

# JEFFERSON PARISH



## JEFFERSON UNITED MITIGATION PROFESSIONALS MULTIJURISDICTIONAL PROGRAM FOR PUBLIC INFORMATION

OCTOBER 2015

# TABLE OF CONTENTS

<b>SECTION 1 INTRODUCTION.....</b>	<b>1</b>
1.1 GOALS .....	1
1.2 BACKGROUND ON JEFFERSON PARISH .....	2
1.2.1 POPULATION.....	3
<b>SECTION 2 PPI COMMITTEE.....</b>	<b>4</b>
<b>SECTION 3 COMMUNITY PUBLIC INFORMATION NEEDS ASSESSMENT .....</b>	<b>6</b>
3.1 JEFFERSON PARISH .....	6
3.1.1 FLOOD HAZARD FOR JEFFERSON PARISH.....	6
3.1.2 SEVERITY OF THE FLOOD HAZARD .....	9
3.1.3 FLOOD PROTECTION MEASURES.....	9
3.2 CITY OF GRETNA .....	9
3.2.1 SEVERITY OF THE FLOOD HAZARD .....	9
3.2.2 FLOOD PROTECTION MEASURES.....	10
3.3 CITY OF HARAHAH.....	10
3.3.1 SEVERITY OF THE FLOOD HAZARD .....	10
3.3.2 FLOOD PROTECTION MEASURES.....	10
3.4 CITY OF KENNER.....	10
3.4.1 SEVERITY OF THE FLOOD HAZARD .....	10
3.4.2 FLOOD PROTECTION MEASURES.....	11
3.5 CITY OF WESTWEGO.....	11
3.5.1 SEVERITY OF THE FLOOD HAZARD .....	11
3.5.2 FLOOD PROTECTION MEASURES.....	11
3.6 TOWN OF JEAN LAFITTE .....	11
3.6.1 SEVERITY OF THE FLOOD HAZARD .....	11
3.6.2 FLOOD PROTECTION MEASURES.....	12
<b>SECTION 4 FLOOD INSURANCE COVERAGE ASSESSMENT (ACTIVITY 370) .....</b>	<b>13</b>
4.1 JEFFERSON PARISH .....	14
4.2 CITY OF GRETNA .....	15
4.3 CITY OF HARAHAH .....	16
4.4 CITY OF KENNER .....	17
4.5 CITY OF WESTWEGO .....	18
4.6 TOWN OF JEAN LAFITTE .....	19
4.7 SUMMARY.....	20
4.8 RECOMMENDATIONS .....	21
<b>SECTION 5 PROJECT DESIGN.....</b>	<b>22</b>
5.1 TARGET AUDIENCES .....	22
5.2 INVENTORY OF PUBLIC INFORMATION EFFORTS.....	23
5.3 MESSAGES .....	23
5.4 OUTREACH .....	23
<b>SECTION 6 OTHER PUBLIC INFORMATION INITIATIVES.....</b>	<b>24</b>
6.1 MAP INFORMATION SERVICE.....	24
6.2 HAZARD DISCLOSURE/REAL ESTATE AGENTS' BROCHURE.....	24
6.3 FLOOD PROTECTION WEBSITE.....	24
6.4 FLOOD PROTECTION ASSISTANCE.....	25
6.5 STREAM DUMPING REGULATIONS.....	25
<b>SECTION 7 PLAN MAINTENANCE .....</b>	<b>26</b>
7.1 ANNUAL EVALUATION.....	26
7.2 PLAN ADOPTION .....	26
<b>APPENDICES.....</b>	<b>27</b>
A. ONGOING PROJECTS .....	27
B. NEW PROJECTS.....	27

# Section 1

## Introduction

Unincorporated Jefferson Parish, City of Gretna, City of Harahan, City of Kenner, City Westwego, and the Town of Jean Lafitte, all located within Jefferson Parish (referred to from here on as JUMP communities), are all impacted by some form of flooding. These communities, who participate in the Community Rating System (CRS), also make up the parish-specific CRS User Group known as Jefferson United Mitigation Professionals (JUMP). Part of JUMP's mission is to take action in protecting the people and property of Jefferson Parish from future flooding.

In an effort to inform and better prepare its residents, JUMP has developed a Multi-Jurisdictional Program for Public Information (MJ-PPI). This program serves as an official strategy for joint education and outreach efforts focusing on flood protection. The benefits of a MJ-PPI include a more comprehensive outreach approach by providing communities and residents with clear, coordinated messages that are delivered in a manner that is cost-effective and consistent. The better access flood-prone residents have to flooding information such as their vulnerability to the flood risk and impacts, the higher chance these residents will be prepared to take action in reducing their risk. The result is a well-informed public, safer living environment, and lower costs associated with flood loss.

### 1.1 Goals

The goal of the Program for Public Information (PPI) is to provide community residents with effective and cost-efficient access to flood risk and risk reduction information, thus raising the chances the public will take action to protect their property from flood-related physical and economic loss. The strategies for effective, cost-efficient delivery are:

- Provide clear and consistent messages, coordinated across all jurisdictions
- Engage stakeholders in developing and delivering messages
- Undertake projects that have measurable outcomes – and annually measure the success of said projects

This MJD-PPI Plan provides JUMP members a coordinated strategy for informing ALL Jefferson Parish citizens about the flood risk posed throughout Jefferson Parish. The goals of JUMP's MJD-PPI Plan are as follows:

1. Create an informed public about the flood hazard in Jefferson Parish and approaches to prepare for and protect against the flood hazard
2. Increase flood insurance coverage across all jurisdictions
3. Decrease flood losses across all jurisdictions
4. Keep all citizens safe from flooding

Not only will this plan provide strategies for outreach to the general public, it will also take into account strategies to reach multi-generational and multi-cultural citizens as well as several specific targeted audiences described later in this document.

From a shared resources perspective, the MJD-PPI Plan allows the different JUMP communities to coordinate staff and monetary resources while providing consistent messages through various delivery mechanisms. The minds behind the Community Rating System have done the research and

learned that people are more likely to change their behavior when they get the same message from different sources.

## 1.2 Background on Jefferson Parish

Jefferson Parish lies in southeastern Louisiana and is bordered by Lake Pontchartrain on the north, Orleans and Plaquemines Parishes to the east, the Gulf of Mexico to the south, and Lafourche and St. Charles Parishes to the west.

Principal physiographic features of the area are the Mississippi River channel, natural levee ridges along its banks and along the banks of abandoned distributary channels, and low marshlands situated between and bordering the channels. Jefferson Parish is divided into East and West Bank by the Mississippi River which meanders through the northern section of the parish. The highest land in the parish is approximately 10 feet above the National Geodetic Vertical Datum (NGVD) along the natural levee that borders the Mississippi River. The East Bank is nearly surrounded by water and bound by the Mississippi River to the south, Lake Pontchartrain to the north, the 17<sup>th</sup> Street Canal to the east, and St. Charles Parish to the west. The West Bank of Jefferson Parish, east of the Harvey canal, is bound by the Donner Canal to the east, the Mississippi River to the north, the Harvey Canal to the west, and the Intracoastal Waterway to the south.



As mentioned earlier in this section the parish consists of six incorporated areas. In addition to the incorporated areas, Metairie is the parish's largest community, an unincorporated area that comprises almost all of East Jefferson Parish. Smaller unincorporated areas include River Ridge and Jefferson. East Jefferson cities include Kenner and Harahan while cities such as Gretna and Westwego are in West Jefferson.

Jefferson Parish consists of a land area of 305 square miles or 195,793 acres and a water area of 336 miles or 215,358 acres. It extends about 55 miles in a north-south direction from the southern shores of Lake Pontchartrain to the Gulf of Mexico.

The southern part of the parish is less populated and is characterized by estuarine systems that lead in from the Gulf of Mexico. The coastal marshes, wetlands, and estuaries contain numerous bodies of shallow water. These bodies of water and wetlands make up over 85 percent of the parish.

With an average annual precipitation of 64.16 inches (Key to the City, Jefferson Parish, Louisiana<sup>1</sup>), flood protection is vital to the parish. Flood protection in northern Jefferson Parish is achieved by a system of levees, floodwalls, canals and drainage pump stations. The parish has 340 miles of canal waterways, drainage ditches, cross drains, culverts, and internal levee systems. There are also 70 pump stations (24 major stations) that include 167 pumps installed throughout the parish drainage system for a total capacity of 47,569 cfs (Jefferson Parish Drainage Department). With the exception of some areas inside the levee protected areas of northern Jefferson Parish, most of the land is located within FEMA's 100-year floodplain. The land area outside of the 100-year floodplain may still be subject to flooding if a levee failure were to occur.

---

<sup>1</sup> <http://www.usacitiesonline.com/lajeffersonparish.htm>; accessed 8/20/15

### 1.2.1 Population

Of the 64 Parishes within the State, Jefferson Parish is the second most populous accounting for almost 10 percent of the overall population of Louisiana. The parish experienced significant growth during the 1970's, with an increase in population of 117,024 people from the 1970 U.S. Census to the 1980 U.S. Census. The population leveled off in the 1980's and remained at approximately 450,000 residents between 1980 and 2000. However, the parish's population, according to the 2010 U.S. Census, experienced a slight decline of approximately 5 percent. See Table 1 for the population of the Parish and cities for years 1980, 1990, 2000, and 2010.

**Table 1**  
**Jefferson Parish Population**

Name	Total 2010 Population	Total 2000 Population	Total 1990 Population	Total 1980 Population
Jefferson Parish	432,552	455,466	448,306	454,592
Metairie	138,481	146,136	149,428	164,160
Kenner, City of	66,702	70,517	72,033	66,382
Marrero	33,141	36,165	36,671	36,548
Terrytown	23,319	25,430	23,787	N/A
Harvey	20,348	22,226	21,222	22,709
Gretna, City of	17,736	17,423	17,208	20,615
Estelle	16,377	15,880	14,091	N/A
River Ridge	13,494	14,588	14,800	N/A
Woodmere	12,080	13,058	N/A	N/A
Jefferson	11,193	11,843	14,521	N/A
Timberlane	10,243	11,405	12,614	N/A
Westwego, City of	8,534	10,763	11,218	N/A
Harahan, City of	9,277	9,885	9,927	N/A
Waggaman	10,015	9,435	9,405	N/A
Bridge City	7,706	8,323	8,327	N/A
Avondale	4,954	5,441	5,813	N/A
Elmwood	4,635	4,270	N/A	N/A
Jean Lafitte, Town of	1,903	2,137	1,469	N/A
Lafitte	972	1,576	N/A	N/A
Grand Isle, Town of	1,296	1,541	1,455	N/A
Barataria	1,109	1,333	1,160	N/A

([www.census.gov/2010census/](http://www.census.gov/2010census/))

As a result of Hurricanes Katrina, Rita, Gustav, and Ike, large numbers of residents were displaced from the State of Louisiana. Hurricane Katrina alone forced an immediate and massive relocation of hundreds of thousands of people, making it difficult to track the population shift. This displacement has caused a parish-wide decrease in population from the 2000 census to the 2010 data.

When looking at the following factors: history, potential for mitigation, susceptible areas, available date, and federal and local disaster declarations, flooding ranks as the parish's top hazard.

