Monroe County Multi-jurisdictional Program for Public Information

March 21, 2017

LORI LEHR INC.

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1. Background

Monroe County is located in the southernmost region of Florida. The County consists of a largely uninhabited mainland section, mostly contained within Everglades National Park and the Big Cypress National Preserve, and the chain of 882 islands known as the Florida Keys. More than 99 percent of the County's population lives on the Keys.

The Florida Keys consist of a uniquely situated archipelago, 220 miles in length, located between the Gulf of Mexico and the Atlantic Ocean. They have 600 miles of exposed coastline. The majority of these islands are bordered by a mangrove plant system. Unlike many of Florida's coastal barrier islands, sandy beaches are uncommon and are mostly located on the Atlantic side of the islands.

Essentially, the Florida Keys consist of a string of coral islands with an average elevation of 4 to 7 feet above mean sea level. Much of the Keys would be flooded in a Category 5 worst case storm event. Two sections in the City of Key West and several coral ridges on Key Largo are the only areas above the predicted flood level.

The Monroe County Comprehensive Emergency Management Plan notes that:

> *Monroe County's highway transportation system is exceptionally unique in that a single road with connecting bridges forms the backbone of the entire county transportation network, and the sole link to the Florida mainland.*

United States Highway One (US 1) is two-lane highway for most of its length. It links the islands with 41 bridges. The bridge system comprises a total of 19 miles of the 126-mile long roadway. US 1 is the main evacuation route for the Florida Keys.

The Florida Keys have been named by the National Hurricane Center as an area most prone to the effects of tropical cyclones. In addition to this risk, they are a popular destination for 15,000 to 50,000 seasonal and holiday overnight visitors. Shelters located in Monroe County do not provide adequate protection for evacuees in the event of a Category 3 or stronger storm. Therefore, evacuating the population plus the visitors is a major issue, complicated by the fact that there is only one highway serving as the sole evacuation route.

An increase in the frequency of flood inundation has been predicted due to the impacts of climate change and the resulting sea level rise. These changes mean that the County's citizens need to be educated on both the larger floods from hurricanes and the smaller, more frequent, floods from local storms and king tides.

One important floodplain management program is the National Flood Insurance Program (NFIP) and its Community Rating System (CRS). Six communities in the County participate in the CRS. In 2016, Monroe County, Islamorada, Marathon, and Key West, agreed that, given the unique flooding hazards in the Florida Keys, enhanced and uniform communications are critical elements in saving lives and avoiding property damage. Therefore, they would work together to prepare a joint Program for Public Information (PPI).

2. Objective

The objective of this Program for Public Information is to develop and deliver unified messages to affected residents and businesses so they will take actions to reduce their exposure to the danger and property damage caused by flooding.

This Program for Public information was prepared following a step-by-step process encouraged by the Community Rating System.

3. The PPI Committee

The Monroe County Program for Public Information began with the creation of the PPI Committee with representatives of both public stakeholders and local governmental staff. All Monroe County jurisdictions were invited to an organizational meeting in April of 2016 to discuss the formation of this PPI Committee. It was decided that each community participating in the PPI would have committee members appointed by their local governing boards.

More than half of the committee members are from local stakeholder groups which include lending institutions, the real estate industry, insurance agencies, the University of Florida, and Fair Insurance Rates for Monroe (FIRM). The balance of the committee members consists of floodplain administrators and the Monroe County Public Information Officer.

Table 1. Monroe County PPI Committee		
Member	**Affiliation**	**Jurisdiction**
Adriana Marchino, FEMA/CRS Coordinator		City of Marathon
Alicia Betancourt, M.A. CFCS, County Extensions Director	University of Florida, Extensions	Islamorada, Village of Islands
Alina Davis, Previews Property Specialist	Coldwell Bankers	Islamorada, Village of Islands
Brian Schmitt, Real Estate Agent	Coldwell Banker Schmitt Real Estate Co.	City of Marathon
Cammy Clark, Public Information Officer		Monroe County
Jay W. Hall, Vice President	BB&T	City of Key West
Mel Montagne, Vice President Sales	Keys Insurance Services	Monroe County
Melissa Grady, Assistant Vice President Business Development	Centennial Bank	City of Marathon
Michele White, Vice President Commercial Team Leader	Capital Bank	Monroe County
Mike Maurer, Board Member	FIRM (Fair Insurance Rates Monroe)	Monroe County
Rebecca Horan, Insurance Agent	Atlantic Pacific Insurance	City of Key West
Scott Fraser, CFM, FEMA/CRS Coordinator & Floodplain Administrator		City of Key West
Toste Muniz, Building Services Coordinator & Floodplain Administrator		Islamorada, Village of Islands

Three meetings of the PPI Committee were conducted to accomplish the following tasks:

- Assess and identify county wide public information needs
- Determine priority groups that warrant special outreach attention
- Formulate important flood-related outcomes and the messages that work toward those outcomes
- Inventory and prioritize existing outreach projects and messages to be disseminated in Monroe County
- Identify new outreach projects to convey messages
- Examine other public information initiatives

The meetings were held in a public forum. Notifications of these meetings were published in local newspapers, the Monroe County Website, and emails to local officials, emergency management, and floodplain development staff.

The first official PPI Committee meeting was held on June 28, 2016. The meeting was opened with a general overview of the steps found in the above outline. Committee members exchanged ideas regarding current effective outreach, and the need to fill the gaps within outreach projects designed to relay clear messages. The umbrella outcome was that the target groups of critical concern should begin to change their behaviors and act to reduce exposure to flood-related hazards.

The second meeting of the PPI committee on August 28, 2016, included the discussion of the inventory of projects and messages currently disseminated by local jurisdictions, stakeholders, and other public entities. Each committee member was given the information summarized in the tables in Section 4.4 Flood Insurance Assessment. The consensus of the committee was that an assessment of the current level of flood insurance coverage should be included in the PPI and monitored by the Committee.

At the third meeting on November 15, 2016, the group focused on stakeholders and priority messages. The PPI committee heard two guest speakers, Jonathan Rizzo, a Warning Coordination Meteorologist with NOAA's National Weather Service (NWS), and Julie Botteri, Upper/Middle Keys Stringer and Web Editor for the Monroe County Tourist Development Council (TDC). NWS and TDC have been longtime partners in disseminating messages to visitors, businesses, local government and citizens.

It was decided that:

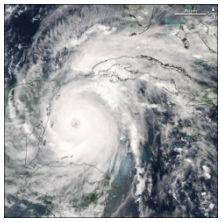
- The PPI should continue the current partnership with the NWS.
- FIRM (Fair Insurance Rates for Monroe) will continue to promote acquisition of flood insurance, provide education, and relay important messages to other groups.
- The University of Florida Extensions will partner with, and endorse, the PPI messages to targeted groups.
- The PPI will support the State of Florida Division of Emergency Management's "Get A Plan!" campaign. This campaign delivers the same messages supported by the committee.

The final meeting was held by the PPI Committee on March 21, 2017. The messages and projects were agreed on and the overall directions for the Multi-jurisdictional Monroe County Program for Public Information were discussed. The Committee unanimously voted to recommend approval of the program to each of the community's governing body.

The PPI Committee's final recommendations on target audiences, outcomes, messages, and outreach projects are summarized in Table 8. Minutes of the committee meetings are available separately.

4. Assessment of Public Information Needs

4.1 The Flood Hazard



Monroe County is in an area of the United States most vulnerable to the threat of flood damage due to tropical cyclones (hurricanes, tropical storms and tropical depressions). The frequency and severity of flooding is expected to increase in the future due to sea level rise. Climate change has also been predicted to cause more frequent and severe rainfall events.

