

Hazard Mitigation Grant Program State-Wide Applicant Briefing

Hurricane Irma (DR-4337)



General Webinar Info

- Audio
 - Call-in: 1-888-670-3525
 - Passcode: 1886032254
- All lines will be muted for the duration of the webinar.
- If you have a question or issue during the presentation please submit it through the webinar and we will try to get to it.
- All questions asked during the webinar will be answered either at the end or in the meeting minutes afterwards.

Welcome and Introductions





Hurricane Loss Mitigation Program (HLMP) Overview

- Originally created as an active response to the devastation brought by Hurricane Andrew, specifically to the insurance Market in the State of Florida.
- Annual appropriation of \$10 million
 - \$3 million to retrofit existing facilities used as public hurricane shelters
 - \$2.8 million to inspect and improve tie-downs for mobile homes through the TCC Mobile Home Tie Down Project
 - \$700,000 to the Florida International University center dedicated to hurricane research
 - \$3.5 million to be used to improve the resiliency of residences through wind and flood mitigation grants.

HLMP Mitigation Grant Program

Funded activities include retrofits, inspections, and construction or modification of building components designed to increase a structure's ability to withstand hurricane-force winds and flooding.

_

Each grant is \$194,000 and all applicable projects must be completed within the fiscal year in which it was contracted.

_

There are no LMS requirements associated with the funding.



Important Dates

HOW TO APPLY:

RFPs are advertised in the Florida Administrative Register and issued via the www.myflorida.com web portal. Email HLMP@em.myflorida.com to request being added to announcements in funding opportunities.

CONTRACT/GRANT PERIOD:

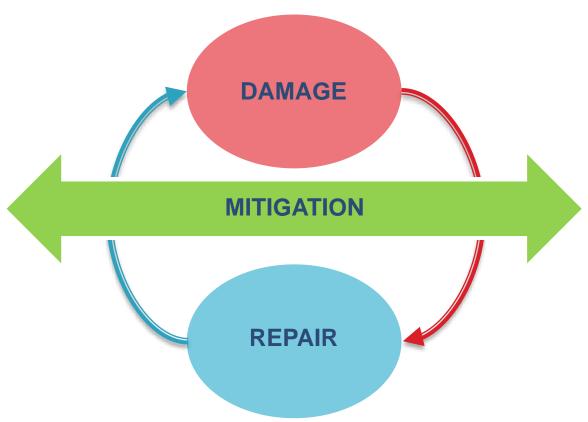
Contracts and grants can begin at any time during the fiscal year, but must all be terminated by June 30 of the same fiscal year. The state fiscal year is July 1 through June 30.

For more information, please email Brianna Beynart at <u>Brianna.Beynart@em.myflorida.com</u> or call (850) 815-4516.



What does Mitigation do?

Mitigation breaks the cycle of disaster, damage, reconstruction and repeated damage



\$6 is saved in future disaster costs for every \$1 of hazard mitigation spent

Natural Hazard Mitigation Saves: 2017 Interim Report (https://www.nibs.org/page/mitigationsaves)

Where Does Mitigation Fit?

Mitigation

Reducing the loss of life and property by lessening the impact of disasters



Recovery

Putting a community back together after a disaster



Response

Saving life and property during and immediately after a disaster

Preparedness

Getting people and equipment ready to quickly and effectively respond to a disaster before it happens



Rule 27P-22, F.A.C

Hazard Mitigation Grant Program (HMGP)

Outlines a project selection process *implemented* at the local level

Requires brief annual updates from each LMS working group regarding local risk & effort

Unique funding allocation process maximizes post-disaster federal funding use



Funding

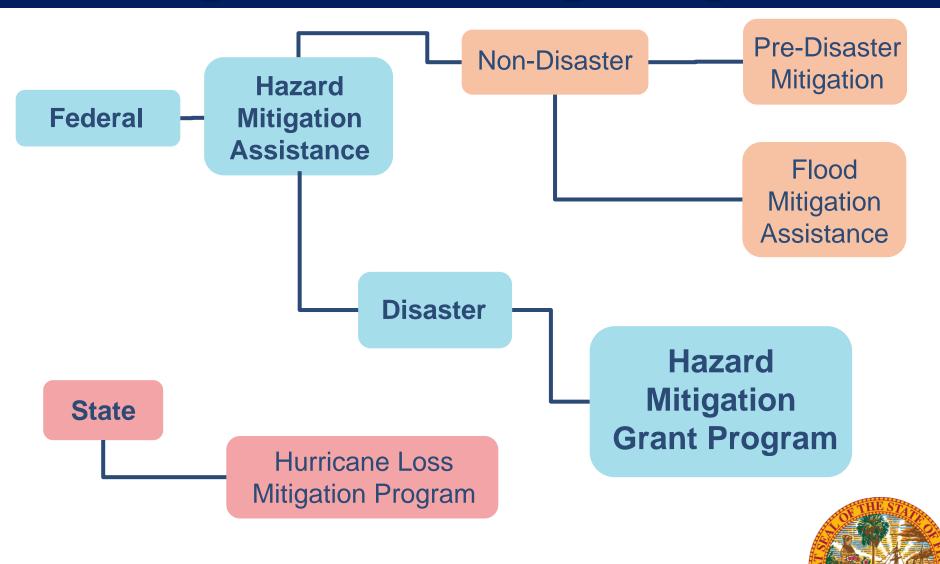
Who can apply?

Am I eligible?

What are the different funding options available?



Mitigation Funding Programs



Who Can Apply?

Private Non-Profit Organizations

Examples: Medical, Residential Health Care Facilities, Educational, Emergency Utility

*If you have been considered eligible for PA, you are most likely an eligible applicant.

All must go through the Local Mitigation Strategy Working Group of the county where the project will take place.

Government Entities

- State Agencies
- Local Governments and Agencies
- Special and Regional Districts

Tribal Nations



Minimum Applicant Eligibility Criteria

Applicant's jurisdiction must have a FEMA-approved local mitigation plan as a condition of receiving a project grant

All jurisdictions included in multi-jurisdictional plan must have formally adopted their respective Local Mitigation Strategy (LMS)

All jurisdictions must participate in the NFIP (communities on probation or suspended from the NFIP are not eligible).



Eligibility Criteria

All mitigation measures submitted to the state for funding consideration must:

- Be consistent with the State Hazard Mitigation Plan
- Provide a long-term solution
- Be located in a vulnerable area as identified in Local Mitigation Strategy (LMS)
- Be technically feasible and meet cost effectiveness and environmental conformity
- The measure must identify a non-federal match (75/25)



Disaster Funding Programs

404/406 Mitigation

Funding Process

Tier

Eligibility

Process



Post-Disaster Mitigation Funding

Hazard Mitigation Grant Program (404)

- Vulnerable to any natural event, not just declared event
- Can be used on private property
- Project can not be eligible under any other federal program
- Must be cost effective and meet other performance criteria

Public Assistance (406)

- Damaged by the eventsite specific mitigation
- Located within defined declaration area
- Can not be used for private property
- Project can not be eligible under any other federal program
- Facility must be in active use at time of the disaster



Program Funding

- HMGP is a cost-reimbursement grant program
 - All approved eligible project costs are financed by the subgrantee with reimbursement requested from the State
- FEMA may fund up to 75% of the eligible costs of each project
- Administrative Costs
- Project Cost-Share
 - The applicant must provide a 25% match, which can be fashioned from a combination of cash and in-kind sources (44CFR 206.432(c)), and project (global) match



Three-Tiered Funding System

- FEMA provides State with initial HMGP funding amount
- State determines County allocations based on the prorated share of federal disaster funds spent in their county on:
 - Public Assistance (PA)
 - Individual Assistance (IA)
 - Small Business Administration (SBA)
- State publishes a Notice of Funding Availability (NOFA) which contains allocations of all designated counties



Three-Tiered Funding System (cont'd)

Tier One

 Initial allocation of submitted and eligible projects will be funded in order of priority as endorsed by the LMS Working Group

Tier Two

 Any allocation remaining after all eligible projects in any designated county are funded will go to another designated county Working Group with a partially funded project contained in original submission.

Tier Three

• If funds remain after the Tier Two funding process, the un-obligated funds will be provided to any applicant statewide with a project application submitted within the application period, on a first-come-first-serve basis until all available funds are obligated.



Eligible Types of Project

- Acquisition:
 - Acquiring and relocating/demolishing structures from hazard-prone areas
- Retrofit:
 - Retrofitting structures to protect them from floods, high winds, earthquakes, or other natural hazards
- Elevation:
 - Elevating existing structures to avoid flooding damages



Eligible Types of Project (cont'd)

Drainage:

 Constructing certain types of minor and localized flood control projects

Wild Fire Activities:

 Defensible space/vegetation barriers; retrofitting with fireresistant materials and vegetation management



Previously Funded HMGP Projects

- Acquisition/relocation
- Elevation of structures
- Elevation of critical infrastructure
- Catch basins/water retention projects
- Wetland restoration
- Flood proofing of nonresidential structures
- Drainage improvements
- Flood control gates
- Sewer backup protection

- Erosion and sediment control projects
- Lift/pump stations retrofits
- Structural hazard control or protective actions
- Retrofitting wastewater treatment plant
- Water diversion
- Shuttering/wind protection measures
- Certain paving projects



What Makes An Eligible HMGP Project?