## Section 2

### PPI Committee

The first step in creating a PPI is to form a committee. JUMP's MJ-PPI Committee is comprised of the following representation:

**Table 2**  
**JUMP MJ-PPI Committee**

Name	Organization/Title	Government vs Stakeholder	Jurisdiction
Michelle Gonzales	JP Director of FP Management & HM	Government	Jefferson Parish
Maggie Olivier	JP Floodplain Manager	Government	Jefferson Parish
Rhonda Collins	JP PIO	Government	Jefferson Parish
Evelyn Cade	JP Planning Department	Government	Jefferson Parish
Alessandra Jerolleman	Water Works/Metairie Resident	Stakeholder	Jefferson Parish
Dwayne LeBlanc	Wright Insurance	Stakeholder	Jefferson Parish
Erin Merrick	Metairie Resident	Stakeholder	Jefferson Parish
Kelli Walker	New Orleans Metro Assn of Realtors	Stakeholder	Jefferson Parish
Tammy Mercier	Real Estate	Stakeholder	Jefferson Parish
Tom Rodrigue	Metairie Resident	Stakeholder	Jefferson Parish
Danika Gorrondona	Gretna - Building Official	Government	City of Gretna
Michael Wesley	Gretna - Floodplain Management	Government	City of Gretna
Brian Heiden	Gulf Coast Bank	Stakeholder	City of Gretna
Lydia Jemison	Jemison & Partners, Inc.	Stakeholder	City of Gretna
Melissa Martin	Entergy	Stakeholder	City of Gretna
Ryan Daul	Daul Insurance Agency, Inc.	Stakeholder	City of Gretna
Steve Bean	Real Estate	Stakeholder	City of Gretna
Edwin Lauricella	Harahan - Regulatory Office	Government	City of Harahan
Angie Albrecht	Harahan Resident	Stakeholder	City of Harahan
Aimee Vallot	Kenner - Director of Inspect & CE	Government	City of Kenner
Bob Ross	Kenner - PIO	Government	City of Kenner
John Parr	State Farm Insurance	Stakeholder	City of Kenner
Vicki Holmes	Orleans Shoring	Stakeholder	City of Kenner
Lisa Tapia	Westwego - Clerk; Floodplain	Government	City of Westwego
Kim Reeves	Orleans Shoring	Stakeholder	City of Westwego
Thelma Meyers	Hispanic Chambers of Commerce	Stakeholder	City of Westwego
Yvette Crain	Jean Lafitte - Clerk; Floodplain	Government	Town of Jean Lafitte
Annette Claverie	Regions Bank	Stakeholder	Town of Jean Lafitte
Teddesse Tewelde	Business Owner	Stakeholder	Town of Jean Lafitte
Monica Farris	UNO-CHART; Resident	Government	Advisors
Pam Lightfoot	NFIP State Coordinator	Government	Advisors
Pat Skinner	LSU AgCenter	Government	Advisors

The role of the committee is to assist in the development of the PPI document by providing feedback on what areas should be targeted for outreach, which audiences should be focused upon, what messages should be disseminated, and through which outlet those messages should be delivered.

The initial MJ-PPI Committee meeting was held on January 20, 2015, at the Kenner Pavilion located in the City of Kenner. The presentation covered an overview of the CRS program and the Parish-specific User Group JUMP. JUMP's facilitator gave a breakdown of the 7-step process required in creating a PPI. The next two committee meetings informed steps 2-5.

The second committee meeting was held on March 24, 2015, at the Leo E Kerner, Jr. Multi-Purpose Complex in the Town of Lafitte. After a brief review of the CRS program, JUMP, and the PPI steps for those who were new to the committee, the group participated in a table exercise. Each table represented a different target audience and the goal was to formulate messages geared toward that audience (step 3). The committee spent 45 minutes brainstorming messages to best communicate the six priority topics to each target audience. The responses were shared in a group discussion.

Committee meeting three occurred on May 19, 2015 at the Westwego Community Center in the City of Westwego. This interactive meeting started with an audience poll to identify the most effective ways to reach each of the targeted audiences. The facilitator provided an overview of the latest PPI draft and highlighted data regarding the Flood Insurance Assessment and how we will attempt to fill in the gaps where flood insurance policies are lacking. The committee was asked to participate in two separate table activities. The first was to revisit the messages and begin to determine desired outcomes. The second was to create mock-up outreach projects (one per table) using the audience poll results (step 4). The products from this meeting are going to serve as creative suggestions for project designs.

### **PPI Committee (at Meeting 2)**



## **Section 3**

# **Community Public Information Needs Assessment**

### **3.1 Jefferson Parish**

#### **3.1.1 Flood Hazard for Jefferson Parish**

Flooding is defined as the accumulation of water within a water body and the overflow of excess water onto adjacent floodplain lands. The floodplain is the land adjoining the channel of a river, stream, ocean, lake, or other watercourse or water body that is susceptible to flooding.

Hundreds of floods occur each year in the United States, including overbank flooding of rivers and streams and shoreline inundation along lakes and coasts. Flooding typically results from large-scale weather systems generating prolonged rainfall. Flooding in Jefferson Parish can be the result of the following weather events: hurricanes, thunderstorms (convective and frontal), storm surge or winter storms.

The history of flooding in Jefferson Parish and each of the municipalities indicates that flooding may occur during any season of the year. In the cooler months, the area is subject to heavy rainfalls resulting from frontal passages. In the summer months, heavy rainfalls result from convective thunderstorms. In the late summer, hurricanes accompanied by rainfall and super-elevated water-surface elevations pose the largest threat of flooding to the area.

The Mississippi River divides the Parish into two distinctly different communities. Development on the East Bank of the Mississippi River consists mainly of residential and commercial improvements. Although some industrial development is located on the East Bank of the river, most of the heavy industrial concentration is found on the West Bank. In recent years, the West Bank area has also experienced rapid residential development. Development on the west bank ranges from small fishing villages at Lafitte and Barataria in the southernmost portion of the Parish to heavily urbanized areas along the Mississippi River.

Since most of Jefferson Parish's land mass is below sea level, a levee and pump system is employed for drainage. The levees protect the Parish from natural overbank flooding of these surrounding water bodies, including the Mississippi River, Lakes Pontchartrain and Cataouatche, and coastal marshes. Pumping is necessary to remove runoff from the drainage system over the levees into the outlying water bodies.

Drainage of floodwaters in Jefferson Parish is accomplished by a system of structures and canals, which outflow to pumping stations. Historically, these pumping stations have been inadequate in capacity to handle the volume of floodwaters reaching the stations and have operated at less than full capacity during floods. In addition, drainage structures through some man-made barriers, such as highway and railroad embankments, have proven inadequate during some rainfall events. The parish has completed twenty-five since the 2008 in an attempt to address these drainage deficiencies.

There have been 49 floods recorded in Jefferson Parish in the period from 1996 to 2014. The principle sources of flooding are rainfall ponding, levee overtopping, and hurricane or tropical storm surges originating in the Gulf of Mexico from Lake Pontchartrain on the East Bank and Lakes

Salvador and Cataouatche on the West Bank. The East Bank of Jefferson Parish has many flood problem areas. The flood-prone areas, such as Hoey's Basin in Old Metairie, are scattered throughout the parish and are caused by land subsidence, and inadequate capacity of canals and culverts. Often they are in low areas, while other areas flood because of inadequacies in downstream parts of the system. Based on past records, the area can expect future flood events throughout the Parish as deep as 18 inches.

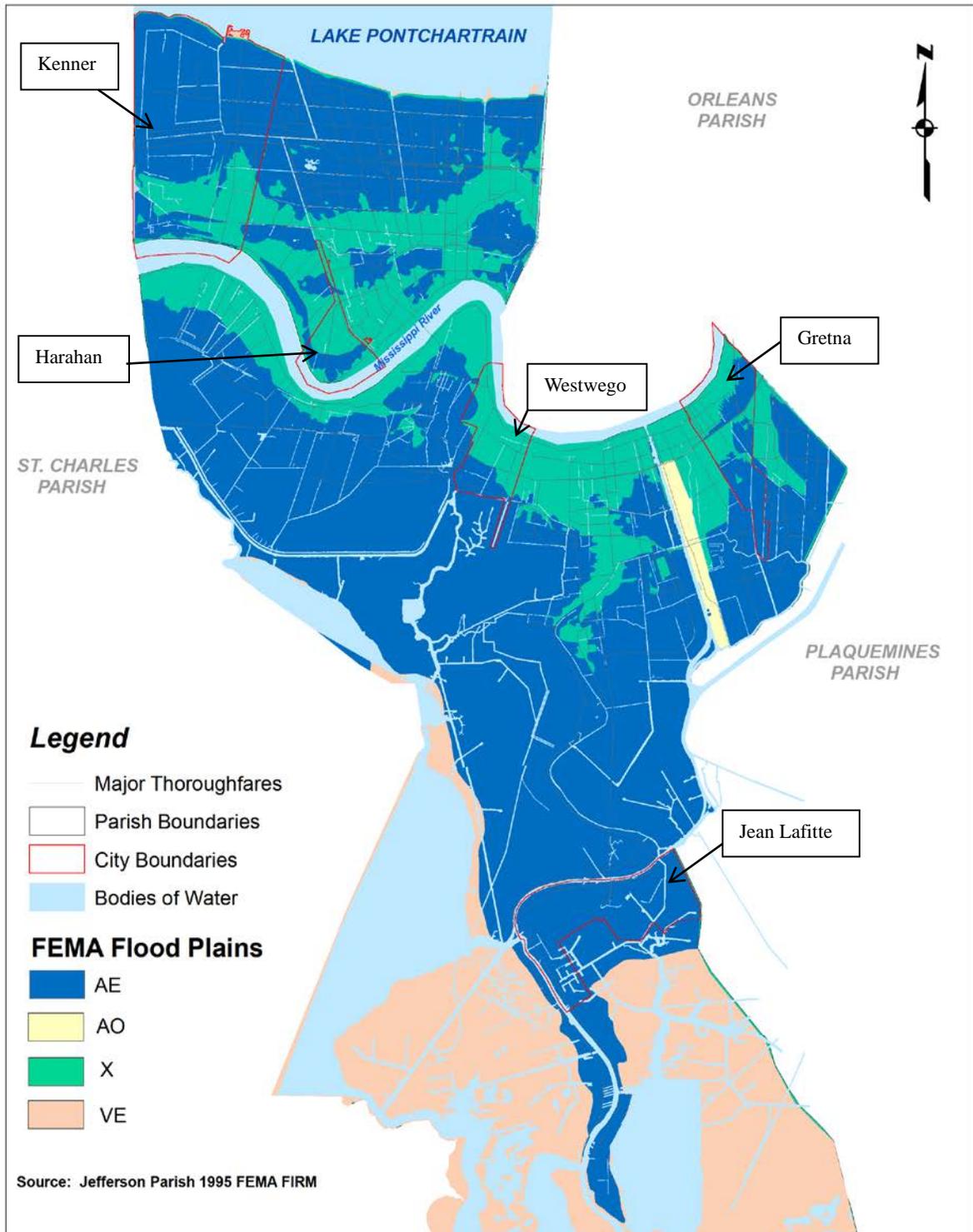
The area of Jefferson Parish outside the levee protection system, including Jean Lafitte and Grand Isle, is most vulnerable to storm surge flooding.

In June of 1973 FEMA produced a Flood Insurance Study (FIS) for Jefferson Parish. A FIS details the flood hazard areas within a particular area or community and typically includes flood elevations, a history of flooding, and the engineering methods used to complete the analysis. The FIS includes the incorporated areas of the parish. A Flood Insurance Rate Map (FIRM) is developed in conjunction with the FIS. The FIRM is the official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones.

Below is the FIRM for Jefferson Parish. The map displays the different flood zones found within Jefferson Parish. The flood zoned designations are defined as follows:

- **Zone AE:** Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones. Mandatory flood insurance purchase requirements and floodplain management standards apply.
- **Zone AO:** Areas subject to inundation by the 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply.
- **Zone X:** Areas outside the 1% annual chance floodplain and 0.2 percent chance floodplain, areas of 1% annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1% annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1% annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone.
- **Zone VE:** Coastal areas subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. Base Flood Elevations (BFEs) derived from detailed hydraulic analyses are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply (FEMA.gov).

Map 2



**JEFFERSON PARISH, LOUISIANA  
1995 FEMA FLOOD PLAIN**

### **3.1.2 Severity of the Flood Hazard**

Flood severity is measured in several ways, including frequency, depth, velocity, and duration, among others. For Jefferson Parish, generally speaking the severity relates to how frequent floods occur. Floods have been and continue to be the most frequent, destructive, and costly natural hazard facing Jefferson Parish. As demonstrated by Hurricanes Katrina and Ike, the northern part of the Parish including Metairie and Kenner are vulnerable to flooding from storm surge from Lake Pontchartrain. In the southern part of the Parish, the Town of Grand Isle is also susceptible to storm surge from the Gulf of Mexico. One of the lowest points in the northern part of Jefferson Parish is Hoey's Basin located in the area of Old Metairie.

The most densely populated areas of Jefferson Parish are protected from flooding by levees, drainage canals, and storm water pumps. The City of Gretna is served by the Hero and Planters pumping stations, which are located along Barataria. The major canal within Gretna is Verret Canal. The City of Kenner is served by a pumping station, which is located in the Parish Line Canal, approximately 3.9 miles below Lake Pontchartrain. The City of Westwego is served by the Westwego and Bayou Segnette pumping stations, which are located in the southwestern portion of the city along Bayou Segnette. The City of Westwego is partially protected from hurricane surges from Lake Salvador and Lake Cataouatche by Parish-built levees.

