



Hazard Mitigation Grant Program State-Wide Applicant Briefing

Hurricane Michael
(DR-4399)



General Webinar Info

- Audio
 - Call-in: 1-888-585-9008
 - Conference Room: 178-098-715
- **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.
- All questions asked during the webinar will be answered either at the end or in the meeting minutes afterwards.



Welcome and Introductions



THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT



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



Preparedness

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

Response

Saving life and property during and immediately after a disaster



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

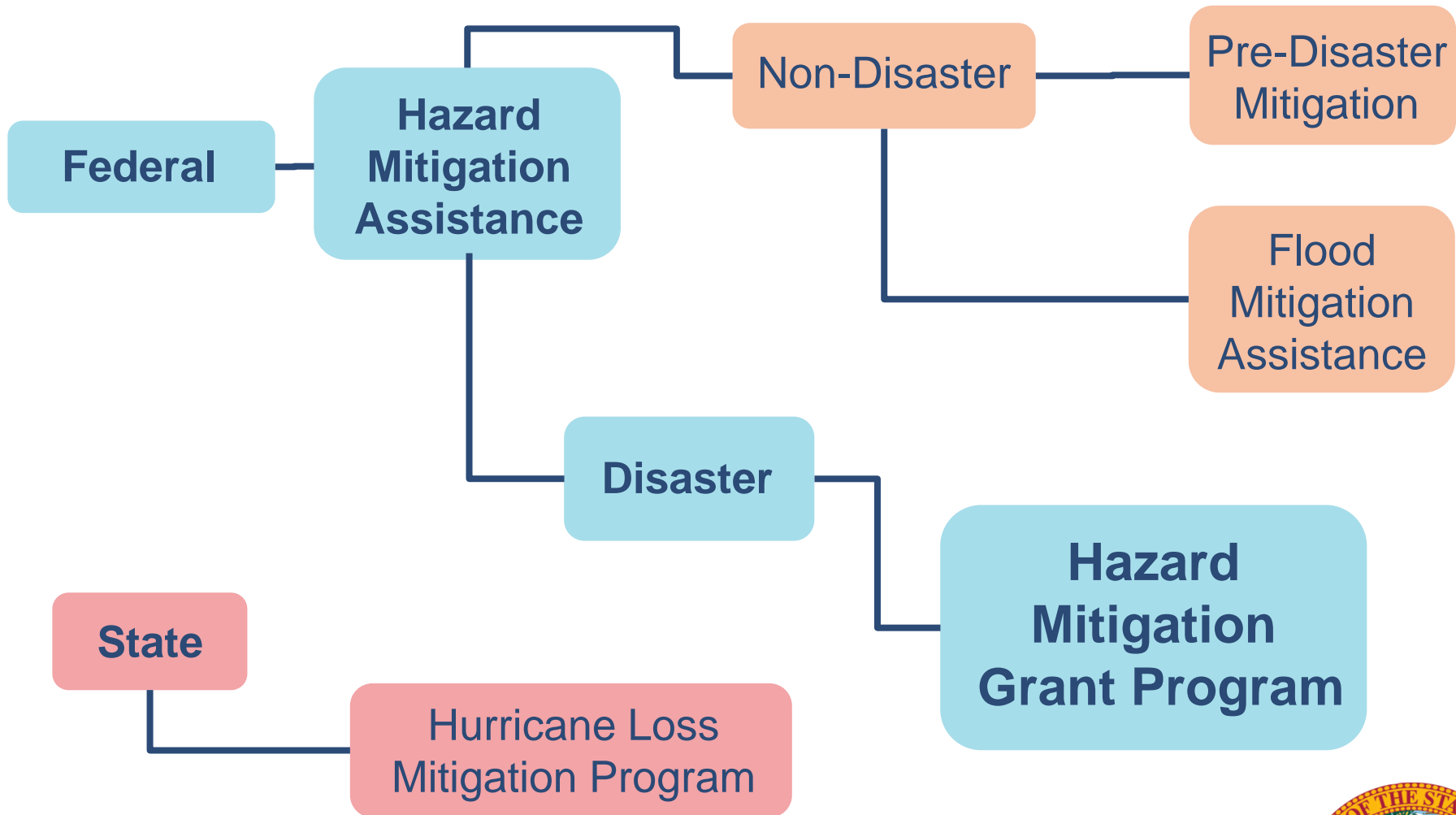
Who can
apply?

What are the
different
funding options
available?

Am I
eligible?



Mitigation Funding Programs



Who Can Apply?

Private Non-Profit Organizations

Examples: Medical, Residential Health Care Facilities, Educational, Emergency Utility, Houses of Worship*

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

Government Entities

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

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

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

Tier
Funding
Process

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 event-site 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 fire-resistant 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 non-residential 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



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)

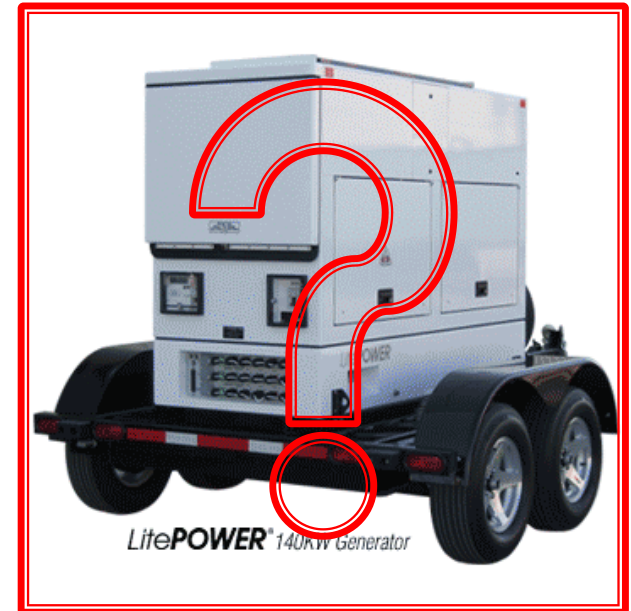
- Be cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster. The grantee must demonstrate this by documenting that the project:
 - Addresses a repetitive problem or a significant risk
 - Will not cost more than the anticipated value 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 and Non-Federal Rep. Status for EHP Reviews
 - 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-4399: TBD**

- 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-4399-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 after 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

- Lump sum is not acceptable
 - 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.

1.	Estimated Federal Share	_____	_____ % of Total	(Maximum 75%)
2.	Non-Federal Share	_____	_____ % of Total	(In-Kind**)
3.	Estimated Local Share	_____	_____ % of Total	(Cash)
4.		_____	_____ % of Total	(Global Match***)
5.		_____	_____ % of Total	(Global Match***)
6.	Other Agency Share <i>(Identify Non-Federal Agency and availability date)</i>	_____	_____ % of Total	
<hr/>				
7.	Total Funding sources from above	<u> \$ 0.00 </u>	0.00% Total	(Equals 100%)

** Identify proposed eligible activities directly related to project to be considered for In-Kind services in Section IV.B. Labor.

*** Separate project applications must be submitted for each Global Match project.

Global Match Project Number and Title: _____

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



Questions?



Application Review

PROJECT MANAGEMENT



ENGINEERING



ENVIRONMENTAL

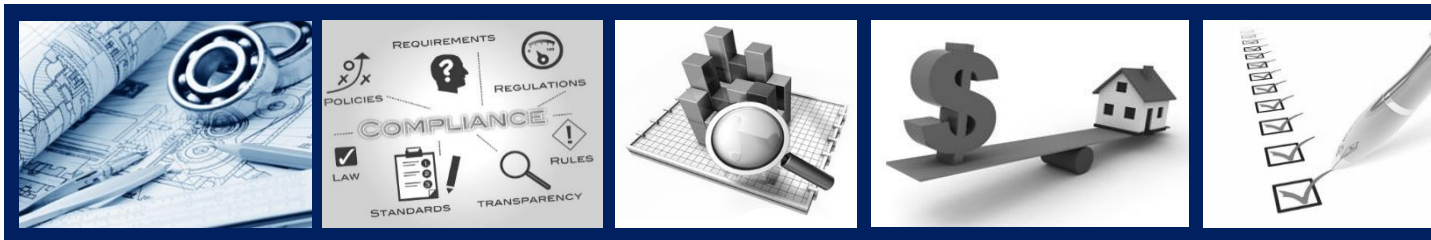


State Mitigation
TECHNICAL UNIT



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)

$$\frac{\text{Benefits}}{\text{Project Cost}} = 1.0 \text{ or greater (Ratio)}$$



Cost Effectiveness- BCA

▶ TYPICAL BENEFITS



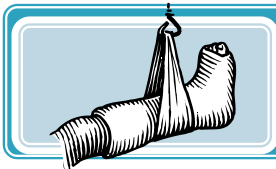
Avoided Physical Damages



Avoided Emergency Response Costs



Avoided Loss-of-Function Impacts



Avoided Injuries and Casualties



Non-Traditional 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 
Associate Administrator
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 SFHA, using the FIRM or best available data. If any part of the structure lies within the 100-year SFHA, 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 (BFE) can be provided for each structure. If the FFE is lower than the BFE, 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

Elevations under
\$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
500 C Street, SW
Washington, DC 20472



FEMA

March 1, 2018

MEMORANDUM FOR: Regional Administrators
Regions I-X

ATTENTION: Regional Mitigation Division Directors
Hazard Mitigation Assistance Branch Chiefs

FROM: Michael Grimm 
Assistant Administrator, Mitigation
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 years.