- Conformance with 44CFR Part 201 (Mitigation Planning Req.)
- Provides beneficial impact
- Conformance 44 CFR part 9 Flood Plain Management and Protection of Wetlands, and 44 CFR part 10 Environmental Considerations
- Solves a problem
- Be technically feasible
- Meets all applicable state and local codes



Project Eligibility (cont'd)

- Be cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster. The grantee must demonstrate this by documenting that the project:
 - Addresses a repetitive problem or a significant risk
 - Will not cost more than the anticipated value of the benefits
 - Has been determined the most practical, effective, and environmentally sound alternative after consideration of a range of options
 - Contributes to a long-term solution
 - Considers long-term changes to the area and has manageable maintenance and modification requirements

44CFR 206.434



Ineligible Activities

- Generators (unless...)*
- Communications equipment
- Warning systems
- New construction (unless...)*
- Potable water supply
- Studies only
- Sewage extensions in undeveloped areas
- Project for which work commences prior to awarding of grant
- Emergency pumps





HMGP Process

- Notice of Funding Availability
- Applicant development workshops
- LMS Working Group submit priority list to state
- Applications submitted to state for eligibility review
- State conducts project reviews
- State submits eligible projects to FEMA for final approval and potential funding consideration
- Upon FEMA approval, State begins the project/grant management process



Time Frame and Expectations

- State submits local applications to FEMA up to 12 months after the disaster declaration. *
- FEMA's goal is to obligate all funds within 24 months of disaster declaration. *
- Program Administration by States
 - Overall quicker state and FEMA approvals.

*These are the maximum lengths of time by statute and are not an average, or typical, time frame for project approval.



Role of the Applicant

Develop/submit eligible and **complete** project applications (original plus 2 copies), postmarked by deadline:

•DR-4337: August 6th, 2018

- Complete State contracting process as timely as possible
- Perform project in accordance with approved scope of work and milestone schedule
- Manage project and funds received
- Submit quarterly reports to State (due no later than the 15th of the month after quarter end)
- Audit projects in accordance with 44 CFR Part 14



HMGP Application Process

- Use the HMGP Application Checklist as a guide for completing the application
- Make sure the disaster is identified
 - (FEMA-4337-DR-FL)
- The descriptive project title (i.e., Volusia County, City of DeBary, West Side Emergency Flood Management System, Drainage)



General Applicant Information

- Name of Applicant Organization
- Applicant type
- County/Counties
- State Legislative/ Congressional District(s)
- Federal Tax
 Identification Number
- FIPS Code
- DUNS number
- FFATA

- Point of Contact
- National Flood Insurance Program (NFIP) Community Identification Number
- Application Preparer Information
- Duly Authorized Representative
- LMS Letter



LMS Endorsement Letter

- Must have priority number and budget (federal share)
- Must identify how project meets LMS goals and objectives
- Signed by LMS Chair
- Applications without a LMS endorsement letter will NOT be processed.



Pre-Award Costs

- Pre-construction soft costs
 - Activities such as engineering, modeling, permitting, environmental study, etc.
- Only costs incurred <u>after</u> Presidential Declaration Date
- Must be approved by State and FEMA
- A request form must be submitted with application
- Cannot include construction
- If the project is not approved, pre-award costs will be solely the responsibility of the applicant



Project (Global) Match

- Any eligible project type under HMGP
- Funded 100% by non-federal funds
- Project must meet HMGP criteria

- Match project must NOT begin prior to approval from FEMA.
- Requires separate project application



Budget Development

Provide detailed costs of the project. This information will be used for the Benefit-Cost Analysis (Do not include contingency costs or maintenance costs in the budget)

- Materials costs (include all in-kind matches)
- Labor costs (include all in-kind matches)
- Other costs/fees (permitting, engineering, etc.)
- Project management costs (factor Admin Costs here)

For more information see 44 CFR §13.24



Budget Development (cont'd)

Detail all anticipated project costs

- Avoid the use of lump sum costs
 - Whenever possible, quantify or provide additional breakdown of large lump sum cost items

- Provide the source of the estimate
 - i.e., documented local costs
 - vendor quotes



Budget Development (cont'd)

- Funding Sources
 - Estimated FEMA Share (maximum federal share is 75%)
 - Non-Federal Share
 - 25% (Cash, In-Kind, Project Global Match)
 - E. Funding Sources (round figures to the nearest dollar)

The maximum FEMA share for HMGP projects is 75%. The other 25% can be made up of State and Local funds as well as in-kind services. HMGP funds may be packaged with other Federal funds, but other Federal funds (except for Federal funds that lose their Federal identity at the State level, such as CDBG, and certain tribal funds) may not be used for the Non-Federal share of the costs.

| Estimated Federal Share | | | | _% of Total | (Maximum 75%) |
|--|---------------|-------------|----------------|---------------|-------------------|
| Non-Federal Share | | | | | |
| Estimated Local Share | | | | _% of Total | (Cash) |
| _ | | | | _% of Total | (In-Kind**) |
| | | | | _% of Total | (Global Match***) |
| Other Agency Share (Identify Non-Federal Agency and availability date) | | | | _% of Total | |
| Total Funding sources from above | | | | | |
| _ | \$ | 0.00 | 0.00% | Total | (Equals 100%) |
| ** Identify proposed eligible activities directly related to | project to be | considered | for In-Kind se | rvices in Sec | tion IV.B. Labor. |
| *** Separate project applications must be submitted for | each Global | Match proje | ect. | | |
| Global Match Project Number and Title: | | 11000 | | | |

Example - page 6 of HMGP application



Project Milestones

- Project Schedule of Work (cannot exceed a 3 year period)
 - Identify project milestones, include all phases of the project
 - Milestone example: project design
 - Number of days to complete example: 6 months



HMGP Update: Irma

- 6-month Allocation update from FEMA
 - Old estimate was \$929,880,399
 - New estimate is \$354,066,081
 - Allocations will be adjusted and distributed via LMSWG and State Website soon.
- Small-Group Applicant Workshops
 - Please respond as soon as possible
 - Consider half-days if a whole day is not possible



Questions?





Application Review

PROJECT MANAGEMENT



State Mitigation CHNICAL UNIT

ENGINEERING

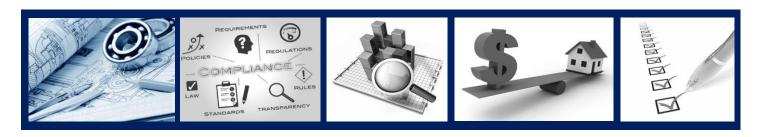


ENVIRONMENTAL



Engineering Review - TechUnit

- PAS / TechUnit is responsible for ensuring that projects are:
 - Good MITIGATION stand-alone projects
 - In compliance with all requirements
 - SOW represents best alternative to solve the problem
 - Feasible
 - Reasonable cost
 - Cost effective State runs a Benefit Cost Analysis (BCA)





Cost-Effective Projects

"The Grantee must demonstrate (that the project is cost effective) by documenting that the project...will not cost more than the anticipated value of the reduction in both direct damages and subsequent negative impacts to the area if future disasters were to occur"

44 CFR Part 206, Section 206.434 Eligibility (c) (5) (ii)



Cost Effectiveness - BCA

The analysis is done utilizing FEMA's Benefit Cost Analysis (BCA) tool (version 5.3)

Benefits
Project Cost = 1.0 or greater (Ratio)

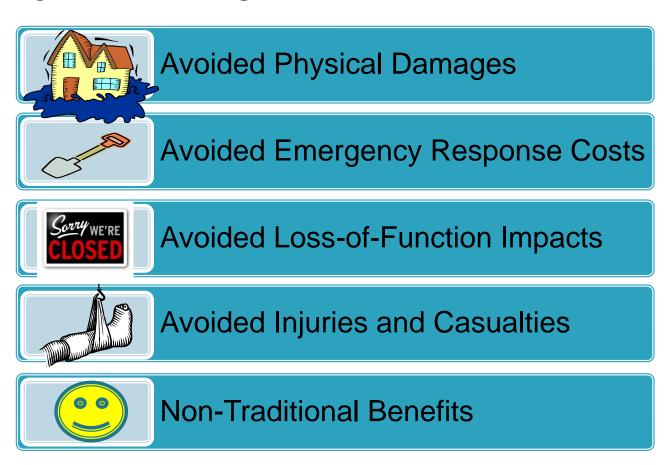
Losses over useful life if NO project is implemented

Losses over useful life if project IS implemented

(\$)

Cost Effectiveness- BCA

TYPICAL BENEFITS





BCA Exemptions

U.S. Department of Homeland Security 500 C Street, SW Washington, DC 20472



MEMORANDUM FOR: Regional Administrators

Regions I-X

ATTENTION: Regional Mitigation Division Directors

Hazard Mitigation Assistance Branch Chiefs

FROM: David L. Miller 2 (Miller)

Federal Insurance and Mitigation Directorate

SUBJECT: Cost Effectiveness Determinations for Acquisitions and Elevations in Special

Flood Hazard Areas Using Pre-calculated Benefits

This memorandum supersedes the August 15, 2013 version and clarifies the use of pre-calculated benefits to determine cost effectiveness of elevations and acquisitions in Special Flood Hazard Areas (SFHA). The Risk Reduction Division analyzed over 11,000 structures acquired or elevated and found that the average benefits for each project type are \$276,000 and \$175,000 respectively. Therefore, FEMA has determined that the acquisition or elevation of a structure located in the 100-year floodplain as delineated on the Flood Insurance Rate Map (FIRM) or based on best available data, that costs less than or equal to the amount of benefits listed above is considered cost effective. For projects that contain multiple structures, the average cost of all structures in the project must meet the stated criterion.