Based on SLOSH (Sea, Lake, and Overland Surges from Hurricanes) mapping models, the National Hurricane Center has determined that the Florida Keys would be inundated by storm surges from all categories of hurricanes and some tropical storms (see Figure 2, next page). Because of this, the Monroe County Evacuation strategy for a Category 3 or greater storm calls for a mandatory evacuation of all Monroe County residents and visitors.

The inherent erratic and irregular tracks of tropical cyclones make it difficult to predict where hurricanes will make landfall. Severe weather is often localized to a specific area due to the geographical makeup of the Florida Keys. The time needed to evacuate all visitors, residents, hospitals, and Special Needs clients could range from 12 hours to more than 30 hours.

A problem unique to the Florida Keys – due to its remote location and single evacuation route by land - is the need to begin evacuations well in advance of a storm's projected landfall, before the storm's track and intensity can be qualified with any great certainty. During years with multiple storm threats and evacuations for cyclone impacts that ultimately never make landfall, the public becomes very complacent with evacuation warnings, increasing the likelihood that greater numbers of people won't evacuate.

Another important factor in the time required to prepare for a hurricane threat and subsequent evacuation is the influx of tourists attending annual events, peak vacation windows and holidays. These reasons, coupled with the limited capacity of US1, the main evacuation route, have compelled Monroe County to implement a phased evacuation system (see Figure 1).

Figure 1 Evacuation Map

In all storm categories, any visitors (tourists, campers, day-trip travelers, etc.), will be the first to be instructed to evacuate to the mainland in order to ensure their safety. In the event of a rapidly escalating storm, a general evacuation to the mainland would be necessary. It is imperative to have a communications program in place to provide crucial information to help visitors safely exit the Florida Keys.

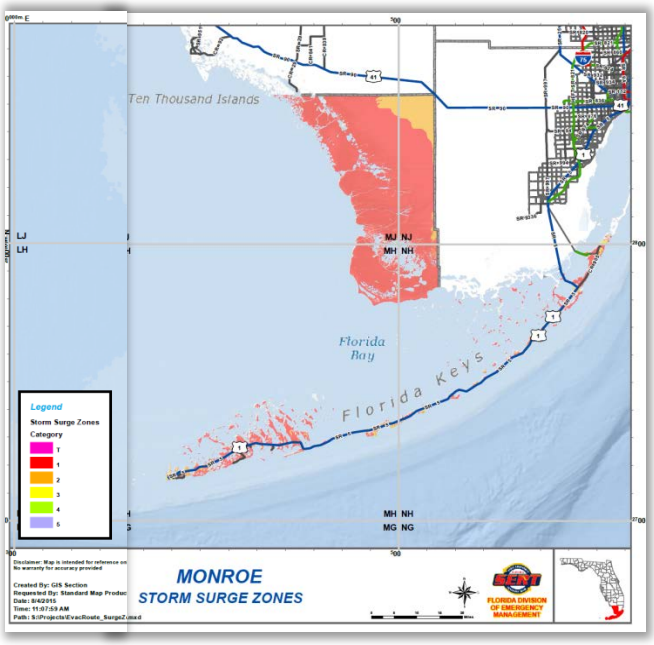
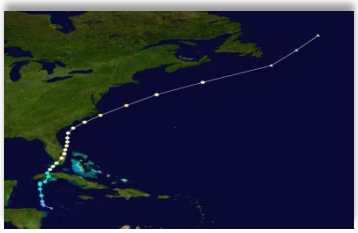


Figure 2 Florida Keys Surge Map

The Florida Keys have weathered numerous hurricanes and tropical storms. The paragraphs below describe five most significant storms. The “Big Five,” caused the lion’s share of the NFIP claims in the Keys.

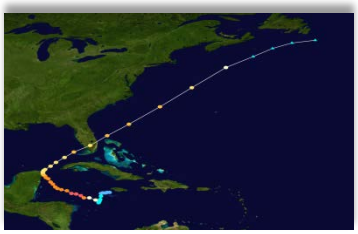
Hurricane Georges – September 1998
Hurricane Georges had winds of up to 155 mph, just below Category 5 status. The eye of the storm passed near Key West. Upon making landfall, Hurricane Georges brought a storm surge of up to 12 feet on Tavernier Key. With waves, as high as 10 feet, many parts of US1 were under water. Georges' waves damaged an estimated 1,536 houses, and destroyed over 170 residences.

Hurricane Mitch – November 1998
Mitch formed in the western Caribbean Sea and ultimately struck Florida as a strong tropical storm. Mitch caused a storm surge of up to 4 feet in the lower Florida Keys before making landfall on the Florida west coast. Many buildings that had been damaged by Hurricane Georges were leveled by Mitch. In all, Mitch caused $40 million in damage in Florida and two deaths from drowning.



Hurricane Irene – October 1999
Irene struck Florida as a Category 1 hurricane. While moving through the Keys, Irene produced a storm surge of up to 2.3 feet in Key Vaca, while Key West reported a surge of 1.5 feet. Irene produced heavy rainfall in the Keys, including 12 inches of rain in Key West. The rain flooded roads throughout the Keys, prompting officials to close 50 miles of US 1.

Hurricane Rita – September 2005
Rita passed approximately 45 mi south of Key West as a Category 2 storm. Most of the Keys experienced rainfall accumulations of three or more inches. A maximum storm surge of 5 feet was recorded, with at least 200 flooded homes in a four-block section of Key West. The Upper Keys suffered extensive damage from this storm system. Claims to NFIP for flood damage were submitted from the entire 126 miles stretch of the Florida Keys.



Hurricane Wilma – October 2005
Flooding from Wilma occurred twice. First, the approaching storm pushed water across the Florida Keys from south to north. As the storm finally crossed into the Everglades, all the water that had been pushed there by the storm was released as Wilma crossed the peninsula. The water then raced back across the Lower Keys a second time and emptied into the sea. The “backwash” of up to 8 feet constituted the peak of the storm surge.

Conclusions: Based on its review of past flooding and the threat of increased hazards due to climate change, the PPI Committee concluded:

- The primary threat to life safety in the Florida Keys is flooding from hurricanes and larger storms that may over wash the islands.
- The best way to protect against this life safety threat is evacuation. There are many obstacles to evacuating the Keys in time, so public information messages on how to do it right are vital.
- The primary threat to property is flooding from storm surge and waves from hurricanes and larger storms.

4.2 Natural Floodplain Functions

Monroe County is home to many varieties of protected or endangered species of wildlife. These species and their habitats deserve protection. A great deal of emphasis has been placed on the protection of Species Focus Areas in Monroe County.

Measures to be taken for the conservation and protection of the natural floodplain and habitat areas include:

- Preventing disturbance to areas that provide critical flood water storage and filtration functions, including mangroves, salt ponds, saltmarsh and buttonwood wetlands, and freshwater wetlands;
- Preventing excessive clearing and disturbance to natural upland vegetation within the floodplain;
- Minimizing any alteration of natural drainage patterns within the floodplain;
- Protecting areas that provide natural water storage and filtration, such as wetlands.

In addition to limiting development related activities that have an adverse impact on natural floodplain functions, the 2008 State Florida Statutes, Article XL, Chapter 704.06 (b) and (f) prohibits the dumping of waste or other materials that are detrimental to drainage and flood control. Each community participating in the PPI has multiple ways of reporting illegal dumping. Code enforcement procedures are in place to limit or stop offenders.

Conclusions: The PPI Committee concluded that the public information program should encourage citizens to appreciate the natural beauty and environment in the Keys by protecting endangered species and their habitat, preventing detrimental development, and reporting illegal activity or uses of land within the floodplain.

