

St. Charles Parish

2020 Floodplain and Stormwater Management Program for Public Information (PPI)

Prepared by members of St. Charles Parish Public Information Office

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Background

St. Charles Parish was founded in 1807 and is home to nearly 53,000 people. Located on the banks of the Mississippi River in Southeast Louisiana, St. Charles Parish offers visitors and residents suburban convenience while maintaining its rural charm.

Since receiving our first Flood Insurance Rate Map (FIRM) in 1983, officials in St. Charles Parish have been committed to following the rules and regulations set forth by the National Flood Insurance Program (NFIP). We strive to continually produce the most effective means of educating and preparing our community to build, sustain and protect their property according to its individual flood risk.

The St. Charles Parish Flood Aware committee has joined efforts with the Flood Loss Outreach & Awareness Task Force (FLOAT). FLOAT is a Community Rating System (CRS) Users Group. The purpose of this joint venture is to serve as a support and educational resource for the local communities who participate in the CRS.

The Community Rating System (CRS) is a part of the National Flood Insurance Program (NFIP). It provides reductions to flood insurance premiums in participating communities. The reductions are based on community floodplain management programs, including public information activities. To keep those discounts, communities must continue to implement their programs and provide status reports to the NFIP each year.

The CRS is a voluntary program available to all National Flood Insurance Program (NFIP) participating communities that incentivizes them to go beyond the minimum floodplain management regulations established by the NFIP to minimize risk in their communities. By taking on CRS activities aimed at increasing floodplain regulation and mitigating existing flood hazards and risks, communities receive "points" that are added together to establish that community's CRS Class. Each class ranking carries with it a percentage discount that is applied to the participating community's residents' flood insurance premiums. FLOAT is a space for community officials to come together and share their best practices and greatest struggles with the CRS program.

Since 2000, the Lake Pontchartrain Basin has been included in no less than 11 Major Presidential Disaster Declarations with the most notable and devastating being Hurricane Katrina, which occurred on August 29, 2005. Following the aftermath of Hurricane Katrina, the jurisdictions of Southeast Louisiana began to truly take floodplain management policymaking seriously and began to make changes that have increased the resiliency of the entire region.

In 2017, St. Charles Parish, with the invaluable help of the FLOAT CRS user's group decided to move forward and begin developing a cohesive program to increase outreach to the public regarding natural hazard preparation, and to continue planning for sustainable communities in the face of the environment in which we live, work and play.

St. Charles Parish has been an active participant in CRS since October 1, 1991 and is currently ranked at a class 8. We continually put forth effort to increase awareness and prepare our community for the inherent risk associated with our area through outreach projects so that they will be more capable of handling and mitigating these risks.

What follows is the document produced by these efforts.



Figure 1: St. Charles Parish Area

Goals of the Flood Aware PPI Plan

The Program for Public Information (PPI) details St. Charles Parish's strategy for informing residents, business owners, developers, government leaders, and civic leaders about their risk from flooding and what they can do to reduce the risk.

The goals of the PPI are:

- 1. To make the public aware of the flood risks their community may be susceptible to.
- 2. To promote an all-hazards approach to public outreach.
- To educate local officials about the importance of making the public aware of flood risks and other hazards.
- 4. To provide the most comprehensive coverage for public outreach using the most cost effective means, including the pooling of resources by seeking private sector partners.
- To provide a level of consistency in the public message disseminated from the various public entities participating in this strategy.
- 6. To promote public awareness Flood Insurance Rate Map and the NFIP.

The PPI's general Target Audiences include:

1. Residents and Business Owners: Residents and business owners need to know their property's risk from natural hazards so they can make informed decisions on how much

insurance they should have and what they can do to reduce their risk.

- Developers, Design Professionals, and Contractors: Developers, design professionals, and contractors need to know the flood risk for the property they are working on so they can design and build structures that meet codes, are safe, and lower the property owner's risk from natural hazards.
- Realtors: Realtors need to know how to determine a property's risk from natural hazards so
 they can inform prospective buyers and assist them in finding out what can be done to reduce or
 eliminate the risk.
- Insurance Agents: Insurance agents need to be able to determine a property's risk so they can
 assist the property owner with acquiring the right type and amount of insurance.
- Civic Leaders: Civic leaders need to know the risks to their community and what they can do to reduce it in order to influence policy and inform the public.

The PPI's specific Target Audiences include:

- Libraries: Libraries can disseminate information about flood risk to multiple members of the community.
- Contractors and Builders (Building Officials Association of Louisiana) (Louisiana Homebuilders Association): Contractors and builders need to know the flood risk of the property they are working on so that they can build structures that meet codes, are safe, and lower the property owner's risk from natural hazards.
- Realtors (Louisiana Realtors Association): Realtors need to know how to determine a
 property's risk from natural hazards so they can inform prospective buyers and assist them in
 finding out what can be done to reduce or eliminate the risk.
- Chemical Plants: Chemical plants need to understand flood risk so that buildings are kept safe and do not contaminate the nearby community and understand the potential impacts to their employees.
- Repetitive Flood Loss Area Residents: Residents in repetitive flood loss areas need to understand their flood risk so that they can take steps to mitigate their homes in order to reduce their flood risk in the future.
 - a. Severe Repetitive Loss Residents: Residents with severe repetitive losses particularly need to understand their flood risk so that they can adequately mitigate their homes to protect them from flood risk in the future.
- Insurance Agents (Professional Insurance Association of Louisiana): Insurance agents
 need to be able to determine a property's risk so they can assist the property owner with
 acquiring the right type and amount of insurance.
- Prospective Buyers working with LRA Realtors: Prospective buyers need to understand flood risk so that they understand the full risks associated with the property they are looking to purchase.

- 8. Floodplain Residents: Residents in the floodplain need to understand flood risk so they mitigate their properties and know how to protect themselves and respond during a flood event.
- Potential Flood Insurance Policy Holders: Potential flood insurance policy holders need to understand flood risk so that they know the cost of living in or near a floodplain.
- 10. Elected Officials (Membership of the Louisiana Municipal Association, Louisiana Police Juror, Gulf States Caucus of NAC) & NACO): Elected officials need to understand the flood risks in their locality so they can communicate them to their constituents.
- St. Charles Chamber of Commerce Businesses: Businesses need to understand flood risk so that they can adequately mitigate their buildings.

Outreach Messages

The outreach messages in this Program for Public Information (PPI) include:

- 1. Know your flood risks discover where your property is in relation to the floodplain
- 2. Insure your property for your flood risks even properties located outside of the floodplain should be insured for flood
- 3. Protect people from the risks turn around, don't drown
- Protect your property from the risk retrofit your home or business to help protect from flooding
- 5. Build responsibly Meet all elevation requirements for structures in flood zones.
- 6. Protect natural floodplain functions keep ditches and culverts clear of debris
- 7. Know your evacuation route for hurricanes have a hurricane plan
- 8. X-Zone can flood purchase flood insurance in zone X
- 9. Know your risk living behind levees

These messages are important because all of the communities in St. Charles Parish are susceptible to natural risks, particularly flooding and hurricanes. Educating the public about these hazards will ensure the safety and protection of all residents in each community.



Figure 2: St. Charles Parish Westbank Sign

Flood Aware Program for Public Information (PPI) Committee

The Flood Aware Committee was formed in 2017 to compile a plan for public information that informs residents of local flood risks and promotes flood insurance coverage. The plan will be submitted to the National Flood Insurance Program (NFIP) for the Community Rating System. Under this system, St. Charles Parish is currently rated an eight.

The Flood Aware Committee is led by the Public Information Office, the parish's Coastal Zone Management team, and stakeholders from the local chamber of commerce, industry, real estate, banks and nonprofits. The committee meets quarterly.