This methodology is available for all Hazard Mitigation Assistance (HMA) grant programs and can be applied to new applications as well as pending projects where the application period has expired. Additionally, pre-calculated benefits can be used to evaluate cost overruns for approved projects, if a new cost effectiveness review is being performed.

The specific geographic location of structures can increase acquisition and elevation costs. The benefit amounts identified above may be adjusted by using the most current locality multipliers included in industry accepted construction cost guides. If a multiplier is used, a copy of the source document must be included as part of the grant application.

The applicant or subapplicant must provide a map that clearly identifies the structure's footprint and delineates the 100-year SFFA, using the FIRM or best available data. If any part of the structure lies within the 100-year SFFA, the applicant or subapplicant can use the pre-calculated benefit value to demonstrate cost effectiveness. As an alternative, First Floor Elevation (FFE) and Base Flood Elevation (BFF) can be provided for each structure. If the FFE is lower than the BFF, pre-calculated benefits can be used to demonstrate cost effectiveness. No other detailed analysis is required. These pre-calculated benefits can be used in 100-year floodplains in riverine and coastal areas.

Acquisitions under \$276,000

\$175,000 (Includes Mitigation Reconstruction)

Requirement: to be located in the Special Flood Hazard Area.

(Issued August 15, 2013)



BCA Exemptions (Con't)

U.S. Department of Homeland Security Washington, DC 20472



March 1, 2018

MEMORANDUM FOR:

Regional Administrators

Regions I-X

ATTENTION:

Regional Mitigation Division Directors Hazard Mitigation Assistance Branch Chiefs

FROM:

Federal Insurance and Mitigation Administration

SUBJECT:

Cost Effectiveness Determination for Non-Residential Hurricane Wind

Retrofit Measures Funded by FEMA

This memorandum establishes the use of pre-determined benefits for wind retrofit projects on non-residential buildings in wind borne debris regions.

Two mitigation packages, Option 1 and Option 2, are considered eligible for the pre-determined benefits:

- · Option 1 consists of (1) opening protection for doors, windows, and louvers against wind borne debris, wind driven rain, and high wind pressure, and (2) roof retrofit, which consists of securing roof top equipment, replacing roof decking and covering
- Option 2 consists of (1) opening protection, (2) roof retrofit, and (3) improvement to or creating a continuous load path from the roof to the foundation

Eligible structures must have primary structural framing that consists of steel, concrete, or reinforced masonry; structures composed of other building materials, such as wood, steel stud, and unreinforced masonry are not eligible for this pre-determined benefit. When retrofitted, structures will comply with the loading requirements of latest edition of the International Building Code (IBC), International Existing Building Code (IEBC), American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures (ASCE 7), FEMA P-577, and the requirements of the locally enforced building code.

Applicants must provide maps with structures clearly indicated as being in a wind borne debris region to be eligible to use the pre-determined benefits. Additionally, the project must have a useful life of at least 25

Mitigation projects meeting the above criteria are considered cost effective if the mitigation project costs less than 19% of the building replacement value. This eliminates the requirement for applicants to conduct a separate benefit cost analysis for eligible projects. The benefits are based on FEMA's existing methodology

Wind Retrofit for Non-**Residential Buildings with** mitigation cost under 10% of the Building Replacement Value.

Requirement: Must have structural framing that consists on **steel**, concrete or reinforced masonry.

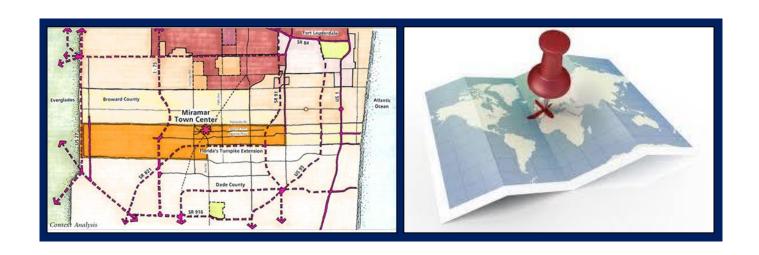
(Issued March 1, 2018)



Project Review - BCA

What do we look for on your application?

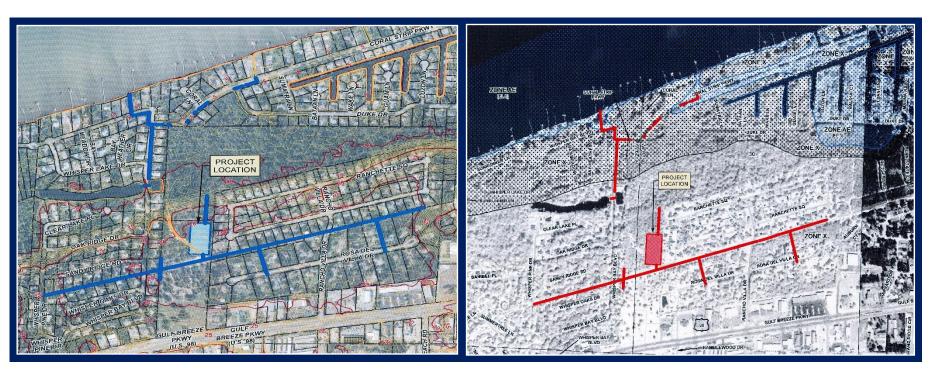
- Clear explanation of the purpose of the project, identifying the problem.
- Detailed Scope of Work identifying the best solution.





Project Review - BCA (Con't)

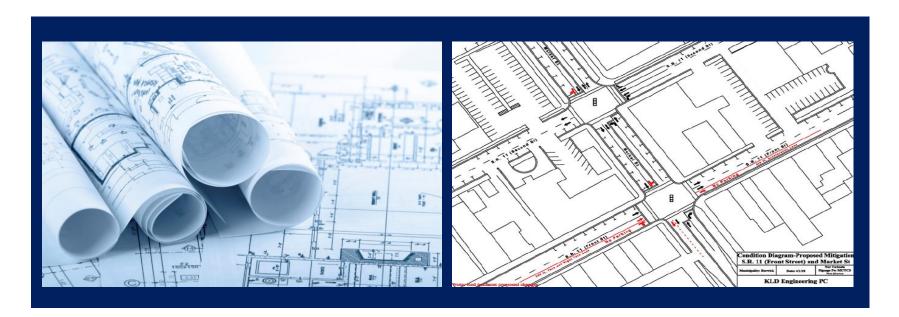
 Project maps identifying the area (location Map, FIRM Map and topographic Maps)





Project Review - BCA (Con't)

Design drawings, if available.





Project Review – BCA (Con't)

- Project's Budget with a break down of every item that is included on the final project cost.
- Project's Milestone Schedule clearly identifying the stages of the project until completion.
- Complete Project Worksheet according to the type of project.

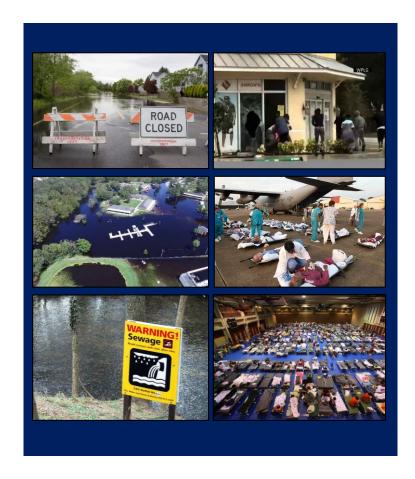








Project Worksheet - BCA



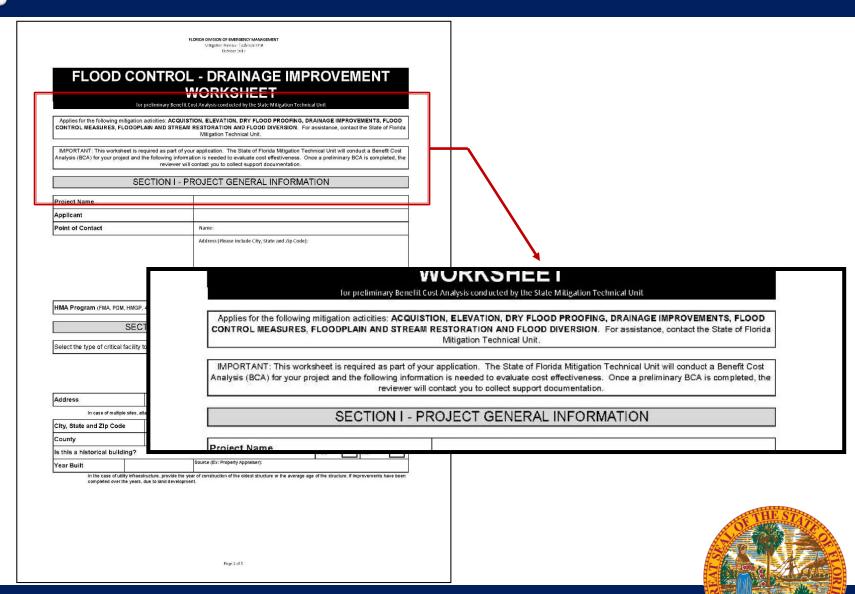
- Worksheet is a fundamental part of the application.
- Your answers should reflect the benefits of your project.
- Answers are used to run a preliminary BCA.
- It is VERY important to answer ALL questions.



Project Worksheets - BCA

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Project Worksheets - BCA



Worksheet- General Info

GENERAL INFORMATION

PROJECT COST

- Estimate from Engineering Department
- Public Works Data
- Vendor's Estimate
- Similar projects

IMPORTANT NOTE: It cannot be a lump sum.