### **3.1.3 Flood Protection Measures**

Jefferson Parish is protected by levees from flooding of the Mississippi and its tributaries due to high stages in the Mississippi River. On the East Bank of the Parish, the Lake Pontchartrain and vicinity hurricane protection levee prevent flooding by hurricane surge from Lake Pontchartrain. The West Bank area is partially protected from hurricane surge from the Gulf of Mexico by Parish-built levees. Levees that exist in the study area provide the Parish with some degree of protection against flooding. However, Hurricane Katrina proved that some of these levees may not protect the Parish from strong events such as a 100-year flood or storm surge from future hurricanes (Flood Insurance Study, Jefferson Parish, LA, Incorporated and Unincorporated Areas, November 9, 2012).

From 2008 – 2014 Jefferson Parish has completed 25 infrastructure/drainage improvement projects through multiple funding sources. In addition to engineered protection from flooding, JUMP communities also participate in the National Flood Insurance Program (NFIP). Participation requires that the communities adopt a floodplain ordinance that meets or exceeds the minimum NFIP criteria and must also adopt any FIRM for the community. In doing so, Jefferson Parish provides flood protection to its residents, commercial buildings, and critical facilities by enforcing floodplain ordinance requirements for new construction, substantial improvements, and all over applicable permitting.

## **3.2 City of Gretna**

### **3.2.1 Severity of the Flood Hazard**

The principle sources of previous flooding in the City of Gretna include rainfall ponding and levee overtopping and hurricane or tropical storm surges originating in the Gulf of Mexico that push water onshore, and into the interior areas of Jefferson Parish. Based on a review of FEMA NFIP repetitive loss and severe repetitive loss records, the most flood prone areas in the City of Gretna appear to be concentrated along Azalea Drive, Claire Avenue, Hero Drive and Rose Drive.

### **3.2.2 Flood Protection Measures**

The most densely populated areas of Gretna are protected from flooding by levees, drainage canals, and storm water pumps. The City is protected from flooding by two levee systems. Along the Mississippi River the U.S. Army Corp. of Engineers (USACE) has constructed a levee system to protect the City from overbank flooding. The rest of the City is protected by levees that run along the Harvey and Algiers Canals (City of Gretna Flood Hazard Mitigation Plan). These levees are part of a hurricane protection system that partially protects the West Bank from storm surge from the Gulf of Mexico (Flood Insurance Study, Jefferson Parish, Louisiana, Incorporated and Unincorporated Areas, November 9, 2012).

Drainage of floodwaters in the City is accomplished by a system of structures and canals, which outflow to pumping stations. The City is served by the Hero and Planters pumping stations, which are located along Baratavia. The major canal within Gretna is Verret Canal. Historically, these pumping stations have been inadequate in capacity to handle the volume of floodwaters reaching the stations and have operated at less than full capacity during floods. In addition, drainage structures through some man-made barriers, such as highway and railroad embankments, have proven inadequate during previous rainfall events.

## **3.3 City of Harahan**

### **3.3.1 Severity of the Flood Hazard**

The principle sources of flooding in the City of Harahan are sheet flow/ponding, levee overtopping, and hurricane or tropical storm surges originating in the Gulf of Mexico. Harahan is located on the East Bank of Jefferson Parish which has many flood problem areas. These problem areas are caused by land subsidence, inadequate capacity of canals and culverts, and inadequate capacity of pumping stations.

Based on a review of FEMA NFIP repetitive loss and severe repetitive loss records, the most flood prone residential areas in Harahan appear to be concentrated along Generes Drive and Hickory Street. Flooding on non-residential areas has occurred in the past along Clearview Parkway and a portion of Elmwood Park Boulevard.

### **3.3.2 Flood Protection Measures**

Since most of Harahan's land mass is located below sea level, a levee and pump system is employed for drainage. The levees protect the City of Harahan from natural overbank flooding of surrounding water bodies, including the Mississippi River and Lake Pontchartrain. The major canal in the City of Harahan is the Soniat Canal. The City of Harahan is served by Pump Station #3 located along Elmwood Canal. Pumping is necessary to remove runoff from the drainage system over the levees into the outlying water bodies.

## **3.4 City of Kenner**

### **3.4.1 Severity of the Flood Hazard**

The principle sources of flooding in the City of Kenner are rainfall ponding, levee overtopping and hurricane or tropical storm surges originating in the Gulf of Mexico from Lake Pontchartrain on the East Bank of the Mississippi River. As demonstrated by Hurricane Katrina, the northern and northwestern part of the City is particularly vulnerable to flooding from heavy rains that have the potential to overwhelm the City's drainage system.

Based on a review of FEMA NFIP repetitive loss and severe repetitive loss records, the most flood prone areas in the City of Kenner appear to be concentrated at the University Section, East and West Louisiana State Drive, and along Tulane Drive.

### **3.4.2 Flood Protection Measures**

The most densely populated areas of the City of Kenner are protected from flooding by levees, drainage canals, and storm water pumps which outflow to pump stations. The major canals in the City of Kenner are Duncan Canal, Canal #1, Canal #2, and Canal #13. The City of Kenner is served by Pump Station #4, which is located in the City along Duncan Canal, Pump Station #3, and the Kenner Relief Pump Station, which is located along the Parish Line Canal approximately 3.9 miles south of Lake Pontchartrain. In Kenner, Lake Pontchartrain and the hurricane protection levee prevents flooding by hurricane storm surge from the Lake up to approximately 17 feet (Flood Insurance Study, Jefferson Parish, Louisiana, Incorporated and Unincorporated Areas, November 9, 2012).

## **3.5 City of Westwego**

### **3.5.1 Severity of the Flood Hazard**

The principle sources of flooding are rainfall ponding and levee overtopping and hurricane or tropical storm surges originating in the Gulf of Mexico from Lake Pontchartrain on the East Bank and Lakes Salvador and Cataouatche on the West Bank. Drainage of floodwaters in the City of Westwego is accomplished by a system of structures and canals, which outflow to pumping stations. Based on a review of FEMA NFIP repetitive loss and severe repetitive loss records, the most flood prone areas in the City of Westwego appear to be concentrated along Avenue A, Dumonde Drive, and along Walton Drive.

### **3.5.2 Flood Protection Measures**

The most densely populated areas of the City of Westwego are protected from flooding by levees, drainage canals, and storm water pumps. The City of Westwego is served by the Westwego and Bayou Segnette Pumping Stations, which are located in the southwestern portion of the city along Bayou Segnette. The City of Westwego is partially protected from hurricane surges from Lake Salvador and Lake Cataouatche by Parish-built levees (Flood Insurance Study, Jefferson Parish, Louisiana, Incorporated and Unincorporated Areas, November 9, 2012).

## **3.6 Town of Jean Lafitte**

### **3.6.1 Severity of the Flood Hazard**

The Town is protected by a system of levees, which helps reduce flood losses, but is still prone to flooding due to its location near the Gulf of Mexico and its low elevation. The entire Town is located within Zone AE, areas within the 100-year floodplain with no base flood elevations.

Ponding and flash floods are infrequent in the Town of Jean Lafitte, yet floods are a significant threat to the Town. Almost all floods associated with this area are a result from strong hurricanes that produced large storms surges along the Louisiana coastline. Based on a review of FEMA NFIP repetitive loss and severe repetitive loss records, the most flood prone areas in the Town of Jean Lafitte appear to be located along Jean Lafitte Boulevard.

### **3.6.2 Flood Protection Measures**

A portion of Jean Lafitte is currently protected from flooding by a system of levees. The levees are up to five feet in height and provide protection for only a portion of the Town. In July 2009, the Town of Jean Lafitte working in coordination with Jefferson Parish, the West Jefferson Levee District, and the US Army Corps of Engineers (USACE) completed phase one of the Fisher Basin tidal levee project. Phase one of the project included 4.7 miles of earthen levees along the southern edge of the town that abuts marshland (The Times-Picayune, Jean Lafitte Gets Millions for Floodwalls). The earthen levee is the first of three phases of the Fisher Basin tidal levee project and will provide Jean Lafitte residents an increased level of flood protection. When fully completed, there will be a ring of levees around the town to protect the area from inundation from nearby marshes and Bayou Baratavia. As part of the project, the USACE plans to raise the Town's current levee protection from roughly five feet to seven feet, and construct seven foot floodwalls in those areas that do not have levees (Jefferson Parish website – Jean Lafitte Groundbreaking, December 4, 2006). In September 2014, workers broke ground on a ring levee that will run along the western boundary of the Town tying in with an already-built back levee that runs along the eastern side, encircling the Town. (The Advocate, Work starts on protective levee for Jean Lafitte, September 9, 2014).

## Section 4

### Flood Insurance Coverage Assessment (Activity 370)

The flood insurance coverage assessment helps JUMP communities identify what areas have flood insurance policies and what areas are lacking in policies. Not only does it allow the committee to look at policy count broken down by type of structure (residential or non-residential) and by flood zone (A and AE, AO, X, or VE), but also by how much coverage exists per both categories. The most common source of flood insurance data is the National Flood Insurance Program (NFIP), the predominant flood insurer in the U.S. The Program maintains a very large database of claims information for millions of policies nationwide. Because of the prevalence of flooding in Jefferson Parish, these NFIP records offer an excellent source of information about policy counts and coverage and can be used as the basis of this flood insurance coverage assessment.

Summary NFIP data was used to create the tables in this section which means there was no identifying information regarding the property address or policy holder's name (see Appendix A). This is compliant with the Privacy Act of 1974. The data includes policy counts for each of JUMP's communities broken down by occupancy type and flood zone as of February 28, 2015. A policy encompasses *any* type of flood insurance policy. It could represent a renter's contents policy, an owner's building policy, or an owner's combined building and contents policy. One other thing to note is that there could be some miscoded data in the policy dataset which may have some properties located within one of the jurisdictions when it should be located within unincorporated Jefferson Parish or vice versa. These observations could explain why policy data, specifically policy counts, may not match the structure count. The flood zone categories found in the summary data are slightly different from the categories in the legend on the Flood Insurance Rate Map (FIRM) on page 8. The FIRM shows AE, AO, X, and VE. The NFIP data breaks the flood zones down these with the addition of what is called "approximate or unnumbered A Zones". This represents an area of the Special Flood Hazard Area (SFHA) that has been minimally studied and has no determined Base Flood Elevations (BFEs). For the purposes of this assessment, A and AE Zones are listed in the same row in the tables below since the FIRM on page 8 does not separate out approximate A Zones. Since approximate A Zones are in the NFIP data for Jefferson Parish but not on the current FIRM, the policies in this category are most likely grandfathered under the previous FIRM.

In addition to the policy data, the PPI Committee needed to get a count of total structures in each municipality so that the number of structures exposed to flooding could be compared to the number of structures with flood insurance policies. The most reliable source for a building count broken down by residential and non-residential is the Water Department. They are able to track the building count by how many active water meters there are. This method provided a reliable count for all of the jurisdictions except for the City of Westwego and a portion of the City of Gretna, both of which are on their own water systems. The GIS Specialist for the City of Gretna provided the count for the properties not on parish water so that all of Gretna could be represented. Westwego was able to provide their count of residential and non-residential structures based on their active water meters. Local GIS data provided the structure count broken down by flood zone for all jurisdictions.

The following pages provide an overview of flood insurance coverage by municipality.

## 4.1 Jefferson Parish

As shown in Table 3, unincorporated Jefferson Parish is well insured with 79% of all structures having policies. At 81%, a greater percentage of residential structures have policies than non-residential structures. With just slightly more than half of the non-residential structures having flood insurance, the PPI committee is going to work with insurance agents to focus outreach efforts toward Jefferson Parish’s non-residential property owners.

The maximum coverage for a single family home is \$250,000 and for a non-residential structure is \$500,000. The average coverage for both residential and non-residential policies are below these maximum amounts. Projects will be implemented that encourage renters and residential and non-residential property owners to review their policy coverage to eliminate underinsured properties.