Figure 3: Flood Aware Meeting



Figure 4: Flood Aware Proclamation



Figure 5: Flood Aware Website Main Page



Figure 6: Flood Aware Website Video Page

St. Charles Parish Flood Aware Committee Members:

































Shown left to right, top to bottom

- 1. Adrienne Bourgeois- Public Information Specialist, St. Charles Parish Government
- 2. Stevie Crovetto- Public Information Director, St. Charles Parish Public Schools
- 3. Nicole DeSoto- Accounting Clerk, United Way of St. Charles
- 4. Julia Fisher-Perrier- Councilwoman District VII / Agent at Brown and Brown Insurance
- **5. Joe Ganote-** *Emergency Preparedness Director*
- 6. Dick Gibbs- Councilman District III / Sales and Operations Leader at Hartwig Moss Insurance Agency
- 7. Kent Greene- Customer Service Representative, Entergy Louisiana, LLC
- 8. Monique Gros- Realtor, Latter & Blum, Inc.
- 9. John Gutierrez- MS4 Coordinator, St. Charles Parish Government
- 10. Danielle Honor-Young- Floodplain/CRS Specialist, St. Charles Parish Government
- 11. Earl Matherne- Planning Administrator, St. Charles Parish Government
- 12. Bub Millet- River Region Chamber of Commerce
- 13. Tamara Plattsmier- Volunteer and Event Manager, United Way of St. Charles
- 14. Courtney Saucier- Housing Rehabilitation Specialist
- 15. Steve Sirmon- Emergency Coordinator, St. Charles Parish Government
- 16. Mary Vedros- Chief Executive Officer, Total Choice Federal Credit Union

Flood Risk Awareness February 7, 2017 10:30a.m. Emergency Operations Center, Hahnville

Name	Organization	Phone	E-Mail
Monique Gros	Latter & Blum / Reallor	504-460-4948	mmgrosoblerblum.com
KENT GREENE	ENTERCY	9011-453-9913	KGZEDJE CENTERCY. COM
Earl Motherne	PEZ,	985-783-5060	ematherne Ostcharlesgou. net
- be rande	EOC	985 183-5060	Janoke stchalagement
TONNSIRMON	EUC	10 IV II.	15 ramedehologos net
Stevie Crovetto	SCPPS	985-785-4289	Scrovetto @ Stchartes K12.1a.45
Donielle Honor-Young	7:2	985783-5060	dhonor@stcharlesgov net
2 0			

Figure 7: Flood Aware Sign in Sheet 1

Flood Hisk Awareness February 7, 2017 10:30a.m. Emergency Operations Center, Hahnville

Name	Organization	Phone	E-Mail
Micole DeSoto	unrequay of SC	CH5321-9063	Nicoled Quiwayse org
Tamara Plattsmier	United way of SC	985-331-9003	tamarapa uwaysorg
	SCP Community Services	985 764-7944	tamorago unay & org country stations and or country sawer and low
Courtney Soucier BUB Millet	River Region Chausen	504-210-9650	BMILLET @ EJEH. ORG
Advience Bouragois	DIO		
John Gutierrez	SCA AW.	504-655-5746	jautierrez@stcharlesgov.net
Ken lones	Shell motion	504/965-7711	
Julia Fisher Perrier	Insurance Agent	514.339.5199	perrier Ostchares gov. net
		7-1-1	0
		-	

Figure 8: Flood Aware Sign in Sheet 2

SIGN IN SHEET Hurricane Campaign Meeting April 10, 2017

NAME	Agency
Joe Ganote	DHSEP
Many Vedros	Total Choice FCLI
Stevi (Notto	SCPPS
Angela Gaubert	Total Choice FCU
Courting Saucier	Community Services
Jamara Hattsmier	United Way of St. Charles
Micole Desoto	
STEVE SIRMON	SCP DHSEP
Fari Mathem	SCP PEZ
Bus MilleT	Riven Region Chausen or Commence
Julia Fisher-Perrier	Stc. Council / Riverlands Insurance
Monique Gos	SCP / Ptz
Ken Joses	Shellmativa
John Ginterree 5	JUDGE
Adrienne bourgenis	SCOPIE STATE OF THE STATE OF TH

Figure 9: Flood Aware Sign in Sheet 3

Sign in Sheet



August 1,2019 Noon - 1:30 p.m.

Courthouse 3rd floor large conference room, Hahnville

Name	Organization	Phone	E-mail
Speler	SCP PID		aboutaglois@ Stonailes gou. net
amile Jaros Spens	SCP P/2		dhoundestcharlesgou het
Earl Mathemale	SEP PFZ		ematmone Ostcharlosgov.net
John autiener Jr.	SCP PW		igntierrez (stcharles gov. net
KENT GREENE	ENTERCEY	904-453-9913	KGEGENE CENTERGY. COM
Poutre Saucier	Copyrid Services	984-764-7944	Crawier Datcherles gov.net
Bus Millet	River Region OHAMISER	504-210-9650	BMILLET @ EJGH. ORG
Julia Fisher Percier	SCP Council Brown Brown	564 339 5199	perrier@stcharlesgovnet
January 1171 and 1171	Insutaine		J.

Figure 10: Flood Aware Sign in Sheet 4

Community Needs Assessment

The communities in the Flood Aware region include populations that may be more vulnerable than others, including individuals over 65 and people living below the poverty level. The table below describes the specific socio-economic data for St. Charles Parish, based on 2010 United States Census Bureau information.

Table: 1

Vulnerable Populations in St. Charles Parish				
Total Population	52,780			
Housing Units	20,372			
Over 65	5,235 (9.9%)			
Below the Poverty Level	11.8%			

Flood Aware Region's Geography

The location that makes up the Flood Aware region is situated in Southeastern Louisiana. The region contains or borders bodies of water which include areas of marsh, wetland and swamp. Because of the proximity to water, much of the land is located in the floodplain. In addition, many of the areas have a low land elevation, therefore they are susceptible to flooding.

St. Charles' Geography, Topography, and Land Uses

St. Charles Parish is located in southeastern Louisiana, on the south shore of Lake Pontchartrain (Figure 10). The Parish measures approximately 37 miles north to south and 16 miles east to west covering 408 square miles.

The Mississippi River divides the parish into an east bank and a west bank. Both banks have main highways that act as entries into New Orleans. Interstates 310 and 10 run through the parish's east bank while Highway 90 runs through the west bank of the parish. Eastbank towns include Destrehan, Montz, New Sarpy, Norco and St. Rose. Westbank towns include Ama, Bayou Gauche, Boutte, Des Allemands, Hahnville, Killona, Luling, Paradis and Taft.

Geologically, the parish is made up of swamp with 127 miles of open water. Along Lake Pontchartrain is mostly marsh, while along Lake Salvador, Lake Des Allemands and Lake Cataouatche, it is mostly swamp. Agriculture (7,047 acres) is the predominant land use.

- St. Charles Parish is largely rural. Land uses within the parish consist of industrial, commercial, residential, swamp, marsh and agricultural land. The majority of the industrial and commercial areas are located along the Mississippi River corridor.
- St. Charles Parish has the 7th smallest land mass area among parishes in Louisiana. Nearly 31 percent of the total parish is actually open water, while another 61 percent is covered by wetlands of several types (wetland forests, scrub, and marsh). Only about 11 percent of the land area (about 20,000 acres) is potentially developable. Of this acreage, approximately 12,300 acres are already used for some type of human activity.

Agriculture, which includes pasture and grassland for livestock and cultivation of sugarcane and other crops, is the most prevalent use of land with over 7,000 acres. Agriculture has always been an important part of the way of life and economy of the parish. While a significant portion of the parish remains in agricultural land use, there are no agricultural preservation programs or retention strategies in place. In addition, the agricultural sector has been declining over the past years compared to other sectors.