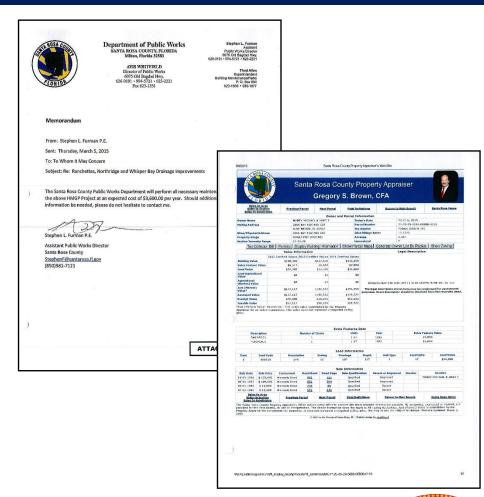
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| Applicant Name 125 Fountain Avenue, L.P. | Liber | Project ty Apartme | | |
| | Libei | ту прагине | | |
| Trade/Item | Unit | Quantity | Unit Cost | Total |
| Division 1: General Requirements | | | | |
| 1 Mobilization | LS | Т | \$20,000.00 | \$20,00 |
| 2 Temporary facilities | LS | | \$30,000.00 | \$30,00 |
| 3 Sidewalk Bridge/Safety | LS | 1 | \$90,000.00 | \$90,00 |
| 4 Dumpsters | EA | 85 | \$1,100.00 | \$93,50 |
| 5 Engineering and Testing | LS | 1 | \$75,000.00 | \$75,00 |
| 6 Plans and Specs | LS | 1 | \$15,000.00 | \$15,00 |
| 7 General Labor | LS | | \$80,500.00 | \$80,50 |
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| 9 | | | | \$ |
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| Division 2: Sitework | | 5 | ololi i rotar | φ 10 1,000 |
| 1 Surveying | li c | 1 1 | 645 000 00 | £1E.00 |
| 2 Clear and grub/drainage | LS LS | 2 | \$15,000.00 \$15,000.00 | \$15,00 \$30,00 |
| 3 Excavation/obstructions | CY | 3964 | \$50.00 | \$198,20 |
| 4 Shoring/ shoring engineer | LS | 775 | \$40.00 | \$31,00 |
| 5 Backfilling/Misc Machine days | | 25 | \$1,500.00 | \$31,00 |
| 6 Plantings | Days | 90 | \$1,500.00 | |
| 7 Paving/Pavers/fencing/curbs | EA | 90 | | \$34,47 |
| 8 Sidewalk with removal | | | \$110,678.00 | \$110,67 |
| | | | 88,652 \$54,500,00 | \$88,65 \$54,50 |
| 9 Site furnishings/play equipment/safety surface 0 | - | + + | \$54,500.00 | \$54,50° |
| 0 | | | | |
| | | Divi | sion 2 Total | \$600,000 |
| Division 3: Concrete | | | | |
| 1 Perimeter walls | CY | 145 | \$550.00 | \$79,75 |
| 2 Interior Walls | CY | 85 | \$550.00 | \$46,75 |
| 3 Perimeter and interior footings/stairs/misc. footings | CY | 414 | \$450.00 | \$186,30 |
| 4 Misc. Concrete/rat slab | CY | 56 | \$400.00 | \$22,40 |
| 5 Precast Concrete Plank | SF | 49118 | \$15.00 | \$736,77 |
| 6 Precast stairs | FLT | 7 | \$5,000.00 | \$35,00 |
| 7 Edge stops | LF | 5112 | \$4.50 | \$23,00 |
| 8 Rebar | LBS | 36953 | \$1.50 | \$55,42 |
| 9 Pump days | EA | 10 | \$1,575.00 | \$15,75 |
| 0 | | | | \$ |
| | | Divis | ion 3 Total | \$1,201,153 |
| Division 4: Masonry | | | | |
| 1 Interior CMU Block | SF | 9482 | \$14.00 | \$132,74 |
| 2 Exterior Block and Brick | SF | 17420 | \$31.00 | \$540,02 |
| 3 Precast lintels, sills and bands | LF | 2488 | \$35.00 | \$87,08 |
| 4 Grouting | SF | 7073 | \$3.00 | \$21,21 |
| -1- | LF | 575 | \$130.00 | \$74,75 |
| 5 Parapets | LS | 1 | \$24,500.20 | \$24,50 |
| 6 Flashing/Scaffold Installation | | 21613 | \$1.50 | \$32,41 |
| | LS | 21013 | | |
| 6 Flashing/Scaffold Installation | LS | 21013 | \$1100 | \$ |
| 6 Flashing/Scaffold Installation 7 Washdown | LS | 21613 | \$1100 | \$ |
| 6 Flashing/Scaffold Installation 7 Washdown 8 | LS | 21613 | \$1100 | |



Worksheet – General Info (con't)

MAINTENANCE COST

- Required for software to escalate that cost over project useful life
 *Only for BCA purposes.
- PROPERTY INFORMATION
 - Location
 - Property details (SF, BRV)
 - Property Appraisal
 - Previous assessment
 - RS Means
 - Other

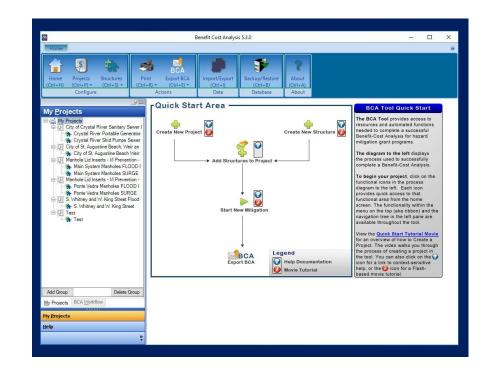




BCA – Methodology

BENEFIT COST ANALYSIS METHODOLOGY

- Two ways to run a BCA
 - Using available historical losses/damages
 - Using expected losses/damages



*In some cases historical and expected could be combined.



Worksheet – Historical Damages

HISTORICAL DAMAGES

- Description of what happened
- Photographs
 - Flooded streets, neighborhood pictures.
 - Pictures of home damages.
- Insurance Claims
- Receipts from past repairs.
- Homeowners affidavits
 - Specific date
 - Specific flood depth





Worksheet – Historical Damages

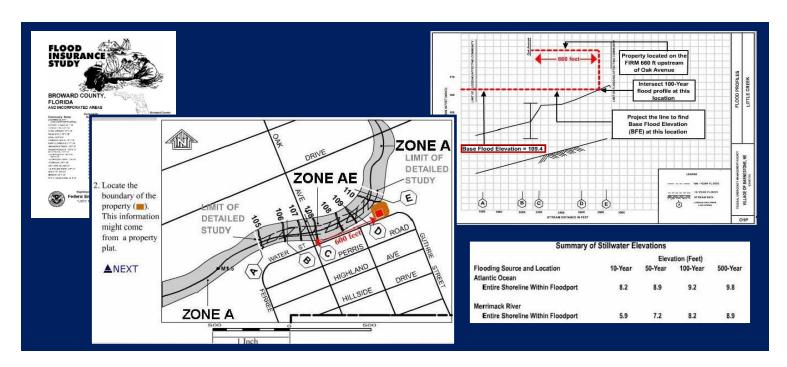
HISTORICAL DAMAGES con't

- Road closures
 - Duration of flooding
 - Traffic count in the affected area
- 911 phone call records.
- Any expenses while attending the emergency.
- Utility Infrastructure
 - Outages
 - Protective measures to avoid outages
 - Affected customers



EXPECTED DAMAGES

Using FIS STUDY to <u>demonstrate</u> that property is at risk



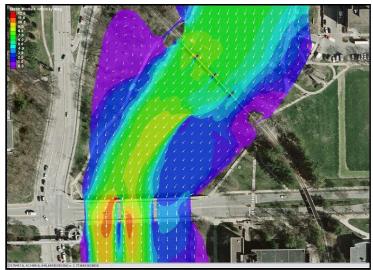
^{*}to be used for specific structures in Coastal or Riverine areas



Using H&H Study:

- Maps identifying the studied area.
- Preliminary designs
- H&H results
 - Existing Conditions
 - After Mitigation conditions (level of protection







Using H&H Study (con't):

- List of structures that could be affected indicating:
 - Building Replacement Value BRV
 - Finished Floor Elevation
 - Survey
 - Lidar
 - GIS information
 - Others

RANCHETTES SUBDIVISION - MAXIMUM STAGES (feet) - Proposed Conditions -Address 2998 Ranchette Square 3011 Ranchette Square 18.52 15.45 15.92 16.38 17.13 17.62 18.10 15.92 16.38 15.45 18.32 15.92 16.38 15.92 16.38 18.32 15.92 16.38 3061 Rosa Del Villa Drive 15.45 15.92 16.38 17 13 18.32

RANCHETTES SUBDIVISION - MAXIMUM STAGES (feet) - Existing Conditions -

| | FFE | FFE Critical Duration Storm Frequency Elevations | | | | | | |
|---------------------------|-------|--|--------|--------|---------|---------|---------|----------|
| Address | | 2-Year | 3-Year | 5-Year | 10-Year | 25-Year | 50-Year | 100-Year |
| 2998 Ranchette Square | 17.73 | 15.98 | 16.30 | 16.57 | 16.87 | 17.19 | 17.55 | 17.76 |
| 3011 Ranchette Square | 18.52 | 18.51 | 18.53 | 18.56 | 18.59 | 18.65 | 18.72 | 18.76 |
| 3012 Ranchette Square | 18.16 | 18.51 | 18.53 | 18.56 | 18.59 | 18.65 | 18.72 | 18.76 |
| 3013 Ranchette Square | 18.57 | 18.51 | 18.53 | 18.56 | 18.59 | 18.65 | 18.72 | 18.76 |
| 3014 Ranchette Square | 18.41 | 18.51 | 18.53 | 18.56 | 18.59 | 18.65 | 18.72 | 18.76 |
| 3053 Rosa Del Villa Drive | 18.58 | 18.51 | 18.53 | 18.56 | 18,59 | 18.65 | 18.72 | 18.76 |
| 3061 Rosa Del Villa Drive | 18.65 | 18.51 | 18.53 | 18.56 | 18.59 | 18.65 | 18.72 | 18.76 |
| 2822 Whisper Oaks Drive | 19.02 | 19.31 | 19.35 | 19.36 | 19.39 | 19.41 | 19.46 | 19.48 |

