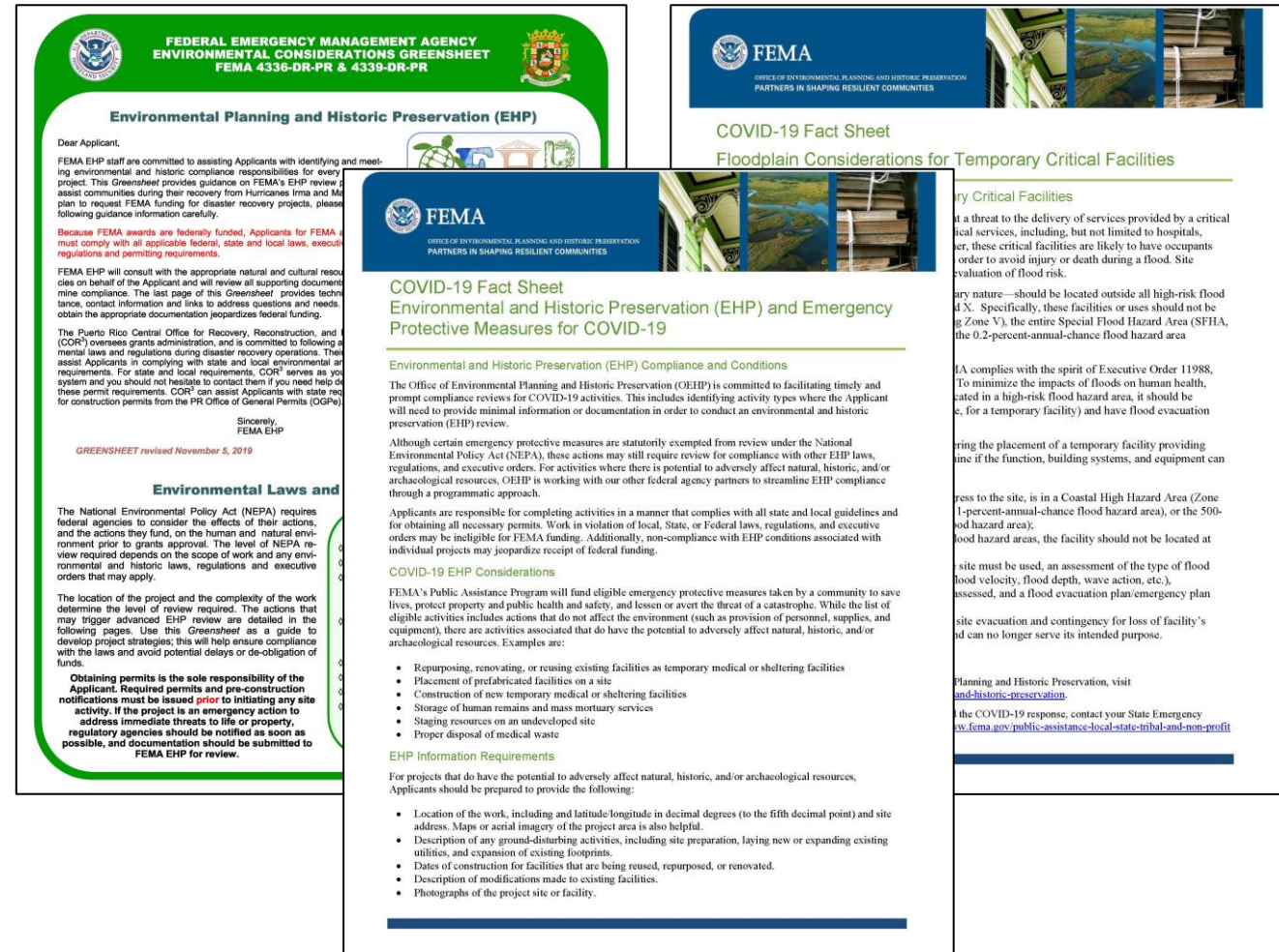
- Greensheets
- Quick Guides
- Fact Sheets
- EHP Specialists assigned to the disaster

Refer to:

- Grants Portal Support Center
 - EHP folder
- Recovery Scoping Video



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Public Assistance Mitigation



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PA Mitigation

Assists Applicants with identifying protective features that reduce the potential for damage to a facility in the future.

Helps incorporate mitigation measures into the PA grant process, to cost-effectively reduce the potential for damage from a future disaster.

What is PA Mitigation? What does PA Mitigation Do?

- Part of the PA project development process.
- Supported by FEMA Mitigation staff with specialized training and experience
- Coordinated with PDMG, EHP, CRC staff, etc.
- Results in a reduced potential for damage to the Applicant's facilities in the future.



