

Community Rating System Assessment - Lafourche Parish

As part of LA SAFE’s comprehensive planning efforts, UNO-CHART assessed the participation of LA SAFE parishes in the National Flood Insurance Program (NFIP) Community Rating System (CRS), in order to make recommendations to improve participation in the program. Reports for each parish provide current CRS ratings, summaries of CRS activities, and recommendations for short and long term goals related to the implementation of the program. As Lafourche Parish does not currently participate in the CRS, this report includes a summary of the parish’s NFIP data, recommendations for short and long term goals for future participation, and potential savings related to NFIP premiums. The parish floodplain manager provided information for this report through in person meetings and digital communications. FEMA and ISO also provided data.

Community Rating System (CRS)

The CRS is a voluntary program, which provides incentives for communities to implement floodplain management activities that exceed those required by the NFIP. The goals of the CRS are to (1) reduce flood damage to insurable property; (2) strengthen and support the insurance aspects of the NFIP; and (3) encourage a comprehensive approach to floodplain management.¹ An incentive for communities to participate in the CRS is discounts on flood insurance premiums for local policyholders. A community earns points for each CRS activity completed; the number of points determines the amount of the flood insurance premium discount. Premium discounts for policies on properties located within the Special Flood Hazard Area (SFHA) range from 5% for a Class 9 community, to 45% for a Class 1. See Table 1 for the number of points per class, along with corresponding premium discounts.

| Credit Points | Class | Premium Reduction | Premium Reduction |
|---------------|-------|-------------------|-------------------|
| | | SFHA* | Non-SFHA** |
| 4,500+ | 1 | 45% | 10% |
| 4,000 – 4,499 | 2 | 40% | 10% |
| 3,500 – 3,999 | 3 | 35% | 10% |
| 3,000 – 3,499 | 4 | 30% | 10% |
| 2,500 – 2,999 | 5 | 25% | 10% |
| 2,000 – 2,499 | 6 | 20% | 10% |
| 1,500 – 1,999 | 7 | 15% | 5% |
| 1,000 – 1,499 | 8 | 10% | 5% |
| 500 – 999 | 9 | 5% | 5% |
| 0 – 499 | 10 | 0 | 0 |

*Special Flood Hazard Area also known as the A and V Zones on a Flood Insurance Rate Map

¹ https://www.fema.gov/media-library-data/1507029324530-082938e6607d4d9eba4004890dbad39c/NFIP_CRS_Fact_Sheet_2017_508OK.pdf

**The Preferred Risk Policy does not receive premium rate credits under the CRS because it already has a lower premium than other policies

Lafourche Parish & the NFIP/CRS at a Glance

- Lafourche Parish does not currently participate in the CRS.
- NFIP total number of policies: 11,112
- NFIP total number of premiums: \$8,741,980
- NFIP insurance in force: \$2,409,094,500
- Lafourche Parish has 396 repetitive loss properties, 81 (20%) have been mitigated

Lafourche Parish

Lafourche Parish does not currently participate in the CRS. However, there are 11,112 policyholders in the parish –31.8% of the policyholders are in the SFHA, 26.6% are not in the SFHA, and 41.6% are not in the SFHA, but have Preferred Risk Policies. As such, 58.4% of policyholders could receive discounts if the parish joined the CRS. The Lafourche Parish 2015 Hazard Mitigation Update² lists “Each political subdivision to join the CRS” as a mitigation action.

Prerequisites and Application for Participation in the CRS

The first step to participating in the CRS is for the Lafourche Parish President to submit a letter of interest to the FEMA Regional Office. FEMA then determines if the parish is meeting the minimum requirements of the National Flood Insurance Program. This usually requires a Community Assistance Visit. If Lafourche Parish meets the minimum criteria, the ISO CRS specialist contacts the CRS Coordinator and schedules a community visit to verify the parish’s programs. The Floodplain Management Program Coordinator housed in the Floodplain Management Section of the Louisiana Department of Transportation and Development can be an important resource for the parish in the application process.