Single-family residential and industrial are the next most land-consuming uses, followed by infrastructure, commercial, institutional, and recreation. Acres in multifamily residential total less than one hundred today. Excluding agricultural land and wetlands, about 427 acres are classified as "undeveloped" or "vacant" land.

Most buildings are slab on grade, and therefore susceptible to flood damage from shallow flooding and drainage problems. Flooding in St. Charles Parish is due to storm surge, severe storms, flash flooding and thunderstorms.



Figure 11: St. Charles Parish on Map



Figure 12: St. Charles Parish LiDAR Map

Flood Risks

Floodplains are lowlands that are subject to recurring floods. Hundreds of floods occur each year, making them one of the most common hazards in all 50 States and U.S. territories. According to FEMA, floods are the most widespread natural disaster aside from wildfires and nearly 90% of all-natural disasters declared by the President involve some sort of flooding. Flooding typically results from large-scale weather systems generating prolonged rainfall. Most communities in the United States have experienced some kind of flooding after spring rains, heavy thunderstorms, or winter snow thaws.

Flooding is defined as the accumulation of water within a water body and the overflow of excess water onto the adjacent floodplain. 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. Flooding is a natural event for rivers and streams (often called "overbank" flooding), and also can be the result of ponding or overland "sheet" flow when rainfall rates temporarily exceed the drainage capacity of an area. In overbank events, excess water from snowmelt, rainfall, or storm surge accumulates and overflows onto banks and adjacent floodplains. In ponding events, water temporarily accumulates in an area until normal drainage allows it to flow away. Overland, or sheet flow floods occur when intense rainfall occurs, and water simply runs across the ground. Overland flooding in extreme cases can reach depths of more than a foot and at relatively high velocities.

The Lake Pontchartrain area is characterized as a coastal zone consisting of low, flat elevations bisected by regular and numerous slow-moving rivers and bayous, which are often relied on as an integral part of the cities and parishes drainage systems. The low, flat topography and slow-moving waterways combine to increase the risk to sheet flooding and ponding in low lying areas. To compensate for this challenge, parishes rely heavily on pump systems for the removal of storm water from low lying areas and from areas located within flood protection barriers.

Over 80% of the Lake Pontchartrain area is located in a Special Flood Hazard Area (SFHA). Some of these areas have been provided with federal, state, or local flood protection barriers. However, many of the most vulnerable areas are outside of the flood protection systems. Even those areas within flood protection systems are vulnerable to flooding when the system is overtopped or breached, as occurred during Hurricanes Katrina and Isaac.

The Lake Pontchartrain area is vulnerable to flooding from storm surge, localized drainage deficiencies, and back flooding. The greatest flood threat to the area is by storm surge from tropical storms and tropical cyclones. Storm surges push large quantities of water into an area and cause both sheet and overbank flooding and can even overtop levees and flood walls. Storm surges that overtop flood protection systems are particularly challenging because the flood waters are then trapped inside the barrier and must be pumped out along with any rain water that also accumulated during the storm event.

A second leading cause of flooding is localized drainage issues due to insufficient or impaired drainage. The area's low flat topography limits gravity's effect on moving water through the drainage system. Pumps are used to augment the drainage systems ability to remove storm and flood waters, but pumps generally require human intervention to ensure they are maintained, turned on when needed, and continue to operate throughout a storm event. Another challenge is impaired drainage due to silt accumulation, litter and debris clogging pipes and culverts, and uneven/rough drainage channels. The lack of efficient flow causes local blockages or slowing which causes the water to backup, overtop the bank, and flood local areas.

A third likely cause of flooding is back flooding, since most of the drainage systems rely on bayous and rivers draining into the lakes then into the Gulf of Mexico. When Lake Pontchartrain is overfilled, the rivers and bayous cannot drain and actually begin to flow back up stream. The combination of backflow, with a continuing need to pump out storm water, overwhelms the flood protection and drainage capacity causing flooding. The effect is often exacerbated by tidal conditions since the majority of the area is in a coastal zone.

St. Charles's Flood Risks

Hurricanes/Tropical Storms

Tropical storms and hurricanes are large-scale systems of severe thunderstorms that develop over tropical or subtropical waters and have a defined, organized circulation. The larger storms generally form over the eastern Atlantic Ocean and move westward. The hurricane season runs from June 1 through November 30, with the peak activity in September. Tropical storms and hurricanes are categorized by their wind speed. While best known for their winds, these storms can also bring flooding of coastal regions, heavy rains that cause inland flooding, thunderstorms, lightning, and tornadoes. In June and October, storms are more likely to come from the Gulf, while in July through September; they generally form in the South Atlantic. The peak recorded wind speed in the parish was 125 miles per hour during Hurricane Camille in 1969.

Affected Area

Tropical storms and hurricanes can affect the entire parish. Every area of St Charles Parish is susceptible to their winds, rain, and tornadoes. Figure 7 below shows the coastal areas that will be evacuated for flooding by categories 1 through 4 storms. Evacuations are currently done on a Parish-wide basis.

Low lying and coastal areas south of I-12 are most prone to storm surge flooding. The 100-year storm surge elevation at the Causeway and I-10 is 11.6 feet. The flood elevation drops one foot for each 2.75 miles inland.

Frequency

Louisiana has had an average of 5-8 hurricanes each decade since detailed records have been kept. Based on historical record, a tropical storm or hurricane should be expected somewhere within the state every 1.2 years (0.83% chance). A hurricane should make landfall every 2.8 years.

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Decade	Hurricanes	T.S.s	Total	Decade	Hurricanes	T.S.s	Total
1850's	3	1	4	1930's	2	8	10
1860's	7	2	9	1940's	3	9	12
1870's	6	3	9	1950's	2	7	9
1880's	7	3	10	1960's	4	4	5
1890's	3	6	9	1970's	4	3	7
1900's	2	7	9	1980's	4	5	9
1910's	3	2	5	1990's	3	2	5
1920's	3	2	5	Totals	57	61	118

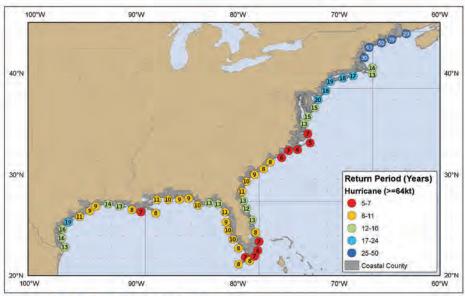


Figure 13: Return Period Map 1

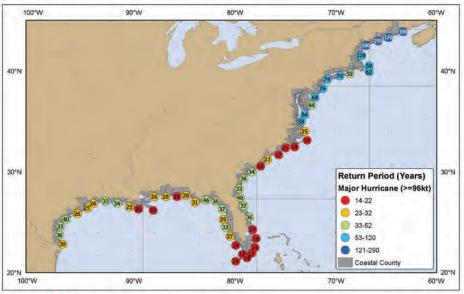


Figure 14: Return Period Map 2

Flooding

Flooding is caused by more water than a drainage system can convey. Flooding is dependent on three factors: 1) precipitation, and antecedent conditions in both 2) the watershed and 3) the drainage channel.

Precipitation

St. Charles Parish receives an average of 63.7 inches of rain each year (1950-2015). The rain comes from tropical storms, convective thunderstorms, and storms caused by the interaction of warm moist air with colder air from the north. The parish's precipitation is not spread out evenly over the year. The amount of rain that falls varies from storm to storm and varies over an area. Where this rain water goes depends on the watershed.

The Watershed

A "watershed" is an area of land that drains into a lake, stream or other body of water. The runoff from rain is collected by ditches and sewers, which send the water to small streams (tributaries), then the water travels to larger channels and eventually to the lowest body of water in the watershed (the main channel, Lake Pontchartrain or the Gulf). When one of these conveyance channels receives too much water, the excess flows over its banks and into the adjacent area – causing a flood.