4.3 Priority Areas

A review of the current flood maps, the history of flooding, and the projections for the future led to the conclusion that there are two types of priority flood hazard areas:

1. The entire area of the Florida Keys is subject to inundation and/or isolation by flooding. People are at risk everywhere. The entire Keys can be considered priority area #1 because the entire Keys would be under water during a Category 5 hurricane and the entire area should be evacuated when a large storm threatens.

2. Priority area #2 is where there is repetitive flooding. Repetitive loss properties are properties where two or more flood insurance claims of at least $1,000 were paid over a ten-year period. A review of the communities' flood insurance records found that 96% of the repetitive loss properties got their designation from the Big Five storms discussed above.

   Mapping repetitive loss areas is a requirement for participation in the Community Rating System. There are separate maps of the four communities' repetitive loss areas. The table below summarizes the areas affected

Table 2. Repetitive Loss

Community	Total Buildings	Buildings in RL Areas
Islamorada, Village of Islands	4,588	221
City of Key West	9,708	1,300
City of Marathon	4,773	112
Monroe County	20,257	7,477

4.4 Flood Insurance Coverage Assessment

The committee began assessing the level of flood insurance coverage by looking at three sets of data provided by FEMA:

- Policy coverage by FIRM Zone,
- Coverage by type of occupancy, and
- Coverage for pre-FIRM and post-FIRM buildings

It was quickly concluded that coverage by FIRM Zone would not be productive because almost all the policies, like the land in the County, are in the SFHA. Here are the numbers:

Table 3. NFIP Policies in the SFHA

Community	Percentage
Islamorada, Village of Islands	95%
City of Key West	85%
City of Marathon	100%
Monroe County	96%

The other two sets of data were worth assessing. The number of policies by type are compared to the number of buildings by type, using data from the County property assessor. There was not an exact match of occupancy type, but as seen in Table 4, the categories are close:

Table 4. Insurance Coverage Table Categories

Table 5 Category	Insurance	Property Assessor *
Single family home	Single family home	Single family home, mobile home,
Multi family residence	2-4 family, all other residential	Multi-family, condominium, compounds, time share
Non-residential	Non-residential	All nonresidential categories
Table 6 Category		
Pre-FIRM	Pre-FIRM	Certificate of occupancy issued before 12/31/1974 **
Post-FIRM	Post-FIRM	Certificate of occupancy issued after 12/31/1974 **
* Key West provided its own data, using similar categories		
** All four communities' FIRMs were issued before 12/31/1974. A building constructed after that date is considered Post-FIRM if the FIRM was published earlier.		

The comparisons of the number of buildings insured under these categories are in the tables on the next two pages.

Coverage by occupancy: The comparisons for single family and nonresidential are useful. From 46% to 53% coverage for single family homes in the four communities. The PPI Committee considered an overall average of 50% coverage in the floodprone Florida Keys to be inadequate.

Table 5. Insurance Coverage by Occupancy Type

Islamorada, Village of Islands					
Occupancy	Policies in Force	Buildings	% of Buildings	Amount of Coverage	
	Number	Number	Covered	Amount	Average
Single Family	1,738	3,777	46%	$480,640,500	$276,548
Multi-Family	1133	209	542%	$231,996,600	$204,763
Non - Residential	230	602	38%	$88,514,300	$384,845
Total	**3,101**	4,588	68%	**$801,151,400**	**$258,353**
Total Residential	**2,871**	3,986	72%	**$712,637,100**	**$248,219**

City of Key West					
Occupancy	Policies in Force	Building	% of Buildings	Amount of Coverage	
	Number	Number	Covered	Amount	Average
Single Family	3,807	7,746	49%	$984,591,900	$258,627
Multi-Family	3,005	881	341%	$601,307,700	$200,102
Non - Residential	750	1081	69%	$340,988,200	$454,651
Total	**7,562**	9,708	78%	**$1,926,887,800**	**$254,812**
Total Residential	**6,812**	8,627	79%	**$1,585,899,600**	**$232,810**

City of Marathon					
Occupancy	Policies in Force	Building	% of Buildings	Amount of Coverage	
	Number	Number	Covered	Amount	Average
Single Family	1,753	3,470	51%	$425,260,000	$242,590
Multi-Family	923	404	228%	$149,051,700	$161,486
Non - Residential	324	899	36%	$106,279,300	$328,023
Total	**3,000**	4,773	63%	**$680,591,000**	**$226,864**
Total Residential	**2,676**	3,874	69%	**$574,311,700**	**$214,616**

Monroe County					
Occupancy	Policies in Force	Building	% of Buildings	Amount of Coverage	
	Number	Number	Covered	Amount	Average
Single Family	10,324	19,473	53%	$2,458,324,900	$238,117
Multi-Family	3,933	778	506%	$820,482,000	$208,615
Non - Residential	1,039	1,624	64%	$363,524,000	$349,879
Total	**15,296**	21,875	70%	**$3,642,330,900**	**$238,123**
Total Residential	**14,257**	20,251	70%	**$3,278,806,900**	**$229,979**

Nonresidential coverage is 36% and 38% for the two smaller cities, but 64% and 69% for Key West

and the unincorporated areas of the County. The Committee felt that these numbers were also too low.

Comparing coverage for multi-family residences is not productive because the policy data includes policies for each condominium unit while the building data is by the number of buildings. The result appears to show that each building has 2 – 5 policies on it.

On the other hand, all three categories are useful for comparing the amount of coverage. On the average, coverage appears appropriate for the types of buildings. Multi-family policies have a lower level of coverage, which is expected because they include condo units, which would be of lower value than single-family homes.

It was noted that the data provided is for total coverage. The data do not show if policies include contents coverage. Nationally, most policies do not, so it can be assumed that most policies in Monroe County do not have contents coverage. That assumption is supported by the fact that the average policy is below the maximum available for structure-only coverage ($250,000 for 1 – 4 family residences and $500,000 for five or more family residential and nonresidential policies). The PPI Committee concluded that the amount of coverage is understandable, but could also be improved, especially if they do not include contents.

Pre- and Post-FIRM building coverage: Table 6 on the next page shows the amount coverage based on the age of the buildings. In all four communities, there is a higher level of coverage for post-FIRM buildings. This is probably because they are newer and more likely to still have mortgages, where a policy is required by Federal law.

Except in Key West, post-FIRM buildings have higher levels of coverage, which would be expected because they are newer. Key West is a historic City with older properties that hold higher values, which explains why the coverage is higher for pre-FIRM building. However, as noted earlier, the amount coverage on all properties could be improved.

Recommendations: The committee recognized that there are challenges to relying on a public information program to improve flood insurance coverage. The decision to purchase an NFIP flood insurance policy is dependent on a myriad of factors, including, but not limited to:

- The increasing cost of flood insurance
- The economic climate
- The time lapse between storm events
- Structure values
- Structures with Federally backed loans
- The availability of private insurance

After wrestling with the question: “Is the current NFIP coverage adequate?” the Committee came to the conclusion that it is, in fact, not adequate. While it is impossible to expect a public information program to control coverage, the committee determined that tracking the number of polices and coverage would clearly be useful.

To that end, the committee recommends that flood insurance policy counts be monitored annually. Each year, the spreadsheet used to create Tables 5 and 6 will be populated with current data and community building counts. The calculations will provide information regarding the general trends of insurance coverage in each jurisdiction that can then be compared to trends in previous years. The annual assessment will also track and report on the outside factors that may be impacting the decision of residents in purchasing new flood insurance policies and the renewal of those already in existence.