During a CRS verification visit, the ISO CRS specialist will meet with the CRS Coordinator and other knowledgeable parties. The ISO specialist will review documentation such as the floodplain protection ordinance, elevation certificates, drainage infrastructure inspection reports, and outreach materials. The community must meet the following criteria to receive a Class 9 rating or above:

- Be in full compliance with the minimum requirements of the NFIP
- Maintain FEMA Elevation Certificates on all new and substantially improved buildings in the SFHA
- Take certain actions if there are one or more repetitive loss properties in the community
- Maintain all flood insurance policies on properties owned by the community that were required as a condition of federal aid

CRS Activity Breakdown

² <http://www.lafourchegov.org/home/showdocument?id=22804>

The table on the following page lists each of the activities available for credit under the Community Rating System. The activities are based on the 2017 CRS Coordinator’s Manual. The manual is accessible online³.

The activities with blue highlighting in the short term column are elements the parish could receive credit for with a minimum amount of work. The elements with blue highlighting in the long term column are activities the parish could receive credit for with a moderate amount of work over a period of time. On some activities, there are elements that are both short and long term, i.e., some credit can be obtained relatively quickly, but more credit would take longer. In these activities, both columns are highlighted.

The state average column details the average points that CRS communities in the state of Louisiana receive in each activity, and the max column reflects the maximum amount of points a community can receive for each activity. Both of these calculations are based on the 2017 CRS Coordinator’s Manual.

| Table 2 – CRS Activity Breakdown | | | | | |
|--|---|-------------------|------------------|-------------------|------------|
| Activity/Element | | Short Term | Long Term | State Avg. | Max |
| 300 Series: Public Information Activities | | | | | |
| 310 (Elevation Certificates) | | | | | |
| a | Elevation Certificates (after CRS application date) | | | 31 | 38 |
| b | Elevation Certificate on post-FIRM buildings | | | 7 | 48 |
| c | Elevation Certificate on pre-FIRM buildings | | | 0 | 30 |
| 320 (Map Information Service) | | | | | |
| a | Providing insurance information from the FIRM | | | 30 | 30 |
| b | LiMWA/floodway info/CBRS area | | | 20 | 20 |
| c | Other flood problems not shown on FIRM | | | 20 | 20 |
| d | Flood depth data | | | 20 | 20 |
| e | Special flood-related hazards | | | 20 | 20 |
| f | Historical flood information/repetitive flooding | | | 20 | 20 |
| g | Natural floodplain functions | | | 0 | 20 |
| 330 (Outreach Projects) | | | | | |
| a | Outreach projects | | | 46 | 200 |
| b | Flood response preparations | | | 0 | 50 |
| c | Program for Public Information bonus | | | 0 | 80 |
| d | Stakeholder bonus | | | 0 | 20 |

³ https://www.fema.gov/media-library-data/1493905477815-d794671adeed5beab6a6304d8ba0b207/633300_2017_CRS_Coordinators_Manual_508.pdf