Mitigation projects meeting the above criteria are considered cost effective if the *mitigation project costs less than 10% 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

www.fema.gov

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

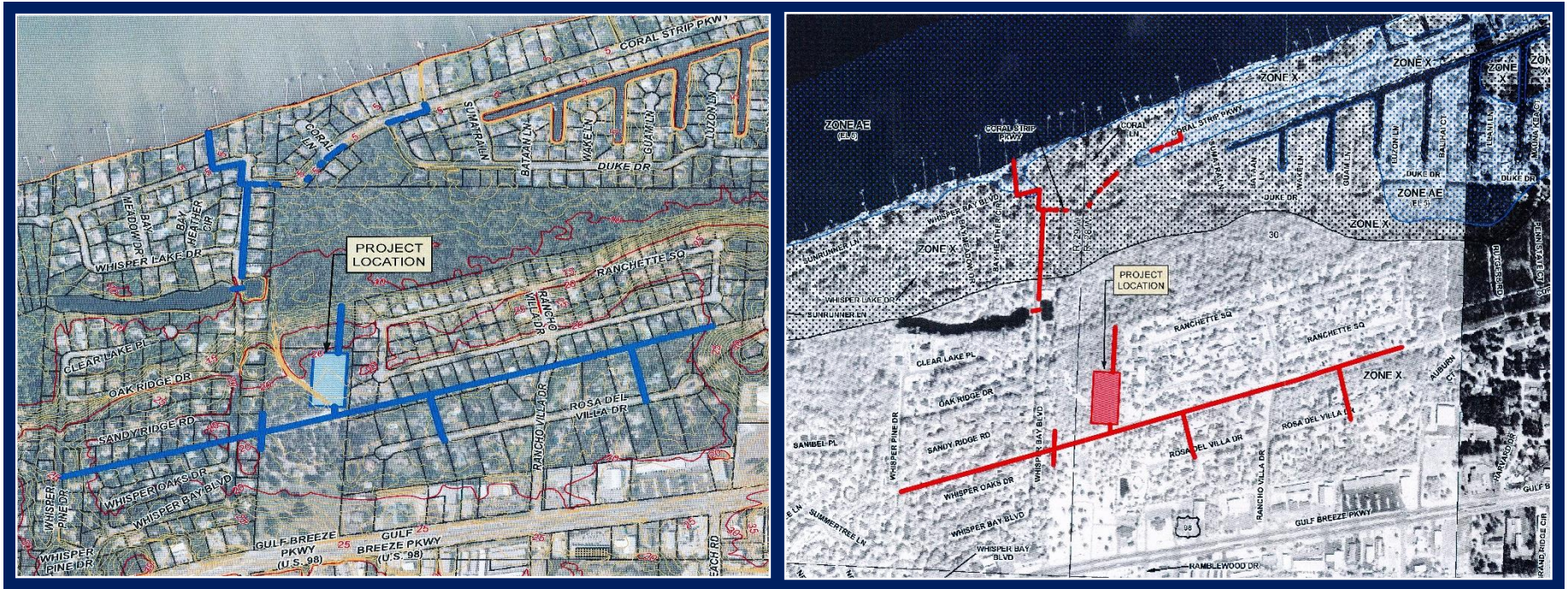
What do we look for on your application?

- ▶ 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

WIND RETROFIT WORKSHEET

For preliminary Benefit Cost Analysis conducted by the State Mitigation Technical Unit

Applies for the following mitigation activities: **WIND RETROFIT** which includes Opening Protection, Load Path, Roof, Code Plus activities. For assistance, contact the State of Florida Mitigation Technical Unit.

IMPORTANT: This worksheet is required as part of your application. The State of Florida Mitigation Technical Unit will conduct a Benefit Cost Analysis (BCA) for your project.

Project Name _____
 Applicant _____
 Point of Contact _____

FLOOD CONTROL - DRAINAGE IMPROVEMENT WORKSHEET

For preliminary Benefit Cost Analysis conducted by the State Mitigation Technical Unit

Applies for the following mitigation activities: **ACQUISITION, ELEVATION, DRY FLOOD PROOFING, DRAINAGE IMPROVEMENTS, FLOOD CONTROL, REPAIRS, FLOODPLAIN AND STREAM RESTORATION AND FLOOD DIVERSION**. For assistance, contact the State of Florida Mitigation Technical Unit.

IMPORTANT: This worksheet is required as part of your application. The State of Florida Mitigation Technical Unit will conduct a Benefit Cost Analysis (BCA) for your project.

Project Name _____
 Applicant _____
 Point of Contact _____

GENERATOR WORKSHEET

For preliminary Benefit Cost Analysis conducted by the State Mitigation Technical Unit

Applies for the following mitigation activities: **PERMANENT GENERATORS, and PERMANENT EMERGENCY STANDBY PUMPS**. For assistance, contact the State of Florida Mitigation Technical Unit.

IMPORTANT: This worksheet is required as part of your application. The State of Florida Mitigation Technical Unit will conduct a Benefit Cost Analysis (BCA) for your project. The following information is needed to evaluate cost effectiveness. Once a preliminary BCA is completed, the results will indicate your project's expected performance.

SECTION I - PROJECT GENERAL INFORMATION

Project Name _____
 Applicant _____
 Point of Contact _____
 Name _____
 Address (Please include City, State and Zip code) _____
 Phone number _____
 Email _____

SECTION II - STRUCTURE GENERAL INFORMATION

HMA Program (HMA, FEMA, FIRM, etc.) _____
 Select the type of structure to be mitigated: Critical Facility Building Utility/Infrastructure Other _____
 Address _____
 In case of multiple structures, please provide a list of buildings to be mitigated with the project.
 City, State and Zip Code _____
 County _____
 Is this a historical building? Yes No Other _____
 Year Built: _____
 In the case of multiple structures, please provide the year of construction for the oldest structure in the average age of the structures. If you cannot determine the year of construction, please provide the best estimate.

SECTION III - HAZARD / MITIGATION INFORMATION

Please select the hazard that will be mitigated with this project:
 Accretion Elevation Dry Flood Proofing Drainage
 Inlet Control Measures Flood and Storm Resistor Flood Diversion
 Other Please describe: _____

HURRICANE SAFE ROOM WORKSHEET

For preliminary Benefit Cost Analysis conducted by the State Mitigation Technical Unit

Applies for the following mitigation activities: **NEW SAFE ROOMS AND RETROFIT OF EXISTING STRUCTURE**. For assistance, contact the State of Florida Mitigation Technical Unit.

IMPORTANT: This worksheet is required as part of your application. The State of Florida Mitigation Technical Unit will conduct a Benefit Cost Analysis (BCA) for your project.

Project Name _____
 Applicant _____
 Point of Contact _____

WILDFIRE WORKSHEET

For preliminary Benefit Cost Analysis conducted by the State Mitigation Technical Unit

Applies for the following mitigation activities: **DEFENSIBLE SPACE, HAZARDOUS FUELS REDUCTION, IGNITION RESISTANT CONSTRUCTION, OTHER ACTIVITIES RELATED**. For assistance, contact the State of Florida Mitigation Technical Unit.

IMPORTANT: This worksheet is required as part of your application. The State of Florida Mitigation Technical Unit will conduct a Benefit Cost Analysis (BCA) for your project. The following information is needed to evaluate cost effectiveness. Once a preliminary BCA is completed, the results will indicate your project's expected performance.

Project Name _____
 Applicant _____
 Point of Contact _____

DROUGHT WORKSHEET

For preliminary Benefit Cost Analysis conducted by the State Mitigation Technical Unit

Applies for the following mitigation activities: **WATER ACQUIFER AND STORAGE RESTORATION, OTHER ACTIVITY RELATED**. For assistance, contact the State of Florida Mitigation Technical Unit.

IMPORTANT: This worksheet is required as part of your application. The State of Florida Mitigation Technical Unit will conduct a Benefit Cost Analysis (BCA) for your project. The following information is needed to evaluate cost effectiveness. Once a preliminary BCA is completed, the results will indicate your project's expected performance.

SECTION I - PROJECT GENERAL INFORMATION

Project Name _____
 Applicant _____
 Point of Contact _____
 Name _____
 Address (Please include City, State and Zip Code) _____
 Phone number _____
 Email _____

SECTION II - STRUCTURE GENERAL INFORMATION

HMA Program (HMA, FEMA, FIRM, etc.) _____
 Address _____
 In case of multiple structures, please provide a list of buildings to be mitigated with the project.
 City, State and Zip Code _____
 County _____

SECTION IV - PROJECT COST INFORMATION

Mitigation Project Cost \$ _____
 Annual Maintenance Cost \$ _____
 In the case of multiple structures, please provide the year of construction for the oldest structure in the average age of the structures. If you cannot determine the year of construction, please provide the best estimate.

HMA Program (HMA, FEMA, FIRM, etc.) _____

Provide the following information:

Address _____

In case of multiple structures, please provide a list of buildings to be mitigated with the project.

City, State and Zip Code _____

County _____

Is this a historical building? Yes No Other _____

Year Built: _____

In the case of multiple structures, please provide the year of construction for the oldest structure in the average age of the structures. If you cannot determine the year of construction, please provide the best estimate.

Annual Maintenance Cost \$ _____

Relates to the project.

Mitigation Project Cost \$ _____

A lump sum cost for the project.

Annual Maintenance Cost \$ _____

Relates to the project.



Project Worksheets - BCA

FLORIDA DIVISION OF EMERGENCY MANAGEMENT
Mitigation Bureau - Technical Unit
October 2017

FLOOD CONTROL - DRAINAGE IMPROVEMENT WORKSHEET

for preliminary Benefit Cost Analysis conducted by the State Mitigation Technical Unit

Applies for the following mitigation activities: **ACQUISITION, ELEVATION, DRY FLOOD PROOFING, DRAINAGE IMPROVEMENTS, FLOOD CONTROL MEASURES, FLOODPLAIN AND STREAM RESTORATION AND FLOOD DIVERSION.** For assistance, contact the State of Florida Mitigation Technical Unit.

IMPORTANT: This worksheet is required as part of your application. The State of Florida Mitigation Technical Unit will conduct a Benefit Cost Analysis (BCA) for your project and the following information is needed to evaluate cost effectiveness. Once a preliminary BCA is completed, the reviewer will contact you to collect support documentation.

SECTION I - PROJECT GENERAL INFORMATION

Project Name	
Applicant	
Point of Contact	Name:
	Address (Please include City, State and Zip Code):

HMA Program (FMA, PDM, HMGP, etc.)

SECTION I - PROJECT GENERAL INFORMATION

Select the type of critical facility to be protected:

Address _____
In case of multiple sites, attach separate worksheets for each site.

City, State and Zip Code _____

County _____

Is this a historical building? Yes No

Year Built _____ Source (EX: Property Appraiser): _____

In the case of utility infrastructure, provide the year of construction of the oldest structure or the average age of the structure, if improvements have been completed over the years, due to land development.

Page 1 of 5

WORKSHEET I

for preliminary Benefit Cost Analysis conducted by the State Mitigation Technical Unit

Applies for the following mitigation activities: **ACQUISITION, ELEVATION, DRY FLOOD PROOFING, DRAINAGE IMPROVEMENTS, FLOOD CONTROL MEASURES, FLOODPLAIN AND STREAM RESTORATION AND FLOOD DIVERSION.** For assistance, contact the State of Florida Mitigation Technical Unit.