St. Charles Parish has 7 major watersheds, which are shown in Figure 8. Within these major watersheds are smaller sub-watersheds that drain into the tributaries. All of these streams have adjacent floodplains that are inundated during a flood.

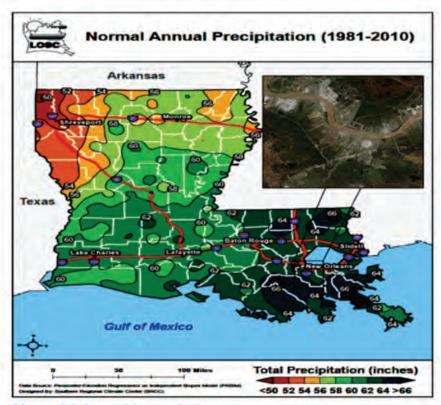


Figure 15: Annual Precepitation

The Channel

Flooding can be aggravated by obstructions in the drainage system. There are two kinds: channel obstructions, such as small bridge or culvert openings or log jams, and floodplain obstructions, such as road embankments, fill and buildings. Channel obstructions will aggravate smaller, more frequent floods, while floodplain obstructions impact the larger, less frequent floods where most of the flow is overbank, outside the channel. Channel obstructions can be natural (e.g., log jams or growth) or man-made (e.g., broken culverts or debris). Channel obstructions can be cleared out by work crews or washed away during larger floods. Floodplain obstructions tend to be more permanent.

Past Hazard Mitigation Efforts

The fact remains that the majority of the parish is located in the SFHA, and there are several large scale projects underway to protect the parish from flooding. This includes the Westbank Hurricane Protection Levee, that's under construction and the West Shore Protection Project and Upper

Barataria which are both in design and planning.

Key to the parish's efforts are its outreach programs intended to inform its residents and business owners what they can do to mitigate their individual risk and to speed their recovery from a flood event.

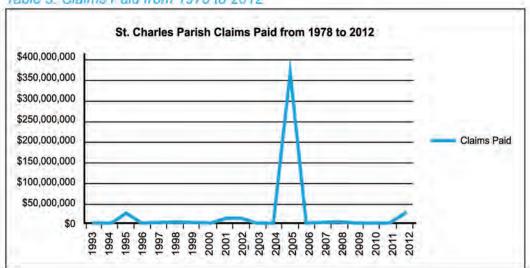


Table 3: Claims Paid from 1978 to 2012

Flood Aware Region Flood Insurance Data (Activity 370)

This section will review the flood insurance data in each community within St. Charles Parish and flood insurance studies (where available). A Flood Insurance Study, or FIS, is a compilation and presentation of flood risk data for specific watercourses, lakes, and coastal flood hazard areas within a community. When a flood study is completed for the NFIP, the information and maps are assembled into an FIS. The FIS indicates that flooding within the parish occurs almost equally between the spring from rainfall and in the late summer from tropical cyclone events; however, flooding can occur anytime during the year. This section will also examine pre- and post- FIRM policies and level of flood insurance coverage in each community, as well as make recommendations for enhancing flood insurance coverage in each community.

According to FEMA, a pre-FIRM structure is one in which "construction or substantial improvement occurred on or before December 31, 1974 or before the effective date of an initial Flood Insurance Rate Map (FIRM)." FEMA defines a post-FIRM structure as "a building for which construction or substantial improvement occurred after December 31, 1974 or on or after the effective date of an initial Flood Insurance Rate Map (FIRM), whichever is later." Table 4 details the initial and current FIRM dates for St. Charles Parish.

Table 4: Flood Aware Region FIRM Dates

Community	Initial FIRM Date	Current FIRM Date
St. Charles Parish	2/2/83	6/16/1992

The majority of flood insurance policies in the Flood Aware region related to pre-Flood Insurance Rate Map (FIRM) structures are located in the Special Flood Hazard Area (SFHA). In St. Charles Parish the majority of the pre-FIRM structures are located in X Zones.

The State of Louisiana NFIP Coordinator's office provided detailed NFIP insurance information for each area within the Community of St. Charles Parish that is detailed in the table below.

Table 5: Pre and	Post-FIRM Po	licies St. Char	les Parish by Zone
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Flood Zone	Policies In Force	Premium	Insurance In Force	Number of Closed Paid Losses	Cost of Closed Paid Losses	Adjustment Expense
AE Zones	2,890	\$2,618,851	\$791,477,600	675	\$15,643,462.37	\$573,600.58
A Zones	183	\$246,000	\$46,763,900	698	\$15,439,755.60	\$451,755.39
AO Zones	4	\$1,963	\$1,312,800	7	\$244,452.05	\$,5180.00
AH Zones	1,365	\$675,189	\$411,510,700	1,288	\$43,039,699.22	\$840,828.08
AR Zones	0	\$0	\$0	0	\$0.00	\$0.00
A99 Zones	2,826	\$2,254,825	\$764,965,500	193	\$5,451,165.43	\$216,117.40
VE Zones	0	\$0	\$0	3	\$93,703.89	\$4,025.26
V Zones	0	\$0	\$0	0	\$0.00	\$0.00
D Zones	0	\$0	\$0	0	\$0.00	\$0.00
B,C, X Zone						
Standard	225	\$302,162	\$47,574,700	544	\$10,661,003.30	\$330,737.72
Preferred	4,093	\$1,777,567	\$1,302,668,000	507	\$8,615,358.59	\$324,995.40
Total	11,586	\$7,876,557	\$3,366,273,200	3,915	\$99,188,567.00	\$2,747,237.0

¹ http://www.fema.gov/national-flood-insurance-program/definitions

St. Charles Parish Flood Insurance Study

St. Charles Parish's FIS was revised in 1992. This study included a wave height analysis, which revised the original study to include wave crest predictions from storm surge. The original flood insurance study, entitled "Type 5, Flood Insurance Study, Louisiana Coastal Region," predicted still water elevations only. Because there is a pronounced tendency for buildings to be constructed to meet minimum requirements only, without thought to the additional hazard due to wave height, an additional study was conducted on potential wave damage in St. Charles Parish. A recent revised FIS was adopted in November 2010. The parish is subject to heavy flooding due to Lake Pontchartrain, Lake Salvador, and Lake Des Allemands effects and the associated wetlands. In St. Charles, flooding can occur during any season of the year. Because so much of the land is low lying, all properties may be subject to flooding. Floodwater collects in a saucer of land prone to subsidence or sinking. The low, flat ground provides little gravity drainage. When the ground is saturated and heavy rain falls quickly, the system can be overwhelmed, and flooding can result.

Flood Zones in St. Charles Parish

Over 87% of the total land area of St. Charles has been designated by FEMA as a Special Flood Hazard Area (SFHA). These areas are assigned as zones A, AE, V, and VE, and are the areas of the parish that are at risk for flooding. Zones A, AE, V and VE are located in the 100-year floodplain. The shores of Lake Maurepas and Pontchartrain are designated as V or VE zones. The rest of the Parish is designated as X zones, or areas in the 500-year floodplain.

Level of Flood Insurance Coverage in St. Charles Parish

The below tables and narrative review the commercial and residential buildings in the Special Flood Hazard Area, the number of flood insurance policies in the parish, and map the policies to identify gaps in order to make recommendations about improving flood insurance coverage in the parish.

St. Charles Parish has both structures and population in the Special Flood Hazard Area (SFHA). This area includes 10,766 structures. The structures in the parish total 22,220, and the population of the parish is approximately 53,000.