**Table 3. Levels of Coverage by Occupancy for Jefferson Parish**

Occupancy	Policies	% of total policies	# of Structures	% of structures w policies	Total Coverage	Average Coverage
Residential	86,282	93.57%	106,281	81.18%	\$20,553,517,200	\$238,213.27
Non-Residential	5,932	6.43%	10,227	58.00%	\$2,453,713,700	\$413,640.21
Total	92,214	100.00%	116,508	79.15%	\$23,007,230,900	\$249,498.24

Unincorporated Jefferson Parish has the following flood zones: AE, AO, VE, and X. The majority of the 92,000 policies are currently in the AE Zone. Thirty-two percent are in the X Zone and less than one percent are in AO and VE Zones. Table 4 shows that the highest percentage of structures with policies are in the AE Zone. This could be because flood insurance is mandated in the Special Flood Hazard Area (SFHA). The AO Zone properties have less coverage than structures in the VE Zone. Policies in the X Zone seem to have the best coverage, assuming the majority are for residential properties where the maximum coverage is \$250,000. Outreach should be targeted to each of the different zones as there is room for improvement across all of them. While 68% of the structures in the parish have insurance, 32% do not. Part of the committee’s goal with this assessment is to increase the overall number of structures with flood insurance.

**Table 4. Levels of Coverage by Flood Zone for Jefferson Parish**

Flood Zone	Policies	% of total policies	# of Structures	% of structures w policies	Total Coverage	Average Coverage
A and AE	62,791	68.11%	84,607	74.21%	\$14,759,207,800	\$235,052.92
AO	287	0.31%	943	30.43%	\$57,424	\$200.08
VE	61	0.07%	147	41.50%	\$10,462,400	\$171,514.75
X	29,052	31.51%	50,666	57.34%	\$8,179,409,600	\$281,543.77
Total	92,191	100.00%	136,363	67.61%	\$23,006,474,200	\$249,552.28

Here is a quick note on the inconsistent structure count. Table 4 shows approximately 20,000 more structures for Jefferson Parish than Table 3. This data comes from two different sources. Table 1 is from the Water Department looking at active water meters and Table 4 includes the structure count based on the parcel map from GIS. The difference could be accounted for either large, multi-family homes that share water meters or abandoned structures. For each of the jurisdictions that follow, there is a difference in structure count for each set of tables, but at a much smaller increment than unincorporated Jefferson Parish.

## 4.2 City of Gretna

Table 5 illustrates that less than half of the structures in the City of Gretna have flood insurance policies. Like unincorporated Jefferson Parish, a greater percentage of residential structures have policies than non-residential structures, but both categories should be equally targeted by outreach.

Renters, residential property owners, and non-residential property owners in the City of Gretna should be encouraged to examine their policy coverage to ensure they have enough coverage for their particular risk.

<b>Occupancy</b>	<b>Policies</b>	<b>% of total policies</b>	<b># of structures</b>	<b>% of structures w policies</b>	<b>Total Coverage</b>	<b>Average Coverage</b>
Residential	2,981	87.47%	6,511	45.78%	\$629,698,400	\$211,237.30
Non-Residential	427	12.53%	1,166	36.62%	\$167,815,100	\$393,009.60
Total	3,408	100.00%	7,677	44.39%	\$797,513,500	\$234,012.18

The City of Gretna has only two flood zones-AE and X (see Table 6). The zones are equally divided geographically by policy count. The percentage of structures with policies is 43% for both zones; however, the average coverage is almost \$100,000 higher for X Zone policies than AE Zone policies. One explanation for this is that most of the AE Zone areas in Gretna tend to be areas of lower income, and these properties owners may have the minimum coverage they can afford. While the PPI committee should be focusing efforts on getting more policyholders within the City of Gretna, those in the AE Zone should be encouraged to increase their amount of coverage as well.

<b>Flood Zone</b>	<b>Policies</b>	<b>% of total policies</b>	<b># of structures</b>	<b>% of structures w policies</b>	<b>Total Coverage</b>	<b>Average Coverage</b>
AE	1,713	50.26%	3,992	42.91%	\$337,707,400	\$197,143.84
X	1,695	49.74%	3,925	43.18%	\$459,806,100	\$271,272.04
Total	3,408	100.00%	7,917	43.05%	\$797,513,500	\$234,012.18

### 4.3 City of Harahan

The City of Harahan has just over 2,500 policies, 95% of which are residential (see Table 7). Of all the residential structures, 63% of them have flood insurance policies. There is room for improvement in the amount of policies for both categories. Forty percent of the City of Harahan is currently uninsured, making it a good candidate for insurance-focused outreach.

Projects will be implemented that encourage renters, residential property owners, and non-residential property owners to monitor their policy coverage to ensure their coverage is appropriate for their risk.

**Table 7. Levels of Coverage by Occupancy for Harahan**

Occupancy	Policies	% of total policies	# of structures	% of structures w policies	Total Coverage	Average Coverage
Residential	2,397	94.89%	3,826	62.65%	\$659,823,600	\$275,270.59
Non-Residential	129	5.11%	317	40.69%	\$41,202,200	\$319,396.90
Total	2,526	100.00%	4,143	60.97%	\$701,025,800	\$277,524.07

Table 8 shows that the City of Harahan also has only two flood zones-AE and X, but there is a much larger X Zone area in this municipality. Policies in the X Zone seem to have relatively better coverage, assuming the majority are for residential properties where the maximum coverage is \$250,000. Outreach could certainly be targeted to all of the City of Harahan as 33% of the city is currently uninsured.

**Table 8. Levels of Coverage by Flood Zone for Harahan**

Flood Zone	Policies	% of total policies	# of Structures	% of structures w policies	Total Coverage	Average Coverage
AE	716	28.35%	1,109	64.56%	\$190,071,700	\$265,463.27
X	1,810	71.65%	2,643	68.48%	\$510,954,100	\$282,295.08
Total	2,526	100.00%	3,752	67.32%	\$701,025,800	\$277,524.07

## 4.4 City of Kenner

As shown in Table 9, roughly 70% of the City of Kenner is insured. Like the previous municipalities, a greater percentage of residential structures have policies than non-residential structures. With just slightly more than half of the non-residential structures having flood insurance, outreach efforts should be geared toward non-residential property owners.

The average coverage for both residential and non-residential policies are below the maximum amounts. Outreach projects can be implemented that encourage renters, residents and non-residential property owners in the City of Kenner to monitor and increase their policy coverage.

Table 9. Levels of Coverage by Occupancy for Kenner						
Occupancy	Policies	% of total policies	# of structures	% of structures w policies	Total Coverage	Average Coverage
Residential	14,485	92.75%	20,353	71.17%	\$3,217,980,200	\$222,159.49
Non-Residential	1,133	7.25%	2,137	53.02%	\$419,960,600	\$370,662.49
Total	15,618	100.00%	22,490	69.44%	\$3,637,940,800	\$232,932.56

The City of Kenner, as illustrated in Table 10, has A, AE and X Zones. Of the almost 16,000 policies, 91% are in the SFHA as it is mandated if there is a mortgage is on the property. This area is well insured with 81% of structures in the SFHA having policies as it is mandated if the property owner has an outstanding mortgage. The X Zone policies have the higher average coverage than AE Zone policies. Outreach should be geared toward increasing the amount of coverage in the AE Zone.

Table 10. Levels of Coverage by Flood Zone for Kenner						
Flood Zone	Policies	% of total policies	# of Structures	% of structures w policies	Total Coverage	Average Coverage
A and AE	14,148	90.61%	16,890	83.77%	\$3,231,818,700	\$228,429.37
X	1,466	9.39%	2,489	58.90%	\$405,990,500	\$276,937.59
Total	15,614	100.00%	19,379	80.57%	\$3,637,809,200	\$232,983.81

## 4.5 City of Westwego

Table 11 depicts the coverage data for the City of Westwego. Less than half of the city is insured for flood loss which makes the City of Westwego a great candidate for outreach. Westwego also has more non-residential structures covered by policies than residential. Projects can be implemented that encourage renters and property owners for both residential and non-residential structures to increase their policy coverage.

<b>Occupancy</b>	<b>Policies</b>	<b>% of total policies</b>	<b># of structures</b>	<b>% of structures w policies</b>	<b>Total Coverage</b>	<b>Average Coverage</b>
Residential	1,230	89.39%	3,020	40.73%	\$272,188,400	\$221,291.38
Non-Residential	146	10.61%	315	46.35%	\$61,463,000	\$420,979.45
<b>Total</b>	<b>1,376</b>	<b>100.00%</b>	<b>3,335</b>	<b>41.26%</b>	<b>\$333,651,400</b>	<b>\$242,479.22</b>

The City of Westwego is comprised mostly of the non-SFHA area, or X Zone, as shown in the 1995 Flood Insurance Rate Map (FIRM) on page 12. The table below illustrates that the majority of policies are X Zone-rated policies; however, almost 54% of the structures with policies are in the A and AE Zones, where it's federally mandated if the property owner has a mortgage on the property. Because there is need for more than 54% of structures to be protected by flood insurance, outreach projects should focus on the structures in the SFHA to increase the number of policies as well as coverage. Outreach efforts can also include the X Zone property owners as properties in this zone are still at risk for flooding.

<b>Flood Zone</b>	<b>Policies</b>	<b>% of total policies</b>	<b># of Structures</b>	<b>% of structures w policies</b>	<b>Total Coverage</b>	<b>Average Coverage</b>
A and AE	328	23.84%	610	53.77%	\$63,017,900	\$192,127.74
X	1,048	76.16%	2,696	38.87%	\$270,633,500	\$258,238.07
<b>Total</b>	<b>1,376</b>	<b>100.00%</b>	<b>3,306</b>	<b>41.62%</b>	<b>\$333,651,400</b>	<b>\$242,479.22</b>

## 4.6 Town of Jean Lafitte

Interestingly, the Town of Jean Lafitte joins the City of Westwego in having a greater percentage of non-residential structures insured for flood than residences. This could be explained by the fact that many of the non-residential structures were built post-FIRM and have to maintain flood insurance. As far as occupancy type goes, the Town of Lafitte is 90% residential. However, only 15% of all structures have flood insurance policies (see Table 13). The increase in the cost of premiums could be the cause for the lack of policies in this area.

Projects can be implemented that encourage renters and all property owners in the Town of Jean Lafitte to increase their policy coverage.

Table 13. Levels of Coverage by Occupancy for Jean Lafitte						
Occupancy	Policies	% of total policies	# of structures	% of structures w policies	Total Coverage	Average Coverage
Residential	229	89.80%	1,537	14.90%	\$45,069,700	\$196,810.92
Non-Residential	26	10.20%	111	23.42%	\$8,658,500	\$333,019.23
Total	255	100.00%	1,648	15.47%	\$53,728,200	\$210,698.82

The entire Town is located within the AE Zone. Average coverage is \$212,000 which is fairly low in comparison to the other municipalities and unincorporated Jefferson Parish. While many properties have been elevated in the Jean Lafitte area with Hazard Mitigation Grant Programs (HMGP) that must maintain flood insurance for the life of the property, the PPI committee will work with insurance agents to focus outreach projects on increasing the amount of coverage in this municipality.

Table 14. Levels of Coverage by Flood Zone for Jean Lafitte						
Flood Zone	Policies	% of total policies	# of structures	% of structures w policies	Total Coverage	Average Coverage
AE	253	100.00%	1,648	15.35%	\$53,662,400	\$212,104.35
X	n/a	n/a	n/a	n/a	n/a	n/a
Total	253	100.00%	1,648	15.35%	\$53,662,400	\$212,104.35

## 4.7 Summary

Several overarching themes emerged from the data presented above. When assessing policy count by *occupancy type*, it is clear to see that the majority of flood insurance policies in JUMP communities are residential as there are simply more residential than non-residential structures in the parish. All but two of the JUMP communities have a greater number of residential structures with policies than non-residential. These two exceptions are the City of Westwego and the Town of Jean Lafitte. Westwego has a relatively small AE Zone where policies are mandated on properties with a federally-backed mortgage. The higher percentage of policies for non-residential structures could be explained by the geography of where the non-residential structures are located within the city, in this case in the AE Zone. Similarly, because Jean Lafitte is entirely within the AE Zone, all property owners with a federally-backed mortgage are mandated to carry flood insurance. This data indicate that perhaps more residential property owners within the town limits do not carry a mortgage, or in many cases, inherited a property and never purchased flood insurance. Others have voiced that the insurance premiums have priced them out of their home. Non-residential owners understand the need to protect their investments and livelihoods by insuring their assets against flood damage given the reality that Jean Lafitte is located outside of the levee protection system. Another note on non-residential properties is that the highest percentage of policies across all jurisdictions is 58%. This means that only one jurisdiction has just slightly more than half of their non-residential structures insured and the other five jurisdictions have less than half. The average coverage for both residential and non-residential policies are below the maximum coverage amount for all the JUMP communities except for the City of Harahan's residential policy coverage.