| Activity/Element | | Short Term | Long Term | State Avg. | Max |
|--|--|------------|-----------|------------|-------|
| 340 (Hazard Disclosure) | | | | | |
| a | Real estate agent disclosure of SFHA | | | 0 | 35 |
| b | Other disclosure requirements | | | 16 | 25 |
| c | Real estate brochure | | | 8 | 12 |
| d | Disclosure of other hazards | | | 0 | 8 |
| 350 (Flood Protection Information) | | | | | |
| a | Library | | | 7 | 10 |
| b | Locally pertinent documents in the library | | | 2 | 10 |
| c | Website | | | 22 | 105 |
| 360 (Flood Protection Assistance) | | | | | |
| a | Property protection advice | | | 25 | 40 |
| b | Advice after a site visit | | | 30 | 45 |
| c | Financial assistance advice | | | 0 | 15 |
| d | Training | | | 4 | 10 |
| 370 (Flood Insurance Promotion) | | | | | |
| a | Flood insurance assessment | | | 15 | 15 |
| b | Coverage plan | | | 0 | 15 |
| c | Plan implementation | | | 0 | 60 |
| d | Technical assistance | | | 0 | 20 |
| 400 Series: Mapping and Regulations | | | | | |
| 410 (Floodplain Mapping) | | | | | |
| a | New study | | | 49 | 350 |
| b | Leverage | | | N/A | N/A |
| c | State review | | | 0 | 60 |
| d | Higher study standards | | | 0 | 200 |
| e | Floodway standard | | | 0 | 140 |
| f | Special hazards mapping | | | 0 | 100 |
| 420 (Open Space Preservation) | | | | | |
| a | Preserved open space | | | 272 | 1,450 |
| b | Deed restriction | | | 0 | 50 |
| c | Natural functions open space | | | 42 | 170 |
| d | Special hazards open space | | | 0 | 50 |
| e | Open space incentives | | | 15 | 250 |
| f | Low density zoning | | | 0 | 600 |
| g | Natural shoreline protection | | | 0 | 120 |
| 430 (Higher Regulatory Standards) | | | | | |
| a | Development limitations | | | 127 | 1,330 |
| b | Freeboard | | | 51 | 500 |
| c | Foundation protection | | | 0 | 80 |
| d | Cumulative substantial improvements | | | 60 | 90 |
| e | Lower substantial improvements | | | 20 | 20 |
| f | Protection of critical facilities | | | 0 | 80 |

| | | | | | |
|--|--|--|--|-----|-------|
| g | Enclosure limitations | | | 214 | 240 |
| h | Building code | | | 52 | 100 |
| i | Local drainage protection | | | 21 | 120 |
| j | Manufactured home park | | | 0 | 15 |
| k | Coastal A Zone regulations | | | 0 | 650 |
| l | Special hazards regulations | | | 0 | 100 |
| m | Other higher standards | | | 25 | 100 |
| n | State mandated standards | | | 0 | 20 |
| o | Regulations Administration | | | 12 | 67 |
| 440 (Flood Data Maintenance) | | | | | |
| a | Additional Map Data | | | 96 | 160 |
| b | FIRM maintenance | | | 10 | 15 |
| c | Benchmark maintenance | | | 27 | 27 |
| 450 (Stormwater Management) | | | | | |
| a | Stormwater management regulations | | | 51 | 380 |
| b | Watershed master plan | | | 0 | 315 |
| c | Erosion and sedimentation control | | | 12 | 40 |
| d | Water quality regulations | | | 20 | 20 |
| 500 Series: Flood Damage Reduction Activities | | | | | |
| 510 (Floodplain Management Planning) | | | | | |
| a | Floodplain management planning | | | 189 | 382 |
| b | Repetitive loss area analyses | | | 0 | 140 |
| c | Natural floodplain functions plan | | | 0 | 100 |
| 520 (Acquisition and Relocation) | | | | | |
| | Acquisition and relocation of buildings | | | 78 | 2,250 |
| 530 (Flood Protection) | | | | | |
| | Retrofitted buildings | | | 71 | 1,600 |
| | Structural flood control and drainage projects | | | 0 | |
| 540 (Drainage System Maintenance) | | | | | |
| a | Channel debris removal | | | 171 | 200 |
| b | Problem site maintenance | | | 41 | 50 |
| c | Capital improvements program | | | 27 | 70 |
| d | Stream dumping regulations | | | 23 | 30 |
| e | Storage basin maintenance | | | 120 | 120 |
| 600 Series: Warning and Response | | | | | |
| 610 (Flood Warning and Response) | | | | | |
| a | Flood threat recognition system | | | 0 | 75 |
| b | Emergency warning dissemination | | | 0 | 75 |
| c | Flood response operations plan | | | 0 | 115 |
| d | Critical facilities planning | | | 0 | 75 |
| e | StormReady community | | | 0 | 25 |
| f | TsunamiReady community | | | 0 | 30 |
| 620 (Levees) | | | | | |
| a | Levee maintenance | | | 0 | 95 |
| b | Levee failure threat recognition system | | | 0 | 30 |