Table 6: St. Charles Structures in the SFHA, Source: St. Charles Parish GIS System

St. Charles Struc Town	# of Structures In SFHA	# of Structures	% of Structures in SFHA
2.54			12-1-17-17
Ama	82	729	11.25%
Bayou Gauche	135	1037	13.02%
Boutte	1045	1415	73.85%
Des Allemands	172	1014	16.96%
Destrehan	3412	3948	86.42%
Hahnville	79	1428	5.53%
Killona	0	357	0%
Luling	2302	5528	41.64%
Montz	0	720	0%
New Sarpy	709	709	100%
Norco	1258	1514	83.09%
Paradis	44	685	6.42%
St. Rose	1519	3002	50.60%
Taft	9	134	6.72%

The SFHA in St. Charles is made up of Zones AE, AH, A99 and VE.

Table 7: St. Charles Commercial and Residential Buildings by Flood Zone

Flood Zone	Residential & Commerical Building	Acres
АН	398	344.07
A99	6,156	6,148.67
AE	4,212	129,993.95
VE	2	41,169.11
X Zone	11,454	27,796
Total	22,220	205451.80

There are a total of 22,220 Residential and Commercial structures in St. Charles Parish, 10,993 of which have flood insurance coverage. Therefore, 49.4% of residential structures in the parish have flood insurance coverage. There are a total of 2,114 non-residential structures in the parish, 593 of which have flood insurance coverage. Therefore, 28% of non-residential structures have flood insurance coverage. Throughout the parish, approximately 47.6% of structures have insurance coverage.

Table 8: S	t Charles	Insurance	Coverage
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Occupancy	Number Of Polocies	Percentage of Total Policies	Number of Buildings	Percentage Of Buildings With Policies	Total Coverage
Residential & Commercial	10,993	94.8	22,220	49.4	3,366,273,200
Industrial Complexes	593	5.2	2,114	.28	N/A
Total	11,586	100	24,334	47.6	N/A

Map Analysis

Most of the populated areas of the parish have flood insurance policies. The above map reveals gaps in the AE, VE and X zones. There are no policies in the north of the parish because it is made up of marsh and swamp. There is also an industrial area in the north of the parish in the X zone. The west bank of the parish is undeveloped in many areas and is primarily an X zone in its populated areas. There are some areas of the parish that could increase their insurance policies, including Frenier, Pleasure Bend, and mobile home districts on the west bank. In Pleasure Bend, the flood zone is VE, and a small fraction of the residents have policies.

St. Charles Parish Current Coverage and Recommendations

Approximately 10,766 of the structures in the St. Charles Parish are in the SFHA, while 11,545 of the structures in the parish are located outside of the SFHA. The flood insurance policy numbers reveal that 67% of the structures in the SFHA have flood insurance coverage and 37% of structures in the non-SFHA have flood insurance coverage.

Flood Insurance Assessment Conclusion

While all of the communities in the Flood Aware region have structures in the SFHA with flood insurance, awareness of their risk and the importance of flood insurance coverage is the message we are trying to have everyone embrace. St. Charles Parish is tackling this issue by conducting outreach projects, revising flood maps, and promoting flood insurance throughout the area.

Repetitive Flooding

FEMA defines repetitive loss properties as those that have received repetitive flooding, in which the NFIP paid two or more claims of more than \$1,000 in flood insurance within a tenyear period. FEMA defines severe repetitive loss properties as those that have received over \$20,000 in flood insurance from four or more claims that were greater than \$5,000 each, or properties that have flooded more than once, and in which the flood claim payments are greater than the value of the property. The localities in the Flood Aware region contain both repetitive loss and severe repetitive loss properties.

St. Charles Parish Repetitive Flooding

In April 2017, St. Charles Parish listed a total of 641 Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties. 48 of those properties have been mitigated and there are 39 unmitigated SRL properties and 554 unmitigated RL properties remaining. In response to this, St. Charles Parish is taking advantage of FEMA Hazard Mitigation grant funds to elevate SRL and RL properties to reduce or, hopefully, eliminate the risk of flooding in the future. Additionally, numerous drainage improvement projects have been completed within

the past ten years that mitigate flooding community-wide. Examples of these projects include culvert improvements, pump station automatic bar screen cleaner installations, pump station capacity increases, and the construction of new pump stations. Some of these projects have been funded in part, or entirely, by grants from the FEMA Hazard Mitigation programs or DOTD Statewide Flood Control Program.



Figure 16: Flooding in Ormond

Other Public Information Efforts

The outreach projects for the Flood Aware PPI are listed in Appendix A. The current ongoing projects are listed first. The stakeholder projects and new projects, which are Flood Aware-wide, are listed below the current ongoing projects. Each project includes details about the parish, the project itself, the project mechanism, the office, the subject matter, the frequency, the target audience, the activity, the message, and the desired message outcome.

There are also outreach projects that fall under other public information initiatives, including Activity 320 – Map Information Service, Activity 340 – Hazard Disclosure, Activity 350 – Flood Protection Information Website, Activity 360 – Flood Protection Assistance, Activity 370 – Flood Insurance Assessment, Activity 540 – Drainage System Maintenance, and Activity 610 – Flood Warning and Response.

St. Charles Parish is doing the following outreach projects:

Activity 310-ELEVATION CERTIFICATES

The objective of this activity is to maintain correct Federal Emergency Management Agency (FEMA) Elevation Certificates and other needed certifications for new and substantially improved buildings in the Special Flood Hazard Area (SFHA).

 The building department maintains elevation certificates for new and substantially improved buildings. Copies of elevation certificates are made available upon request.

Activity 320 - Map Information Service

The objective of this activity is to provide inquirers with information about the local flood hazard and about flood-prone areas that need special protection because of their natural functions.

- Credit is provided for furnishing inquirers with basic flood zone information from the community's latest flood Insurance rate map. The service is publicized annually, and records are maintained
- LSU AgCenter provides an online map tool located at floodmaps.lsuagcenter.com. The
 website offers flood zone information of both the FIRM and DFIRM maps throughout
 Louisiana. All residents of Louisiana are encouraged to visit the map and learn about their
 flood zone.

Activity 330- OUTREACH PROJECTS:

The objective of this activity is for the public information office to coordinate all efforts along with other departments within St. Charles Parish and with specific stakeholders to increase flood hazard awareness, to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- See appendix A Outreach Projects for the list of ongoing and new projects.
- See appendix B for Flood Response Procedures

Activity 340 -Hazard Disclosure

Activity 340 involves the disclosure of flood hazards, particularly that real estate agents should disclose those hazards to potential homebuyers. The outreach projects that qualify for Activity 340 are listed below:

- Credit is provided for state and community regulations requiring disclosure of flood hazards.
- Floodplain Management staff notify their realtors about hazard disclosure with an email. The
 email provides flood insurance and retrofitting information for prospective homebuyers. The
 realtors are encouraged to share this information with potential homeowners.

Activity 350 – Flood Protection Information Website

The Objective of this activity is to provide the public with information about flood protection that is more detailed than that provided through outreach projects. The projects that qualify for Activity 350 are listed below:

- Credit is provided for floodplain information displayed on the community's website.
- St. Charles's Parish's Facebook, Twitter, and main website all contain information on preparing for natural hazards such as flooding and hurricanes and protecting life and property from those hazards. The website and social media aim to increase the number of policies and retrofits in the parish.
- St Charles Parish Emergency Operations Center provides a weather notification alert system

that alerts residents of emergency weather conditions year-round. The goal of the system is to keep residents safe from weather hazards by increasing the number of people who are aware of the hazard.