When assessing the data by *flood zone*, the Cities of Harahan and Westwego are the only two JUMP communities with a much higher percentage of policies in the X Zone than in the AE Zone. This is likely due to the fact that both jurisdictions have more geographical area in the non-SFHA and thus a higher volume of property owners in the X Zone. When analyzing the number of structures with flood policies in the X Zone, only Harahan contains more insured X Zone properties (68%) than AE (65%). Interestingly, although flood insurance is mandatory for policy holders in Zone AE with a federally backed mortgage, more policies are in place for structures in the X Zone across all of the JUMP communities. The previous FIRM had larger X Zone areas than the current FIRM, and many of these policies have been grandfathered. As mentioned at the beginning of this section, multiple policies (renters, building, and/or contents) could be counted for some of the same structures. Although flood policies are well represented in the AE Zones with Jefferson Parish, City of Harahan, City of Kenner, and City of Westwego having more than 50% of their SFHA properties insured for flood, there are still many properties without insurance in the SFHA.

When analyzing the tables side by side, it is clear to see that flood insurance coverage on the East Bank outshines the coverage on the West Bank. This is illustrated by the total percentage of structures with policies for the Cities of Harahan and Kenner are more than 65%, with 67% and 81% respectively. The Cities of Gretna and Westwego and the Town of Jean Lafitte have 43% coverage or less.

## 4.8 Recommendations

The PPI committee should work with insurance agents to focus flood insurance outreach efforts on all non-residential property owners to increase the total number of insured non-residential structures. The committee should also seek to increase the amount of coverage property owners have as Harahan is the only jurisdiction whose average coverage exceeds the maximum coverage for residential structures. The average coverage is higher for X Zones for all of the jurisdictions except unincorporated Jefferson Parish and Jean Lafitte (no X Zones). Since premium rates for X Zone-rated properties are generally more affordable, this is not surprising. Outreach needs to address the property owners in the X Zone as well to inform and remind them that despite the drainage and levee improvements, flooding can occur beyond the SFHA and affect their properties as well.

## Section 5 Project Design

### 5.1 Target Audiences

The committee agreed on eleven target audiences on which to focus outreach efforts:

*Target Audience #1 – Repetitive Loss/Severe Repetitive Loss Properties*

RL/SRL property owners have suffered from multiple floods. They can benefit from outreach on various mitigation techniques, the reality of their flood risks, and grant opportunities to assist in mitigating from future flooding.

*Target Audience #2 – Senior Citizens (via Council on Aging)*

Seniors are particularly vulnerable to flood risks and the rising cost associated with living in a floodplain and recovering from a flood. Jefferson Parish has ten Senior Centers that are managed by the parish's Council on Aging service which will be the principle venue for reaching seniors.

*Target Audience #3 – Jefferson Parish Chamber of Commerce*

Small businesses need to be aware of their flood risks so they can properly plan to protect their assets as well as the building in which the business operates. They also need to understand the cost of having a business that may be susceptible to flooding. For businesses, the cost of a flood is not only measured in physical damage, but also in time and money (business interruption).

*Target Audience #4 – Drivers Ed Classes (new drivers)*

As flooding can happen anywhere in Jefferson Parish and the New Orleans Metropolitan Area, new drivers need to be aware of the dangers of driving in flood waters as well as what to do if they find themselves approaching a flooded street.

*Target Audience #5 – N.O. Metropolitan Association of Realtors*

Realtors are key players in helping prospective buyers understand the flood risk their property may face and in promoting flood insurance and other flood proofing techniques.

*Target Audience #6 – Louisiana Homebuilders Association*

Homebuilders need to be aware of the flood risks and building regulations so that the homes they build meet or exceed building code requirements that are above the Base Flood Elevation; thus, keeping residents high and dry. This, in turn, will help keep flood insurance cost reasonable.

*Target Audience #7 – Properties outside the Levee*

Properties outside of the levee system are more vulnerable to hurricane winds and storm surge. They must be aware of how to respond when a hurricane is projected to hit the area. This includes protecting their homes and evacuating to higher ground.

*Target Audience #8 – Prospective Buyers*

Prospective buyers need to understand the local flood risks so that they can be aware of the risks and costs associated with the property they are looking to purchase, particularly if that property is in or near the floodplain.

### *Target Audience #9 – Building Officials Association of Louisiana (BOAL)*

Building officials need to know the latest floodplain regulations so they can regulate buildings in or near the floodplain accordingly.

### *Target Audience #10 – Foreign Language Speakers*

The New Orleans Metro Area is a melting pot of various backgrounds and cultures. The City of Kenner has a high concentration of Spanish speakers and the City of Gretna has several Vietnamese speaking communities. Making outreach materials accessible to speakers of other languages is vital to ensuring the safety of all our residents.

### *Target Audience #11 – General Public*

Since the majority of the parish is in a floodplain, flooding can occur anywhere. We want to inform our residents and business owners of the flood risks and ways to mitigate from future flood damage.

## **5.2 Inventory of Other Public Information Efforts**

To maximize capacity and resources, the committee is building on what is already being done. Each community has catalogued the flood preparedness outreach that is currently being conducted by their own departments, other departments within their governmental unit, and other agencies (some of which are represented on the committee). This list “Ongoing Projects” will continue to be implemented and can be found in Appendix A.

## **5.3 Messages**

Messages must state what actions the audience should take. Each message should provide basic information about the topic and where to go for more information. The messages need to be tailored to one or more of the CRS’ priority topics listed below. Topics 7-9 were identified by JUMP’s committee as additional topics.

1. Know your flood hazard
2. Insure your property for your flood hazard
3. Protect people from the hazard
4. Protect property from the hazard
5. Build responsibly
6. Protect natural floodplain functions
7. Know your evacuation route
8. Whether you live inside the levee or outside of it, flooding can happen. Make a plan.
9. Floods don’t respect X Zone boundaries. You are still at risk. Buy flood insurance.

With each message, an intended outcome has been identified. Messages and anticipated outcomes are listed in the project lists in Appendices A and B.

## **5.4 Outreach**

Once the messages and outcomes were determined, the PPI committee identified how the messages are going to be conveyed, how often, and by whom. Outreach projects are the platform in which the messages are delivered. The “New Projects” list focuses on new mechanisms for delivering the priority messages to the target audiences. These projects are listed in Appendix B.

## **Section 6**

### **Other Public Information Initiatives**

In addition to the annual outreach projects identified in the appendices, JUMP communities offer other flood protection services to inform the public of their flood risk and educate them on ways to mitigate against potential flooding.

#### **6.1 Map Information Service**

There are several ways to obtain flood map information in Jefferson Parish. Interested persons can fill out the online flood zone determination request form by logging onto the Floodplain Management and Hazard Mitigation website at <http://www.jeffparish.net/index.aspx?page=3781> to request a flood zone determination for their property, or potential property for those house hunting. The inquirer enters the target property's address and their contact information. The floodplain manager will acknowledge the request and reply with map information within two business days. If the inquiry is for a property located in an incorporated jurisdiction, the message will be provided to that jurisdiction's floodplain manager. Additionally, map information can be requested by phone, email, or in person. This service is advertised annually to all residents via the water bill insert (OP#38). The PPI Committee will consider alternative methods of publicizing this service. When an inquirer has a property in the X Zone, a handout will be provided to convey the message under topic 9, or it will be stated verbally.

#### **6.2 Hazard Disclosure/Real Estate Agents' Brochure**

Real estate agents across LA are required by law to disclose to prospective buyers whether a property is located in a floodplain and whether it has previously flooded using the Property Disclosure Document. Real estate agents can contact Jefferson Parish by following the steps listed in 6.1 to acquire a property's flood zone. The New Orleans Metropolitan Association of REALTORS has agreed to let JUMP publicize this service to its members and share the real estate agents' brochure through email blasts and/or their online weekly newsletter REALNews. JUMP members also plan to present on these topics at realtor and lender luncheons and local meetings.

#### **6.3 Flood Protection Website**

Jefferson Parish has many resources posted to the parish website regarding flood protection. The Department of Emergency Management page currently houses many of these items such as flood preparedness, property protection, family emergency plan checklist, hurricane preparedness including details on how to plan for an evacuation with contraflow map showing evacuation routes and evacuation assistance sign-up (priority topic 7), the Mississippi River gauge and many others. The website will be updated to include information on priority topics 8 and 9. To further promote topic 8, JUMP will provide information on the levee system and ways to prepare and plan for a levee failure. For topic 9, which emphasizes flood insurance promotion for X zones, JUMP will incorporate resources such as the "Cost of Flooding" tool created by FloodSmart. Information about the JP Alert System is also posted to the website. It provides real-time emergency notices telling users what to do, where to go, and who to contact for that particular emergency. New users can sign up online.

## **6.4 Flood Protection Assistance**

Jefferson Parish provides flood protection assistance to property owners at community meetings, over the phone, office visits, or site visits per request. The Floodplain Management and Hazard Mitigation Department provides the assistance as staff are familiar with structural and non-structural mitigation measures. Depending on the property owner's situation, multiple departments (drainage, sewer, environmental affairs, etc.) may get involved to develop the best solution for that particular property. The staff member will then provide property protection advice to that homeowner about small-scale, low-cost mitigation measures he or she can implement to alleviate the flooding issue or inform the homeowner of larger-scale options such as an elevation project and potential funding sources to assist with an elevation project. This service is advertised annually to all residents via the water bill insert (OP#38).

## **6.5 Stream Dumping Regulations**

The Jefferson Parish Department of Environmental Affairs shares educational materials on stream dumping regulations such as the bilingual department brochure (OP#7) with the public through their many outreach efforts. This brochure covers how to properly dispose of different types of waste like grass clippings, fill, and concrete. Those who violate these regulations are sent a notice of violation with a letter detailing what they must do to comply. This department also conducts a storm drain marking program to inform residents that storm drains lead directly to streams and are not appropriate locations for waste disposal. Additionally, the Department of Inspection and Code Enforcement has posted numerous "no dumping" signs around various parts of the parish. These regulations are advertised annually to all residents via the water bill insert (OP#38).

## **Section 7**

### **Plan Maintenance**

#### **7.1 Annual Evaluation**

The MJ-PPI Committee will meet at least once a year to evaluate the PPI and incorporate any needed revisions into an evaluation report. The evaluation will cover:

- A review of the projects completed
- Progress toward the desired outcomes
- Recommendations regarding projects not completed
- Potential changes in the target audiences

JUMP will coordinate and facilitate this meeting, and provide an evaluation report reflecting the decisions made by the committee. The outcomes and revisions will be submitted as part of the annual CRS recertification package for all JUMP communities.

#### **7.2 Plan Adoption**

Each of the MJ-PPI communities will adopt this document on an individual basis. The adoption process for each community will be carried out by the appropriate governing body of each jurisdiction.