| | | | | | |
|-------------------|---------------------------------------|--|--|----|----|
| c | Levee failure warning | | | 0 | 50 |
| d | Levee failure response operations | | | 0 | 30 |
| e | Levee failure critical facilities | | | 0 | 30 |
| 630 (Dams) | | | | | |
| a | State dam safety program | | | 45 | 45 |
| b | Dam failure threat recognition system | | | 0 | 30 |
| c | Dam failure warning | | | 0 | 35 |
| d | Dam failure response operations | | | 0 | 30 |
| e | Dam failure critical facilities | | | 0 | 20 |

Short and Long Term Goals

The CRS Activity Breakdown above shows the CRS activities and elements for which Lafourche Parish could potentially receive credit, based on the 2017 CRS Coordinator’s Manual. CRS activities are numbered according to series 300 through 600. Each activity in the series lists elements for potential points. For example, 300 is the series for Public Information Activities, and 310 is the Elevation Certificate activity that has three elements: a, b, and c.

Lafourche Parish may also use this as a reference for actionable short term and long term goals to earn CRS credit points. The highlighting in the short term column reflect activities that may require minimal resources to accomplish. Long term goals may require moderate to substantial resources for the parish to accomplish over time. Any recommendation that requires action by the Parish Council, such as an ordinance amendment, is treated as a long term goal. For some elements, such as 430 higher regulatory standards, some of the work may be done quickly by seeking credit for existing programs (short term), but other aspects of the activity may take more time (long term).

310: Elevation Certificates

This activity provides credits for communities to maintain elevation certificates on newly constructed buildings. The parish will receive credit for maintaining certificates for new buildings, as this is a minimum requirement of CRS participation. South Central Planning and Development Commission assists with the Elevation Certificate process.

Additional points may be available if the parish is able to provide documents on maintaining elevation certificates on buildings constructed before the parish’s new CRS entry date. Lafourche Parish participated in the CRS in the past but is not currently active. The community’s new application to CRS will provide a new entry date that will be used for this activity.

320: Map Information Service

This activity credits communities for providing information from the Flood Insurance Rate Map (FIRM). The 2017 CRS Coordinator’s Manual expanded this credit from simply reading the FIRM to residents, to providing additional flood-related information that might be on other maps. This additional information can include repetitive flood loss areas, wetlands, and natural functions.

Lafourche Parish could receive credit by providing information from the FIRM, historical flood information/repetitive flooding, flood depth information, and information on natural floodplain functions. The parish currently maintains a log of all phone requests and the information that is shared with residents.

330: Outreach Projects

This activity credits projects that provide information to the public. Parishes receive credit for outreach projects by distributing one or more messages, through one or more methods, at least once a year. For instance, parishes can provide information on flood hazards to all residents through an annual mailing. Lafourche Parish could also receive credit for an annual mailing to all repetitive loss properties, or providing flood risk and insurance information using social media.

Lafourche Parish is an active member of a CRS Users Group called FLOAT (Flood Loss Outreach and Awareness Taskforce), in which St. Charles Parish, St. John the Baptist Parish, St. Tammany Parish, Tangipahoa Parish, and Terrebonne Parish in addition to the cities of Covington, Mandeville, New Orleans, and Slidell meet monthly to work together to accomplish CRS goals. Through the Users Group, communities share outreach brochures and other outreach project ideas to educate the public around flood risk.

Lafourche Parish currently maintains press releases and other outreach messages sent in response to flooding. The Parish may receive credit for flood response preparations if they develop a plan for how public information will be disseminated. Members of FLOAT developed a template for such a plan.

Lafourche Parish may also decide to follow FLOAT's lead in the development of a Program for Public Information (PPI) – a more formal strategy for education and outreach. The PPI can provide the opportunity for the parish to earn bonus credit for outreach projects that are implemented.