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Features of PA Mitigation

- PA Mitigation funding is incorporated as part of the overall PA grant
- Non-competitive funding is available for most permanent work projects
- Mitigation measures already completed or underway could be eligible for funding
- PA Mitigation specialists are available to assist in developing grant proposals
- Simplified cost-effectiveness determination or full Benefit-Cost Analysis (BCA) Toolkit



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PA Mitigation's 5 Eligibility Criteria

Proposed mitigation measures are evaluated for eligibility:

1. Be part of Permanent Work project
2. Directly reduce the potential of future damage to the damaged portion(s) of the facility
3. Cost-effective
4. Technically feasible
5. Compliant with all laws and Executive Orders



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PA Mitigation Protects Facilities from Future Damages



1.



2.



Directly reduce the potential future damage to the damaged portion(s) of the facility.



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Examples of Hazard Mitigation (1 of 3)

- Gabion baskets
- Upsize culverts
- Gable end wall bracing
- Articulated block matting
- Water control structures
- Elevated critical equipment
- Bioswales, bioretention and rain gardens



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Examples of Hazard Mitigation (2 of 3)

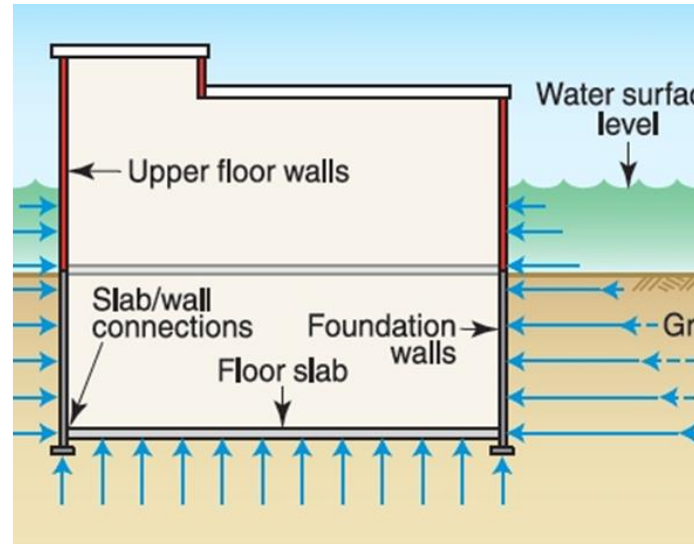
- Breakwaters
- Culvert headwalls and wingwalls
- Hurricane clips/ties
- Dry floodproofing doors
- Flood barrier panels
- Elevation of equipment



Examples of Hazard Mitigation (3 of 3)



Installing new drainage facilities (including culverts across a damaged road).



Dry floodproofing both damaged and undamaged buildings that contain components of a system that are functionally interdependent.