SION - FLOOD DEPTH (feet)

| 3- ear | 5- Year | 10-Year | 25-Year | 50-Year | 100-Year |
|-----------|------------|---------|---------|---------|----------|
| 2.60 | 2.44 | 2.29 | 2.00 | 1.82 | 1.72 |
| 2.60 | 2.14 | 1.39 | 0.90 | 0.42 | 0.20 |
| .24 | 1.78 | 1.03 | 0.54 | 0.06 | -0.16 |
| .65 | 2.19 | 1.44 | 0.95 | 0.47 | 0.25 |
| .49 | 2.03 | 1.28 | 0.79 | 0.31 | 0.09 |
| .66 | 2.20 | 1.45 | 0.96 | 0.48 | 0.26 |
| .73 | 2.27 | 1.52 | 1.03 | 0.55 | 0.33 |
| .38 | 0.96 | 0.74 | 0.46 | 0.16 | -0.04 |

RANCHETTES SUBDIVISION - FLOOD DEPTH (feet) - Existing Conditions -

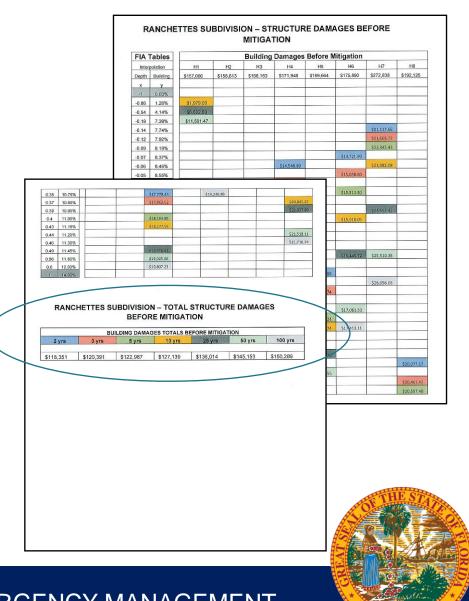
| | FFE | Critical Duration Storm Frequency Elevations | | | | | | |
|---------------------------|-------|--|-----------|--------|---------|---------|---------|----------|
| Address | | 2-Year | ar 3-Year | 5-Year | 10-Year | 25-Year | 50-Year | 100-Year |
| 2998 Ranchette Square | 17.73 | 1.75 | 1.43 | 1.16 | 0.86 | 0.54 | 0.18 | -0.03 |
| 3011 Ranchette Square | 18.52 | 0.01 | -0.01 | -0.04 | -0.07 | -0.13 | -0.20 | -0.24 |
| 3012 Ranchette Square | 18.16 | -0.35 | -0.37 | -0.40 | -0.43 | -0.49 | -0.56 | -0.60 |
| 3013 Ranchette Square | 18.57 | 0.06 | 0.04 | 0.01 | -0.02 | -0.08 | -0.15 | -0.19 |
| 3014 Ranchette Square | 18.41 | -0.10 | -0.12 | -0.15 | -0.18 | -0.24 | -0.31 | -0.35 |
| 3053 Rosa Del Villa Drive | 18.58 | 0.07 | 0.05 | 0.02 | -0.01 | -0.07 | -0.14 | -0.18 |
| 3061 Rosa Del Villa Drive | 18.65 | 0.14 | 0.12 | 0.09 | 0.06 | 0.00 | -0.07 | -0.11 |
| 2822 Whisper Oaks Drive | 19.02 | -0.29 | -0.33 | -0.34 | -0.37 | -0.39 | -0.44 | -0.46 |



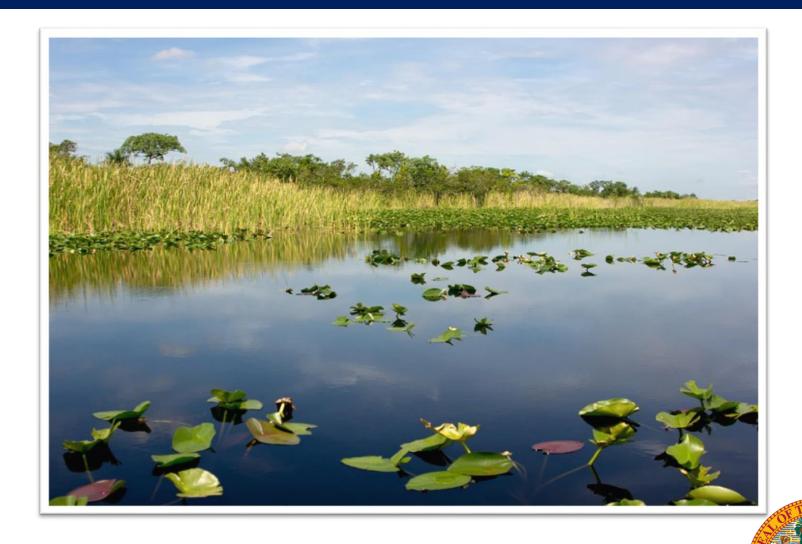
Using H&H Study (con't):

DAMAGE CALCULATION

- Calculations over affected properties before and after mitigation, using Replacement Value and the depth of estimated flooding:
 - Building Damage
 - Content Damage
 - Displacement Cost



Environmental Review



Environmental Review

National Environmental Policy Act (NEPA) establishes a national policy for the protection and maintenance of the environment by providing a process which all federal agencies must follow



NEPA

- Clean Water Act
- Clean Air Act
- Endangered Species Act
- Farmland Protection Policy Act
- Wild and Scenic Rivers Act
 - (Wekiva and Loxahatcee)
- National Historic Preservation Act

- Fish and Wildlife Coordination Act
- Magnuson –Stevensons FisheryConservation and Management Act
- Coastal Barrier Resources Act
- Coastal Zone Management Act
- Migratory Bird Treaty Act
- **Executive Orders**



NEPA

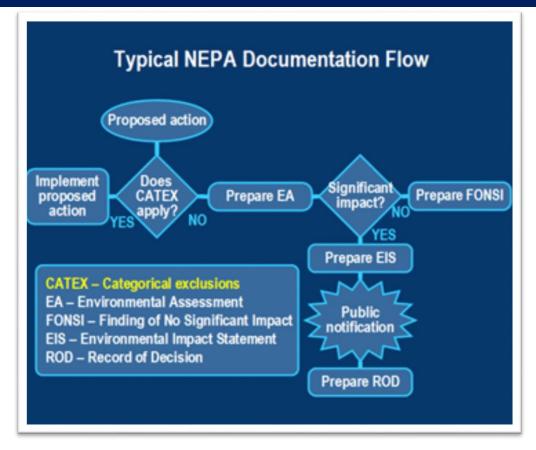
Executive Orders

- 11988: Floodplain Management
- 11990: Wetland Protection
- 13175: Consultation and Coordination with Indian Tribal Governments
- 12988: Environmental Justice





Environmental NEPA



Statutory Exclusion – Emergency Actions

Categorical Exclusion – No significant impact (previously determined)