- Louisiana Sea Grant's Homeowners Handbook, located at seagrant.noaa.gov, includes information on insurance, building responsibly, making a plan for hazards, and retrofitting your home for hazards. The goal of the handbook is to decrease the amount of damage following a flood event.
- National Sea Grant's Resilience Toolkit, located at seagrant.noaa.gov, includes information
 on protecting property from hazards, making a plan for hazards, and retrofitting homes for
 hazards. The aim of the toolkit is to decrease the amount of damage following a flood event.
- CPRA's website, cims.coastal.louisiana.gov/floodrisk, includes risk and resilience information, specifically coastal restoration projects. The website details flood hazards throughout southeast Louisiana now and in the future. The goal of the website is to protect the citizens of Louisiana from future flood hazards.
- The Coalition for Sustainable Flood Insurance's website, www.facebook.com/CSFIUSA; csfi.info, was created to ensure that flood insurance rates are kept affordable. It includes information on flood hazards, insuring property from flood hazards, protecting people and property from the flood hazard and building responsibly. The aim of the site is to keep flood insurance affordable in order to increase the number of flood insurance policies in the community.
- The Realtor's Association website, www.nomar.com, contains flood insurance information, including flood hazards, insuring for flood hazards, and contacting officials about the hazard. The website aims to increase the members of NOMAR and the general public who visit the website to get information on flood insurance, find their risk, and get contact information for local and state floodplain officials.

Activity 360 – Flood Protection Assistance

The objective of this activity is to provide one-on-one help to people who are interested in protecting their property from flooding. The outreach projects that qualify for Activity 360 are listed below:

St. Charles Parish advises residents and business owners of their risk and how to mitigate
it, as required for major projects. The parish offers information on flood hazards, insuring for
flood hazards, protecting people from the hazard, and building responsibly. The parish aims
to increase the number of inquiries related to flood designation of properties and increase the
number of inquiries related to retrofitting methods.

Activity 370 - Flood Insurance Promotion

Activity 370, flood insurance assessment, includes outreach activities specifically on flood insurance. Additionally, as part of the credit for these outreach activities, a parish official must encourage flood insurance. The objective of this activity is to improve flood insurance coverage in the community. The outreach projects that qualify for Activity 370 are listed below:

- St. Charles Parish will dedicate the month of May to NFIP related messages on social media.
 The social media month will serve to promote flood insurance and advise residents on how to
 reduce their rates. The goal of the month is to increase the number of flood insurance policies
 in the area.
- St. Charles Parish will send out a mailer dedicated to flood insurance, in order to promote
 flood insurance and provide advice to residents on how to reduce their rates. The goal of the
 mailer is to increase the number of flood insurance policies in the area.
- St. Charles Parish will distribute a video of an elected parish official discussing the

importance of flood insurance through their website, social media, and other methods during the flood awareness month, in order to further promote flood insurance. This outreach project aims to increase the number of flood insurance policies in the area.

Activity 420 - Open Space Preservation

Activity 420 includes open space preservation, deed restrictions, natural functions open space, and special flood-related hazards open space, open space incentives, low-density zoning, and natural shoreline protection.

- Credit is provided for preserving approximately 21 percent of the Special Flood Hazard Area as open space and preserving open space land in a natural state.
- St. Charles Parish informs the general public about protection natural floodplain functions through providing information on preserving natural open space, such as wetlands, and providing educational materials and encouraging visits to those locations.

Activity 430 - Higher Regulatory Standards:

The Objective of this activity is to credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the NFIP.

- Credit is provided for enforcing regulations that require local drainage protection.
- Credit is provided for the enforcement of building codes, and regulations administration.

Activity 440- Flood Data Maintenance:

The OBJECTIVE of this activity is to make community floodplain data more accessible, current, useful, and/or accurate so that the information contributes to the improvement of local regulations, insurance rating, planning, disclosure, and property appraisals.

- Credit is provided for maintaining and using digitized maps in the day to day management of the floodplain
- Credit is provided for maintaining copies of all previous FIRMs and Flood Insurance Study Reports.

Activity 450 - Stormwater Management:

The OBJECTIVE of this activity is to prevent future development from increasing flood hazards to existing development, to protecting existing hydrologic functions within the watershed, and to maintain and improve water quality.

The community enforces regulations for erosion control and water quality.

Activity 502- Repetitive Loss Category:

Every CRS community with one or more unmitigated repetitive loss property on FEMA's current list must keep the list updated and submit a Repetitive Loss List Community Certification (CC-RL) at each verification visit. Additional requirements depend on the community's repetitive loss category, which is determined by the number of repetitive loss properties without mitigation measures AFTER the community has updated the repetitive loss property information and submitted it for approval. Properties that have been mitigated or that are shown to be in another community are not counted when determining the repetitive loss category.

Based on the updates made to the NFIP Report of Repetitive Losses as of August 31, 2015,
 St. Charles Parish, LA has 642 repetitive loss properties and is a Category C community for

CRS purposes. All requirements for a Category C community have been met.

Activity 510- Floodplain Management Planning

The objective of this activity is to credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs. The outreach projects that qualify for Activity 510 are listed below:

 Credit is provided for the adoption and implementation of the St. Charles Parish Hazard Mitigation Plan, adoption on January 12, 2015. A progress report must be submitted on an annual basis. An update to the credited plan will be due by October 1, 2020.

Activity 520- Acquisition and Relocation:

The OBJECTIVE of this activity is to encourage communities to acquire, relocate, or otherwise clear existing buildings out of the flood hazard area.

 Credit is provided for acquiring and relocating 10 buildings from the community's regulatory floodplain.

Activity 530 -Flood Protection:

The OBJECTIVE of this activity is to protect buildings from flood damage by:

- Retrofitting the buildings so that they suffer no or minimal damage when flooded, and/or
- Constructing small flood control projects that reduce the risk of flood waters' reaching the buildings.

Activity 540 - Drainage System Maintenance

The OBJECTIVE of this activity is to ensure that the community keeps its streams, channels, and storage basins clear of debris so that their flood carrying, and storage capacity are maintained.

- St. Charles Parish institutes an annual parish-wide clean-up day, Trash Bash. This Clean Sweep is publicized in the newspaper and on their website and encourages residents to keep debris and trash out of ditches and streams. The aim of the outreach project is to publicize the stream dumping regulations in the parish and improve drainage in the parish by increasing the number of clean drains and culverts.
- St. Charles Parish performs routine ditch and culvert clean outs through our Public Works
 Department. The aim of the project is to the stream dumping regulations in the area and
 improve drainage in the parish by increasing the number of clean drains and culverts.

Activity 610 – Flood Warning and Response:

The OBJECTIVE of this activity is to encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. This activity focuses on the community's emergency management actions and plans, and efforts coordinated through the community's emergency manager. Therefore, the emergency manager should be the point of contact.

Activity 710 - County Growth Adjustment:

The OBJECTIVE of this credit step is to increase the credit for activities related to managing new development in areas that are growing.

 All credit in the 400 series is multiplied by the growth rate of the county to account for growth pressures. The growth rate for St. Charles Parish is 1.07

Draft Review

The draft was sent to Dave Arkens, the FEMA Region 6 insurance liaison, for review.

Annual Evaluation

The Flood Aware PPI Committee will meet at least once a year, to evaluate the Plan and incorporate any needed revisions. The evaluation will cover:

- · A review of the projects that were completed
- · Progress toward the desired outcomes
- · Recommendations regarding projects not completed
- Changes in the target audiences

The Flood Aware committee shall consult with local government to refresh their CRS Community needs at least once every two years, and bring the results to the Annual Evaluation. The outcomes and revisions will be submitted as part of the annual CRS recertification package for the committee to present to the council and Parish President.

Plan Adoption

St. Charles Parish

A final draft approved by the Flood Aware committee will be presented to the St. Charles Parish Council for adoption.

The Program of Public Information will be introduced as a resolution at the council meeting by the floodplain coordinator, and thence approved by the Council Members by a simple vote.

Flood Aware's Flood Response Preparation (FRP) Written Procedures

St. Charles Parish is impacted by some form of flooding. Flood Aware's mission is to take action in protecting the people and property of Jefferson Parish from future flooding.