Bonus credit may also be earned if the non-parish stakeholders can implement projects described in the PPI. Stakeholders would include the South Lafourche Levee District, utility companies, industry, etc.

340: Hazard Disclosure

This activity credits communities for advising people who may purchase property in the flood hazard area. All communities in Louisiana receive 15 points under other disclosure requirements for state laws that require sellers to disclose a property's hazard.

In the long term, the parish could get credit for other disclosure requirements, such as requiring real estate agents to distribute a brochure that educates homebuyers about flood risk.

350: Flood Protection Information

The flood protection information activity provides credit to communities who share information about flood protection with the public. Lafourche Parish could receive credit for providing flood

information materials and locally pertinent documents (e.g., Hazard Mitigation Plan, Coastal Zone Management Plan, etc.) in the public library. Required documents for the library include:

1. Above the Flood: Elevating Your Floodprone House, FEMA-347 (2000)
2. Answers to Questions About the National Flood Insurance Program, F-084 (2011)
3. Coastal Construction Manual, FEMA-P-55, (2011)
4. Elevated Residential Structures, FEMA-54 (1984)
5. Protecting Manufactured Homes from Floods and Other Hazards, FEMA P-85 (2009)
6. Mitigation of Flood and Erosion Damage to Residential Buildings in Coastal Areas, FEMA-257 (1994)
7. Protecting Building Utilities From Flood Damage, FEMA-P-348 (1999)
8. Protecting Floodplain Resources, FEMA-268 (1996)
9. Reducing Damage from Localized Flooding, FEMA 511 (2005)

The parish could also enhance its current flood related web page (<http://www.lafourchegov.org/services/nfip-fema-floodmap-info>) to include links to more information such as <https://www.getagameplan.org/evacInfo.htm> or floodhelp.uno.edu.

360: Flood Protection Assistance

This activity credits communities that give one-on-one flood protection advice to residents. For credit, the parish can document the property protection advice given and site visits conducted by a local official. The parish could also create an outreach project advertising the property protection advice and advice after a site visit.

The parish could send one or more property protection advisors to FEMA classes on retrofitting. The parish can also enlist advisors to provide financial assistance advice on funding property protection measures.

370: Flood Insurance Promotion

Activity 370 encourages communities to analyze levels of flood insurance coverage and promote flood insurance where it is most needed. Lafourche Parish could include the assessment and planning needed for this credit in its development of a Program for Public Information (Activity 330).

410: Floodplain Mapping

In this activity, localities receive credit for conducting new floodplain mapping studies, contributing to FEMA's studies, or having studies that use higher standards than FEMA's mapping criteria. Lafourche Parish completed a flood study in 2008. If it is used to set regulatory flood protection elevations, it should be submitted for a courtesy review to determine if it would warrant credit under this activity.

420: Open Space Preservation

In this activity, parishes receive credit for keeping land vacant through ownership or regulations. Open space areas are areas such as public beaches, state parks, or school playing fields intended to be kept as an open space; private wildlife or nature preserves; or land where regulatory requirements effectively prohibit new development. As an example, Pointe-aux-Chenes Wildlife

Management Area is partially located in Lafourche Parish and likely would be credited for both preserved open space and natural functions open space.

This report recommends that the parish investigate the following credits in Activity 420: preserved open space and natural functions open space. The easiest place to start is to research vacant publicly owned land in the floodplain and obtain agreement from the owning agency to not develop it. The parish could also develop rules and regulations to keep and preserve areas of natural open space in a natural state.