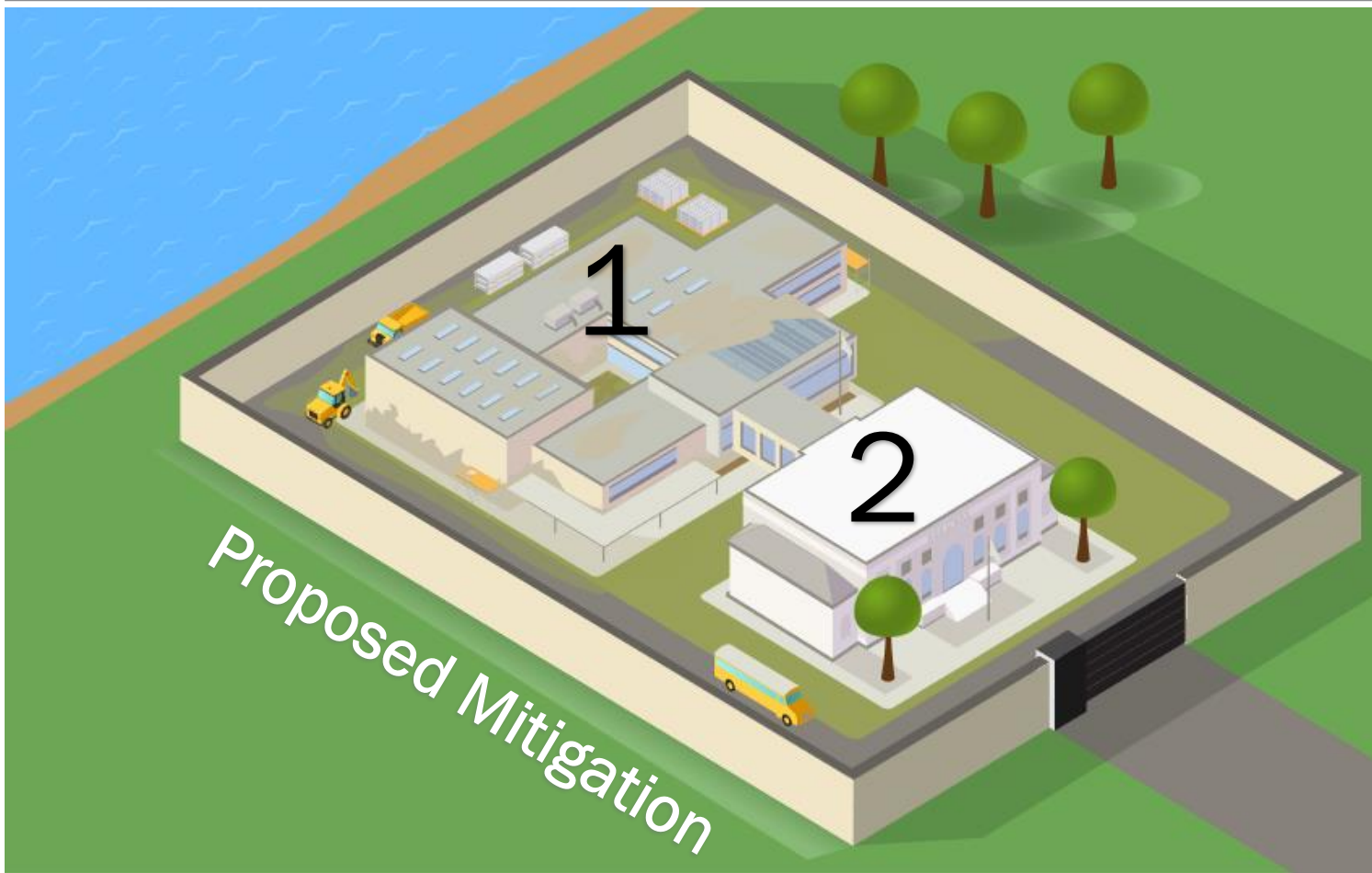


Constructing floodwalls around damaged facilities.



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PA Mitigation Protects Facilities from Future Damages



Mitigation measures must mitigate the damaged portions of a facility, but they may also protect portions that are undamaged.

- A floodwall built to protect a school with flood damage to its gymnasium may protect the entire facility, including undamaged classrooms.
- These measures are evaluated on a case-by-case basis.

(PAPPG V4, p. 155)



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Example Mitigation Project Activities

Hurricanes and windstorms repeatedly damaged power lines and transformers.