Table 6. Summary of Pre-and Post -FIRM Policies and Claims

Islamorada, Village of Islands					
Type	Policies in Force	Buildings	% of Buildings	Amount of Coverage	
	Number	Number	Covered	Dollar	Average
Pre-FIRM	1,044	1,894	55%	$249,542,000	$239,025
Post-Firm	2,057	2,694	76%	$551,609,400	$268,162
Total	3,101	4,588	68%	$801,151,400	$258,353

City of Key West					
Type	Policies in Force	Buildings	% of Buildings	Amount of Coverage	
	Number	Number	Covered	Dollar	Average
Pre-FIRM	4,130	5,728	72%	$1,077,877,900	$260,987
Post-Firm	3,432	3,980	86%	$849,009,900	$247,381
Total	7,562	9,708	78%	$1,926,887,800	$254,812
City of Marathon					
Type	Policies in Force	Buildings	% of Buildings	Amount of Coverage	
	Number	Number	Covered	Dollar	Average
Pre-FIRM	1,459	2,364	62%	$272,325,900	$186,652
Post-Firm	1,541	2,409	64%	$408,265,424	$264,935
Total	3,000	4,773	63%	$680,591,324	$226,864

Monroe County					
Type	Policies in Force	Coverage	% of Buildings	Amount of Coverage	
	Number	Amount	Covered	Dollar	Average
Pre-FIRM	5,644	6,931	81%	$1,136,672,900	$201,395
Post Firm	9,652	14,944	65%	$2,505,658,000	$259,600
Total	15,296	21,875	70%	$3,642,330,900	$238,123

The following recommendations were made by the committee to promote the value of insuring one's property for damage by a flood:

1. Encourage evaluation of flood insurance for sufficient coverage, including that for contents, by renters, owners, nonresident owners and business owners in the repetitive loss areas.
2. Inform all residents that homeowner' insurance policies do not cover damage from flood.
3. Educate property owners and residents in repetitive loss areas of ways to reduce risk from flood which could lower flood insurance premiums.
4. Inform home buyers of the importance of knowing the flood risks and the availability of NFIP flood insurance.
5. Continue partnerships with community stakeholders in order to promote the understanding of how flood insurance works and ways to mitigate risk.

4.5. Priority Audiences

Some areas and people deserve more attention than others. For that reason, a Program for Public Information should identify priority areas and audiences that would receive different messages. After reviewing and assessing the flood hazard threats and flood insurance data, the PPI Committee selected the following priority audiences (PAs):

PA #1 is priority area #1, i.e., All residents, businesses, and visitors in the Florida Keys. As noted in Section 4, people are at risk everywhere. People throughout the Keys (including tourists) need to know about the flood hazard, evacuation and safety precautions, rules for construction, and protecting natural floodplain functions.

PA #2 is priority area #2, the repetitive loss areas. Repetitive loss area owners need information on ways to protect their properties from repeated flooding.

PA #3: is key professionals involved with real estate transactions. Real estate and insurance agents along with lenders need to know how to help protect house hunters and other looking for property by advising them of potential flood hazard and the benefits of flood insurance.

PA #4: the tourist industry. The ultimate audience is all tourists. However, they are hard to contact and it is difficult for a centralized program to reach them all. Therefore, the audience for PPI materials would be the hotels, restaurants, and other businesses that deal directly with tourists. The PPI materials should advise these businesses to give tourists information on the flood hazard, evacuation procedures, and flood safety measures.

PA #5 The electronic media, radio and television stations that cover the Keys. They should give listeners and viewers messages on the flood hazard, evacuation procedures, and flood safety measures.

PA #6: Building department customers, i.e., everyone considering a construction project, need to know the floodplain management development regulations and the opportunities to include flood mitigation measures in their projects.

4.6. Current Outreach Efforts

The PPI Committee reviewed the outreach efforts currently being implemented by public agencies and private organizations. These are listed in Table 7, below.

Table 7. Current Outreach Projects

Agency/Organization	Project	Distribution Area	Type	When
MOCO Building	Facts on Flooding	MOCO SFHA	Brochure	Annual
MOCO Building	Repetitive Loss Outreach	MOCO RL Areas	Letter	Annual
MOCO Building	Facts on Flooding Letter	MOCO Realtors, Lenders, Insurance	Letter and Brochure	Annual
The Citizen	Hurricane Guide	County-wide	Color Brochure	Annual
Contractor Licensing Board	Licensed Contractor	County-wide	Barometer	Annual
MOCO EM	Evacuation Signs	County-wide	Signs	Ongoing
MOCO EM	Hurricane Survival Guide	County-wide	Keynoter Newspaper	Annual
MOCO	MOCO Media Book	Media	Media Blitz	Annual
MOCO EM	Protecting Paradise	County-wide	Newspaper Insert/ Citizen, Barometer, Keynoter	Annual
MOCO EM	Channel 76 Broadcast	County-wide	Television	Annual
MOCO EM	Various Presentations Monroe County EM	County-wide	Events	Annual
FDEM	State Rack Cards	Building Dept.	Rack Cards Static	Ongoing
MOCO	Media Guide	Media	Media Outlet Guide	Annual
FIRM	Property Insurance Users Guide	County-wide	FIRM Website	Ongoing
FIRM	Mitigation Workshops	County-wide	Workshop	3 Annual
NWS Keys	Hurricane Program and Responding to Disasters	County-wide	Workshop	Annual
NWS Keys	FL Keys Seafood Festival Upper Keys Nautical Market FKCC Community Day	County-wide	Booths	Annual
NWS Keys	Storm Spotting Class	County-wide	Workshop	2 Annual
NWS Keys	Florida Keys NWS Website/publications	County-wide	Website	Ongoing
NWS Keys	FB and Twitter	County-wide	Social Media	Annual
MOCO EM	Emergency Management Website	County-wide	Website	Ongoing

Agency/Organization	Project	Distribution Area	Type	When
MOCO EM	Facebook	County-wide	Social Media	Annual
Marathon	Flood Brochure	Marathon	Brochure Mailed SFHA	Annual
FEMA	Various Brochures	Marathon	Building Department	Ongoing
TDC	Prepared in Paradise	County-wide	Tourist Related Businesses	Ongoing
TDC	Tourist Industry Workshop	County-wide	Tourist Related Businesses	Annual
Monroe County/TDC	Media Blitz Training	County-wide	Workshop	Annual
Keys Energy	Bill Stuffer	County-wide	Brochure	Annual
Key West	RL Brochure	Key West	Brochure	Annual
Key West	Real Estate Brochure	Key West	Brochure	Ongoing
NWS	Severe Weather Week	County-wide	Workshop	Annual
NWS Social Media	Facebook	County-wide	Social Media	Annual
TDC Social Media	Facebook	County-wide	Social Media	Annual
Key West	Website	County-wide	Website	Ongoing
Key West	Brochure to Lenders, Realtors, Insurance Industry	Key West	Brochure	Annual
Islamorada	EM Events	Islamorada	Booths	Annual
Islamorada	Newspaper Insert	Islamorada	Brochure	Annual
Islamorada	RL Brochure	Islamorada	Brochure	Annual
Islamorada, Marathon, Key West, MOCO	Website	Islamorada, Marathon, Key West, MOCO	Website	Ongoing
Severe Weather Guide	Brochure EM Events	County-wide	Monroe County EM	Various
Publix	Hurricane Brochure	County-wide	Brochure	Ongoing
Key West	Why you need flood insurance	Key West	Brochure	Ongoing
MOCO	Realtor Flyer	MOCO	Brochure	Ongoing

An assessment of these current efforts concluded that they provide a lot of coverage on flood insurance and floodplain management issues, in addition to hurricanes and hazard topics. The Committee felt that the following media would be the most effective and supportive of the PPI's messages.

News media

Media outlets distribute current weather conditions, warnings, evacuation and emergency response information as needed during and after approaching storms. Newspapers post an annual hurricane guide that includes information about warning systems, preparation for storms and storm safety.

It is important to note that there are no local TV news stations on the Keys and that all TV broadcast news comes from the Mainland. The communication of pertinent local information becomes a challenge given the difference in the potential impact of storms on the Mainland in comparison to those experienced in the Keys.