430: Higher Regulatory Standards

This activity provides credits to communities that require higher standards of flood protection for new buildings. This activity has more elements than any other, but only the following apply to, or are recommended for, Lafourche Parish as short and long term goals:

- a. Development limitations: Communities receive credit for prohibiting fill, development, and/or material storage in the floodplain.
- b. Freeboard: Communities receive credit for requiring new and substantially improved buildings to be elevated one foot or more above the base flood elevation (BFE). This requirement can greatly reduce flood insurance premiums, because buildings with freeboard receive less flood damage.

| Zone | Height | Premium |
|-------------|----------------------|----------------|
| A | 2 - 4 feet > grade | \$1,192 |
| A | 1 foot > grade | \$2,277 |
| A w/BFE | 2 or more feet > BFE | \$447 |
| A w/BFE | 0 - 1 foot > BFE | \$1,583 |
| AE | 3 feet > BFE | \$343 |
| AE | 2 feet > BFE | \$451 |
| AE | 1 feet > BFE | \$748 |
| AE | At BFE | \$1,578 |

Table 3 to the right illustrates the direct financial benefits of freeboard. The bottom line shows that the owner of a new building constructed at the base flood elevation (the minimum level required by the NFIP) pays more than twice as much as for the same building with one foot of freeboard. A building three feet above the BFE has a premium that is less than 25% of the premium for a new building with no freeboard.

- c. Foundation protection: The parish must require an architect to sign off on building plans and account for subsidence to receive this credit.
- d. Cumulative substantial improvements: The parish could adopt a higher standard for substantial improvements that triggers the elevation requirement for repetitively flooded properties (and makes Increased Cost of Compliance financial assistance available for elevating substantially damaged buildings).
- f. Protection of critical facilities: Communities receive credit for protecting facilities such as hospitals, fire stations, drainage pumps, and other safety, health care, or utility facilities that are vital to the community. A long-standing federal recommendation advises communities to protect such facilities to the 500-year flood level.

- g. Enclosure limits: The parish could receive points for requiring nonconversion agreements for elevated buildings. The objective is to prevent future alterations that negate the flood protection provided by elevating damage prone areas above the flood level (for example: converting a part of the lower area into an improved living room).
- h. Building code: The parish could receive points for adopting the state building code and attaining a Class 5/5 or better under the Building Code Effectiveness Grading Schedule.
- i. Local drainage protection: The parish could receive points for requiring all new buildings to be elevated a certain distance above the centerline of the street.
- j. Regulations administration: The parish could receive 5 points for each staff person who attends certain training and/or is a Certified Floodplain Manager. That credit could increase over time as staff attend more training and/or become certified. This element also credits keeping records or files at a secure offsite storage facility, or backed up for security.

440: Flood Data Maintenance

The flood data maintenance activity offers credit for providing additional flood map data.

Lafourche Parish could receive credit if certain flood map elements are maintained and used by the regulatory staff. There are thirteen such map data elements; the elements include but are not limited to parcels, building footprints, coastal high hazard areas, and 500-year floodplain boundaries. The parish could receive more credit by providing copies of all of their Flood Insurance Rate Maps, as well as a Flood Hazard Boundary Map. In the long term, the parish could seek credit for establishing benchmarks that meet specifications for areas subject to subsidence.

450: Stormwater Management

This activity includes managing stormwater in the community. Credits for this activity include four different approaches to managing new development in the watershed:

- a. Require larger new developments to construct on site retention or detention basins
- b. Develop and implement a watershed master plan that addresses existing and expected issues of drainage resulting from new or redevelopment
- c. Require erosion and sediment control measures on construction sites
- d. Require water quality measures in new drainage and stormwater facilities

If the parish wants to be a CRS Class 4 or better, a watershed master plan is a prerequisite. Lafourche Parish currently has a Master Drainage Plan (see <http://www.lafourchegov.org/departments/permits/planning/master-drainage-plan>). The parish can submit this plan for a courtesy review to determine whether or not it can qualify for credit.

Lafourche Parish currently enforces stormwater management regulations, erosion and sediment control, and water quality regulations. Related ordinances can be submitted for a courtesy review to indicate if the ordinances meet required standards for credit under the CRS. In the long term, the parish could receive credit for requiring retention basins.