IMPORTANT: This worksheet is required as part of your application. The State of Florida Mitigation Technical Unit will conduct a Benefit Cost Analysis (BCA) for your project and the following information is needed to evaluate cost effectiveness. Once a preliminary BCA is completed, the reviewer will contact you to collect support documentation.

SECTION I - PROJECT GENERAL INFORMATION

Project Name	
---------------------	--



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.


Construction Cost Estimate Worksheet				
Applicant Name		Project Name		
125 Fountain Avenue, L.P.		Liberty Apartments		
Trade/Item	Unit	Quantity	Unit Cost	Total
Division 1: General Requirements				
1 Mobilization	LS		\$20,000.00	\$20,000.00
2 Temporary facilities	LS		\$30,000.00	\$30,000.00
3 Sidewalk Bridge/Safety	LS	1	\$90,000.00	\$90,000.00
4 Dumpsters	EA	85	\$1,100.00	\$93,500.00
5 Engineering and Testing	LS	1	\$75,000.00	\$75,000.00
6 Plans and Specs	LS	1	\$15,000.00	\$15,000.00
7 General Labor	LS		\$80,500.00	\$80,500.00
8				\$0.00
9				\$0.00
10				\$0.00
Division 1 Total				\$404,000.00
Division 2: Sitework				
1 Surveying	LS	1	\$15,000.00	\$15,000.00
2 Clear and grub/drainage	LS	2	\$15,000.00	\$30,000.00
3 Excavation/obstructions	CY	3964	\$50.00	\$198,200.00
4 Shoring/ shoring engineer	LS	775	\$40.00	\$31,000.00
5 Backfilling/Misc Machine days	Days	25	\$1,500.00	\$37,500.00
6 Plantings	EA	90	\$383.00	\$34,470.00
7 Paving/Pavers/fencing/curbs			\$110,678.00	\$110,678.00
8 Sidewalk with removal			88,652	\$88,652.00
9 Site furnishings/play equipment/safety surface			\$54,500.00	\$54,500.00
10				\$0.00
Division 2 Total				\$600,000.00
Division 3: Concrete				
1 Perimeter walls	CY	145	\$550.00	\$79,750.00
2 Interior Walls	CY	85	\$550.00	\$46,750.00
3 Perimeter and interior footings/stairs/misc. footings	CY	414	\$450.00	\$186,300.00
4 Misc. Concrete/rat slab	CY	56	\$400.00	\$22,400.00
5 Precast Concrete Plank	SF	49118	\$15.00	\$736,770.00
6 Precast stairs	FLT	7	\$5,000.00	\$35,000.00
7 Edge stops	LF	5112	\$4.50	\$23,004.00
8 Rebar	LBS	36953	\$1.50	\$55,429.50
9 Pump days	EA	10	\$1,575.00	\$15,750.00
10				\$0.00
Division 3 Total				\$1,201,153.50
Division 4: Masonry				
1 Interior CMU Block	SF	9482	\$14.00	\$132,748.00
2 Exterior Block and Brick	SF	17420	\$31.00	\$540,020.00
3 Precast lintels, sills and bands	LF	2488	\$35.00	\$87,080.00
4 Grouting	SF	7073	\$3.00	\$21,219.00
5 Parapets	LF	575	\$130.00	\$74,750.00
6 Flashing/Scaffold Installation	LS	1	\$24,500.20	\$24,500.20
7 Washdown	LS	21613	\$1.50	\$32,419.50
8				\$0.00
9				\$0.00
10				\$0.00
Division 4 Total				\$912,736.70



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


Department of Public Works
 SANTA ROSA COUNTY, FLORIDA
 Milton, Florida 32583

AVIS WHITFIELD
 Director of Public Works
 6075 Old Bagdad Hwy.
 626-0191 • 994-5721 • 626-2221
 Fax 626-1331


Stephen L. Furman
 Assistant
 Public Works Director
 6075 Old Bagdad Hwy.
 626-0191 • 994-5721 • 626-2221

Chad Allen
 Departmental
 Building Maintenance/Construction
 P. O. Box 904
 626-1669 • 626-1877


Memorandum


From: Stephen L. Furman P.E.
 Sent: Thursday, March 5, 2015
 To: To Whom It May Concern
 Subject: Re: Ranchettes, Northridge and Whisper Bay Drainage Improvements

The Santa Rosa County Public Works Department will perform all necessary maintenance on the above HMGP Project at an expected cost of \$3,600.00 per year. Should additional information be needed, please do not hesitate to contact me.


 Stephen L. Furman P.E.
 Assistant Public Works Director
 Santa Rosa County
 StephenF@sanrosaflova.gov
 (850)981-7121

ATTACHMENT


Santa Rosa County Property Appraiser
 Gregory S. Brown, CFA



Parcel ID	Parcel Parcel	Block Parcel	PLM Definition	Assessed Value	Santa Rosa Item
0801015	2855 BAY WINDSOR A 1001 P	2855 BAY WINDSOR A 1001 P	Single-Family	\$110,200	0801015

Owner and Parcel Information

Owner: HUNTER WINDSOR A 1001 P
 Parcel Number: 2855 BAY WINDSOR A 1001 P
 The Owner: HUNTER WINDSOR A 1001 P
 Address: 2855 BAY WINDSOR A 1001 P
 City: Milton, FL 32583
 County: Santa Rosa County, FL
 State: FL
 Zip: 32583

Value Information

2014 Certified Value	2013 Certified Value	2012 Certified Value
\$110,200	\$110,200	\$110,200
Market Value	\$6,117	\$6,650
Extra Feature Value	\$75,083	\$103,550
Land Value	\$0	\$0
Land Agricultural Value	\$0	\$0
Agriculture (Official) Value	\$0	\$0
Land (Official) Value	\$110,217	\$116,850
Assessed Value	\$110,217	\$116,850
Market Value	\$75,083	\$103,550
Land Value	\$0	\$0
Land Agricultural Value	\$0	\$0
Land (Official) Value	\$110,217	\$116,850

Extra Feature Data

Description	Number of Items	Unit	Year	Enter Feature Value
SWAPING	1	141	1995	\$1,800
CORRAL	1	107	1995	\$1,800

Land Information

Item	Land Code	Description	Zoning	Area	Shape	Unit Type	Land Use	Land Value
1	000100	SPR	SPR	1.17	107	1	LT	\$24,000

Sale Information

Date	Sale Price	Interest	Sand Bank	Sand Page	Sale Qualification	Vendor or Empowered	Qualifier	Grantee
10-01-1998	\$ 170,000	Wholly Paid	000	000	Qualified	Empowered		HUNTER WINDSOR A 1001 P
08-01-1997	\$ 100,000	Wholly Paid	000	000	Qualified	Empowered		
05-01-1995	\$ 10,000	Wholly Paid	000	000	Qualified	Empowered		
07-01-1994	\$ 25,000	Wholly Paid	000	000	Qualified	Empowered		

Parcel and Block Search

Parcel ID	Block Parcel	Block Parcel	Block Definition	Parcel and Block Search	Santa Rosa Item
0801015	2855 BAY WINDSOR A 1001 P	2855 BAY WINDSOR A 1001 P	Single-Family		0801015

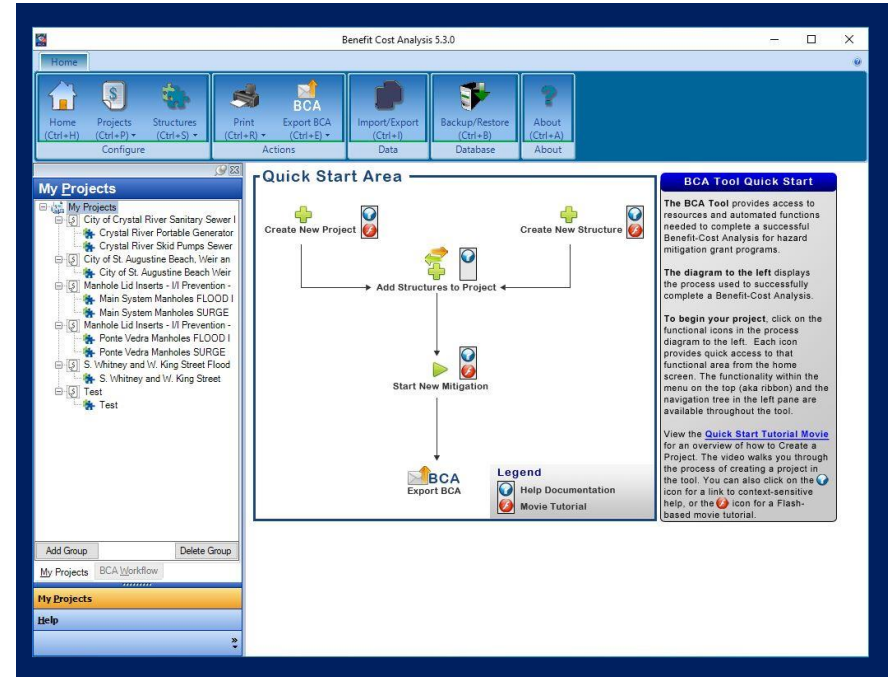
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BCA – Methodology