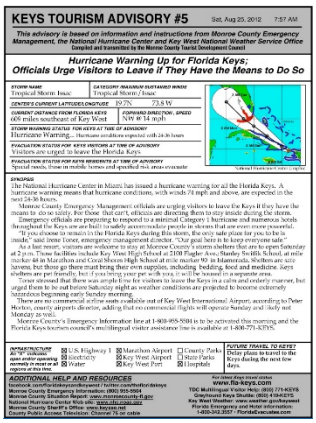
NWS Key West

Before hurricane season, NWS Key West provides outreach to educate residents and visitors of the potential dangers associated with hurricane season. The messages include ways to stay informed, prepare for storms and evacuate safely. NWS disseminates messages in the following ways:

- Hurricane Awareness Week
- Social media posts on Facebook and Twitter
- Booths at local events
- Various workshops
- Website information, brochures, videos, up-to-date weather

Tourist Development Council (TDC)

The Florida Keys TDC has a formal communication program that is closely coordinated with local emergency management officials. The TDC provides crucial information to ensure that visitors are able to safely exit the Florida Keys in the event a hurricane threatens the region. The TDC communicates their messages by:



KEYS TOURISM ADVISORY #5 Sat, Aug 25, 2012 7:57 AM

This advisory is based on information and instructions from Monroe County Emergency Management, the National Hurricane Center and Key West National Weather Service Office Compiled and transmitted by the Monroe County Tourist Development Council

Hurricane Warning Up for Florida Keys; Officials Urge Visitors to Leave if They Have the Means to Do So

STORM NAME	CATEGORY (MAXIMUM SUSTAINED WINDS)
Tropical Storm Isaac	Tropical Storm / Isaac

CENTER'S CURRENT LATITUDE/LONGITUDE	
19.7N	73.8 W

CURRENT DISTANCE FROM FLORIDA KEYS	FORWARD DIRECTION / SPEED
405 miles southeast of Key West	NW @ 14 mph

STORM WARNING STATUS FOR KEYS AT TIME OF ADVISORY

Hurricane Warning... Hurricane conditions expected with 24-36 hours

EVACUATION STATUS FOR KEYS VISITORS AT TIME OF ADVISORY

Visitors are urged to leave the Florida Keys

EVACUATION STATUS FOR KEYS RESIDENTS AT TIME OF ADVISORY

Special needs, those in mobile homes and specified risk areas evacuate

National Hurricane Center / Jamie Rhome

UPDATE

The National Hurricane Center in Miami has issued a hurricane warning for all the Florida Keys. A hurricane warning means that hurricane conditions, with winds 74 mph and above, are expected in the next 24-36 hours.

Monroe County Emergency Management officials are urging visitors to leave the Keys if they have the means to do so safely. For those that can't, officials are directing them to stay inside during the storm.

Emergency officials are preparing to respond to a minimal Category 1 hurricane and numerous hotels throughout the Keys are are built to safely accommodate people in storms that are even more powerful.

"If you choose to remain in the Florida Keys during this storm, the safe place for you to be is inside," said Irene Toner, emergency management director. "Our goal here is to keep everyone safe."

As a last resort, visitors are welcome to stay at Monroe County's storm shelters that are to open Saturday at 2 p.m. Those facilities include Key West High School at 2100 Flagler Ave.; Stanley Switlik School, at mile marker 44 in Marathon and Coral Shores High School at mile marker 90 in Islamorada. Shelters are safe havens, but those go there must bring their own supplies, including bedding, food and medicine. Keys shelters are pet friendly, but if you bring your pet with you, it will be housed in a separate area.

Toner stressed that there was ample time for visitors to leave the Keys in a calm and orderly manner, but urged them to be out before Saturday night as weather conditions are projected to become extremely hazardous beginning early Sunday morning.

There are no commercial airline seats available out of Key West International Airport, according to Peter Horton, county airport's director, adding that no commercial flights will operate Sunday and likely not Monday as well.

Monroe County's Emergency Information line at 1-800-955-5501 is to be activated this morning and the Florida Keys/northern council's multilingual visitor assistance line is available at 1-800-771-5375.

INFRASTRUCTURE STATUS: Open and/or operating normally in most or all regions at this time.			
☒ U.S. Highway 1	☒ Marathon Airport	☐ County Parks	FUTURE TRAVEL TO KEYS? Delay plans to travel to the Keys during the next few days.
☒ Electricity	☒ Key West Airport	☐ State Parks	
☒ Water	☒ Key West Port	☒ Hospitals	

ADDITIONAL HELP AND RESOURCES

facebook.com/floridakeyscouncil / twitter.com/floridakeys

Monroe County Emergency Information: (800) 955-5501

Monroe County Tourist Development Council: www.fla-keys.com/tdc/

National Hurricane Center Web site: www.nhc.noaa.gov

Monroe County Sheriff's Office: www.keysso.net

County Public Access Television: Channel 76 on cable

For latest Keys road status: www.fla-keys.com

TDC Multilingual Visitor Help: (800) 771-5375

Monroe County Sheriff's Office: (305) 292-7000 x 2375

Key West Weather: www.weather.gov/keywest

Florida Emergency and Hotel information: 1-850-242-3557 / FloridaEvacuation.com

- Hosting an annual "Hurricane Preparedness Workshop for the Tourism Industry "
- Posting hurricane information on the TDC website homepage for the duration of the hurricane season
- Social media posts to Facebook and Twitter
- Participation in the annual Media Blitz
- Distribution of the "Protecting Paradise" Brochure

FIRM (Fair Insurance Rates Monroe)

FIRM's outreach program has a strong emphasis on obtaining adequate insurance and the proper rating of risk. This grassroots organization has recently begun offering a series of workshops to help residents understand insurance and the value of mitigation. An "Insurance Users Guide" is posted on the FIRM website in addition to other valuable information related to purchasing flood insurance coverage.

Monroe County Emergency Management
The Monroe County Emergency Management Division is responsible for the coordination of response to storm events in all of Monroe County. The Division actively promotes storm safety, preparedness, warning, shelters, and evacuation plans. A variety of methods is employed for delivering relevant information regarding storm events, including:

- Interactive Website
- Booths at local events
- TDC Workshop
- Publications in local newspapers
- Alert notifications
- Social media

Florida Division of Emergency Management (FDEM)
This agency supplies both printed and electronic publications to all communities in Monroe County. Topics covered include knowing your hazard, protecting property, protecting people, the importance of insurance and building responsibly. The publications are made available for display and distribution county-wide.

Communities
The committee also reviewed additional projects currently being implemented by the participating jurisdictions. These projects were largely put in place to meet the CRS and NFIP objectives that include mailers to the SFHA, repetitive loss areas, insurance agents, realtors, and lenders. Other efforts include placement of publications on websites, in local libraries and many public buildings.

5. Outcomes and Messages

The committee came to the following conclusion: Despite the abundant and even redundant messaging in Monroe County by the public and private sector, gaps continue to exist in communicating those messages deemed most important by the PPI Committee. The jurisdictions are doing a good job of filling these gaps.

One common problem with the current efforts is that while they are informative, many do not tell the audience what to do. The primary objective of the PPI is to encourage people to change behavior. In order to achieve this behavioral change, the committee selected the outcomes, i.e., what they wanted to actually change. Outcomes are indicators, not exact measures of the success of these campaigns. Progress toward the outcomes will be tracked and reported at an annual committee meeting.

From these outcomes, jurisdictions can develop outreach efforts with unified, action oriented messages. Research has shown that behavior is changed when messages are positive. These messages should clearly state what people should do. Research also found that messages need to be repeated and delivered from different sources.

The outcomes and messages recommended by this PPI report are in Table 8 on the next pages.