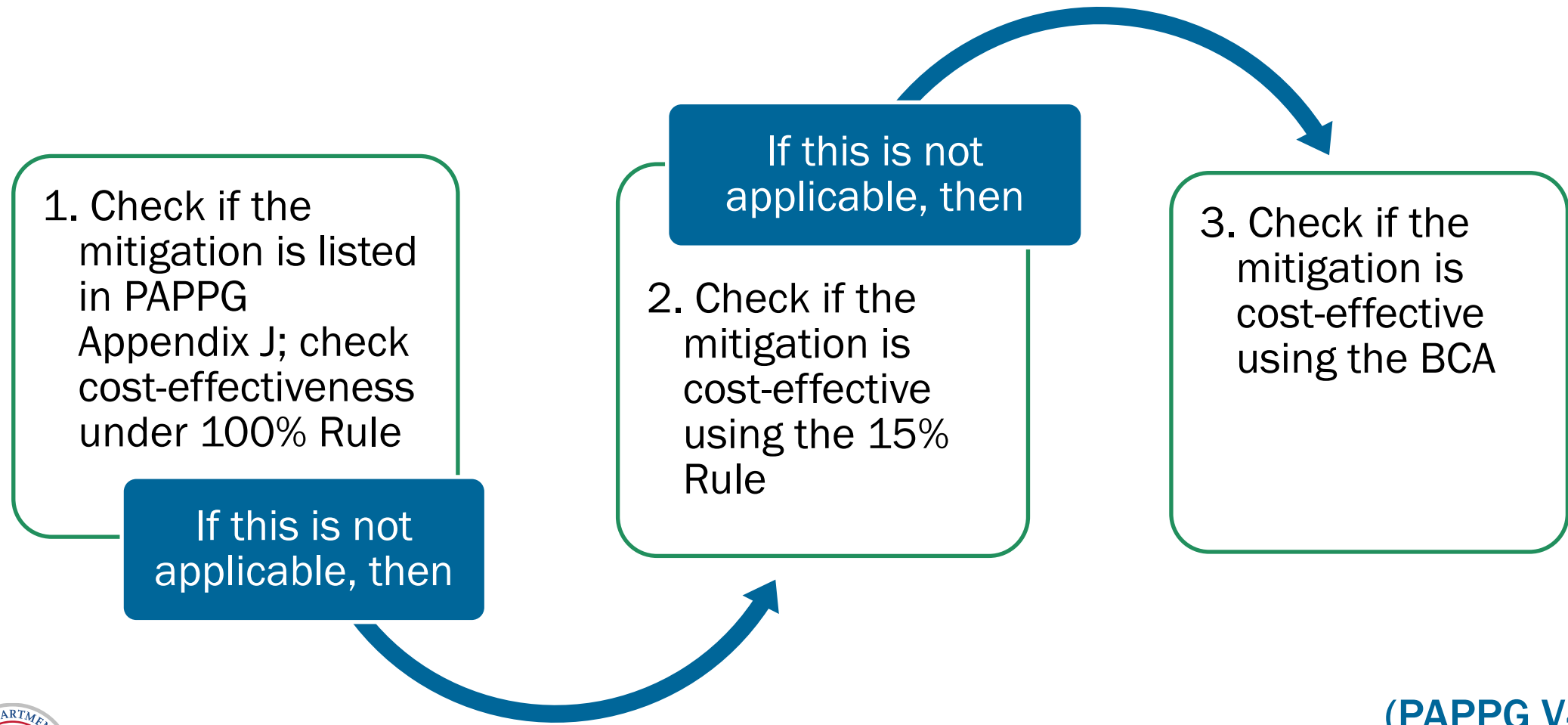
Mitigation included

- Strengthening and adding poles to support pole-mounted transformers
- Adding guy-wires with anchors
- Replacing power lines with heavier gauge lines
- Providing looped distribution service to critical facilities such as hospitals and fire stations
- Installing ground mounted transformers in concrete block vaults



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PA Mitigation Cost-Effectiveness Approach



(PAPPG V4, p. 155)



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PAPPG Appendix J: Cost-Effective Mitigation Measures

- Replace drainage structure with larger one
- Improve erosion control with energy dissipation features or geotextile fabric and revetments
- Install submersible pumps
- Elevate or dry floodproof equipment
- Anchor storage tanks to prevent movement
- Install shut-off valves
- Dry or wet floodproof or elevate buildings
- Install higher-rated power poles and guys and anchors
- Install stronger sign panels and supports

APPENDIX J: COST-EFFECTIVE PUBLIC ASSISTANCE HAZARD MITIGATION MEASURES

FEMA considers the following mitigation measures to be cost-effective Public Assistance (PA) mitigation if the measures do not exceed 100 percent of the eligible repair cost (prior to any insurance reductions). The mitigation measures must meet all eligibility requirements described in [Chapter 8.IV, Hazard Mitigation](#). There may be instances where these measures are required by codes or standards. In such cases FEMA first evaluates whether the work is eligible as a code or standard (See [Chapter 8.II, Codes and Standards](#)).

I. Drainage Structures:

For Sections I.A. and I.C. (below), PA and environmental and historic preservation (EHP) staff coordinate to determine whether a hydrologic and hydraulic (H&H) study is needed. The Applicant must submit an H&H study to determine the appropriate culvert size with no adverse up or downstream impacts and National Flood Insurance Program regulations when:

- The facility is in a special flood hazard area;
- There is a potential adverse impact to the floodplain;⁴⁰⁵
- There is a potential adverse impact to a federally listed threatened or endangered species, critical habitat, or essential fish habitat;⁴⁰⁶ or
- It is required to demonstrate compliance with the Clean Water Act.

A. Replace the structure with multiple structures or a larger structure. The Applicant may use existing SLTT drainage criteria for sizing replacement culverts. The Applicant must consider replacement structures with regard to the total drainage system.

B. For the purpose of erosion control, add properly designed entrance and exit structures, such as a headwall, wingwalls, flared aprons, or energy dissipation measures to increase efficiency and help to minimize scour and erosion. Depending on the severity of erosion, solutions for bank protection may include gabion baskets, rip rap,



Example

Adding a relief culvert located at the same crossing site as a damaged culvert and in the embankment above the flow line of the primary culvert or located upstream of the main culvert. A relief culvert provides an alternate route for the flow if the main culvert is over capacity or gets plugged and prevents sedimentation through the high-flow scouring action.

⁴⁰⁵ 44 C.F.R. §§ 9.11(d)(4) and 60.3(b)(7), (c)(10), and (d)(3).

⁴⁰⁶ Endangered Species Act 16 U.S.C. §§ 1531-1544 and Magnuson-Stevens Fishery Conservation and Management Act.
V4 2020



Is it Cost Effective?

During an incident, the electric power panels for the public restrooms on a beach front were shorted out by the storm surge. The Applicant decided to mitigate with quick disconnect plugs and portable electrical panels. They can now unplug the power panels and take them to a safe place prior to a storm and quickly return them to get their beaches operational.