BENEFIT COST ANALYSIS METHODOLOGY

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



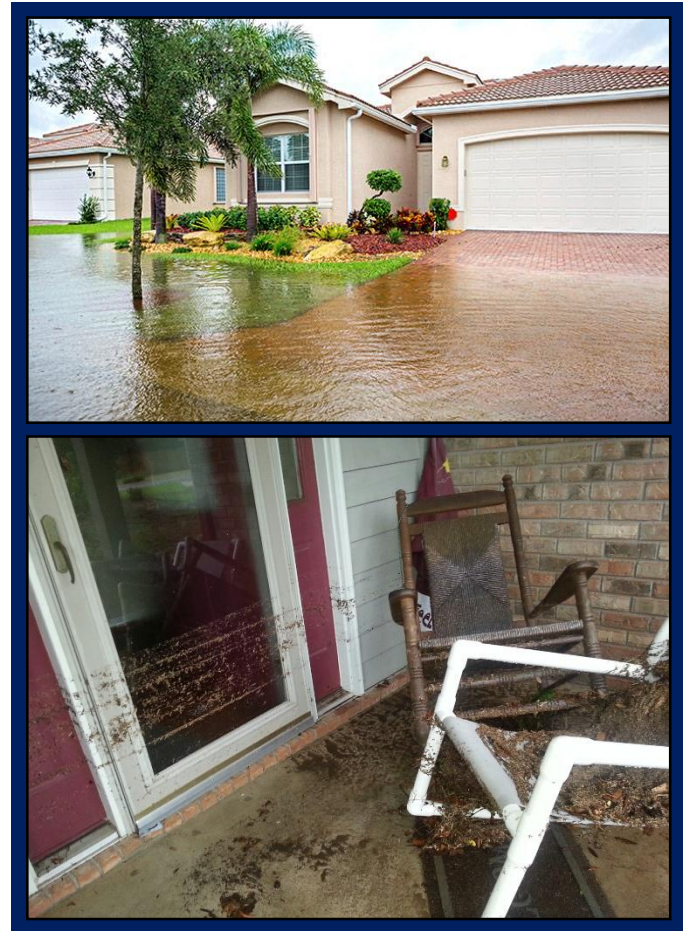
***In some cases historical and expected could be combined.**



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

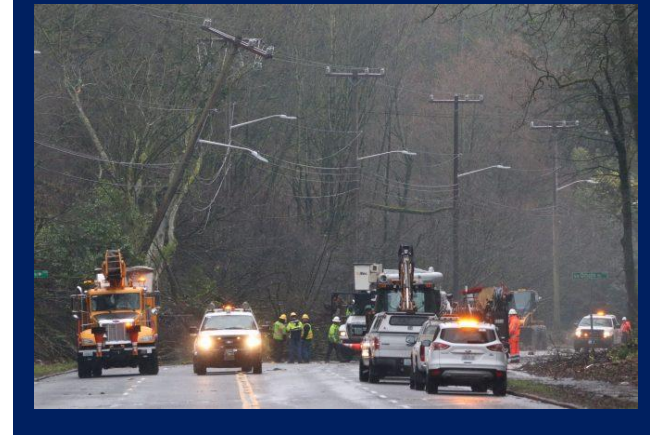
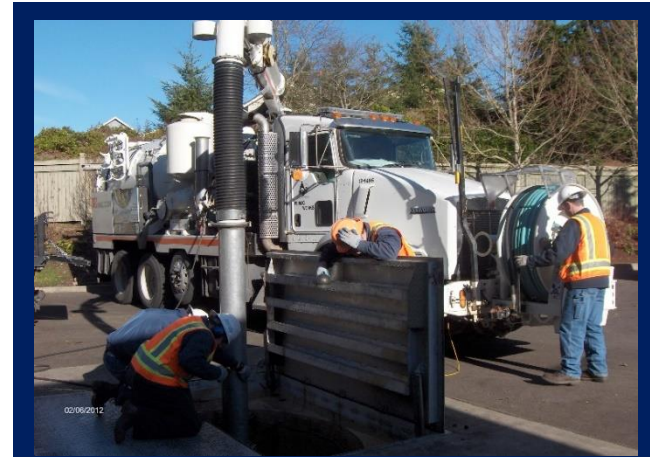


Worksheet – Historical Damages

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.

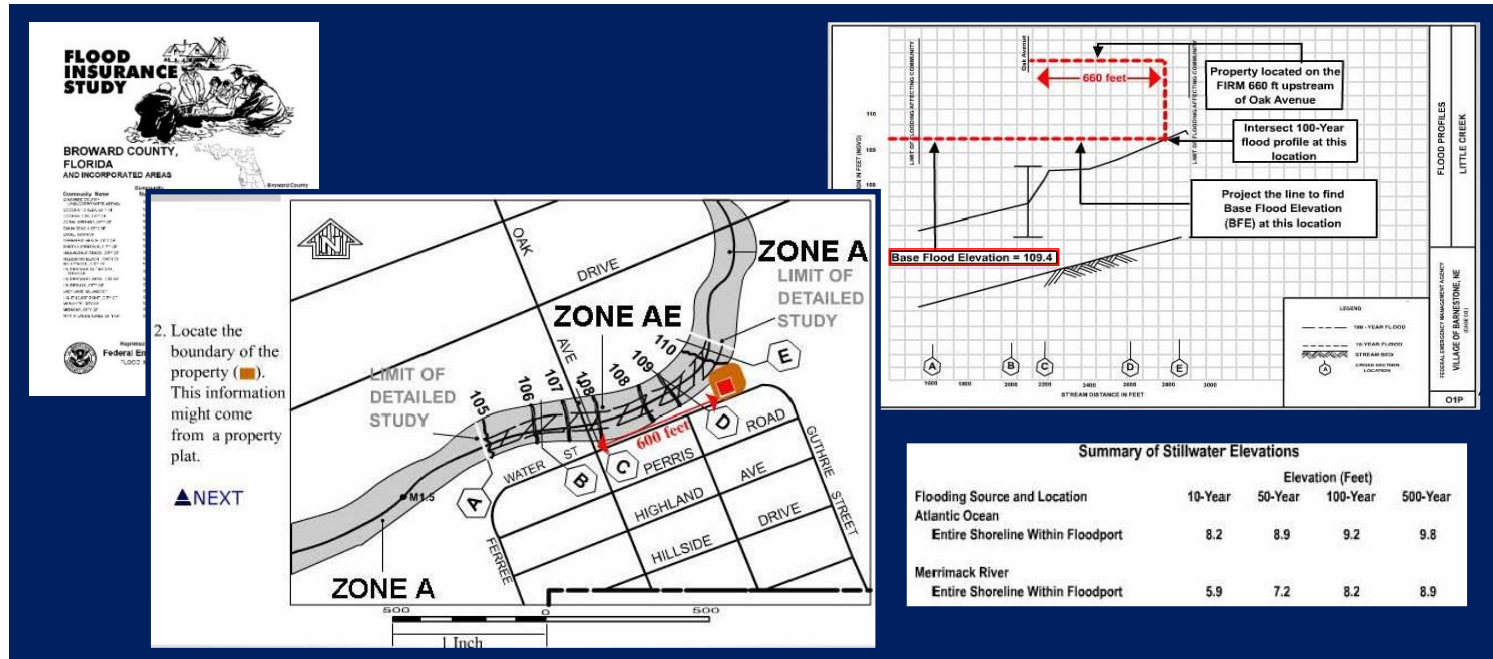
- ▶ Utility Infrastructure
 - ▶ Outages
 - ▶ Protective measures to avoid outages
 - ▶ Affected customers



Worksheet – Expected Damages

▶ EXPECTED DAMAGES

- ▶ Using FIS STUDY to demonstrate that property is at risk



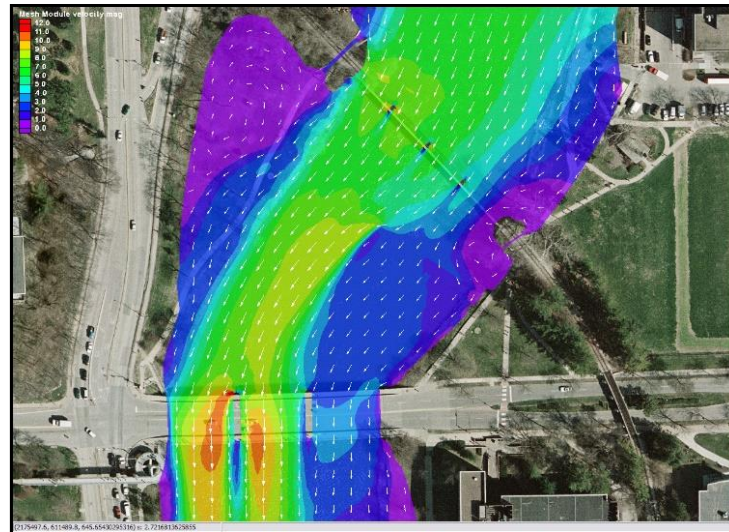
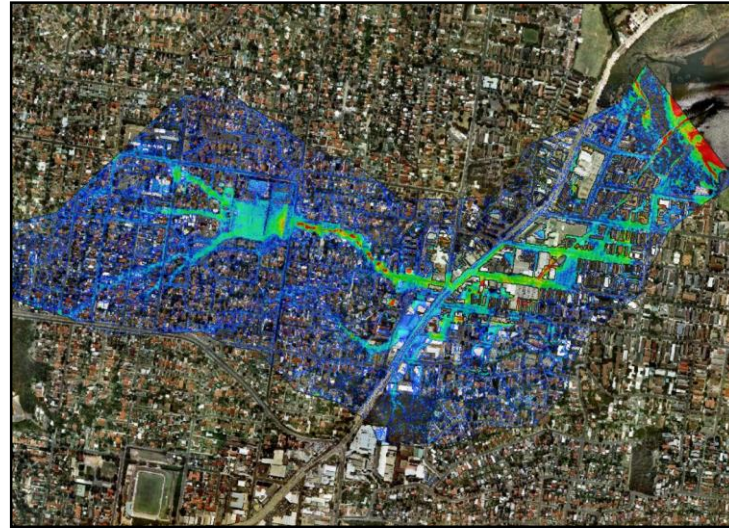
*to be used for specific structures in Coastal or Riverine areas



Worksheet – Expected Damages

Using H&H Study:

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



Worksheet – Expected Damages

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	FFE	Critical Duration Storm Frequency Elevations						
		2-Year	3-Year	5-Year	10-Year	25-Year	50-Year	100-Year
2998 Ranchette Square	17.73	14.87	15.13	15.29	15.44	15.73	15.91	16.01
3011 Ranchette Square	18.52	15.45	15.92	16.38	17.13	17.62	18.10	18.32
3012 Ranchette Square	18.16	15.45	15.92	16.38	17.13	17.62	18.10	18.32
3013 Ranchette Square	18.57	15.45	15.92	16.38	17.13	17.62	18.10	18.32
3014 Ranchette Square	18.41	15.45	15.92	16.38	17.13	17.62	18.10	18.32
3053 Rosa Del Villa Drive	18.58	15.45	15.92	16.38	17.13	17.62	18.10	18.32
3061 Rosa Del Villa Drive	18.65	15.45	15.92	16.38	17.13	17.62	18.10	18.32
2822 Whisper Oaks Drive	19.02	17.13	17.64	18.06	18.28	18.56	18.86	19.06