## **Appendices**

**A. Ongoing Projects**

**B. New Projects**

**Appendix A - Ongoing Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>1.SRL/RL Properties</b>	OP#1 Grant opportunities to RL/SRL homeowners-mailout	Mitigation grants may be available for your property based on flood claims history. Contact the Jefferson Parish Department of Floodplain Management and Hazard Mitigation at 504-736-6540 to find out if you are eligible.	Increase the number of mitigated structures in the parish	Floodplain Management and HM	annually	-	All
	OP#2 Grant opportunities to RL/SRL homeowners-mailout	Mitigation grants may be available for your property based on flood claims history. Contact the Jefferson Parish Department of Floodplain Management and Hazard Mitigation at 504-736-6540 to find out if you are eligible.	Increase the number of mitigated structures in the parish	Orleans Shoring	annually	Orleans Shoring	All
	OP#3 Flood Awareness Newsletter to RL HO-mailout	Based on your structure's history of flooding, you may be at a high risk for future flooding.	Inform RL HO of their risk and decrease # of flood claims	Code Enforcement	annually	-	JP, Kenner, Westwego
<b>2.Senior Citizens</b>	OP#4 Senior Expo	Know your flood hazard. Purchase flood insurance. Be safe in a flood. Protect your property from flood damage. Get necessary permits. Clean catch basins. Prepare for Hurricane Season.	Inform Seniors of Flood Safety and Insurance so they stay safe	Citizens Affairs	every March	-	All
	OP#5 Annual Senior Luncheon-Table	Hurricanes can produce major flooding in Jefferson Parish. Ensure your property is protected from wind and flood. Check that your flood insurance policy is current and consider a separate policy for your contents. Renters can get flood insurance too. Evacuate to higher ground.	Residents learn how to prepare for hurricanes and increase number of insurance policies	Emergency Preparedness	every May	-	JP
	OP#6 Retired Senior Volunteer Program-Emergency Preparedness outreach at Community Centers and Senior Centers	Hurricanes can produce major flooding in Jefferson Parish. Ensure your property is protected from wind and flood. Check that your flood insurance policy is current and consider a separate policy for your contents. Renters can get flood insurance too. Evacuate to higher ground.	Residents learn how to prepare for hurricanes and increase number of insurance policies	Citizens Affairs	year-round	-	All
<b>10.Non-English Speakers (Span, Viet)</b>	OP#7 Brochure-Storm Water Program (2 languages)	Keep drains clean from auto, yard, pet, cooking, and construction wastes.	Non-English speakers learn how to keep drains clean	Envir Affairs	year-round	-	JP
	OP#8 Curb Marker (2 languages)	No dumping in storm drains.	Non-English speakers learn how to keep drains clean	Envir Affairs	year-round	-	JP

**Appendix A - Ongoing Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>11. General Public</b>	OP#9 Brooms to Basins	Keep storm drains clean and free of debris.	Improved drainage system and fewer complaints of backups	Drainage	year-round	-	JP
	OP#10 Video on website	Check out this video for an inside view of Jefferson Parish's drainage system. Click here to learn more.	Residents learn how drainage works and are encouraged to keep the system clean	Drainage	year-round	-	JP
	OP#11 Safe House Open Houses	Safe Houses have been fortified to keep the pump operators safe during hurricanes.	Residents are more likely to evacuate	Drainage	annually	-	JP
	OP#12 Brochure-All Hazards Preparedness Guide	Hurricanes can produce major flooding in Jefferson Parish. Ensure your property is protected from wind and flood. Check that your flood insurance policy is current and consider a separate policy for your contents. Renters can get flood insurance too. Evacuate to higher ground.	Residents learn how to prepare for hurricanes and have smoother evacuations	Emergency Management	year-round	-	JP
	OP#13 St. Joachim Family Expo and Craft Show-Table	Hurricanes can produce major flooding in Jefferson Parish. Ensure your property is protected from wind and flood. Check that your flood insurance policy is current and consider a separate policy for your contents. Renters can get flood insurance too. Evacuate to higher ground.	Residents learn how to prepare for hurricanes and increase number of insurance policies	Emergency Management	every March	-	JP
	OP#14 Presentations by request	Various Emergency Management and Hurricane Preparedness topics	Residents learn how to prepare for multi-hazards and protect themselves and their property	Emergency Management	year-round	-	JP
	OP#15 Brochures on Display at Office	Various Emergency Management/Flood/Hurricane-related topics	Residents learn how to prepare for hurricanes and increase number of insurance policies	Emergency Management	year-round	-	JP
	OP#16 Hurricane Preparedness Day	Hurricanes can produce major flooding in Jefferson Parish. Ensure your property is protected from wind and flood. Check that your flood insurance policy is current and consider a separate policy for your contents. Renters can get flood insurance too. Evacuate to higher ground.	Residents learn how to prepare for hurricanes and increase number of insurance policies; smoother evacuations	Emergency Management	every May	-	JP

**Appendix A - Ongoing Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>11. General Public</b>	OP#17 Flood-related Links to Website	Know your flood hazard. Protect your property. Know your evacuation route (with Contraflow Map). Know what to do before, during, and after a flood.	Residents learn how to prepare for hurricanes and increase number of insurance policies; smoother evacuations	Emergency Management/ Floodplain Management	year-round	-	All
	OP#07 Brochure-Storm Water Program (2 languages)	Keep drains clean from auto, yard, pet, cooking, and construction wastes.	Reduce the number of calls for drainage maintenance; reduction in flooding	Envir Affairs	year-round	-	JP
	OP#18 Brochure-Dept of Environmental Affairs	Recycle waste responsibly and keep the storm drains clean.	Cleaner water systems as noted by positive scores on water testing results	Envir Affairs	year-round	-	JP
	OP#08 Curb Marker (2 languages)	No dumping in storm drains.	Reduce the number of calls for drainage maintenance; reduction in flooding	Envir Affairs	year-round	-	JP
	OP#19 "Enviro Scape" Poster and Essay Contest	Keep pollutants out of the storm drains. Pollutants harm the receiving water bodies such as Lake Pontchartrain and Bayou Barataria and the sea life in them.	Students learn how the stormwater conveyance system works; maintain high levels of water quality and protect natural habitats	Envir Affairs	Sept-March annually	-	JP
	OP#20 "Non-Point Source Pollution/Solutions" Poster and Essay Contest	Keep pollutants out of the storm drains. Pollutants harm the receiving water bodies such as Lake Pontchartrain and Bayou Barataria and the sea life in them.	Educate school-age kids about keeping the bayous and ditches clean; maintain water quality; protect fish and other sea creatures	Envir Affairs	every April	-	JP
	OP#21 Great American Clean Up	Pick up litter to make the community "Cleaner and Greener"	Reduce the number of calls for drainage maintenance; reduction in flooding	Envir Affairs	year-round	-	JP
	OP#22 Christmas Tree Recycling Program	Donate your Christmas tree and restore the marsh.	Rebuild and/or increase marsh area	Envir Affairs	every January	-	JP
	OP#23 Beach Sweep	Protect the fish and turtles in Lake Pontchartrain by keeping trash out.	Maintain high levels of water quality and protect natural habitats	Envir Affairs	every Sept	-	JP

**Appendix A - Ongoing Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>11. General Public</b>	OP#24 "Sewer Science" Water Treatment Lab in High Schools	Don't trash the Mississippi River. We rely on it for drinking water.	High school students learn about the environment; maintain high levels of water quality and protect natural habitats	Envir Affairs	Sept-March annually	-	JP
	OP#25 MS4 Program	Keep trash and pollutants out of the storm drains, river, lake, and bayous.	Maintain high levels of water quality and protect natural habitats	Envir Affairs	year-round	-	JP
	OP#26 Workshop-Managing Stormwater in Functional Landscapes	Keep debris out of storm drains.	Improved stormwater systems; reduced number of calls for drainage maintenance	Envir Affairs	annually	-	JP
	OP#27 Lake Pontchartrain Basin Foundation Lake Fest	Protect the fish and turtles in Lake Pontchartrain by keeping trash out. (other various environmental topics)	Maintain high levels of water quality and protect natural habitats	Envir Affairs	annually	-	JP
	OP#28 Jefferson Beautification Inc. Earth Day	Pick up litter to make the community "Cleaner and Greener". No dumping in storm drains. (other various environmental topics)	Learn stream dumping regulations and improve drainage; maintain high levels of water quality and protect natural habitats	Envir Affairs	every April	-	JP
	OP#29 Patrick Taylor Storm Drain Marking Event	Pick up litter to make the community "Cleaner and Greener". No dumping in storm drains.	Learn stream dumping regulations and improve drainage; maintain high levels of water quality and protect natural habitats	Envir Affairs	every March	-	JP
	OP#30 Spring Sweep	Keep debris out of drains and ditches.	Learn stream dumping regulations and improve drainage; maintain high levels of water quality and protect natural habitats	Envir Affairs	every March	-	JP
	OP#31 Civic Association Clean Up Events	Keep debris out of drains and ditches.	Learn stream dumping regulations and improve drainage; maintain high levels of water quality and protect natural habitats	Envir Affairs	year-round	-	JP

**Appendix A - Ongoing Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>11. General Public</b>	OP#32 Stop the Trash Bash	Keep debris out of drains and ditches.	Learn stream dumping regulations and improve drainage; maintain high levels of water quality and protect natural habitats	Envir Affairs	every April	-	JP
	OP#33 Leaders Against Litter	Keep debris out of drains and ditches.	Learn stream dumping regulations and improve drainage; maintain high levels of water quality and protect natural habitats	Envir Affairs	every March	-	JP
	OP#34 EPA Trash Free Waters	Keep debris and trash out of drains and ditches.	Learn stream dumping regulations and improve drainage; maintain high levels of water quality and protect natural habitats	Envir Affairs	every July	-	JP
	OP#35 Map inquiry service	You may live in the Special Flood Hazard Area. Find out by requesting a flood zone determination online at <a href="http://www.jeffparish.net/index.aspx?page=3781">www.jeffparish.net/index.aspx?page=3781</a> or call 504-736-6541.	Increase # of online requests and calls for zone designation	Floodplain Management and HM	year-round	-	All
	OP#36 JP TV Channel (Hurricane Season PSAs, Evacuation Exercise, etc)	Hurricanes can produce major flooding in Jefferson Parish. Know your evacuation plan and get to higher ground.	Residents learn how to prepare for hurricanes and increase number of insurance policies; smoother evacuations	Public Information Office	year-round	-	JP, Kenner
	OP#37 Flyers/handouts at office	Flooding can happen anytime. Retrofit your property to protect it from flood waters. Buy flood insurance.	Inform residents of the cost of flooding and increase the # of flood insurance policies	Floodplain Management and HM; Code Enforcement	year-round	-	All
	OP#38 Water bill mail out	Know your flood hazard. Purchase flood insurance. Be safe in a flood. Protect your property from flood damage. Get necessary permits. Clean catch basins.	Citizens will be better prepared for floods and have fewer flood claims; increase number of online flood zone determination requests; protect natural habitats.	Floodplain Management and HM	annually	-	JP, Gretna, Harahan, Kenner, Jean Lafitte

**Appendix A - Ongoing Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>11. General Public</b>	OP#39 Site visits	Call the Hazard Mitigation Office at 504-736-6541 to schedule a site visit to learn ways to retrofit or mitigate your property against flood waters.	Answer site-specific questions and encourage HOs to mitigate; increase # of mitigated structures	Floodplain Management and HM	as requested	-	JP, Gretna, Harahan, Kenner
	OP#40 Presentations by request	Flooding can happen anytime. Retrofit your property to protect it from flood waters. Know your flood hazard. Buy flood insurance.	Inform residents of mitigation, the cost of flooding and increase the # of flood insurance policies	Floodplain Management and HM	year-round	-	JP, Gretna, Harahan, Kenner
	OP#41 Meet with realtors, home builders, contractors	Your clients may be in a Special Flood Hazard Area. Help them understand and prepare for their level of risk.	By sharing a consistent message with homebuyers/new buyers about their flood risks and mitigation options	Floodplain Management and HM	as requested	-	JP, Gretna, Harahan, Kenner
	OP#42 JP App	Download the Jefferson Parish to receive hurricane and other disaster event updates via social media.	Residents are informed in real time of the hazard and what steps to take as the hurricane approaches and after it has passed	Public Information Office	year-round	-	JP
	OP#43 JP Library System	various FEMA brochures	Educate residents on flood the hazard, how to protect themselves and their property, and encourage mitigation	Floodplain Management and HM	year-round	FEMA	All
	OP#44 JP Employee Newsletter	Various topics on hurricane preparedness, drainage, emergency management, and environmental	Inform parish employees on how to prepare for hurricanes and protect the parish infrastructure and water bodies	Public Information Office	every other month	-	JP
	OP#45 JPAAlert - Emergency Notification System	Jefferson Parish operates an emergency warning system to alert citizens about the possibility of impending flooding. When you hear three (3) short dual tones over TV and radio stations, listen closely for what action(s) you should take.	Warn residents when eminent weather is approaching and what steps to take to see it through; fewer hazard-related injuries	Emergency Management	year-round	-	JP