Table 8. Outcomes and Messages

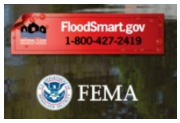
Topic Outcome Message	PA #1 Everyone	PA #2 Rep Loss Areas	PA #3 Key Professionals	PA #4 Tourist Industry	PA #5 Media	PA #6 Permit Customers
1. Know your flood hazard						
Outcome: Everyone evacuates when told						
Message: All areas of the Keys are subject to a flood hazard	✓			✓	✓	
Outcome: Increased requests for map information						
Message: Find out what flood zone you are in			✓			✓
Outcome: Residents in repetitive loss areas are aware of the hazard						
Message: Your property is in an area that has repetitively flooded		✓				
2. Insure your property						
Outcome: Improved flood insurance coverage						
Message: Call your agent to discuss your coverage	✓	✓	✓			✓
3. Protect your property from the hazard						
Outcome: Increase in requests for mitigation assistance						
Message: Contact your community for flood protection assistance	✓		✓			✓
Outcome: Increase in the number of permits for mitigation projects						
Message: Elevate your equipment above the flood level		✓				
4. Protect people from the hazard						
Outcome: Increase in the number of peoples signed up to receive alerts.						
Message: Sign up for alerts	✓		✓	✓	✓	✓
Outcome: Everyone evacuates when told						
Message: Prepare a flood evacuation plan		✓				
5. Build responsibly						
Outcome: Fewer cases of unpermitted work						
Message: Check with the Floodplain Official before planning a project	✓	✓	✓			✓
6. Protect natural floodplain functions						
Outcome: Increase in reports of illegal activities						
Message: Keep natural areas undisturbed	✓		✓			✓
Message: Report illegal dumping or clearing		✓				
7. Building mitigation						
Outcome: Decrease in the number of insurance claims						
Message: Install a permanent flood protection measure on your building	✓	✓				✓
8. Hurricane evacuation – 1						
Outcome: Everyone evacuates when told						
Message: Know your evacuation zone	✓	✓	✓	✓	✓	✓
9. Hurricane evacuation – 2						
Outcome: Everyone evacuates when told						
Message: Get a mobile flood app on your phone		✓	✓	✓		
Message: Get a plan	✓					✓
10. Licensed Contractors						
Outcome: Fewer cases of unpermitted work						
Message: Hire only licensed contractors	✓	✓	✓			✓

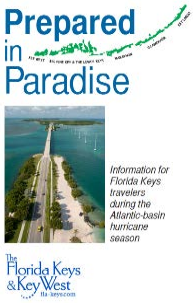
6. Delivering the Messages

The committee has recognized that an effective program for communication must be concise and progressive and should take into consideration current trends in the way people get their news. A variety of message delivery methods were discussed. The committee has determined that the following six means of delivery will most effectively reach the primary target audience.

Direct Mail Brochures & Letters –
Direct mail is an effective means of communication for audiences such as the SFHA and the repetitive loss areas. This focuses on the hazards specific to these areas and can be integrated with Web and Social Media in an effort to direct the recipient to more detailed discussion of topics most important to each of the areas. Brochures and letters can also provide contact information to aid in contacting local officials. The use of QR codes will also be incorporated to solicit the reader's active participation.

Informational material in public places –
Target audiences were described in some instances as "customers" who frequent businesses or local governments and other public places. Informational material is useful for the tourist industry and residents in order to communicate potential hazard, preparedness and evacuation procedures during hurricane season. Materials placed in many different locations that convey the same messages are likely to have a very high saturation rate for diverse audiences.





Public workshops –
Annual workshops held with the media, tourist industry and local residents provide 2-way communication between the target groups and local officials. Stakeholders often hold workshops in conjunction with emergency management to convey messages in a unified way.

Booths at events –

Events and outdoor activities are popular and well attended in the Florida Keys by both residents and visitors alike. Local emergency management departments as well as stakeholders such as the NWS place booths at major festivals and events.

TV –
Monroe County does not have local news reporting TV stations. All news is sent from neighboring counties. Since television is still the number one source of news, it is imperative that the media in the surrounding areas be kept abreast of local conditions. Monroe County conducts a "Media Blitz" on an annual basis to ensure that the media has current emergency and contact information. The TV stations are provided with both written and digital material. Monroe County does have TV Channel 76, a local outlet that broadcasts public meetings and pre-recorded material.

Internet websites –
Today, an overwhelming number of people, including seniors, search the Internet for news and events. Search engines are used as a means to obtain immediate answers to questions and current events. Currently, the only news source outranking the Internet is TV. Locally maintained websites on the Internet can offer readers much more in-depth information regarding the flood hazard, how to prepare for a weather event, protecting property and lives, and a vast array of other flood-related topics. Website information is easily kept up-to-date with the most current information. This is a distinct advantage over printed materials that become quickly outdated and obsolete. In fact, most printed material provides website addresses and tells the reader to "go" to the site for more information.

Social and mobile media -
Researchers have now begun publishing data on the use of social media in disasters, and lawmakers and security experts have begun to assess how emergency management can best adapt. Michael Beckerman, President and CEO of the Internet Association, told a House Subcommittee on Emergency Preparedness, response, and communication, "The Convergence of Social networks and mobile has thrown the old response playbook out the window." A Pew Research Center study conducted in 2016 in association with the John S. and James L. Knight Foundation, states that; "Fully 81% of Americans get at least some of this news through websites, apps or social networking sites. And, this digital news intake is increasingly mobile. Among those who get news both on desktop computers and mobile devices, more than half prefer mobile."

7. Outreach Projects

Based on the public information needs assessment and the review of current outreach projects in section 4, the PPI Committee endorsed some current projects, recommended improvements to some, and identified new outreach projects. The projects will include priority messages that encourage taking actions to produce the outcomes identified in Table 8.

Table 9. Planned Outreach Projects

OP	Project	Topic/Message									
		1	2	3	4	5	6	7	8	9	10
1	Facts on Flooding Brochure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Repetitive Loss Area Brochure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Know Before You Buy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	TDC Hurricane Workshop	✓			✓				✓		
5	NWS Hurricane Awareness	✓	✓		✓				✓	✓	
6	Media Blitz Week-Media Guide	✓			✓				✓		
7	Brochures Permitting Dept.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	The Citizen Hurricane Guide		✓		✓				✓		✓
9	FIRM Mitigation Workshops	✓	✓	✓		✓		✓			
10	TDC Website	✓			✓				✓	✓	
11	KW Licensed Contractor										✓
12	Evacuation Signs			✓					✓		
13	Channel 76 Monroe County TV	✓			✓				✓	✓	
14	NWS Website	✓							✓	✓	
15	County -wide Events	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	Help Customers Real Estate Flyer	✓	✓								

The main goal of the PPI is to develop a coordinated approach to the communication of public information. This is accomplished by delivering unified messages from multiple sources directed to priority audiences. In order to ensure that there is unified messaging throughout the communities' public information, recommendations are made for the following activities:

Map Information Service: Providing accurate hazard information is a vital component in the continuing effort to protect lives and property. All jurisdictions will publicize the availability of personal assistance provided by the FIRMs and understanding other risks associated with flooding and other special flood related hazards. The PPI Committee recommends that, where applicable, the information provided by each community should include the items underlined:

- All FIRM panel information
- FIRM zone and base flood elevation
- Coastal High Hazard Area
- Coastal Barriers Resources Act areas

- A note that even if a property is outside the SFHA, all parts of the Florida Keys are subject to flooding from a large storm
- Preserved wetlands
- Species focus area

Hazard Disclosure: Realtors and prospective buyers are of special concern to all of Monroe County and are identified by the PPI as a priority audience. The PPI Committee recommends that real estate agents be sent a brochure to give to customers looking to purchase property. The brochure advises the buyer to contact their local floodplain official to "Know Before You Buy." Realtors should also receive a publication endorsed by the National Association of Realtors and FEMA outlining what they should know and say to customers about flood risk and flood insurance.