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

Address	FFE	Critical Duration Storm Frequency Elevations						
		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	19.38	19.41	19.46	19.48

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

Address	FFE	Critical Duration Storm Frequency Elevations						
		2-Year	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	-0.28	-0.33	-0.34	-0.37	-0.39	-0.44	-0.46

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

Address	FFE	Critical Duration Storm Frequency Elevations						
		2-Year	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	-0.28	-0.33	-0.34	-0.37	-0.39	-0.44	-0.46



Worksheet – Expected Damages

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

RANCHETTES SUBDIVISION – STRUCTURE DAMAGES BEFORE MITIGATION									
FIA Tables		Building Damages Before Mitigation							
Interpolation	Depth	H1	H2	H3	H4	H5	H6	H7	H8
		\$157,098	\$158,613	\$168,163	\$171,948	\$189,664	\$175,800	\$272,838	\$192,126
	x								
	y								
	-1								
	-0.86	\$1,979.03							
	-0.54	\$8,602.83							
	-0.18	\$11,691.47							
	-0.14								\$21,137.66
	-0.12								\$21,608.77
	-0.09								\$22,845.43
	-0.07							\$14,721.99	
	-0.06				\$14,546.80			\$15,038.60	\$23,082.09
	-0.05							\$15,511.90	
	0.35			\$17,779.44		\$18,248.88			\$20,845.27
	0.37			\$17,862.62					\$21,037.89
	0.39								\$24,555.47
	0.4			\$18,194.85				\$15,018.05	
	0.43			\$18,277.04					
	0.44								\$25,518.11
	0.46								\$21,710.24
	0.49			\$18,976.92					
	0.56			\$19,025.66				\$16,445.72	\$25,510.35
	0.6			\$19,607.23					
	1								
	0.8								\$28,056.03
	0.74								\$17,061.33
	0.61								\$17,413.11
	0.76								\$20,077.17
	0.55								\$20,461.47
									\$20,597.48

RANCHETTES SUBDIVISION – TOTAL STRUCTURE DAMAGES BEFORE MITIGATION									
BUILDING DAMAGES TOTALS BEFORE MITIGATION									
2 yrs	3 yrs	5 yrs	10 yrs	25 yrs	50 yrs	100 yrs			
\$118,351	\$120,391	\$122,987	\$127,139	\$136,014	\$145,153	\$150,289			



Environmental and Historic Preservation Review



THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT



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 Loxahatchee)
- ▶ National Historic Preservation Act
- ▶ Fish and Wildlife Coordination Act
- ▶ Magnuson –Stevensons Fishery Conservation and Management Act
- ▶ Coastal Barrier Resources Act
- ▶ Coastal Zone Management Act
- ▶ Migratory Bird Treaty Act
- ▶ **Executive Orders**



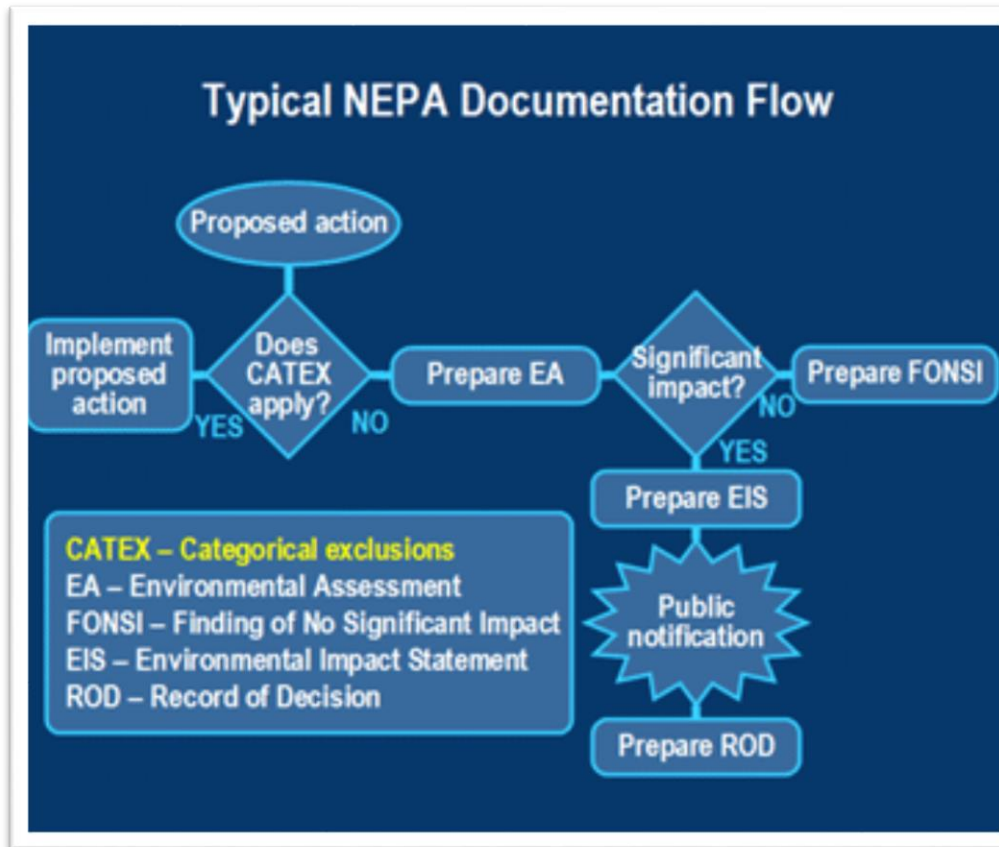
NEPA

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 STATE USE ONLY		
FEMA-___-DR-FL	<input type="checkbox"/> Standard HMGP	<input type="checkbox"/> 5% Initiative Application <input type="checkbox"/> Initial Submission or <input type="checkbox"/> Application Complete <input type="checkbox"/> Re-Submission
Support Documents	Eligible Applicant	Project Type(s)
<input type="checkbox"/> Conforms w/ State 405 Plan <input type="checkbox"/> In Declared Area <input type="checkbox"/> Statewide	<input type="checkbox"/> State or Local Government <input type="checkbox"/> Private Non-Profit (Tax ID Received) <input type="checkbox"/> Recognized Indian Tribe or Tribal Organization	<input type="checkbox"/> Wind <input type="checkbox"/> Flood <input type="checkbox"/> Other: _____
Community NFIP Status: (Check all that apply) <input type="checkbox"/> Participating Community ID#: _____ <input type="checkbox"/> In Good Standing <input type="checkbox"/> Non-Participating <input type="checkbox"/> CR5	LMS Ranking: _____ County: _____	
State Application ID: _____		

(TIME-DATE STAMP HERE)

This application is for all Federal Emergency Management Agency (FEMA Region IV) Hazard Mitigation Grant Program (HMGP) proposals. Please complete ALL sections and provide the documents requested. If you require technical assistance, please contact the Florida Division of Emergency Management at DEM_HazardMitigationGrantProgram@em.myflorida.com.

Section I – Applicant

A. Applicant Instruction: Complete all sections that correspond with the type of proposed project

<u>Application Sections I-IV:</u>	All Applicants must complete these sections
<u>Environmental Review:</u>	All Applicants must complete these sections
<u>Maintenance Agreement:</u>	Any Applications involving public property, public ownership, or management of property
<u>Flood Control – Drainage Improvement Worksheet:</u>	Acquisition, Elevation, Dry Flood proofing, Drainage Improvements, Flood Control Measures, Floodplain and Stream Restoration, and Flood Diversion – one worksheet per structure
<u>Generator Worksheet:</u>	Permanent, portable generators, and permanent emergency standby pumps
<u>Tornado Safe Room Worksheet:</u>	New Safe Room, Retrofit of existing structure, Community Safe Room, Residential Safe Room
<u>Hurricane Safe Room Worksheet:</u>	New Safe Room, Retrofit of existing structure
<u>Wind Retrofit Worksheet:</u>	Wind Retrofit projects only – one worksheet per structure
<u>Wildfire Worksheet:</u>	Defensible Space, Hazardous Fuels Reduction, Ignition Resistant Construction, other
<u>Drought Worksheet:</u>	Aquifers, other
<u>Request for Public Assistance Form:</u>	FEMA Form 90-49 (Request for Public Assistance): All applicants must complete, if applicable.
<u>Acquisition Forms:</u>	If project type is Acquisition, these forms must be completed. (Only one of the two Notice of Voluntary Interest forms is necessary.) Model Statement of Assurances for Property Acquisition Projects Declaration and Release Notice of Voluntary Interest (Town Hall Version) Notice of Voluntary Interest (Single Site Version) Statement of Voluntary Participation FEMA Model Deed Restriction Language
<u>Application Completeness Guidance / Checklist :</u>	All applicants are recommended to complete this checklist and utilize the guidance for completing the application.



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.***

1. 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.

2. 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.

3. 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.)*

A. Site

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): 32436

2. Title Holder: Acme Home Property Management Inc.

Coordinates in degrees, minutes and seconds format are **NOT acceptable*



Application – Location Examples

▶ Multiple locations such as Lift Stations

Lift Station	Coordinates
LS 24-1	(28.345678, -82,234567)
LS 14-1	(28.345678, -82,234567)
PS 4-3	(28.345678, -82,234567)
PS 57-3	(28.345678, -82,234567)
PS 57-2	(28.345678, -82,234567)

▶ Multiple buildings

Fire Station	Address	Coordinates
1	000 Hawk Ridge, Sunny, Florida 32000	(28.345678, -82,234567)
2	000 Hawk Ridge, Sunny, Florida 32000	(28.345678, -82,234567)
3	0th Street NE, Sunny, Florida 32000	(28.345678, -82,234567)
4	000 Heron Road, Sunny, Florida 32000	(28.345678, -82,234567)
5	000 Sandpiper Road, Sunny, Florida 32000	(28.345678, -82,234567)

**If the project will take place outside the building the coordinates provided should correspond to the exact location of project activities.*



Application – Location Examples

▶ Linear Drainage Projects

Location	Coordinates	
State Road 30-E Somewhere in Florida, 32800	Begin	(28.345678, -82,234567)
	End	(28.345678, -82,234567)

▶ Drainage Projects with Boundaries

Location	Coordinates	
Sunny, Florida 32000	NE	(28.345678, -82,234567)
	NW	(28.345678, -82,234567)
	SE	(28.345678, -82,234567)
	SW	(28.345678, -82,234567)