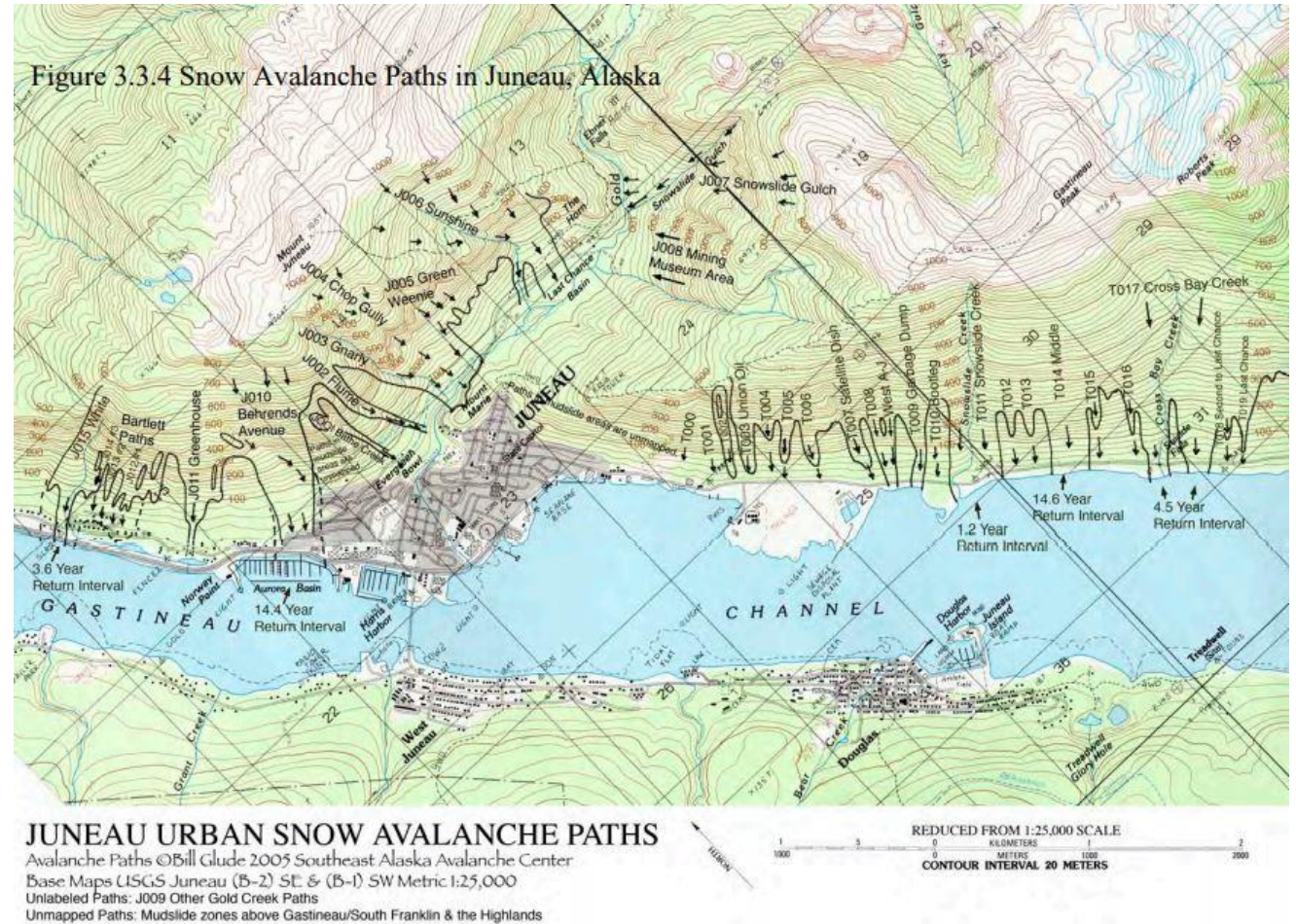
Access PA Mitigation Cost Effectiveness:

- Cost-effectiveness was demonstrated using the 15% rule.
- This mitigation saved the city the cost of future power panel repairs and the cost of renting temporary restroom facilities for the time required to repair the power panels.



Additional Cost Considerations

- Architectural, engineering, and design services for the approved scope of work are eligible costs, provided they are reasonable
- PA funds cannot duplicate other Hazard Mitigation Assistance funds or other federal programs



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PA Mitigation Specialists

Assist Applicants in developing the Hazard Mitigation Proposal (HMP), in coordination with:

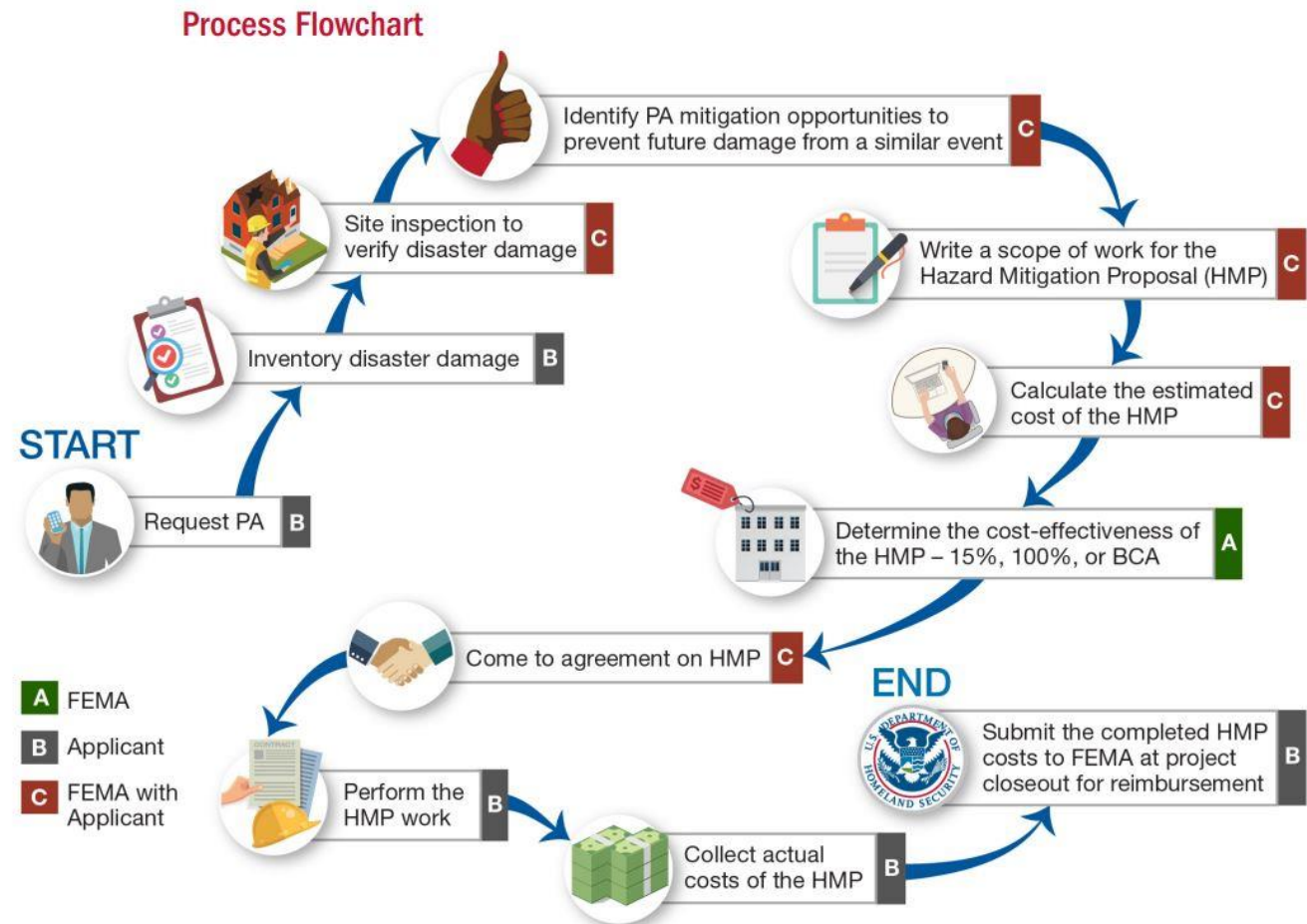
- State, Tribal and Territorial Hazard Mitigation Officers
- PDMGs
- Site Inspectors
- EHP Subject Matter Experts



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PA Mitigation in PA Process

- Applicant Briefing
- Exploratory Call
- Recovery Scoping Meeting & Report
- Inventory Disaster Damage
- Site Inspection & Site Inspection Report
- Scope of Work Development
- Review and validation prior to closeout of a project



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PA Mitigation in Grants Portal

Grants Portal

Dashboard

Change Organization

My Organization

Texas A&M University (000-U5MOP-00)

Profile

Personnel

Applicant Event Profiles

Exploratory Calls

Recovery Scoping Meetings

Damages

Work Order Requests

Work Orders

Projects

My Post-Award Ops

My Tasks

Calendar

Intelligence

Project

4332DR-TX (4332DR) / Texas A&M University (000-U5MOP-00) / [56737] FM1960 Culvert

406 Mitigation Profile

Submitted on 10/03/2019 11:41 AM by Lanneau, Peter

Mitigation Information

HMP Scope

HMP Cost

Documents

Damages with Mitigation Opportunity

Filters

CATEGORY

Select...

HMP SCOPE COMPLETE?

All

HMP COST COMPLETE?

All

Quick Search...

SHOW/HIDE COLUMNS

Damage #	Category	Name	Damage Description	% Work Complete	Applicant Priority	HMP Type	HMP Scope Complete?	HMP Cost Complete?	HMP Total Cost	Formulated Cost
120198	C	Culvert 3	Head walls and wing walls damaged by falling rubble from building	0	Medium	Supplement Repair Cost	Yes	Yes	\$50,000.00	\$143,000.00