In coordination with its Program for Public Information, Flood Aware has chosen public information projects to be implemented specifically after a flood. These Flood Response Preparation Procedures will go into effect when a flooding disaster that is declared for St. Charles Parish by the Federal Emergency Management Agency. Information will be circulated to the affected areas as soon as local officials are allowed in the area. This should happen within two weeks of the declared event, depending on the scale of the event. Coordination with the Louisiana Floodplain Management Association Disaster Response Team (DRT) will be leveraged to assist with distribution of materials.

Flood aware has identified 2 projects to be distributed to flooded areas.

- OP 29 FRP#1 LFMA Door Hanger
- OP 30 FRP#2 ICC Trifold Brochure

These projects have been prepared and printed so that they are ready for distribution. After a declared flood event occurs, members of St. Charles Parish and LFMA DRT will work in tandem with the various departments that assess damage in their jurisdictions to disseminate the projects. Projects will be distributed to 100% of the flooded properties. If the damaged structures exceed the number of printed items, additional printing will be requested.

Flood Aware Program for Public Information Appendix A - Flood Response Procedures

200	Project	Project Mechanism	Office/Stakeholder	Subject Matter	Frequency	Target Audinnice	Activity	Duirench Message(s)	Mossage(s)	Desired Message Outcome(s)
OP2	Map Inquiry Service	Website / Brochure	SCP Planning & Zoning	Knew your fleed risk, build accordingly	Always Available	Homeowners and Contractors	320	Know your flood hazard; insure- your property for your flood. hazard; Protect people from the hazard; Build responsibly.	Your property may be in a Special Flood Hazard Area, you may be required to have insurance and you may want to related your newlenovated home. Contact the floodplain administrator to determine your flood zone and building requirements.	To increase the number of inquiries relate to flood designation of properties and increase the number of inquiries related to rebrottling methods.
OP3	Know your flood hazard online map tool	Veibure	LSUAG Cent	Flood zone information	Always Available	General Public	320,350	Know your food hazard; Refroll your home for the hazard; Know your lood, hazard in the future; General flood education	Your properly may be in a Special Flood Hazard Area, you may be required to have insurance and you may went to retroit your newlenovated home. Visit floodmaps leurgoenter com to determine your flood zone.	Increase number of adjuduals that know their flood zone and associated risk.
OP4	WWL Humicame Guide	Television	WML TV	Humcane information and preparedness	Annual	General Public	330	Know your hazard, protect your property, protect people	Make family disaster plan examples and information can be found by watching WML-TV or log onto wwitk.com for the latest storm updates.	To increase the number of homeowners who are prepared for huntianea and floor in the community.
OP5	DMV Poster	Poster	DMV	Keep Louisiana Beautrul Poster	Ongoing	New drivers	330	Natural function and drainage system maintenance	Keep Louisiana beautiful, don't litter	Decrease the amount of litter tossed from vehicles that gets into atom drains, disches, rivers, and lakes.
OP6	A Citizen's Gudie	Brochure	SCP Planning & Zoning	Flood Prevention and Safety	Annual	General Public	330	Know your hazard, Protect your property, Protect people : Flood Insurance, Desinage Maintenence, Natural Functions	Know your flood nazard. Purchase flood insurance, Be safe in a flood. Protect your properly from flood damage. Get necessary permits. Clean catch basins.	Crizons will be better prepared for flood and have lewer flood claims: increase number of flood zone determination requests; project natural hebitats.
OP7	Be Prepared	Brochuru	SCP Planning & Zoning	Knowing your rask and being prepared	Annual	General Public	330	Protect your property, Protect people, Evacuation	Humicane season BE PREPARED, Protecting your home. Sheltering in place. Parish contact info. Assisted evacuation, info for per owners. Riscovery resources.	Keep residents safe from weather hazard increase the number of people who are aware of the hazard
OP8	Know Your Raks	Brochure	SCP Planning & Zoning	Know your flood risk	Annual	General Public	330	Know your hazard, Protect your Property, Protect People, Flood Insurance, Drainage Maintenance, Natural Functions	Wealther emergencies, Protective actions, Evacuation Routes, Disaster Planning, Safety Tips	Keep residents safe from weather hazard increase the number of people who are aware of the hazard
OP9	Website	Website: http://www.st chadespanshla.gov/	SCP Planning & Zoning	Flood Information	Alkeys Available	General Public	330	Know your hazard, Protect your Property, Protect People, Rood Insurance, Oranisage Maintenance, Natural Functions	Parish retailed enformation about floods and flood safety.	Ciscens will be better prepared for floods and have fewer flood dairns, increase number of flood zone determination requests; protect natural habitats.
0P10	Turn Around Don't Enter	Signage	SCP Planning & Zoning	Signs placed to warm residents of storm water danger	Always Available	General Public	330	Protect people, protect property	Turn around don't drown. A car can be swept away in 2 feet of swiftly moving water.	Reduce the amount of demages to vehicles and reduce loss of life
P11	Weather Alert	PA System	SCP Emergency Operations Center	Alerts Residents	Monthly.	General Public	330	Protect people, protect property	When you hear the aren broadcast from the parish services, listen closely for what action(s) you should take	Keep residents safe form weather hazard increase the number of people who are aware of the nazard
P12	Trash Bash	Community Participation	Contract Monitors	Alerts Residents	Annual	General Public	330	Protect your property from the hazard, Drainage Maintenance, Natural Functions	Protect waterways, don't litter	Reduce the amount of trash in waterway and storm drains

Flood Aware Program for Public Information Appendix A - Flood Response Procedures