Application – Location

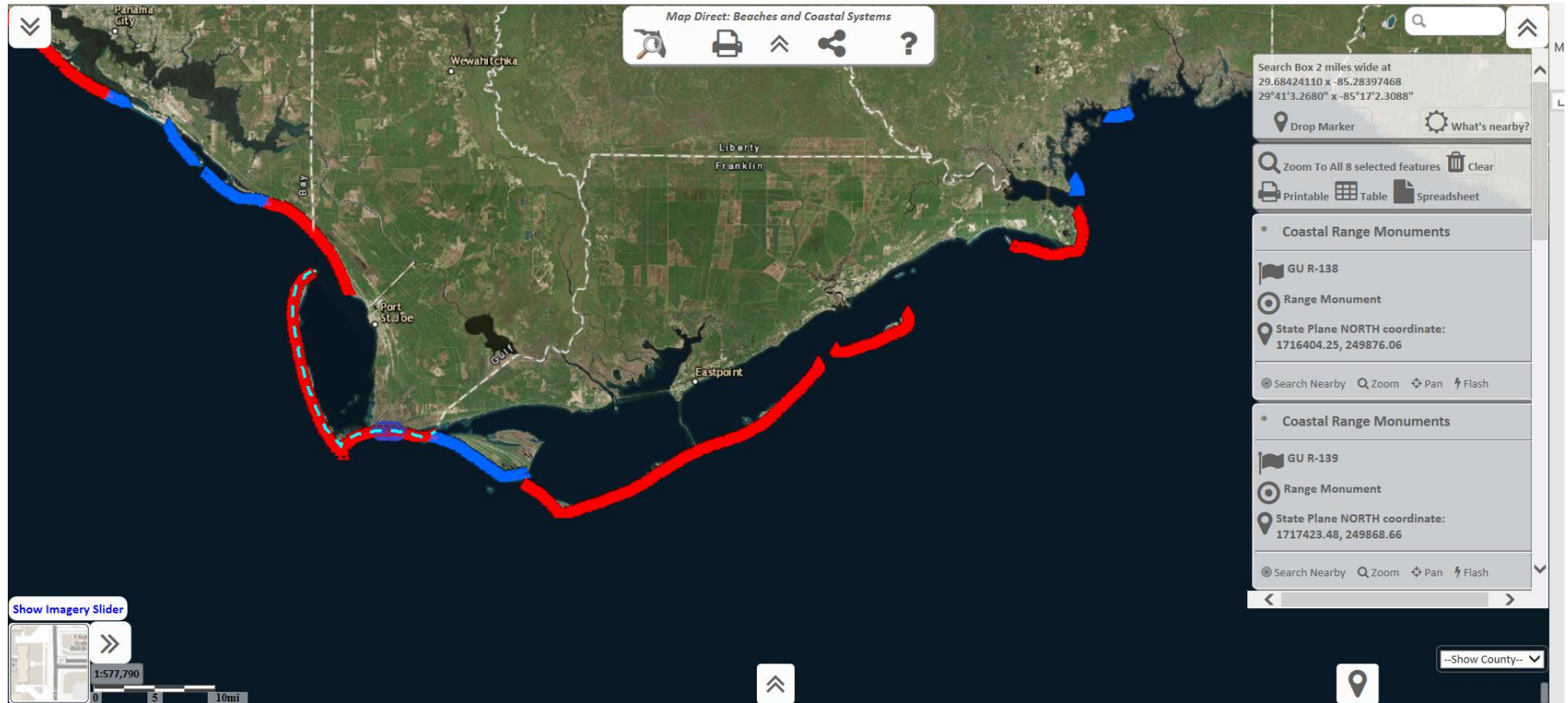
3. Is the project site seaward of the Coastal Construction Control Line (CCCL)? Yes No
4. Provide the number of each structure type (listed below) in the project area that will be affected by the project. Include *all* structures in project area.
- | | | | |
|---|----------------------|---|----------------------|
| <input checked="" type="checkbox"/> Residential property: | <input type="text"/> | <input type="checkbox"/> Public buildings: | <input type="text"/> |
| <input type="checkbox"/> Businesses/commercial property: | <input type="text"/> | <input type="checkbox"/> Schools/hospitals/houses of worship: | <input type="text"/> |
| <input type="checkbox"/> Other: | <input type="text"/> | | |

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>



THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT



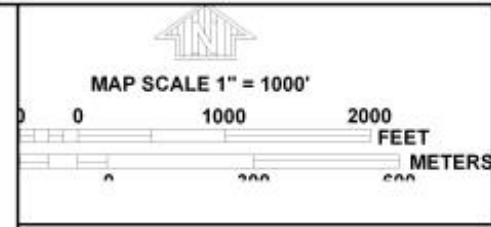
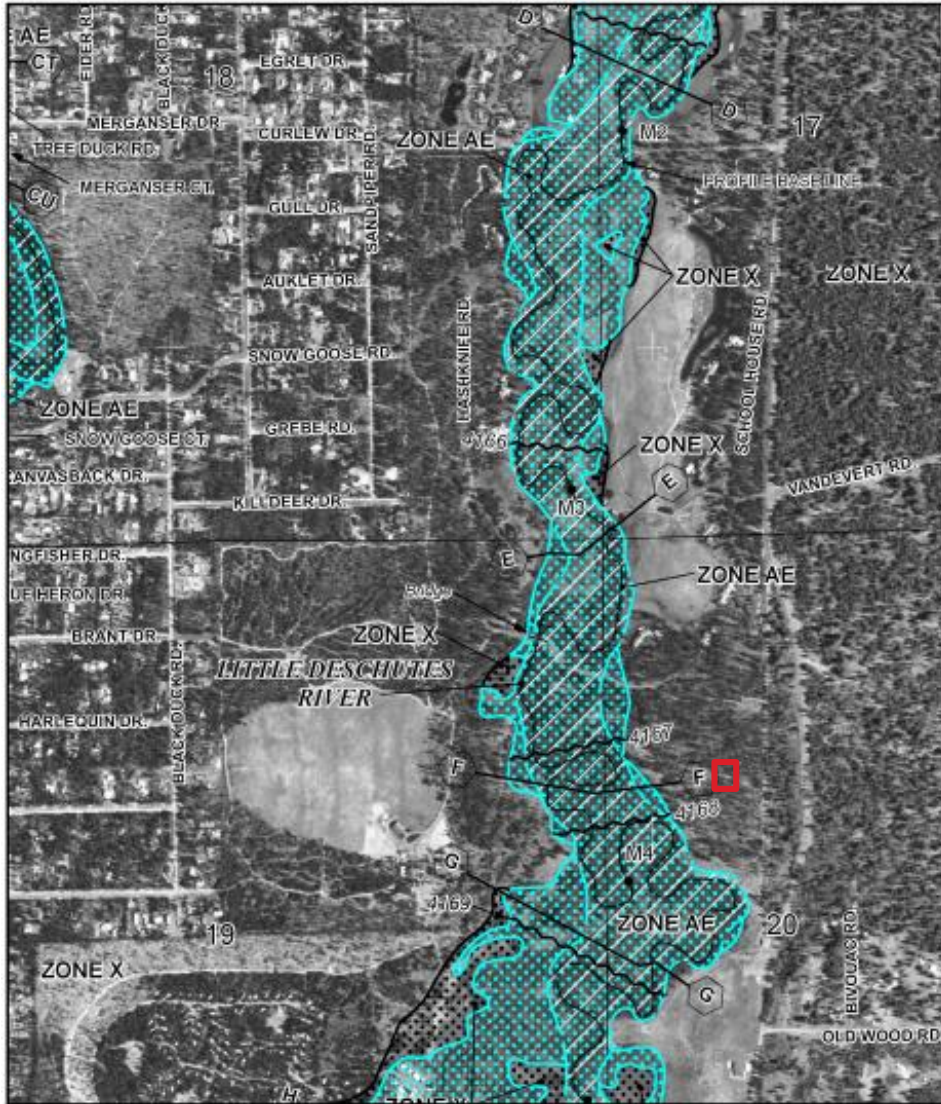
Application - FIRM

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

1. <input type="checkbox"/> Attach one (1) copy of the FIRM map, a copy of the panel information from the FIRM, and, if available, the Floodway Map. <i>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.</i> 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 Web-page at https://msc.fema.gov/portal .	
2. Using the FIRM, determine the flood zone(s) of the project site (Check all zones in the project area) <i>(See FIRM legend for flood zone explanations) (A Zone must be identified)</i>	
<input type="checkbox"/> VE or V 1-30	<input checked="" type="checkbox"/> AE or A 1-30
<input type="checkbox"/> AO or AH	<input type="checkbox"/> A (no base flood elevation given)
<input type="checkbox"/> B or X (shaded)	<input type="checkbox"/> C or X (unshaded)
<input type="checkbox"/> Floodway	<input type="checkbox"/> [Redacted]
<input type="checkbox"/> 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. <input type="checkbox"/> 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. <input type="checkbox"/> Attach a copy of a Special Flood Hazard Area Flood Insurance Assurance(s).	



FIRM



NFIP PANEL 1130E

FIRM
FLOOD INSURANCE RATE MAP
DESCHUTES COUNTY,
OREGON
AND INCORPORATED AREAS

PANEL 1130 OF 2250
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS	COMMUNITY	NUMBER	PANEL	SUFFIX
	DESCHUTES COUNTY	41600	1130	E
	UNINCORPORATED AREAS			

Notes to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on all Community Number Flood community.

MAP NUMBER
41017C1130E

MAP REVISED
SEPTEMBER 28, 2007

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov/



FIRM

National Flood Hazard Layer FIRMette



Legend

- Cross-Sections
- Base Flood Elevations
- Flood Hazard Zones**
 - 1% Annual Chance Flood
 - Regulatory Floodway
 - Special Floodway
 - Area of Undetermined Flood Hazard
 - 0.2% Annual Chance Flood
 - Future Conditions 1% Annual Chance Flood Hazard
 - Area with Reduced Risk Due to Levee



LOMRs

- Effective

Map Panels

- Digital Data
- Unmodernized Maps
- Unmapped

This map complies with FEMA's standards for the use of digital flood maps. The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. The base map shown complies with FEMA's base map accuracy standards.

The NFHL is a living database, updated daily, and this map represents a snapshot of information at a specific time.