Website: As discussed earlier, the Internet is fast becoming one of the primary means in which people access news and information. Websites allow for more in-depth exploration into topics of concern to each audience reader and can be tailored to local conditions. The PPI Committee recommends that all four communities' websites and Monroe County Emergency Management website include links to other websites that have more detailed information on the PPI's priority topics and messages.

The websites should be checked monthly to ensure the links are still working. They should be updated annually to reflect the changes recommended by the PPI committee during the annual evaluation process.

Flood Protection Assistance: One of the priority messages determined by the committee is mitigation for flood prone structures. Flood protection messages are included in the outreach to residents of the repetitive loss areas and SFHA. The outreach projects proposed in this PPI should include reminders that property owners are encouraged to call their community's floodplain official for assistance with flood and repetitive flooding issues on their property.

The staff providing the assistance should remind everyone that they face a flood hazard regardless of their location. They should encourage property owners to consider mitigation efforts both large and small in order to reduce flooding loss. They should also promote those retrofitting measures that can impact flood insurance premiums.

Drainage Maintenance: The State of Florida regulation prohibits dumping of non-solid waste in any waterway and all local jurisdictions have local codes that prohibit dumping of solid waste on any property, whether privately or publicly owned. One of the PPI priority messages is to encourage citizens to report illegal dumping. That message should be included in all outreach projects possible, including those disseminated to all people, not just those going to the SFHA or repetitive loss areas.

Table 10 identifies the annual projects that the committee decided would most be appropriate to deliver the important messages outlined in Table 8. Many of the projects are endorsed by locally recognized stakeholders and community elected officials. Some of the projects were already being implemented while others were created to fill "gaps" recognized by the committee.

Table 10 Annual Public Information Projects

Projects	Assignment	Delivery	Schedule	Stakeholder
OP 1. Facts on Flooding Brochure*	CRS Coordinator	Mailed to everyone	May	UF Extensions
OP 2. Repetitive Loss Brochure	CRS Coordinator	Mailed to RLAs	June	FIRM
OP 3. Know Before You Buy	CRS Coordinator	Key real estate professionals	Ongoing	FIRM
OP 4. TDC Hurricane Workshop	TDC, MOCO PIO, NWS	Workshop Tourist Industry	May	NWS
OP 5. NWS Hurricane Awareness	NWS	Week long campaign	May	NWS
OP 6. Media Blitz Week-Media Guide	TDC, MOCO PIO, NWS	Face to Face meetings with all media	May	NWS
OP 7. Brochures Permitting Dept.	CRS Coordinator	Displays public places	Ongoing	FDEM
OP 8. The Citizen Hurricane Guide	Hurricane Guide	60K Distributed to all businesses county-wide	Ongoing	The Citizen
OP 9. FIRM Workshops	FIRM	Mitigation workshops held county-wide	3 Annual	FIRM
OP 10. TDC Website	TDC	Workshop with local tourist industry	Ongoing	
OP 11. KW Licensed Contractor	MOCO	Building Department Hurricane Guides	May	Contractor License Board
OP 12. Evacuation Signs	MOCO EM	120 Miles of US 1	Ongoing	
OP 13. Channel 76 MOCO TV	MOCO EM	Local TV Broadcast	Ongoing	
OP 14. NWS Website	NWS	Website accessed by all residents and visitors	Ongoing	NWS
OP 15. County-wide Events	MOCO EM	Booth at events county-wide.	35 Various Events	NWS FDEM
OP 16. Help Customers Realtors	CRS Coordinator	Emailed directly to real estate agents	August	Realtor Association

Note: Outreach projects OP 1 - OP16 in Table 10 benefit all of the participating communities.
*OP 1 – Endorsed by local elected official.

The committee acknowledged that different types of projects are more effective than others for reaching the priority audiences. The project types are:

Targeted projects (T) – Projects distributed directly to all the members of a priority audience. The messages clearly explain that the recipient is receiving the messages because he/she is part of a priority audience.

General Outreach Projects (G) – These are newspaper articles, signs, tweets, presentations, etc. that reach out to the audiences, but don't necessarily reach all the members.

Informational Projects (I) – Typically these are brochures, flyers and similar documents that are in a public place or made available on request. Unlike General Outreach, the audience has to seek out the messages in Informational Projects. For CRS purposes, websites are considered to be informational projects.

Table 11 demonstrates the project types.

Table 11. Type of Project

OP	Projects	PA #1 Everyone	PA #2 Rep Loss Areas	PA #3 Key Professionals	PA #4 Tourist Industry	PA #5 Media	PA #6 Permit Customers
1	Facts on Flooding Brochure	T	G				I
2	Repetitive Loss Area Brochure		T				
3	Know Before You Buy	I		T			
4	TDC Hurricane Workshop				T		
5	NWS Hurricane Awareness	G	G	G		G	
6	Media Blitz Week-Media Guide					T	
7	Brochures Permitting Dept.	I					I
8	The Citizen Hurricane Guide	G					
9	FIRM Mitigation Workshops	G	G	G			
10	TDC Website				T		
11	KW Licensed Contractor Notice	G					T
12	Evacuation Signs	G	G		G		
13	Channel 76 Monroe County TV	G	G		G		
14	NWS Website	I	I	I	I	I	I
15	County-wide Events	G	G				
16	Help Customers Real Estate Flyer			T			

8. Flood Response Projects

Projects in Table 10 are to be implemented every year. They convey flood protection measures that are appropriate for motivating people to take steps to protect themselves and their property from damage prior to a flooding event. Flood response messages are delivered just prior to, during, and after a storm or flood. The messages typically tell people to take short term precautions to prepare for and recover from an event. The committee reviewed a variety of flood response outcomes and selected the messages in Table 12 below:

Table 12. Flood Protection Messages for All Monroe County Communities

Timing	Topic Outcome Messages	Everyone in the Keys	Visitors	Businesses	Mobile home residents	Returning residents	Permit applicants
Threatening storm or flood	**1. Know your hazard**						
	Outcome: Reduced number of rumor related calls to hotline						
	Message: Know where to turn for reliable and up-to-date information		✓	✓		✓	
	Message: Sign up for alerts @ Monroecountyem.com	✓			✓		
	3. Protect property from hazard						
	Outcome: Less damage from flying debris						
	Message: Trim your trees and bring in outdoor furniture	✓			✓		
	Message: Put shutters or plywood on windows			✓			
	Outcome: Visitors stay informed and evacuate as asked						
	Message: Visit the Florida Keys Website		✓	✓			
	4. Protect people from hazard						
	Outcome: People follow evacuation procedures						
	Message: Evacuate if told to do so		✓	✓			
	Message: Mobile home residents must evacuate for all hurricanes	✓			✓		
	8. Hurricane evacuation						
	Outcome: People evacuating don't get stranded						
	Message: Do not get on the road without a chosen destination	✓	✓	✓	✓		
	9. Hurricane preparedness						
	Outcome: Mobile homes do not become debris						
	Message: Check your mobile home tie-downs				✓		

Timing	Topic Outcome Messages	Everyone in the Keys	Visitors	Businesses	Mobile home residents	Returning residents	Permit applicants
After a storm or flood	**2. Insure your property**						
	Outcome: People buy insurance						
	Protect yourself from the next flood with flood insurance	✓		✓	✓		✓
	4. Protect people from hazard						
	Outcome: People stay safe						
	Message: Monitor TV, Radio and internet for when is it safe to re-enter	✓		✓	✓	✓	
	Outcome: Access to information from mobile device						
	Message: Check-in with family and friends by texting or social media		✓				
	5. Build responsibility						
	Outcome: Flooded buildings properly repaired						
	Message: Hire a licensed contractor			✓	✓	✓	✓
	Message: Contact local floodplain official for information on regulation	✓					
	7. Building Mitigation						
	Buildings built or repair stronger and safer						
	Message: Contact the local floodplain official about grants to rebuild.	✓		✓			
	Message: Talk to your insurance agent. Your flood policy could help with the cost to elevate your building.					✓	✓

Based on the public information needs assessment in Section 4 and review of current flood response projects, the PPI Committee concluded that the projects listed in Tables 13 relayed priority messages that are consistent with the finding of the assessment. As with the annual public information projects, the committee found that many of the existing projects relay and repeat the important messages for flood response both before and after a storm or flooding event.