Environmental Assessment – Brief review to determine effect

Environmental Impact Statement – Extensive review analyzing impact



Application –Walk Through

Acquisition/Demolition Example

| | THIS SECTION FOR STA | ATE USE ONLY | | | | |
|--|--|---|---|--|--|--|
| FEMADR-FL | | Initiative Application ial Submission or | Application Complete Re- Submission | | | |
| Conforms w/ State 409 Plan In Declared Area | gible Applicant State or Local Government Private Non-Profit (Tax ID Re | Project Type(s) Wind Flood Other: | | | | |
| Community NFIP Status: Check all that Participating Community ID#: In Good Standing Non-Partici | Cou | Ranking: | U Otner: | | | |
| State Application ID: | | | | | | |
| | | | | | | |
| the Florida Division of Emergency Mana Section I - Applicant A. Applicant Instruction: Compl | | | • | | | |
| Application Sections I-IV: | All Applicants must comp | lete these sections | | | | |
| Environmental Review: | All Applicants must comp | lete these sections | | | | |
| Maintenance Agreement: | Any Applications involving public property, public ownership, or management of property | | | | | |
| | | | | | | |
| Flood Control – Drainage Improvement Worksheet: | Acquisition, Elevation, Dr Control Measures, Flood | y Flood proofing, Dra plain and Stream Res | inage Improvements, Flood toration, and Flood Diversion | | | |
| Improvement Worksheet: | Acquisition, Elevation, Dr Control Measures, Flood - one worksheet per str | y Flood proofing, Dra olain and Stream Res ucture | inage Improvements, Flood toration, and Flood Diversion | | | |
| | Acquisition, Elevation, Dr Control Measures, Flood - one worksheet per str | y Flood proofing, Dra plain and Stream Res ucture erators, and permane | inage Improvements, Flood toration, and Flood Diversion int emergency standby pumps | | | |
| Improvement Worksheet: Generator Worksheet: Tornado Safe Room | Acquisition, Elevation, Dr. Control Measures, Flood; – one worksheet per str Permanent, portable gene New Safe Room, Retrofit | y Flood proofing, Dra plain and Stream Res ucture erators, and permane of existing structure, | inage Improvements, Flood toration, and Flood Diversion int emergency standby pumps | | | |
| Improvement Worksheet: Generator Worksheet: Tornado Safe Room Worksheet: Hurricane Safe Room Worksheet: Wind Retrofit Worksheet: | Acquisition, Elevation, Dr Control Measures, Floody on en worksheet per str Permanent, portable gen New Safe Room, Retrofit Residential Safe Room New Safe Room, Retrofit Wind Retrofit projects onl | y Flood proofing, Dra olain and Stream Res ucture erators, and permane of existing structure, of existing structure y – one worksheet pe | inage Improvements, Flood toration, and Flood Diversion int emergency standby pumps Community Safe Room, | | | |
| Improvement Worksheet: Generator Worksheet: Tornado Safe Room Worksheet: Hurricane Safe Room Worksheet: Wind Retrofit Worksheet: Wildfire Worksheet: | Acquisition, Elevation, Dr. Control Measures, Floody one worksheet per str Permanent, portable gen. New Safe Room, Retrofit Residential Safe Room New Safe Room, Retrofit Wind Retrofit projects onl Defensible Space, Hazan other | y Flood proofing, Dra olain and Stream Res ucture erators, and permane of existing structure, of existing structure y – one worksheet pe | inage Improvements, Flood toration, and Flood Diversion nt emergency standby pumps Community Safe Room, | | | |
| Improvement Worksheet: Generator Worksheet: Tornado Safe Room Worksheet: Hurricane Safe Room Worksheet: Wind Retrofit Worksheet: Wildfire Worksheet: Drought Worksheet: | Acquisition, Elevation, Dr. Control Measures, Floody one worksheet per str Permanent, portable genines and Safe Room, Retrofit Residential Safe Room New Safe Room, Retrofit Wind Retrofit projects on Defensible Space, Hazanother Aquifers, other | y Flood proofing, Dra olain and Stream Res ucture erators, and permane of existing structure, of existing structure y – one worksheet pe dous Fuels Reduction | inage Improvements, Flood toration, and Flood Diversion int emergency standby pumps Community Safe Room, er structure i, Ignition Resistant Construction | | | |
| Improvement Worksheet: Generator Worksheet: Tornado Safe Room Worksheet: Hurricane Safe Room Worksheet: Wind Retrofit Worksheet: Wildfire Worksheet: Drought Worksheet: Request for Public Assistanc Form: | Acquisition, Elevation, Dr. Control Measures, Floody - one worksheet per str Permanent, portable gen New Safe Room, Retrofit Residential Safe Room New Safe Room, Retrofit Wind Retrofit projects onl Defensible Space, Hazan other Aquifers, other FEMA Form 90-49 (Requ complete, if applicable. | y Flood proofing, Dra olain and Stream Res ucture erators, and permane of existing structure, of existing structure y – one worksheet pe dous Fuels Reduction est for Public Assista | inage Improvements, Flood toration, and Flood Diversion int emergency standby pumps Community Safe Room, er structure in, Ignition Resistant Construction | | | |
| Improvement Worksheet: Generator Worksheet: Tornado Safe Room Worksheet: Hurricane Safe Room Worksheet: Wind Retrofit Worksheet: Wildfire Worksheet: Drought Worksheet: Request for Public Assistanc | Acquisition, Elevation, Dr. Control Measures, Floody one worksheet per str Permanent, portable gen New Safe Room, Retrofit Residential Safe Room New Safe Room, Retrofit Wind Retrofit projects onl Defensible Space, Hazan other Aquifers, other EFMA Form 90-49 (Requ | y Flood proofing, Dra olain and Stream Res ucture erators, and permane of existing structure, of existing structure y – one worksheet pe dous Fuels Reduction est for Public Assista on, these forms must be of Voluntary Intere- ces for Property Acquis (Tomor Hail Version) (Single Site Version) | inage Improvements, Flood toration, and Flood Diversion in temergency standby pumps Community Safe Room, er structure in Ignition Resistant Construction ince): All applicants must be completed. | | | |





Application – Project Description

B. Project Description, Scope of Work, and Protection Provided (Must be Completed in Detail)

Describe, in detail, the existing problem, the proposed project, and the scope of work. Explain how the proposed project will **solve** the problem(s) and provide the level(s) of protection described in Part A. Also, if available, attach a vendor's estimate and/or a contractor's bid for the scope of work. **Please ensure that each proposed project is mitigation and not maintenance**.

Describe the existing problems:

The structure at 123 Main St. Anytown, FL is a single family slab on grade structure subject to repetitive flood loss as defined by the National Flood Insurance Program. The NFIP claims data indicates that the house flooded in 2005, 2008, and 2011. The house flooded again during the 2014 flood event. Due to the road elevation the water runs onto the property and when the drainage retention area fills up it causes the water to run onto the surrounding properties and floods those homes creating a health and safety issue for the residence.

Describe the type(s) of protection that the proposed project will provide:

This acquisition will return the flood prone property to open space and will prevent the flooding of the houses on either side of the property. Acquiring this property will allow the water seep into the open ground which will help protect neighbors from flooding during high rain events.

Scope of Work (describe in detail what you are planning to do):

The scope of work for this project is to acquire the Smith residence located at 123 Main Street. Anytown, FL 32456, demolish the structure, remove debris, abandon the well, and septic tank, disconnect all utilities and conduct site restoration. The land will be converted to open space and deed restricted as set forth in FEMA program requirements as described in 44 CFR 206.434 (e) The completed work shall comply with all Federal, State, and Local Rules and Regulations.



Application – Location

Section III - Project Location (Fully describe the location of the proposed project.)

| Δ | | ς | iŧ | ۵ |
|---|----|---|----|---|
| _ | ٠. | | | = |

| 1. | Describe the physical location of this project, including street numbers (or neighborhoods) and project site zip code(s). Provide precise longitude and latitude coordinates for the site utilizing a hand-held global positioning system (GPS) unit or the equivalent: |
|----|---|
| | Location: Address(s): 123 Main St, Anytown, FL GPS coordinates (decimal degree format): 28.40000, -82.50000 Project Zip Code(s): 32456 |
| 2. | Title Holder: Acme Home Property Management Inc. |
| 3. | Is the project site seaward of the Coastal Construction Control Line (CCCL)? 🔲 Yes 🔯 No |
| 4. | Provide the number of each structure type (listed below) in the project area that will be affected by the project Include all structures in project area. |
| | Residential property: Businesses/commercial property: Char: Public buildings: Schools/hospitals/houses of worship: |

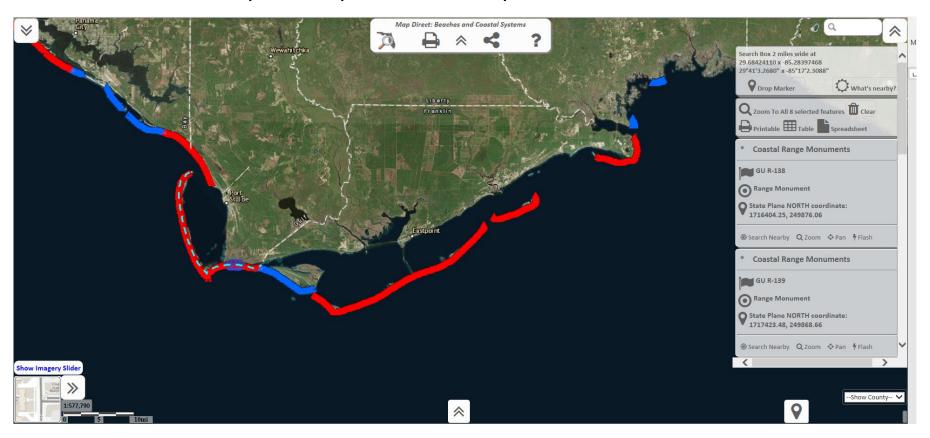
To determine if the project area is seaward of the CCCL go to