**Appendix A - Ongoing Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>11. General Public</b>	OP#46 Link to FloodSmart Website (370)	variety of tools and topics on the NFIP	Increase in flood insurance policies; better informed residents about the flood risks	Floodplain Management and HM	year-round	FloodSmart	JP
	OP#47 Brochure-When do I need a Permit?	Build responsibly. Get proper permits when you make a change to your property.	Fewer building code violations	Code Enforcement	year-round	-	JP
	OP#48 Brochure-Emergency Preparedness Initiative "Prepare Yourself" (Disaster Readiness Tips for Owners of Pets or Service	Your pet can evacuate with you. Learn which shelters/hotels allow animals before Hurricane Season.	More people evacuating with their pets rather than staying behind in times of disaster	Citizens Affairs	year-round	National Organization on Disability	JP
	OP#49 Regional Teen CERT Camp	Disaster response can be learned at any age. If you want to be a first responder when you grow up, check out the Teen CERT Camp this summer.	Teens get introduced to and educated on disaster preparedness and response; stronger emergency responders in future years	Emergency Management	every July	-	JP
	OP#50 Drainage Maintenance	Keep storm drains clean.	Free flowing drainage system will have fewer instances of back up and less street flooding	Floodplain Management	year-round	-	Gretna, Harahan, Kenner, Westwego
	OP#51 Gretna Heritage Festival-booth	various flood-related handouts	Inform residents of the cost of flooding and increase the # of flood insurance policies	Gretna Building Official	every Oct	-	All
	OP#52 Night Out Against Crime-Table	various flood-related topics	Inform residents of the cost of flooding and increase the # of flood insurance policies	Harahan Building Official	every Oct	-	All
	OP#53 Handouts at City Hall	various flood-related topics	Inform residents of the cost of flooding and increase the # of flood insurance policies	Code Enforcement	year-round	-	Kenner
	OP#54 Realtors, Ins Agents, Lenders - Mailout	Your clients may be in a Special Flood Hazard Area. Help them understand and prepare for their level of risk.	By sharing a consistent message with homebuyers/new buyers about their flood risks and mitigation options	Code Enforcement	annually	-	Kenner, Westwego

**Appendix A - Ongoing Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>11. General Public</b>	OP#55 Utility bill-mailout	Hurricanes can produce major flooding in Westwego. Ensure your property is protected from wind and flood. Buy flood insurance.	Residents learn how to prepare for hurricanes and evacuations	Code Enforcement	every May	-	Westwego
	OP# 56 Brochure on Hurricane Preparedness	Prepare now for Hurricane Season. Register with the JP Emergency Alert System. Sign up for electronic banking services.	Employees understand the operating procedures for the Credit Union during a hurricane/emergency so that they stay on top of their accounts.	JP Employees Federal Credit Union	year-round	-	JP
	OP#57 Museum/Video	Jean Lafitte has many different kinds of wildlife and fish. Keep trash and pollutants out of Bayou Barataria and the surrounding marsh areas to protect the animals and keep the drain systems clear.	Reduce flooding and protect wildlife and fisheries	Floodplain Management	year-round	-	Jean Lafitte
	OP#58 LA Homeowner's Handbook to Prepare for Natural Hazards	Jefferson Parish is vulnerable to flooding, hurricanes, storm surge, and other hazards. Ensure your property is protected from wind and flood.	Encourage more residents to mitigate their homes against flooding and decrease flood damages	Floodplain Management and HM	year-round	LA Sea Grant	All
	OP#59 Flood Mapping Portal	You may live in a Special Flood Hazard Area. Find out by logging onto <a href="http://maps.lsuagcenter.com/floodmaps/?FIPS=22051">http://maps.lsuagcenter.com/floodmaps/?FIPS=22051</a> . Your community's contact person and phone number is provided.	Increase # of inquiries to flood zone designation	Floodplain Management and HM	year-round	LSU AgCenter	All
	OP#60 Floodhelp Portal	Flooding can happen anytime. Retrofit your property to protect it from flood waters.	Increase # of inquiries related to flood mitigation	Floodplain Management and HM	year-round	UNO-CHART	All
	OP#61 Flooding and Hurricane Alerts; Hurricane Tracking Maps, Evacuation Tips	There is a hurricane heading your way. Evacuate if mandated to stay out of harm's way.	Residents stay informed with real-time news alerts and learn how to prepare for hurricanes and evacuations and reduce amount and cost of hurricane-related damages.	WWL News Channel 4 Television, Website, Brochure Facebook, and Twitter	year-round	WWL News Channel 4	All

**Appendix A - Ongoing Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>11.General Public</b>	OP#62 Hurricane Season News/Alerts, Hurricane Guide with Contraflow Instructions	There is a hurricane heading your way. Evacuate if mandated to stay out of harm's way.	Residents stay informed with real-time news alerts and learn how to prepare for hurricanes and evacuations and reduce amount and cost of hurricane-related damages.	Fox 8 News Television, Webstie, App, and Twitter	year-round	Fox 8 News	All
	OP#63 U.S. Army Corps of Engineers-New Orleans District Announcements	various levee and coastal-related topics	Residents learn about residual risk from living within a levee system	U.S. Army Corps of Engineers-New Orleans District Website, Facebook, and Twitter	year-round	U.S. Army Corps of Engineers-New Orleans District	All
	OP#64 Southeast LA Flood Protection Authority-East Presentations	various levee and coastal-related topics	Residents learn about residual risk from living within a levee system	Southeast LA Flood Protection Authority-East	year-round	Southeast LA Flood Protection Authority-East	All
	OP#65 Wright Flood Insurance Webinars to Agents	Flood insurance is changing. Help your clients understand their policies.	Agents better understand insurance changes and how that affects their clients; clients have better understanding of their policy	Wright Flood Insurance	year-round	Wright Flood Insurance	All
	OP#66 Brochures on flood insurance	Flood insurance is changing. How well do you understand your flood insurance policy?	Increase in flood insurance policies and decrease flood damage	Wright Flood Insurance	year-round	Wright Flood Insurance	All
	OP#67 Hurricane Guide	Hurricanes can produce major flooding in Jefferson Parish. Ensure your property is protected from wind and flood. Check that your flood insurance policy is current and consider a separate policy for your contents. Renters can get flood insurance too. Evacuate to higher ground.	Residents learn how to prepare for hurricanes and evacuations and reduce amount and cost of hurricane-related damages.	Red Cross and the LA State Police Public Safety Services	every June	GOHSEP	All

**Appendix B - New Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>1.RL/SRL Properties</b>	OP#68 HO Assn meetings	various flood-related topics as requested	Increase # of mitigation projects and insurance policies; decrease # of flood claims	Floodplain Management and HM	Quarterly	-	JP
	OP#69 High Water Mark Initiative (370)	The water got ___ high for Hurricane Katrina. Ensure you have current flood insurance and consider increasing your coverage.	Publicize flood depths of historic floods in the parish and increase the # of flood insurance policies	Floodplain Management and HM	year-round	Water Works	All
	OP#70 Evacuation Plan Checklists	Evacuations can take a long time. Develop your evacuation plan before Hurricane Season and plan to leave early.	More residents evacuating for hurricanes; more residents leaving early; fewer flood-related fatalities	Floodplain Management and HM	year-round	UNO-CHART	All
	OP#71 Substantial damage/improvement (and ICC)	Any improvements or damage that are equal to or more than 50% the market value of the property will need to be elevate above the BFE.	More compliant structures; increase # of mitigation projects and insurance policies; decrease # of flood claims	Floodplain Management and HM	year-round	FEMA	All
<b>2.Senior Citizens</b>	OP#72 Senior Center Outreach and Games (like BINGO)	You may live in a Special Flood Hazard Area. Know your risk and buy flood insurance.	Seniors understand their risks and are better prepared for floods and hurricanes	Floodplain Management and HM	year-round	-	All
	OP#73 Health fairs	various flood-related topics	Inform Seniors of Flood Safety and Insurance so they stay safe; fewer flood-related fatalities among the Senior demographic	Floodplain Management and HM	year-round	-	All
	OP#74 Senior Center Presentations on Flood Insurance (370)	There are benefits to maintaining your flood insurance even though it is no longer required. Increased Deduction = Lower Premium; will include information on available technical assistance	Increase in X zone and renters flood insurance policies; more policies maintained; seniors learn what questions to ask their agent	Floodplain Management and HM	year-round	-	All

**Appendix B - New Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>2.Senior Citizens</b>	OP#75 Seniors tour the EOC	Hurricanes can produce major flooding in Jefferson Parish. Ensure your property is protected from wind and flood. Check that your flood insurance policy is current and consider a separate policy for your contents. Renters can get flood insurance too. Evacuate to higher ground.	Residents learn how to prepare for hurricanes and increase number of insurance policies	Citizens Affairs and Emergency Management	annually	-	All
	OP#76 Field trip to Lafitte's Barataria Museum (watch movie)	Jean Lafitte has many different kinds of wildlife and fish. Keep trash and pollutants out of Bayou Barataria and the surrounding marsh areas to protect the animals and keep the drain systems clear.	Seniors get to see firsthand the Barataria-Lafitte area and learn about wetlands from the video; Reduce flooding and protect wildlife and fisheries	Citizens Affairs	annually	-	All
	OP#77 High School Senior Service day-clean up Senior Centers	school seniors volunteer at Senior Centers to clean storm drains, install rain gardens, or any other flood-related service to the Senior Center)	infrastructure and how it can help reduce flooding; could open an interest in future career paths; Seniors get a more flood-resistant building in which they	Floodplain Management and HM	annually	-	All
	OP#70 Evacuation Plan Checklists	Evacuations can take a long time. Develop your evacuation plan before Hurricane Season and plan to leave early.	More Seniors evacuating for hurricanes; more residents leaving early; fewer flood-related fatalities	Floodplain Management and HM	year-round	UNO-CHART	All
	OP#71 Substantial damage/improvement (and ICC)	Any improvements or damage that are equal to or more than 50% the market value of the property will need to be elevate above the BFE.	More compliant structures; increase # of mitigation projects and insurance policies; decrease # of flood claims	Floodplain Management and HM	year-round	FEMA	All
<b>3.JP Chamber of Commerce (small business)</b>	OP#78 Speak at Chamber luncheons	One ft of water could cost this ___ much damage. Learn how flood insurance is changing.	Shorter business interruption time and costs when a disaster hits; increase in commercial flood policies	Floodplain Management and HM	annually	-	All
	OP#70 Evacuation Plan Checklists	Evacuations can take a long time. Develop your evacuation plan before Hurricane Season and plan to leave early.	More residents evacuating for hurricanes; more residents leaving early; fewer flood-related fatalities	Floodplain Management and HM	year-round	UNO-CHART	All

**Appendix B - New Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>3.JP Chamber of Commerce (small business)</b>	OP#79 Business Continuity Workshops with a focus on flood and hurricane preparedness	Keep your business safe from flooding.	Shorter business interruption time and costs when a disaster hits; increase in commercial flood policies	Floodplain Management and HM/JEDCO	annually	UNO-CHART	All
	OP#80 Flyer-Flood Facts for Businesses	Know what's in your policy and have a back up location for your employees and your files.	More businesses surviving disasters	Floodplain Management and HM	year-round	FloodSmart	All
	OP#81 Insert for newsletter	Highlight green infrastructure such as bio swales, canals as attractive water features, walking paths	More green infrastructure is utilized by businesses	Floodplain Management and HM	quarterly	-	All
	OP#71 Substantial damage/improvement (and ICC)	equal to or more than 50% the market value of the property will need to be elevate above the BFE.	More compliant structures; increase # of mitigation projects and insurance policies; decrease # of flood claims	Floodplain Management and HM	year-round	FEMA	All
<b>4.New Drivers (Driver's Ed)</b>	OP#82 Handouts for Driver's Ed Course	Know your flood hazard-avoid flooded areas. Be aware of flash flood and standing water dangers to drivers.	New drivers become aware of flood safety; fewer fatalities and flood-related car accidents	Floodplain Management and HM	year-round	NOAA; Progressive	All
	OP#83 Flooded Streets Video	Know your flood hazard-avoid flooded areas. Be aware of flash flood and standing water dangers to drivers.	New drivers become aware of flood safety; fewer fatalities and flood-related car accidents	Floodplain Management and HM	year-round	-	All
	OP#84 Rallies at schools/School fairs	Turn Around Don't Drown	New drivers become aware of flood safety; fewer fatalities and flood-related car accidents	TBD	annually	NOAA	Gretna, Harahan, Jean Lafitte, Westwego
	OP#85 Window Punch (with message imprinted)	Don't get stuck in car that has stalled in flooded waters.	Fewer fatalities among drivers	Floodplain Management and HM	year-round	-	All
	OP#86 Create a laminated information card with emergency procedures	Take these steps when you have an emergency.	New drivers know how to respond to an emergency or disaster	Floodplain Management and HM	year-round	-	All
	OP#87 Poster for schools, driving school, DMV	Know your flood hazard-avoid flooded areas. Be aware of flash flood and standing water dangers to drivers.	New drivers become aware of flood safety; fewer fatalities and flood-related car accidents	Floodplain Management and HM	year-round	-	All