510: Floodplain Management Planning

The Floodplain Management Planning activity provides points to communities who create plans to manage their floodplains. Activity 510 provides points to communities that develop and adopt three types of these plans:

- a. A floodplain management or multi-hazard mitigation plan to provide overall guidance for preventing and reducing flood problems. This is a requirement for Lafourche Parish because it is a Category C repetitive loss community, or one with 50 or more repetitive loss properties. The parish has a hazard mitigation plan that would provide some credit, and can update this plan over the long term for additional points.
- b. Area analyses for repetitive loss areas. A long term goal for the parish could be to prepare an area analysis, starting with the most severely affected repetitive loss area(s).
- c. Plans that protect natural floodplain functions. Typically, this credit is for existing plans, so an appropriate long term goal could be to research, locate, update, and adopt plans that would qualify for this credit. It is recommended to first check the Point-aux-Chenes Wildlife Management Area and the Coastal Zone Management Plan.

520: Acquisition and Relocation

Under this activity, communities can receive credit for the removal, demolition, or relocation of a building from the regulatory floodplain. Points for this activity are based on the number of buildings cleared in proportion to the number of buildings that exist in the floodplain.

The parish can receive credit for this activity by removing buildings from the floodplain. Communities can receive even more points for clearing repetitive loss properties.

530: Flood Protection

Credit is available for flood protection projects such as elevating or retrofitting buildings, and constructing structural flood control and drainage projects. Points for this activity are based on the technique used and the number of buildings protected by the technique. For example, as the most effective retrofitting technique, elevation projects receive the most points.

The parish could also track retrofitting projects through the permitting process to help with this credit.

540: Drainage System Maintenance

The drainage system maintenance activity provides credit based on the community's drainage inspection and maintenance program. Communities receive points by making annual inspections, and documenting the follow up maintenance.

The drainage system maintenance elements are listed as short term projects as they are in place now but may require updated record keeping and inspection procedures. The parish could receive credit for channel debris removal and stream dumping regulations. The parish could receive credit by documenting annual drainage inspections of catch basins, ditches, canals, pipes, roadways or road drainage either after a complaint, or after a major storm. The parish could receive more points by implementing a capital improvements program, and documenting storage basin maintenance.

610: Flood Warning and Response

Communities receive credit for four flood warning and response activities:

- a. Receiving advanced notification of an impending flood (threat recognition),
- b. Issuing warnings to the threatened population (warning dissemination),
- c. Taking steps to protect life and reduce losses during the flood (response operations), and
- d. Coordinating with critical facilities (critical facilities planning).

Under the 2017 CRS Coordinator's Manual, a community must receive some points under all four of these elements. Parish CRS/floodplain management staff could meet with the emergency manager and the South Lafourche Levee District to review the flood warning and response activities that could receive credit. The Lafourche Parish Sheriff's Office maintains an emergency alert service called "CODE RED," designed to alert residents via phone or text message about emergency situations. CODE RED may be credited as part of this activity. Once credit for all of the first four elements is verified, Lafourche Parish could receive additional credit as a StormReady community.

620: Levees

Under this activity, communities receive points for levee maintenance and levee failure warning and response procedures. Very few communities (none in Louisiana) receive any credit for this activity.

The parish could receive points for this activity by reaching out to the South Lafourche Levee District, and documenting the levee maintenance program and the levee failure warning and response plan. The parish could also get credit in Activity 330 for the prerequisite annual outreach project that advises residents that their area could flood if the levee overtopped.

630: Dams

Communities can also receive credit for dam failure warning and response programs. The 2017 CRS Coordinator's Manual limits credit to those communities that would flood due to a dam failure.

Because Lafourche Parish is not vulnerable to a high hazard dam failure, it is not eligible for this credit.

Short Term Strategy Goals

The UNO-CHART team identified goals the parish could implement in the short term to earn CRS credit. The goals are elements the parish could receive credit for with a minimum amount of effort.