http://ca.dep.state.fl.us/mapdirect/?focus=beaches



FDEP Beaches and Coastal Systems

http://ca.dep.state.fl.us/mapdirect/?focus=beaches





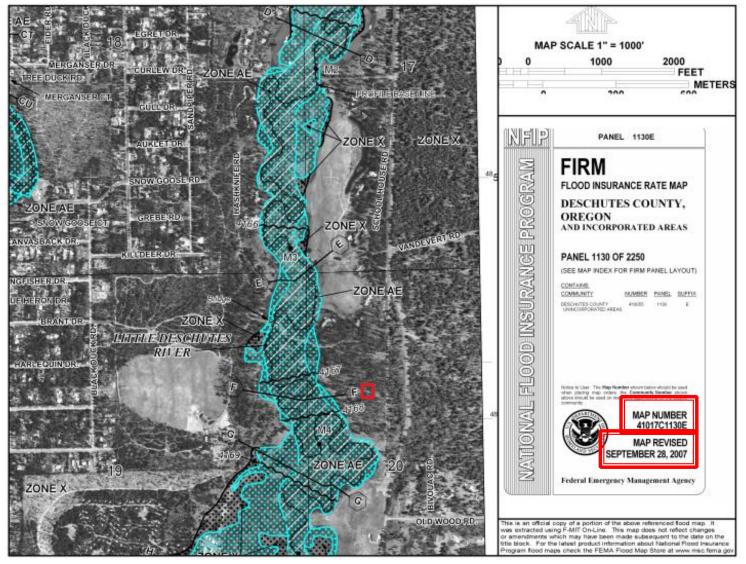
Application - FIRM

B. Flood Insurance Rate Map (FIRM) Showing Project Site

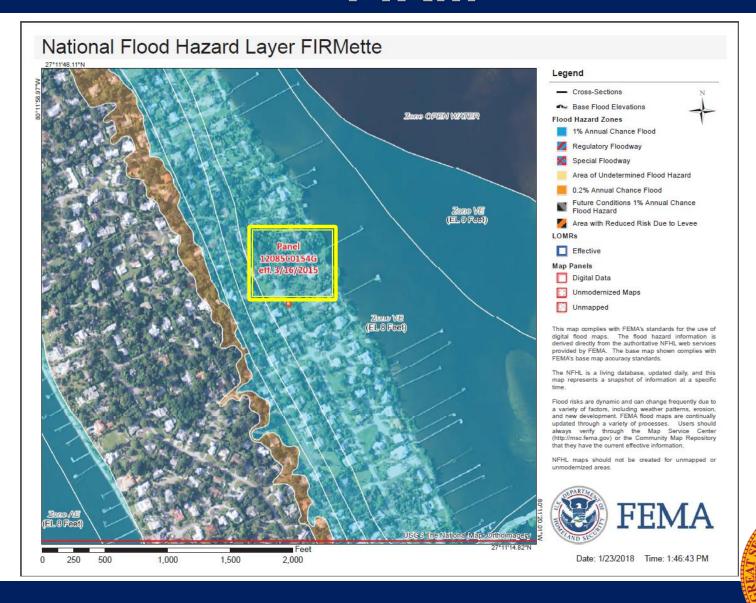
| 1. | Attach one (1) copy of the FIRM map, a copy of the panel information from the FIRM, and, if available, the Floodway Map. FIRM maps are required for this application (if published for your area). Also, all attached maps must have the project site and structures clearly marked on the map. FIRMs are typically available from your local floodplain administrator who may be located in a planning, zoning, or engineering office. Maps can also be ordered from the Map Service Center at 1-800-358-9616. For more information about FIRMs, contact your local agencies or visit the FIRM site on the FEMA Webpage at https://msc.fema.gov/portal . | | | | | | | | |
|--------|---|----------|-----------------------------------|--|--|--|--|--|--|
| 2. Usi | Using the FIRM, determine the flood zone(s) of the project site (Check all zones in the project area) (See FIRM legend for flood zone explanations) (A Zone must be identified) | | | | | | | | |
| | VE or V 1-30 | \times | AE or A 1-30 | | | | | | |
| | AO or AH | | A (no base flood elevation given) | | | | | | |
| | B or X (shaded) | | C or X (unshaded) | | | | | | |
| | Floodway | | | | | | | | |
| | Coastal Barrier Resource Act (CBRA) Zone (Federal regulations strictly limit Federal funding for projects in this Zone; please coordinate with your state agency before submitting an application for a CBRA Zone project). | | | | | | | | |
| 3. | If the FIRM Map for your area is not published, please attach a copy of the Flood Hazard Boundary Map (FHBM) for your area, with the project site and structures clearly marked on the map. | | | | | | | | |
| 4. | Attach a copy of a Special Flood Hazard Area Flood Ins | sura | nce Assurance(s). | | | | | | |



FIRM



FIRM



FIRM

- Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE, and V
 - Consult with local floodplain admistrator
 - Proof of consultation required prior to project approval
 - FEMA Floodplain Administrator List can be found on floridadisaster.org
 - Public Notice Required (a draft may be provided with application)



Application – Maps and Photographs

C. City or County Map with Project Site and Photographs

- Attach a copy of a city or county scale map (large enough to show the entire project area) with the project site and structures marked on the map.
- 2. Attach a USGS 1:24,000 TOPO map with project site clearly marked on the map.
- 3. For acquisition or elevation projects, include copy of Parcel Map (Tax Map, Property Identification Map, etc.) showing each property to be acquired or elevated. Include the Tax ID numbers for each parcel, and Parcel information including year built and foundation.
- 4. Attach photographs (at a minimum 4 photographs) for each project site per application. The photographs should be representative of the project area, including any relevant streams, creeks, rivers, etc. and drainage areas that affect the project site or will be affected by the project, and labeled. For each structure, please include the following angles: front, back and both sides.

Please provide all of these items **DIGITALLY**, if possible



- Attach a copy of a city or county scale map with project site and structures marked
 - Google Earth
 - Google Maps: https://www.google.com/maps
 - NEPA Assist
 http://nepassisttool.epa.gov/nepassist/entry.aspx





Drainage Location Map Example



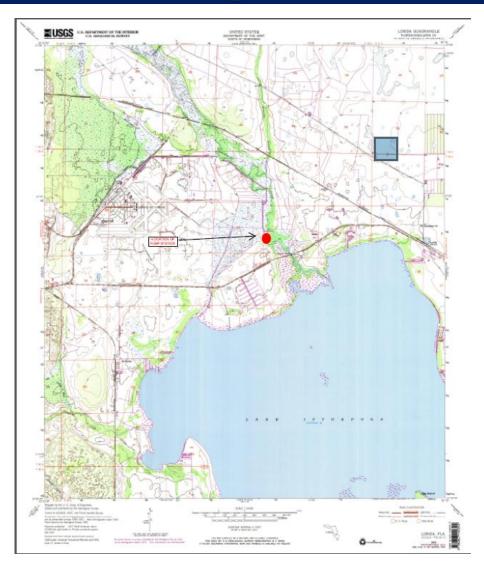


Location Map Example Demolition



- Attach USGS TOPO map with project site clearly marked
 - Google Earth
 - NEPA Assist
 - USGS The National Map Viewer: http://viewer.nationalmap.gov/viewer/





TOPO Map Example Demolition



- For acquisition or elevation projects, include copy of Parcel Map
 - Local Property Appraiser's office





- Attach photographs for each project site. Photographs should be representative of the project area, including any streams, creeks, rivers, etc. and drainage areas which affect the project site or will be affected by the project.
 - All four sides of structure
 - All areas of ground disturbance
 - Upstream/downstream (drainage)
 - Dry Conditions





Photograph #1 – Existing Subdivision control structure (upstream view).



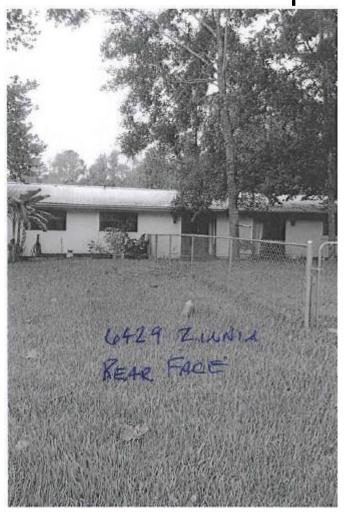
Photograph #2 – Existing Subdivision control structure (downstream view).

Examples of Good Photographs Demolition and Drainage





Examples of Bad Photographs









Application – Section V

Section V. Environmental Review and Historic Preservation Compliance

(NOTE: This application cannot be processed if this section is not completed.)

Because the HMGP is a federally funded program, all projects are required to undergo an environmental and historic preservation review as part of the grant application process. Moreover, all projects must comply with the National Environmental Policy Act (NEPA) and associated Federal, State, Tribal, and Local statutes to obtain funding. NO WORK can be done prior to the NEPA review process. If work is done on your proposed project before the NEPA review is completed, it will NOT be eligible for Federal funding.

A. The following information is required for the Environmental and Historic Preservation review:

All projects must have adequate documentation to determine if the proposed project complies with NEPA and associated statutes. The State Environmental Staff provide comprehensive NEPA technical assistance for Applicants, with their consent, to complete the NEPA review. The type and quantity of NEPA documents required to make this determination varies depending upon the project's size, location, and complexity. However, at a minimum, please provide the applicable documentation from this section to facilitate the NEPA compliance process.

- Detailed project description, scope of work, and budget/costs (Section II and Section IV of this application).
- 2. Project area maps (Section III, part B & C of this application)
- Project area/structure photographs (Section III, part C of this application).
- Preliminary project plans.
- Project alternatives description and impacts (Section V of the application).
- Please complete the applicable project worksheets.
 Documentation showing dates of construction are required for all structures.
- 7. Environmental Justice Attach documents regarding evaluation (required) and satisfactory resolution (if necessary) of Environmental Justice issues (Highly Disproportionate, Adverse Impact (effects) on Minority or Low Income Population). Documents can include public meeting records, media reports letters from interested persons and groups, studies on population, ethnic groups, quality of life, housing, economics, transportation, public services, schools, public health, recreation, voting, etc.
- Provide any applicable information or documentation referenced on the Information and Documentation Requirements by Project Type below.



Application – E.O. 12898

| B. Ex | ecutive Order ' | 12898; | Environmental | Justice for | Low | Income ar | nd Minorit | y Po | pulation: |
|-------|-----------------|--------|---------------|-------------|-----|-----------|------------|------|-----------|
|-------|-----------------|--------|---------------|-------------|-----|-----------|------------|------|-----------|

Are there low income or minority populations in the project area or adjacent to the project area?
 No X Yes; please describe any disproportionate and adverse effects to these populations:

No minority population in area: Anytown FL, 23.5% Florida 21.9%

Low income population in project area: Anytown FL 20.3% Florida 15.6%

No disproportionately high and adverse impact on low income population

- To help evaluate the impact of the project, please indicate below any other information you are providing.
 - Description of the population affected and the portion of the population that would be disproportionately and adversely affected. Please include specific efforts to address the adverse impacts in your proposal narrative and budget.
- Attached materials or additional comments: Please include pdf documentation from the US Census Quick Facts and American Factfinder's website of the project area (http://www.census.gov/).