10 Showing 1 to 1 of 1 entries

Previous 1 Next



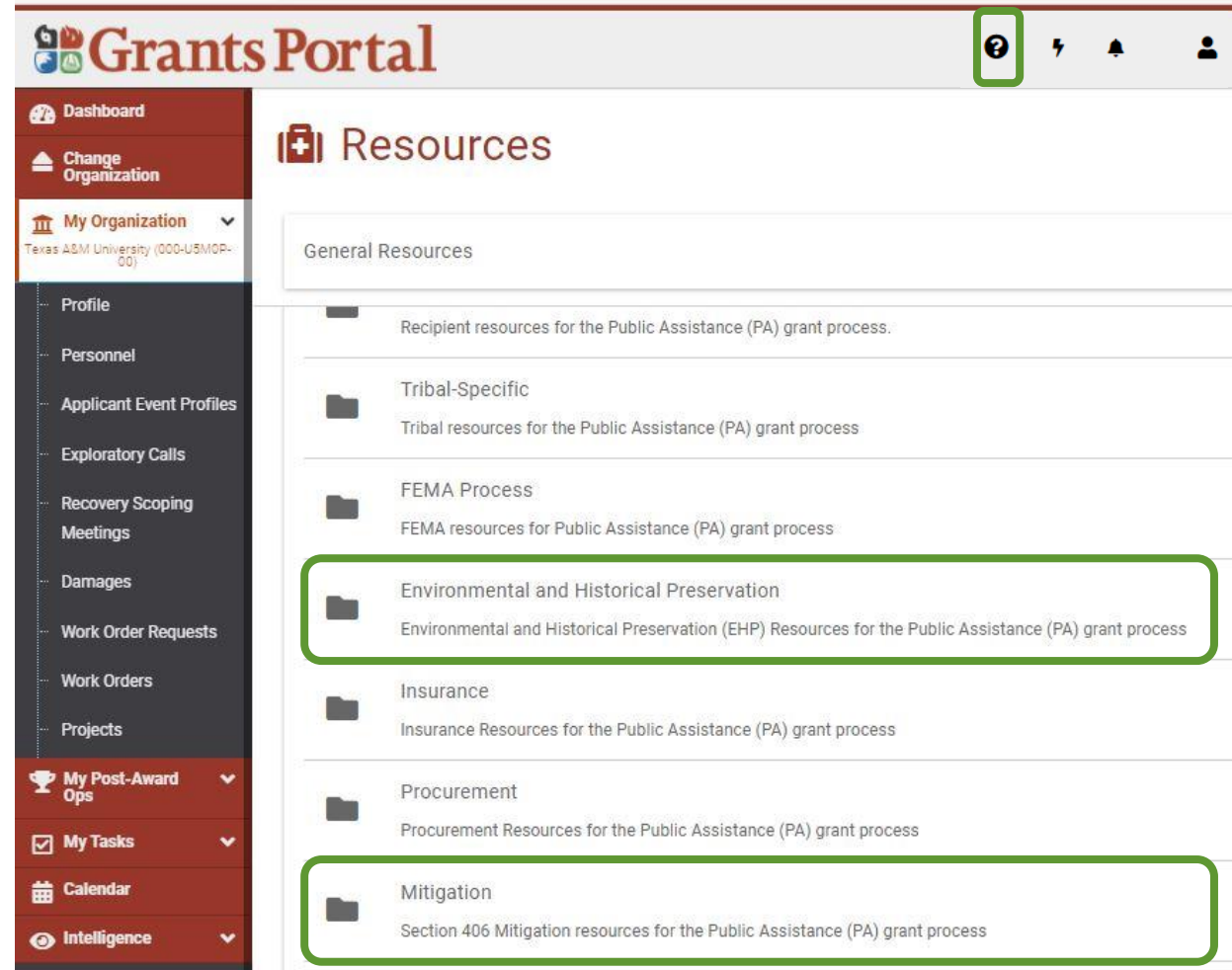
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Resources

EHP and PA Mitigation Resources in Grants Portal

- Assigned FEMA EHP & PA Mitigation (406) Specialists
- Applicant and Recipient Subject Matter Experts
- Grants Portal Support Center



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EHP and PA Mitigation Resources

EHP for FEMA Grant Applications

<https://www.fema.gov/grants/guidance-tools/environmental-historic>

Public Assistance 406 Mitigation Brochure

<https://www.fema.gov/sites/default/files/2020-06/fema-pa406-mitigation-brochure.pdf>

PA Program and Policy Guide (pages 153-157; 242-246)

https://www.fema.gov/sites/default/files/documents/fema_pappg-v4-updated-links_policy_6-1-2020.pdf



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Mitigate Disaster Damage with
FEMA Public Assistance

The Federal Emergency Management Agency (FEMA) recognizes that after a disaster, the best time to protect a facility from future, similar damage is during the recovery period. Mitigation projects done during the recovery reduce overall cost and construction efforts associated with retrofitting a repaired facility.

If you qualify for repairs through FEMA's Public Assistance (PA) Program (Robert T. Stafford Disaster Relief and Emergency Act, Section 406), you may also be eligible for additional funding to protect your facility.

During the recovery process, FEMA will assist you with assessing damage, developing a Hazard Mitigation Proposal, and evaluating the cost-effectiveness of mitigation projects.