Flood risks are dynamic and can change frequently due to a variety of factors, including weather patterns, erosion, and new development. FEMA flood maps are continually updated through a variety of processes. Users should always verify through the Map Service Center (<http://msc.fema.gov>) or the Community Map Repository that they have the current effective information.

NFHL maps should not be created for unmapped or unmodernized areas.



FEMA

Date: 1/23/2018 Time: 1:46:43 PM



FIRM

- ▶ Zones X-Shaded, 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 administrator
 - 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

1. 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.



Maps and Photographs

- ▶ 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>



Maps and Photographs



Drainage Location Map
Example



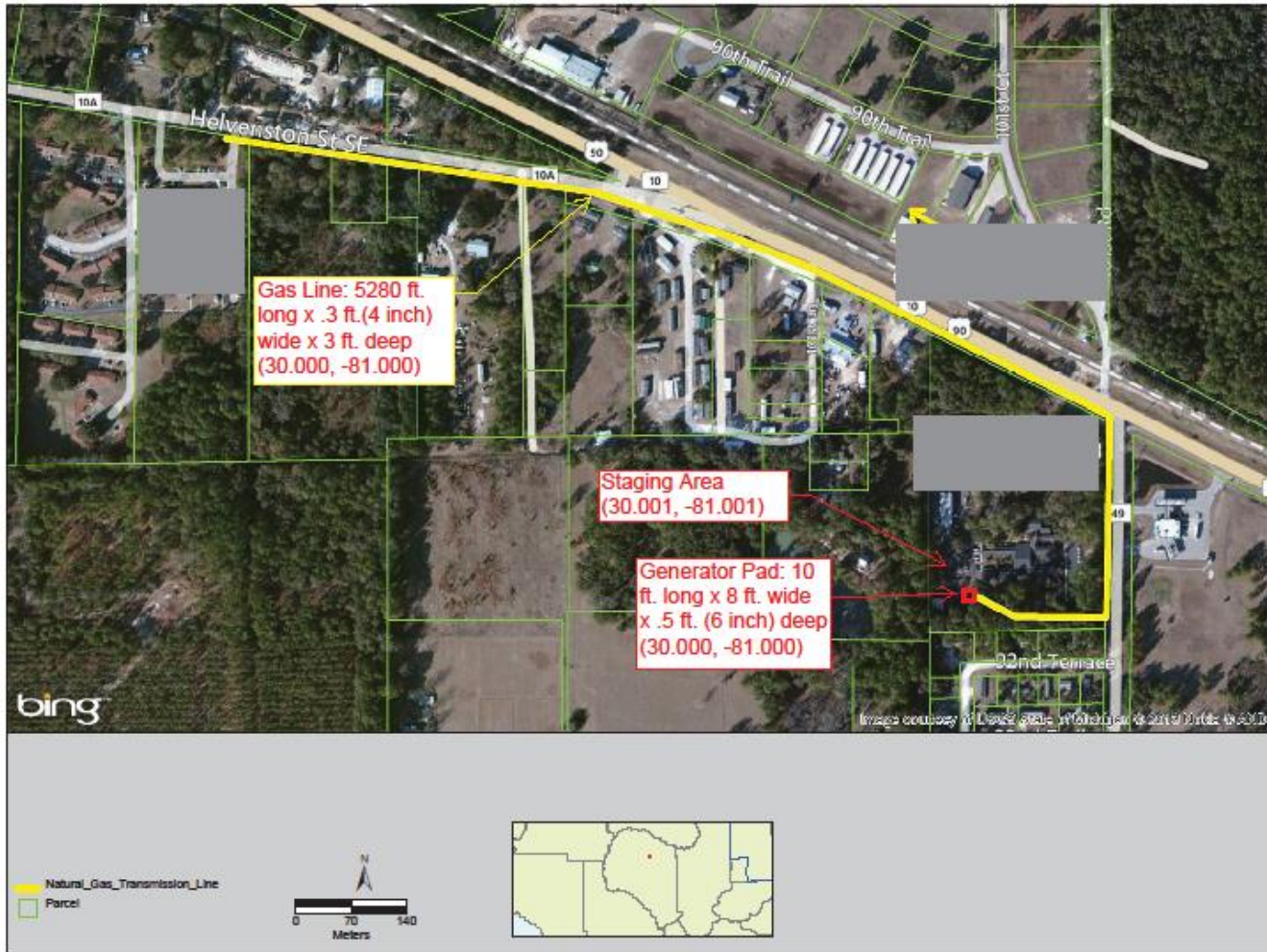
Maps and Photographs



Demolition
Location Map
Example



Maps and Photographs



Generator Location Map Example



Maps and Photographs

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



Maps and Photographs

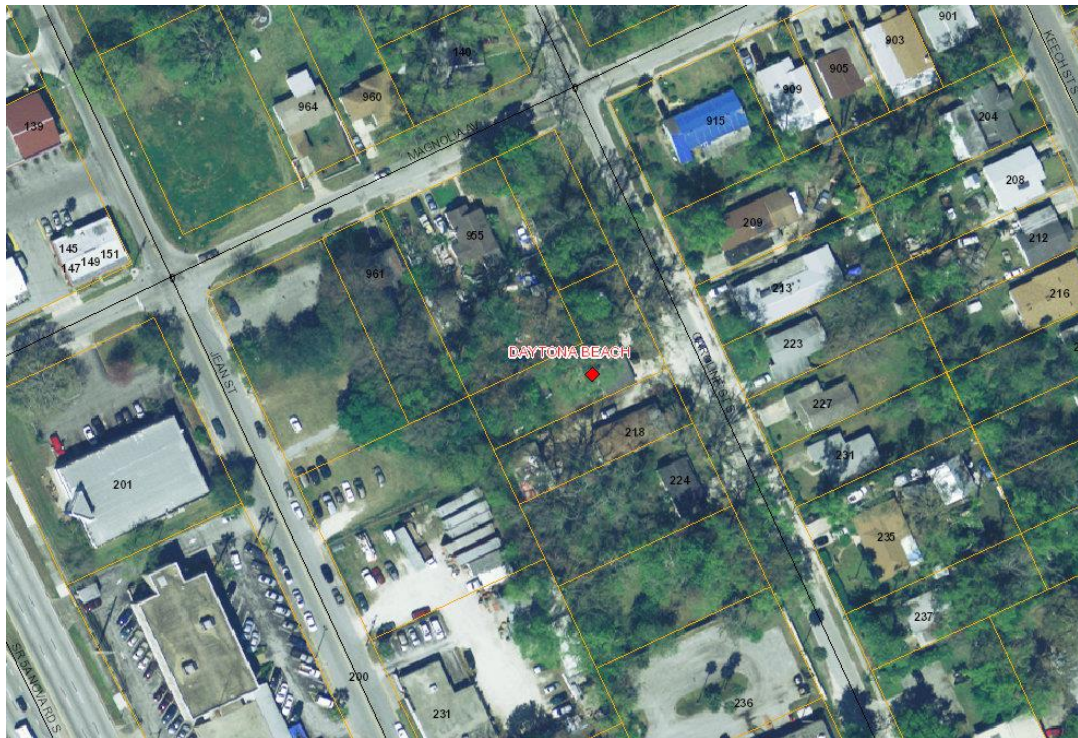


TOPO Map Example
Demolition



Maps and Photographs

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



Maps and Photographs

- ▶ 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**



Maps and Photographs



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



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

Examples of Good Photographs Demolition and Drainage

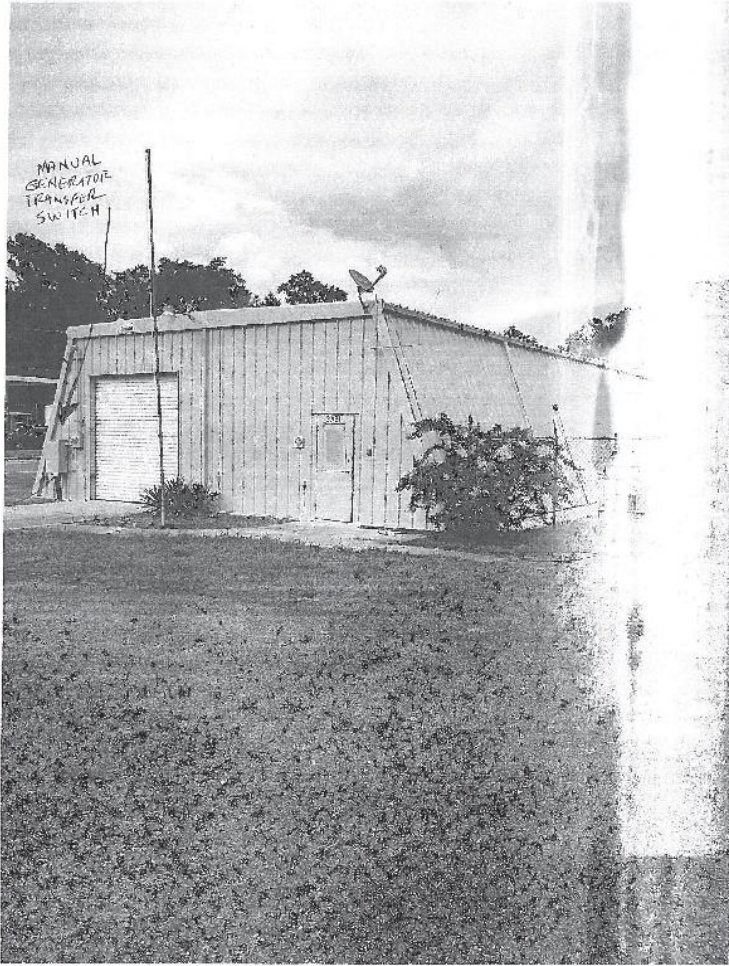


123 Main St facing North



Maps and Photographs

Examples of Bad Photographs



Maps and Photographs

- ▶ When including maps and photographs in the CD make sure to:
 - Properly name maps: aerial map, topo map, etc...
 - Images should not be blurry or low resolution.
 - Photographs shall not be more than a year old.
 - Google street photos are not acceptable.
 - Scanned photos with low resolution are not acceptable.



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.

1. 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)
3. Project area/structure photographs (Section III, part C of this application).
4. Preliminary project plans.
5. Project alternatives description and impacts (Section V of the application).
6. 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.
8. Provide any applicable information or documentation referenced on the *Information and Documentation Requirements by Project Type* below.