4 -	Project	Project Mechanism	Office/Stakeholder	Subject Matter	Frequency	Target Audience	Activity	Dutreach Message(s)	Massago(s)	Desired Message Quicome(s)
OP13	Market the business case for coastal restoration in Louisiana	Advocacy (http://gnoinc. org/mitatives/gno- incinistatives/core /)	Coalition for Coastal Resilience and Economy (CCRE)	An informed, educated voice of advocacy for sustainable restoration efforts in Louisiana's wetlands, river, delta and coastline.	Ongoing	Businesses in Southeast. Louissana; General Public	330	know your flood hazard; protect people from the hazard; protect your property from the hazard; build responsibly, protect natural floodplain functions; hurricane protection, general preparedness and flood education	CCRE is a business-led group whose mission is to market the business case for coastal restoration in Louisians. Adsomize RESTORE and other federal funds that are allocated to Louisians. Ensure than RESTORE and other funds are spent on their interfield purposes (LA Coastal Master Pfan).	To increase the number of businesses involved in coastal restoration and maximize RESTORE and other federal funds allocated to Louisiana.
)P14	"Keep Your Business in Business"	FEMA Brochure	Lobby of STP Planning and Permit Office	Flood Insurance	Always Available	Businesses	330	Protect your property from the hazard	Flood insurance can protect your business.	To increase the number of flood insurance policies in the community.
P15	"Flood Insurance Requirements for Recipients of Federal Disaster Assistance"	FEMA NFIP Brochure	Lobby of STP Planning and Permit Office	Flood Insurance	Always Available	Homeowners and Contractors	330	Protect your property from the hazard	Flood insurance can protect your home and/or business.	To increase the number of elevated homes in the community.
P16	"Homeowner's Guide to Retrofitting: 6 Ways to Protect Your House from Flooding"	FEMA Brochure	Lobby of STP Planning and Permit Office	What is Retrofitting & financial assistance	Always Available	Homeowners and Contractors	330	Protect your property from the hazard	Protect your property from the hazard and provides information on financial assistance	To increase the number of flood insurance policies in the community.
)P17	"Mold & Mildew: Cleaning up your Flood Damaged Home"	FEMA Brochure	Lobby of STP Planning and Permit Office	Repairing your flooded home	Always Available	Homeowners and Contractors	330	Repairing your flooded home	Cleanup after a flood and ways to reduce damages from future disasters	To increase the number of flood insurance policies in the community.
DP18	"Preparing Your Pets for Emergencies, Makes Sense, Get Ready Now,"	FEMA Brothure	Lobby of STP Planning and Permit Office	Pet Info-Pets Need Protection Tool!	Always Available	Pet Owners	330	Protect people and pets from the hazard; Protect yourself and your property from hurricanes; Be prepared for natural hazards	Hurricane season is June Lithrough November 30, with peak season in September, be prepared and prepare your pets.	To increase the number of people whisign up for the weather notification ale system, and to increase the number of flood insurance policies in the community
DP19	Realtors Association email	Email, through the association	Realtor Association	Flood insurance information	Annually	Member of Association of Realtors	330	Know your flood hazard, flood insurance	Your property may be in a Special Flood Isszard Area, you may be required to have insurance and you may want to refrolf! your new/renovated home. Contact the floodplain administrator to determine your flood zone and building requirements.	To increase the number of inquiries related to properly flood designation particularly for first time homelowers increase the number of inquiries relats to retrofitting methods, decrease amount of damage following a flood event, and increase the number of policies throughout the community.
DP20	UNO-CHART Website	Website: floothelp.uno.edu	UNO-CHART	Repetitive Flood Portal	Always Available	General Public	350	Know your hazard, Protect your Property, Protect People, Flood Insurance, Drainage Maintenance Natural Know your hazard, Protect	Properties in St. Charles partsh may be experience flooding. Visit floodhelp.uno.edu to learn more about way your risk and ways to protect your family and property.	To increase the number of individuals that are prepared for flooding.
DP21.	Homeowners Handbook	Louisiana Homeowner's Handbook, a 100+ page booklet, created by Sea Grant Louisiana and the Gulf of Mexico Alliance	Louisiana See Grant	Preparing for natural hazards	Always Available	General Public	350	Property, Protect People, Flood Insurance, Drainage Maintenance, Natural Functions	Protect yourself and your home from hurricanes, tornadoes, and floods by building responsibly and insuring your property.	To increase the number of flood insurance policies and retrofitted home in the community.
OP22	Coalition for Sustainable Flood Insurance	Website: www.faceboo.k.com/CSFIU SA; csfi.info	Coalition for Sustainable Flood Insurance (CSFI)	To ensure that flood insurance rates are kept affordable.	Dogoing	General Public	350	Know your flood hazard: insure your property for your flood hazard; protect people from the hazard; protect your property from the hazard; build responsibly	The Coalition for Sustainable Flood insurance (SFI) works to ensure that flood insurance offered through the National Flood insurance Program is affordable for primary residential and commercial properties while assuring that the NFIP is not in an efficient, fiscally sound manner. Keeping flood insurance affordable encourages homeowhere to purchase flood insurance.	To keep flood insurance affordable in order to increase the number of flood insurance policies in the community.
OP23	Flood insurance awareness month	Web campaign	Floodplain Management Office	Protect yourself with flood insurance	Annual	General Public	370	Protect people from the hazard	Get information on your flood risk and prepare now with an emergency plan, which should include purchasing flood insurance to protect property and possessions from flood damage.	To increase the number of flood insurance policies in the Greater New Orleans area.

Flood Aware Program for Public Information Appendix A - Flood Response Procedures

	Project	Project Mechanism	Office/Stakeholder	Subject Marint	Frequency	Target Audience	Activity	Outreach Messages	Manage(s)	Desired Wessings Outcome(s)
OP24	Video of Public Information Officer discussing importance of flood insurance posted on website and social media during flood awareness month in May	Video	Public Information Office	To promote flood insurance and advise residents on how to reduce their rates	Ongoing	General Public	370	Insure your property for your flood hazard	Every resident and business owner is at some level of local disks and flood insurance is available to help reduce the fluvarical impact of a flood whether your building is in a Special Flood Isaara di Area or not. Just a few inches of flood water can cause tens of thousands of dollars in damage to your home or husiness. While most disasters are cowered under a standard homeowner's policy, flooding its not, and remember, there's a 30-day waiting period from the date of purchase before your policy goes into effect. Therefore, NUW is the best time to buy flood insurance. You can speak to a licensed insurance agent to get more information.	To increase the number of flood insurance policies in St. Charles Parish.
OP25	"A Small Investment Protects You from a Big Problem"	FEMA Brothure	Lobby of STP Planning and Permit Office	Flood Insurance	Always Available	Homeowners and Contractors	370	Insure your property for your flood hazard; General flood education	All areas are susceptible to flooding, and owners can purchase flood insurance,	To increase the number of flood insurance policies in the community.
OP26	The Adventures Activity Book	Activity Book & Live Mascot	SCP Public Information & EOC	Awareness of Natural Hazards & How to prepare	Annually	Youth/Summer Program	330	General preparedness and flood education.	Now is a good time to instill in younger minds and future homeowners the importance of preparing for natural disasters.	To increase the number of flood insurance policies in the community. To decrease the amount of flood dalaims filled by promoting better practices through an expanded knowledge of ratural disaster preparedness.
OP27	FEMA's NFIP 2019 Outreach campaign	To urge communities to prepare for hurricanes and the devastating flooding they can bring, FEMA's National Flood insurance Program (NFIP) is encouraging New Orleans area residents to protect the lives they've built by investing in flood insurance.	FEMÁ	Preparing for 2019 hurricane season	Annually	General Public	350	Know your hazard, Protect your Property, Protect People, Flood Instrance, Drainage Maintenance, Natural Functions	Protect yourself and your home from hurricanes, tornadoes, and floots by building responsibly and insuring your property.	To increase the number of flood insurance policies and retrofilted homes in the community.

Flood Aware Program for Public Information Appendix B - Flood Response Procedures

ST CHARLES PARISH FUTURE OUTREACH PROJECTS

-	Project	Project Mechanism	Umice/staxenolder	Subject matter	Frequency	Target Audience	Activity	Outreact Message(a)	message(s)	Desired Message Odicame(s)
OP26	Randrop Mascot	Physical Appearances	SCP Planning & Zoning	Flood Awareness	Upon Request/Amountly	General Public	330	Know your Flood Hazard	Be prepared & plan	To increase the number of flood insurance policies in the community.
OP27	Welcome Package/ Door Hanger	Brechures	SCP Planning & Zoning	Resources & Information	Ongoing	General Public	330	Flood Risk Awareness & Resources	Be informed & protect your property	To increase the number of flood insurance pokels in the community.
OP28	Adopt a Catch Basin	Website	SCP Planning & Zoning	Adopt a catch basin to reduce street flooding and protect the floodplain	Dingoing	General Public	330	Stormwater Management, Know your flood hazard; Protect matural floodplain functions. Protect your property from the hazard.	Community angagement & property protection. Clean debris from in front of catch basin to reduce street flooding. Clear trash to ensure only rain goes down the drain	To reduce debris blocking draws, to reduce trash & charactal flowing into draw; to increase resident participation.
OP 29	REB Brochure	Brochure	Real Estate Agents	Know your Flood Risk, Buy Flood Insurance	Always Available	General Public	370	Knew your Flood Hazarad	Know your flood hazard; Insure your property for your flood hazard; Build responsibly	For future home owners to know their food hezard, buy flood insurance and build high.
OP30 - FRP 81	DRT - Door Hanger	Door Hanger	Distribute after flood	Build back responsibly	Always Ayafable	General Public	330	Know your hazard, protect people, protect properly, build responsibly, natural functions	Repairing your home after a disaster can be difficult. Consider options to build smarter to prevent future damager	Reduce future damages to flood-prone structures
OP 31 - FRP #2	FEMA ICC TWold Brochum	Brochure	Distribute after flood	Pland insulation information	Aways Avalable	General Public	330	Insurance, Build Responsibly	Eleveting your home after a flood can prevent future damages	Reduce future damages to flood-prone structures