Examples of Mitigation Projects Funded by Public Assistance

Flood door to provide facility dry floodproofing mitigation



Heat pump elevated 4 feet above ground to prevent flooding damage



Steel reinforced concrete and waterproofed flood walls around a building to protect facility from the horizontal pressure of flood water



Concrete wingwalls around a culvert to prevent road erosion



V1.1 2019

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Safeguarding Personally Identifiable Information (PII)

- If you administer or manage documents for FEMA Grants, you are responsible for safeguarding personally identifiable information (PII) consistent with applicable federal, state, local, and tribal laws regarding privacy and obligations of confidentiality
- PII is any information that can directly or indirectly identify an individual, including a name, address, date of birth, driver's license or Social Security number, or financial account information and **MUST NOT be uploaded into the Grants Portal or Grants Manager**



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Procurement Guidance

- Review the FEMA Procurement Disaster Assistance Team (PDAT) website to view procurement supplemental documentation:
 - <https://www.fema.gov/grants/procurement>
- FEMA's Procurement Guidance for Recipients and Subrecipients Under 2 C.F.R. Part 200 (Uniform Rules) provides additional details regarding Federal procurement and contracting requirements.

Document Throughout Your Procurement Process

It is important to document in detail as you:



Select the appropriate procurement method and contract type



Follow the socioeconomic affirmative steps



Conduct an independent cost estimate and cost or price analysis



Select a responsible contractor



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DHS Office of the Inspector General

Use the following contact information to report Corruption, Waste, Fraud, Abuse, Mismanagement and Misconduct to the Department of Homeland Security Office of Inspector General:

Phone: 1-800-323-8603

DHS Office of Inspector General/MAIL STOP 0305

Attention: Hotline

245 Murray Lane SW

Washington, DC 20528-0305

Website: <https://www.oig.dhs.gov/>



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Public Assistance Hotline and Videos

Call Support: (866) 337-8448

Grants Portal / Grants Manager

National Hotline Hours of Operation (M-F):

8:00 AM - 8:00 PM EST and

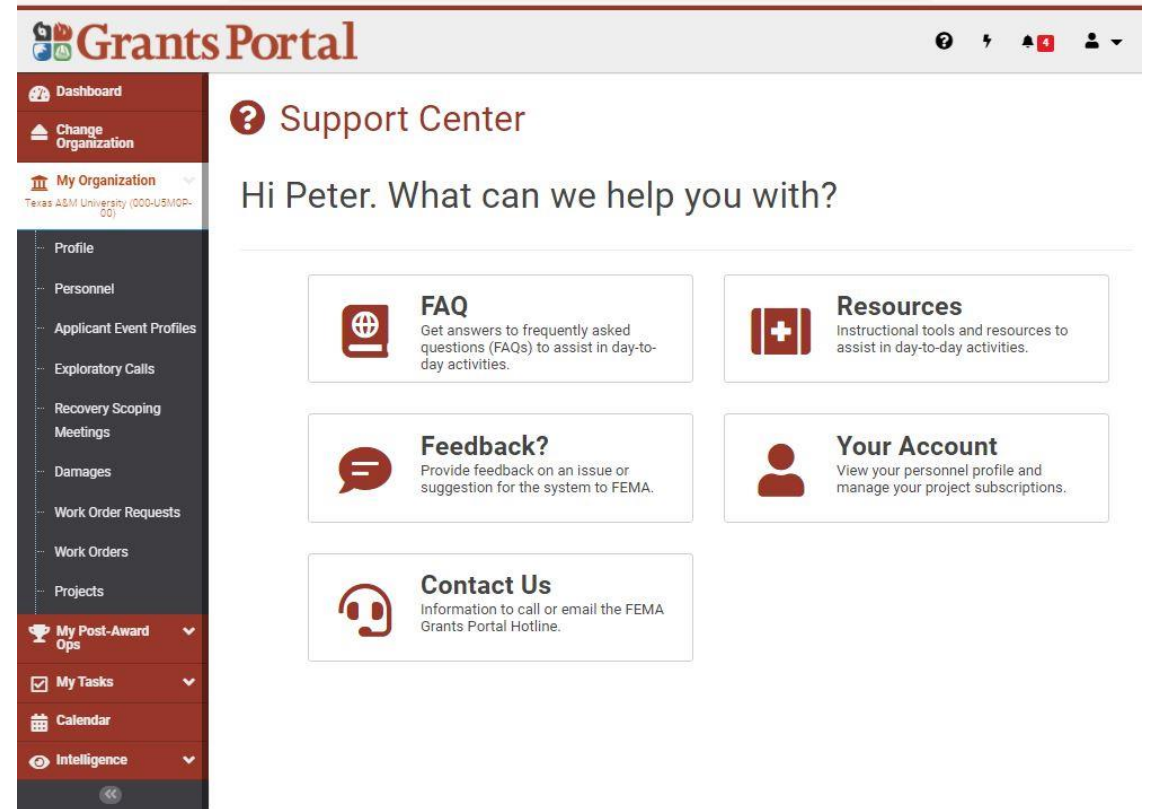
Puerto Rico 8:30 AM – 5:00 PM AST

Email Support:

FEMA-Recovery-PA-Grants@fema.dhs.gov



FEMA PA Grants Portal -
Grants Manager Channel



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Thank you!



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