Information accessed March 1, 2018 on American FactFinder



E.O. 12898

- Minority = % non-white (alone)
 - Minority population in area if % non-white is higher than state average
- Low Income = % of people below poverty line
 - Low income population in area if poverty level higher than state average.



E.O. 12898

U.S. Census Bureau – American Fact Finder

http://factfinder2.census.gov



Community Facts

Find popular facts (population, income, etc.) and frequently requested data about your community.

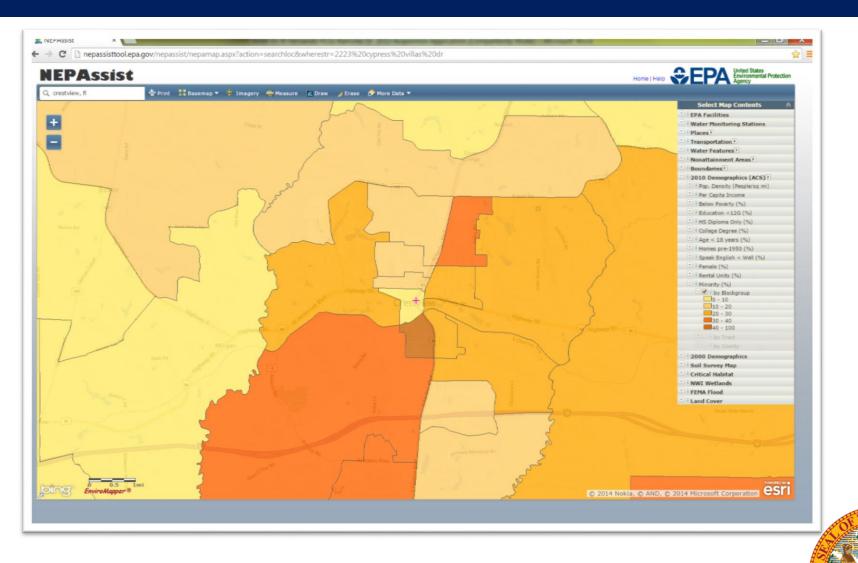
Enter a state, county, city, town, or zip code:



- Guided Search
- Advanced Search
- Download Center



NEPA Assist Tool http://nepassisttool.epa.gov/



Application- Tribal Consultation

C. Tribal Consultation (Information Required)

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effect of their undertakings on historic properties. The NHPA requires that agencies must complete this process prior to the expenditure of any Federal funds on the undertaking. A Tribal Consultation is required for any project disturbing ground or moving soil, including but not limited to: drainage projects; demolition; construction; elevation; communication towers; tree removal; utility improvements.

 Describe the current and future use of the project location. A land use map may be provided in lieu of a written description.

The current land use of the project location is residential with low intensity. Future land use is residential with medium intensity. A future land use map has been provided.

2. Provide information on any known site work or historic uses for project location.

The single family residence was built in 1984 in a newly developed community. There are no previous known use of the project area. All previous site work includes the building and maintenance of a private, single family, residential home.

Attach a copy of a city or county scale map (large enough to show the entire project area) with the horizontal limits (feet) and vertical depths (square feet) of all anticipated ground disturbance of 3 inches or more.



Tribal Consultation



Ground disturbance map should include:

Horizontal limits (ft.) and vertical depth of all anticipated ground disturbance.

Street address and geographic latitude/ longitude of the construction area.

geographic latitude/ longitude of staging areas.



Activities That May Require Tribal Consultation

- Any project with 3" or more of ground disturbing activities, including but not limited to:
 - Drainage projects
 - Demolition
 - Elevation
 - Communication Towers
 - Construction
 - Tree Removal
 - Utility improvements



Application - Alternative Actions

D. Alternative Actions (Information Required)

The NEPA process requires that at least two alternative actions be considered that address the same problem/issue as the proposed project. In this section, list **two feasible** alternative projects to mitigate the hazards faced in the project area. One alternative is the "No Action Alternative".

1. No Action Alternative

Discuss the impacts on the project area if no action is taken.

If no action is taken the structure at 123 Main St. Anytown, FL will continue to experience flooding from storm events. Also, other structures around the house will be affected since there will be no open space for flood waters to seep into.



Alternative Actions

2. Other Feasible Alternative

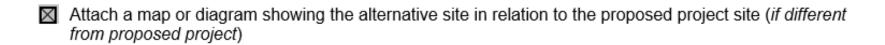
Describe a feasible alternative project that would be the next best solution if the primary alternative is not accomplished. This could be an entirely different mitigation method or a significant modification to the design of the current proposed project. Please include a Scope of Work, engineering details (if applicable), estimated budget and the impacts of this alternative. Complete *all* of parts **a-e** (below).

a. Project Description for the Alternative

Describe, in detail, the alternative project, and explain how the alternative project will solve the problem(s) and/or provide protection from the hazard(s). Also, provide pros and cons for this alternative and a reason for why it was not selected.

Another feasible alternative is to elevate the structure. This will keep the structure from flooding from rain events, however, this action will not allow the same amount of seepage and may not protect the neighbors as effciently as the open space project will.

Project Location of the Alternative (describe briefly, if different from proposed project)





Alternative Actions

c. Scope of Work for Alternative Project

The scope of work for this project is to elevate the existing residence located at 123 Main St. The structure was built in 1984 and is a single family residence located in the AE flood zone. The structure will be elevated three (3) feet above the established Base Flood Elevation of 10 feet. The elevated structure should comply with all applicable local, state, and federal code and permitting requirements. The areas below the lowest floor must be used solely for parking of vehicles. building access or storage.

d. Impacts of Alternative Project

Discuss the impact of this alternative on the project area. Include comments on these issues as appropriate: Environmental Justice, Endangered Species, Wetlands, Hydrology (Upstream and Downstream Surface Water Impacts), Floodplain/Floodway, Historic Preservation and Hazardous Materials.

No additional impacts will be created with the elevation of the structure. The structure will remain in the floodplain.



Alternative Actions

e. Estimated Budget/Costs for Alternative Project

In this section, provide details of all the estimated costs of the alternative project (round figures to the nearest dollar). A lump sum budget is acceptable.

| Materials: | |
|-------------------------------|---------|
| Labor: | |
| Fees: | |
| Total Estimated Project Cost: | \$ 0.00 |



Other Documentation

- Permits / Concurrence Letters
 - Most Common:
 - USACE Nationwide Permit
 - Water Management District (WMD) Environmental Resource Permit (ERP)
 - FDEP NPDES NOI, NOT, SWPPP (closeout)
 - FWC/USFWS if in rural area
 - Floodplain Administrator
 - National Marine Fisheries Service if next to coastline
 - National Resource Conservation Service
 - State Historic Preservation Officer* (SHPO)
- Public Notice (as applicable)



NEPA Regulatory Agencies

State:

- Florida Department of Environmental Protection
- Florida Water Management Districts (5)
- Florida Fish and Wildlife Conservation Commission
- Florida Department of Agriculture and Consumer Services
- State Historic Preservation Office



NEPA Regulatory Agencies

Federal:

- •U.S. Army Corps of Engineers (USACE)
- ▶U.S. Fish and Wildlife Service
- NOAA/National Marine Fisheries Service
- •U.S. Environmental Protection Agency
- Natural Resources
 Conservation Service

- National Park Service
- U.S. Forest Service
- Federal Aviation Administration
- Tribal Historic Preservation Office
- Advisory Council on Historic Preservation



USACE

- If affecting or potential to affect a wetland area a USACE permit or no permit required (NPR) must be provided.
 - NEPA Assist Tool
 - National Wetlands Inventory http://www.fws.gov/wetlands/Data/Mapper.html





USACE

- If within 200' of waterbody (any waterbody including streams, creeks, rivers, ponds, lakes, gulf, etc.) you must have:
 - USACE Permit or notification from the Regulatory Branch that no permit is required (NPR).
 - Photographs of project in relation to the waterbody





Public Notice

- Required for projects:
 - With a significant impact to the community and environment
 - Impact floodplain
 - Impact wetlands
- Use State/FEMA Format
 - Publish on Sunday and weekdays
 - 30 day comment period from the public





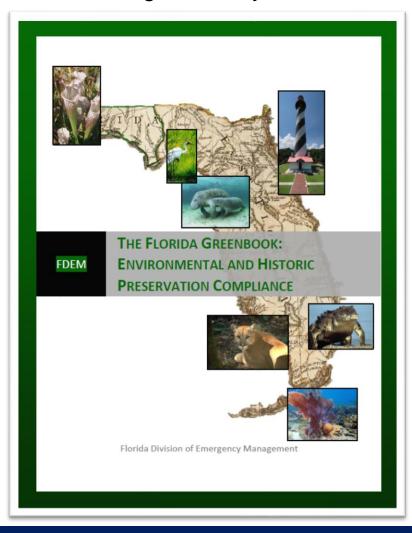
Things that can TERMINATE a Project

- Starting BEFORE environmental review is complete.
- Assuming it does not have to comply with environmental laws if statutorily excluded.
- Not providing a defined scope of work (SOW) and project location.
- Changing SOW and not informing the State/FEMA.



Other Resources

http://www.floridadisaster.org/Recovery/documents/FLGreenbook.pdf





QUESTIONS?



Contacts

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