Application – E.O. 12898

B. Executive Order 12898; Environmental Justice for Low Income and Minority Population:

1. Are there low income or minority populations in the project area or adjacent to the project area?
 No 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

2. 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.

3. 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



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.

1. 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.

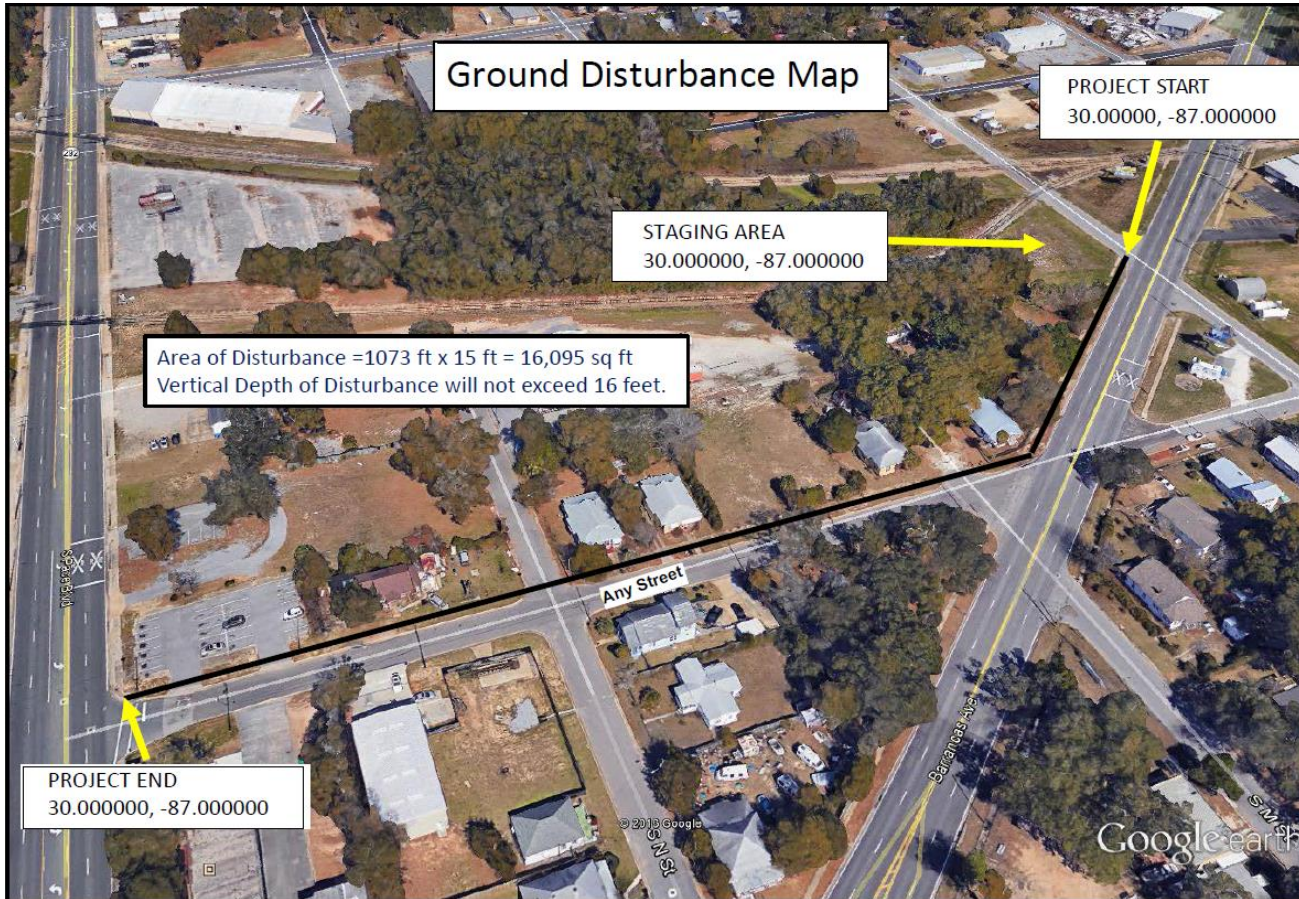
The single family residence was built in 1984 in a newly developed community. There are no previous known use of the project area. All previous site work includes the building and maintenance of a private, single family, residential home.

- 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.

**If your project will not have 3 inches or more of ground disturbance please include a notation here.*



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
 - Construction
 - 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 efficiently as the open space project will.

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

- Attach a map or diagram showing the alternative site in relation to the proposed project site *(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

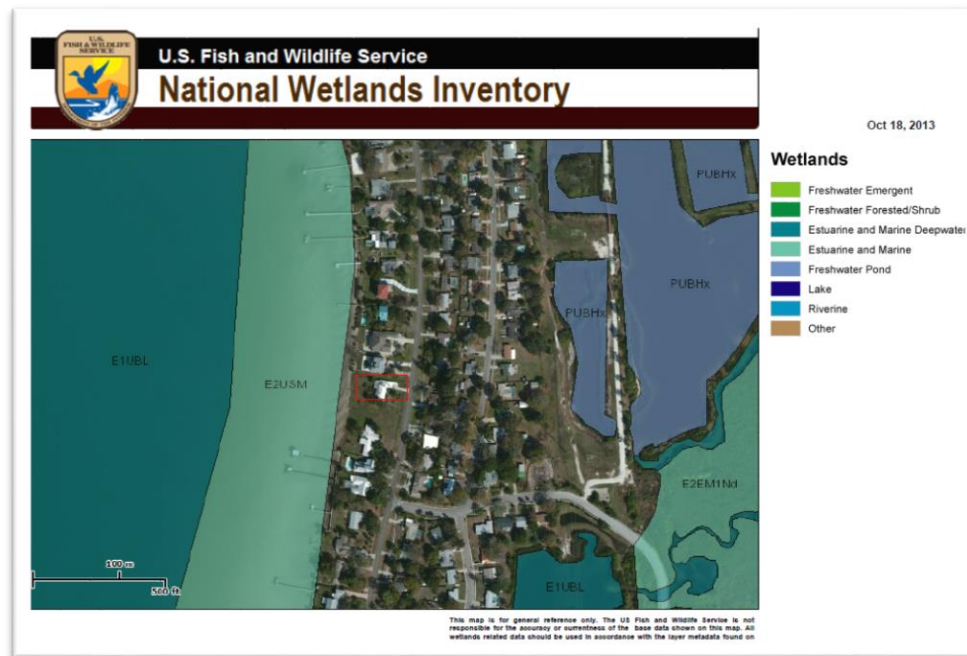
Federal:

- ▶ 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>



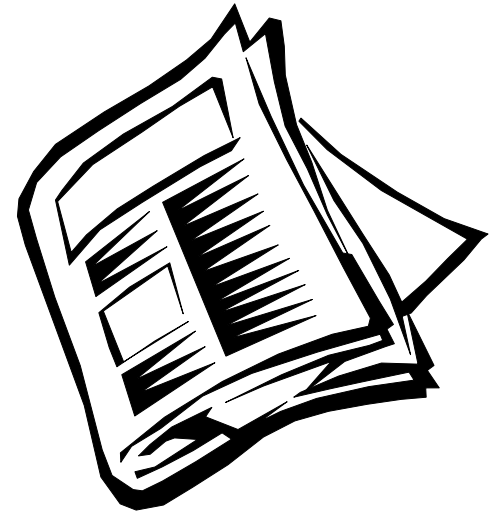
USACE

- ▶ **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/or environment
 - Impact or located in the floodplain
 - Impact or located in wetlands
- ▶ Use State/FEMA Format
 - Comment period from the public



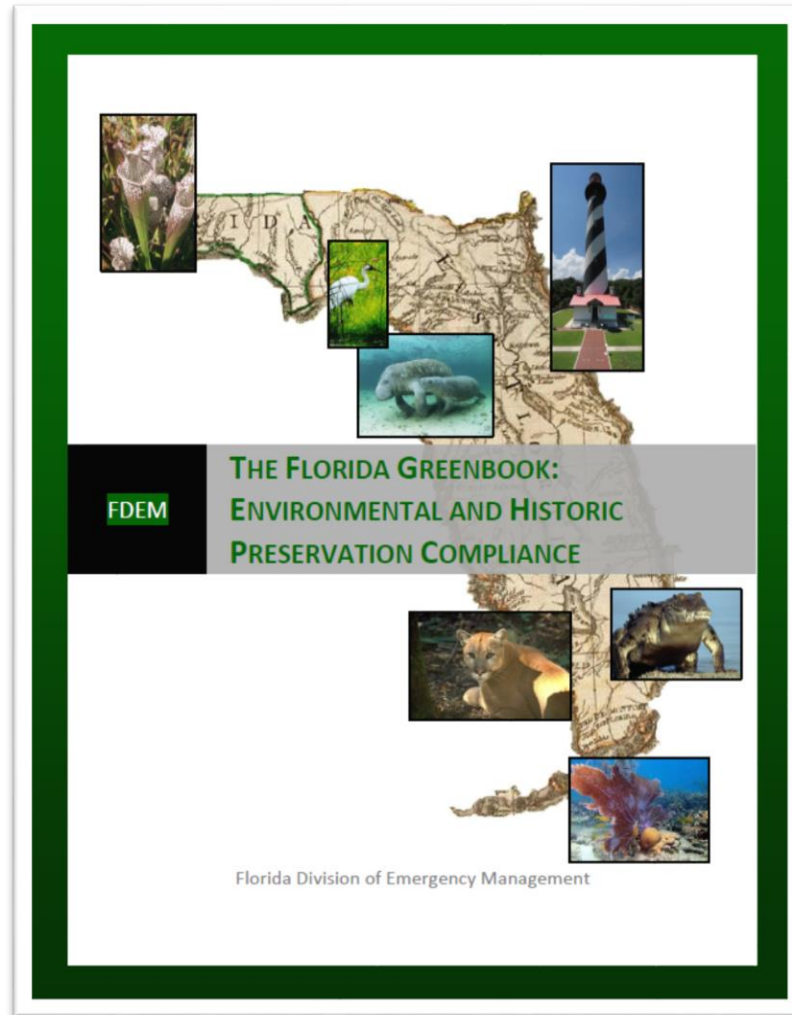
Things that can **TERMINATE** a Project

- Starting **BEFORE** Environmental and Historic Preservation 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

floridadisaster.org/globalassets/importedpdfs/flgreenbook.pdf



QUESTIONS?



Contacts

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