The committee also determined that along with the priority topics of know your hazard, insure your property, protect your property and people, that special attention should be given to 3 additional topics, which are hurricane evacuation, hurricane preparedness and building mitigation. The desired outcomes and messages are included in Table 12.

Table 13. Flood Response Planned Projects

FRP	Project	Topic/Message								
		1	2	3	4	5	6	7	8	9
1	News Releases	✓		✓	✓	✓			✓	✓
2	Social Media	✓		✓	✓	✓			✓	✓
3	TDC Website	✓			✓				✓	
4	MOCO EM Website	✓	✓	✓	✓	✓			✓	✓
5	NWS Hurricane Awareness	✓	✓		✓				✓	✓
6	Handouts various locations	✓	✓		✓	✓		✓	✓	✓
7	Handouts at re-entry	✓	✓		✓			✓		

Since pre-event projects need to be delivered quickly and reach as many audiences as possible, the committee decided that unified messages should be delivered via TV new, radio, internet and social media. The information delivered by these methods can be updated quickly to reflect current conditions. The communities in the FL Keys coordinate with the NWS Key West, the TDC and the Monroe County Emergency Management Director and the Monroe County PIO to ensure that messages are consistent.

Table 14 identifies the projects that the committee decided would be appropriate to deliver the important messages when preparing for a storm event and to help with the recovery efforts. The committee recommended a "print ready" package of various materials to be distributed to various locations and to hand out to residents returning to the Keys after an evacuation. The committee will work with the Monroe County PIO to further develop handouts for FRPs 6 and 7.

Table 14. Flood Response Project Delivery

Projects	Assignment	Delivery	Stakeholder
FRP 1. News Releases	MOCO PIO NWS	Everyone Visitors Businesses Mobile home residents	NWS
FRP 2. Social Media	MOCO PIO NWS TDC	Everyone Visitors Businesses Mobile home residents	NWS TDC
FRP 3. TDC Website	TDC	Visitors	TDC
FRP 4. MOCO EM Website	MOCO PIO	Everyone Visitors Businesses Mobile home residents	NWS
FRP 5. NWS Hurricane Awareness	NWS	Everyone Visitors Businesses Mobile home residents	NWS
FRP 6. Handouts various locations	TDC, MOCO PIO, NWS	Everyone Visitors Businesses Mobile home residents Returning residents	NWS FEMA Contractor Licensing
FRP 7. Handouts at re-entry	MOCO	MOCO EM	FEMA Contractor Licensing

Flood response messages will be disseminated as deemed appropriate by the Monroe County Emergency Manager and the Monroe County Public Information Officer (PIO). Jurisdictions and TDC will support and mirror the projects and messages. The general projects are listed in Table 14. The Monroe County Public Information Officer in conjunction with the County Division of Emergency Management will work together to update the flood response projects annually just prior to hurricane season.

Media Collaboration with NWSChat

FRP #1 News Release – The MOCO Emergency Manager and the MOCO PIO will identify which news releases will include the messages in Table 10.

FRP #2 Social Media Messages and Posts – The MOCO Emergency Manager, MOCO PIO, TDC and NWS Key West will coordinate posts on Facebook and tweets on Twitter. The messages will be repeated and updated to reflect current conditions.

FRP #3 TDC Website – The TDC will work closely with the MOCO Emergency Division, the MOCOPIO and the NWS Key West to updated the website with the appropriate messages for the tourist industry and visitors.

FRP #4 MOCO Website – All messages for residents and visitors will be repeated on the MOCO website. All jurisdictions are encouraged to provide links to the MOCO website with the goal being unified and constant messages appropriate for the flood event.

FRP #5 NWS Key West Website – Messages concerning threatening weather, preparedness and recovery will be posted on the website and consistent with the flood response messages in all other flood response projects.

FRP #6 Handouts in Various Locations – All jurisdictions keep FEMA, NWS Key West and locally tailored brochures on-hand ready to distribute both after a storm or flooding event.

FRP #7 Handouts @ re-entry – The Monroe County Sherriff's Office issues re-entry stickers to residents of Monroe County. Flood response projects will be delivered at the checkpoint as appropriate and deemed necessary.

Handouts for FRP 6 and 7 will be reviewed annually and updated with more current or relative brochures projects. The following publications will be printed and distributed as appropriate for each flood event:

- Business Pre-Post Storm Recovery Brochure – NWS Stakeholder
- Florida DPBR Tips for Hiring a Contractor – DPBR Stakeholder
- FEMA/NFIO Build Back Safer and Stronger Brochure – FEMA Stakeholder
- Repairing Your Flooded Home Guide – American Red Cross Stakeholder
- FEMA Increased Cost of Compliance Coverage – FEMA Stakeholder
- Protecting your Home and Property from Flood Damage – FEMA Stakeholder
- Managing Your Flood Insurance Claim Flyer – FloodSmart Stakeholder
- Flood Preparation and Safety Flyer - FloodSmart Stakeholder
- Flood Insurance Claim Handbook – FEMA Stakeholder

It was concluded that although most of the projects and messages would be appropriate for all audiences, there are certain audiences that need to be reached with specific messages. Table 15 below is an accounting of the types of projects deemed most effective in reaching the target audiences. The description of each type of project is included in the narrative prior to Table 11.

Table 15. Type of Flood Response Project

FRP	Project	Everyone in the FL Keys	Visitors	Businesses	Mobile home residents	Returning residents	Permit applicants
1	News Releases	T	T	T	T		
2	Social Media	G	G	G	G	G	G
3	TDC Website		I	I			
4	MOCO EM Website	I	I	I	I	I	I
5	NWS Hurricane Awareness	I	I	I	I	I	I
6	Handouts various locations	I	I	I	I	I	T
7	Handouts at re-entry			G		T	

9. Implementation and Evaluation

The PPI committee will meet in May and November of each year to review activities and evaluate the program.

In May, the committee will review community reports on progress toward the desired outcomes of the messages. The community reports will show the tracking of statistical outcomes, where available, including but not limited to:

- Requests for FIRM information
- Numbers of flood insurance policies, by category
- Flood protection assistance request
- Number of permits for mitigating floodprone property
- Number of people registered for alerts
- Evaluation of code cases for flood related unpermitted work
- Code cases for illegal dumping or clearing
- Number of mitigated repetitive loss structures

At the November meeting, the PPI committee will review insurance coverage trends and evaluate projects. An evaluation report will be prepared and sent to the governing boards of each jurisdiction. Where the evaluation indicates, revisions are warranted, such as replacing a project or redirecting messages, the committee will vote to adjust the projects accordingly.

In the years where there is a storm event the committee will review emergency management after action reports to evaluate:

- Evacuation statistics including occupancy of shelters and traffic counts on US 1 if available
- General information on the extent of flooding
- General information on injuries and property damage
- Statistics on flood-related construction and violations for unpermitted work

Every five years, the entire PPI will be updated and insurance coverage evaluated.