**Appendix B - New Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>4.New Drivers (Driver's Ed)</b>	OP#88 Art contest (prize could be gas gift card)	Know your flood hazard-avoid flooded areas. Be aware of flash flood and standing water dangers to drivers.	New drivers become aware of flood safety; fewer fatalities and flood-related car accidents	Floodplain Office	annually	-	Gretna, Harahan, Jean Lafitte, Kenner, Westwego
	OP#89 "Safe Driver" credit on car insurance if pass annual test (similar to good grade discount)	Don't drive through flooded streets.	New drivers become aware of flood safety; fewer fatalities and flood-related car accidents	Floodplain Management and HM	TBD	-	All
	OP#90 PSA	If your car gets flooded, only comprehensive auto insurance covers it; not flood insurance. Work with your parents to review your auto policy or call your agent.	Increase in comprehensive auto coverage	Floodplain Management and HM	year-round	U.S. National Weather Service	All
<b>5.NO Metro Assn of Realtors</b>	OP#91 Brochure from Realtors to Clients	Know the flood risk for a property before you buy it.	Buyers have full disclosure of flood risk and cost associated with new purchase	Floodplain Management and HM	year-round	-	All
	OP#92 Flood history of target property	Did you know that FEMA only provides the flooding history to a property's owner? Ask the seller to provide the flood history before any contracts are signed.	Buyers have full disclosure of flood risk and cost associated with new purchase	Floodplain Management and HM	year-round	-	All
	OP#93 Flood Hazard Disclosure to Buyer	Inform prospective buyers of a property's flood zone and the flood insurance purchase requirements for properties in the Special Flood Hazard Area.	Buyers have full disclosure of flood risk and cost associated with new purchase	Real Estate Agents	year-round	-	All
	OP#94 Email blasts to all members (370)	Flood insurance is changing. Stay informed with these updates. Will include information on available technical assistance.	Realtors better understand insurance changes and how that affects their clients	Floodplain Management and HM	annually	-	All
	OP#95 Provide excerpt for NOMAR's newsletter	Your clients may be in a Special Flood Hazard Area. Help them understand and prepare for their level of risk.	NOMAR members are aware of the risk their clients face and to share a consistent message with homebuyers about their flood risks and mitigation options	Floodplain Management and HM	Quarterly	-	All

**Appendix B - New Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>6.Home Builders Assn</b>	OP#96 Create brochure geared toward Assn Members	Know your flood maps, know your floodplain manager. Get insurance quote on blue prints.	Fewer variances to the building code; no surprises on insurance rates	Floodplain Management and HM	year-round	-	All
		Consider freeboard to decrease NFIP premiums and increase marketability of house.	More affordable premiums leads to higher coverage/ decreased risk; increase in requests for zone determinations and ECs	Code Enforcement/ Bldg Official	year-round	-	All
		Good neighbors don't trash the neighborhood.	Construction site crews clean up after themselves daily	Code Enforcement/ Bldg Official	year-round	-	All
	OP#97 Update language on permit	\$___ has been paid out in claims for X zone properties. If your property is in the X zone, you are still at risk of flooding. Buy insurance.	Increase # of flood insurance policies in X zones	Code Enforcement/ Bldg Official	year-round	-	All
	OP#98 Create brochure geared toward their clients on building wisely	Educate new property owners on freeboard. Be safe and build high.	Less damage to property, savings on flood insurance	Code Enforcement/ Bldg Official	year-round	-	All
	OP#71 Substantial damage/improvement (and ICC)	Any improvements or damage that are equal to or more than 50% the market value of the property will need to be elevate above the BFE.	More compliant structures; increase # of mitigation projects and insurance policies; decrease # of flood claims	Floodplain Management and HM	year-round	FEMA	All
<b>7.Properties Outside the Levee</b>	OP#70 Evacuation Plan Checklists	Beware of storm surge. Evacuations can take a long time. Develop your evacuation plan before Hurricane Season and plan to leave early.	More residents evacuating for hurricanes; more residents leaving early; fewer flood-related fatalities	Floodplain Management and HM	year-round	UNO-CHART	JP and Lafitte
	OP#71 Substantial damage/improvement (and ICC)	Any improvements or damage that are equal to or more than 50% the market value of the property will need to be elevate above the BFE.	More compliant structures; increase # of mitigation projects and insurance policies; decrease # of flood claims	Floodplain Management and HM	year-round	FEMA	All

**Appendix B - New Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>8.Prospective/ New Buyers</b>	OP#99 Disseminate brochure describing FEMA's flood zones, BFE, and the cost of a flood	Know the flood risk for a property before you buy it.	Increase in the number of inquiries from prospective buyers asking about a potential home's flood zone.	Floodplain Management and HM	year-round	FloodSmart	All
	OP#100 Distribute NFIP literature to local real estate agents to distribute to all buyers (370)	Flood damages are not covered by Homeowner's or Business Multi-Peril Insurance. Only flood insurance will cover contents and structural damage due to flooding. Will include information on available technical assistance.	Increase in the number of flood insurance policies at purchase	Floodplain Management and HM	year-round	-	All
	OP#101 Flood Disclosure Clause (handout) (370)	Protect for flood from ANY source. Buy flood insurance. The NFIP has paid \$ --- claims in your flood zone. Increased Deduction = Lower Premium. Purchase an Elevation Certificate to determine full risk.	Increase in the number of flood insurance policies and amount of coverage.	Tax Assessor's Office	year-round	-	All
	OP#102 Flood Insurance Promotion (370)	Protect for flood from ANY source. Buy flood insurance. The NFIP has paid \$ --- claims in your flood zone. Increased Deduction = Lower Premium. Purchase an Elevation Certificate to determine full risk. Will include information on available technical assistance.	Increase in the number of flood insurance policies and amount of coverage.	Floodplain Management and HM	year-round	-	All
	OP#103 Create brochure on building requirements and accessory structures/enclosures.	There are penalties for enclosures. Consult with your agent prior to converting your garage. Use flood-resistant materials.	Fewer code violations and Board of Standards and Appeals cases.	Code Enforcement/ Bldg Official	year-round	-	All
<b>9.BOAL</b>	OP#104 Excerpt for newsletter	Your clients may be in a Special Flood Hazard Area. Help them understand and prepare for their level of risk.	More building officials are aware of the floodplain implications in regards to building requirements	Code Enforcement/ Bldg Official	Quarterly	-	All
	OP#71 Substantial damage/improvement (and ICC)	Any improvements or damage that are equal to or more than 50% the market value of the property will need to be elevate above the BFE.	More compliant structures; increase # of mitigation projects and insurance policies; decrease # of flood claims	Floodplain Management and HM	year-round	FEMA	All

**Appendix B - New Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>10.Non-English Speakers (Span, Viet)</b>	OP#70 Evacuation Plan Checklists (multi-languages)	Beware of storm surge. Evacuations can take a long time. Develop your evacuation plan before Hurricane Season and plan to leave early.	More non-English speakers evacuating for hurricanes; more residents leaving early; fewer flood-related fatalities	Floodplain Management and HM	year-round	UNO-CHART	All
	OP#105 JP TV	Various topics on hurricane preparedness, drainage, emergency management, and environmental	Inform non-English speaking residents on how to prepare for hurricanes and protect the parish infrastructure and water bodies	Public Information Office	year-round	-	JP
	OP#106 Share various literature in Spanish and Vietnamese	various flood-related topics	Inform non-English speakers of mitigation, the cost of flooding and increase the # of flood insurance policies	Floodplain Management/Emergency Management	year-round	FloodSmart/Red Cross	Kenner, Gretna
	OP#71 Substantial damage/improvement (and ICC)	Any improvements or damage that are equal to or more than 50% the market value of the property will need to be elevate above the BFE.	More compliant structures; increase # of mitigation projects and insurance policies; decrease # of flood claims among non-English speakers	Floodplain Management and HM	year-round	FEMA	All
<b>11.General Public</b>	OP#68 HO Assn meetings	Flooding can happen anytime. Retrofit your property to protect it from flood waters. Know your flood hazard. Buy flood insurance.	Increase in # of mitigation projects and insurance policies; decrease # of flood claims	Floodplain Management and HM	Quarterly	-	JP
	OP#69 High Water Mark Initiative (370)	The water got ___ high for Hurricane Katrina. Ensure you have current flood insurance and consider increasing your coverage.	Publicize flood depths of historic floods in the parish and increase the # of flood insurance policies	Floodplain Management and HM	year-round	Water Works	All
	OP#70 Evacuation Plan Checklists	Beware of storm surge. Evacuations can take a long time. Develop your evacuation plan before Hurricane Season and plan to leave early.	More residents evacuating for hurricanes; more residents leaving early; fewer flood-related fatalities	Floodplain Management and HM	year-round	UNO-CHART	All
	OP#107 Video tutorials or webinar of mapping portal	Find out how to find your flood zone on the flood map.	Residents learn how to find their flood zone remotely	Floodplain Management and HM	year-round	-	All
	OP#108 National PrepareAthon Day	Warning, there is an emergency in your area. Follow these prompts to stay safe.	Test emergency alert system and receive feedback	Emergency Management	every Sept	-	All

**Appendix B - New Projects**

Target Audience	Outreach Projects (OP)	Message	Outcomes	Assignment	Proposed Schedule	Stakeholder	CRS Community
<b>11.General Public</b>	OP#109 YouTube Video on Flood Insur (370) or letter	Flooding can happen anytime. Check that your flood insurance policy is current and consider a separate policy for your contents. Renters can get flood insurance too. Evacuate to higher ground when necessary.	Increase in # of flood insurance policies parishwide	Parish President/ Mayor	year-round	FloodSmart YouTube Video	All
	OP#110 One-pager on new HFIAA surcharge	The NFIP charges a new surcharge. Click on this document to learn more.	Policyholders better understand their policy terms and fewer of them overpaying the surcharge	Floodplain Management and HM	year-round	-	JP
	OP#111 Create brochure on flood insurance and mitigation (370)	Flood insurance is changing. How well do you understand your flood insurance policy? Will include information on available technical assistance.	Increase in flood insurance policies and decrease flood damage	Parish President/ Mayor	year-round	FloodSmart?	All
	OP#112 Pilot "Flood Club" Program with Jefferson Parish Credit Union (370)	Save monthly for your flood premium payment by opening a Flood Club account.	Policyholders will have the option of a monthly installment to the Credit Union so they can better manage saving for their annual premium payment (like a Christmas Club).	Floodplain Management and HM	year-round	-	JP
	OP#113 Link to NOMAR's Website (370)	Flooding can happen anytime. Check that your flood insurance policy is current and consider a contents policy. Renters can get flood insurance too.	The general public will visit the website to get updates on flood insurance and contact information for local and state floodplain officials	Floodplain Management and HM	year-round	NOMAR	All
	OP#114 Home and Garden Show	Floods can happen anytime. Know your flood hazard and get insurance.	Increase in # of flood insurance policies parishwide	Floodplain Management and HM	every March		All
	FRP#1 Door hangers	Know what to do after a flood. Protect your property from the next one.	Structures are more resilient to future storms and flooding because of increase in retrofitting activities.	Floodplain Management and HM	after an event	LSU AgCenter	All
	FRP#2 Substantial damage (ICC)	ICC can help mitigate grant your home if it is declared substantially damaged.	More compliant structures; increase # of mitigation projects and insurance policies; decrease # of flood claims	Floodplain Management and HM	after an event	FEMA	All
	FRP#3 Grant opportunities -handout	Protect your property from the next flood. Contact the Jefferson Parish Dept of Floodplain Management and Hazard Mitigation at 504-736-6540 to know if you qualify for a mitigation grant.	Increase the number of mitigated structures in the parish	Floodplain Management and HM	after an event	-	All