- **310: Elevation Certificates**
 - Provide copies of elevation certificates completed before applying to the CRS
- **320: Map Information Services**
 - Provide information from the FIRM, historical flood information/repetitive flooding, flood depth information, repetitive flood information, and information on natural floodplain functions
- **330: Outreach Projects**
 - Submit existing outreach projects for credit
 - Develop procedures for outreach projects to be disseminated before, during and after a flood
- **350: Flood Protection Information**
 - Place flood related documents (including locally pertinent documents) in the library; verify that the documents are included in the library's catalog
 - Enhance flood home page on the parish website and link it to other sources of flood protection and flood safety information
- **410: Floodplain Mapping**
 - Investigate potential credit from parish funded study in 2008.
- **420: Open Space Preservation**
 - Map and document the preserved open space in the parish
 - Develop rules and regulations to keep and preserve large areas of natural open space in a more natural state
- **430: Higher Regulatory Standards**
 - Submit for determination of parish's BCEGS class
 - Train additional staff and help them qualify as Certified Floodplain Managers
- **440: Flood Data Maintenance**
 - Add more flood-related layers to the parish's GIS
 - Collect and make available copies of all of the Flood Insurance Rate Maps that have been issued for the parish
- **450: Stormwater Management**
 - Submit for review Master Drainage Plan and ordinances related to current stormwater management regulations, erosion and sediment control, and water quality regulations.
- **510: Floodplain Management Planning**
 - Submit hazard mitigation plan for review
 - Research, locate, update, and adopt plans that would qualify for natural floodplain functions plan credit (e.g., Coastal Zone Plan, Point-aux-Chenes Wildlife Management Area)
- **520: Acquisition and Relocation**
 - Continue to acquire properties, especially repetitive loss properties, when possible
- **530: Flood Protection**

- Continue to complete flood protection measures, such as elevation of buildings
- Track projects through the permitting process
- **540: Drainage System Maintenance**
 - Submit for review elements of 540 and revise procedures accordingly

Long Term Strategy Goals

The UNO-CHART team further identified goals the parish could implement in the long term to earn CRS credit. The goals are activities the parish could receive credit for with a moderate amount of work over a period of time.

- **330: Outreach Projects**
 - Develop a Program for Public Information
 - Reach out to potential stakeholders to implement projects on behalf of the parish.
- **340: Hazard Disclosure**
 - Distribute a brochure to realtors that educates homebuyers about flood risk
- **360: Flood Protection Assistance**
 - Send property protection advisors to FEMA classes on retrofitting
 - Provide financial assistance advice on funding retrofitting measures
- **370: Flood Insurance Promotion**
 - Conduct and include a flood insurance assessment, develop a plan, and implement outreach focused on flood insurance; the assessment and plan can be developed as part of the Program for Public Information in Activity 330 (Outreach Projects)
- **420: Open Space Preservation**
 - Provide incentives for developers to preserve open space in rural areas
- **430: Higher Regulatory Standards**
 - Pursue credit for freeboard.
 - Prohibit fill, development, and/or material storage in the floodplain
 - Require an architect to sign off on building plans and account for subsidence
 - Adopt a higher standard for substantial improvements
 - Protect critical facilities to the 500-year flood level
 - Require non-conversion agreements for new elevated buildings
 - Require all new buildings to be elevated a certain distance above the centerline of the street.
- **440: Flood Data Maintenance**
 - Establish or document benchmarks that meet the specifications for areas subject to subsidence
- **450: Stormwater Management**
 - Require retention basins.
- **510: Floodplain Management Planning**
 - Prepare and adopt repetitive loss area analyses
- **610: Flood Warning and Response**
 - Meet with the emergency manager and South Lafourche Levee District to review flood warning and response activities that may receive credit
- **620: Levees**
 - Work with South Lafourche Levee District to document its maintenance programs
 - Develop levee failure warning and response plans for each major levee system

- Advise residents in leveed areas that they could flood if the levee overtopped or failed

Implementing the short and long term goals could help the parish gain credit in the CRS. The table below lists the potential dollars saved by communities in each CRS class.

| Table 4 – NFIP Premium Dollars Saved by CRS Class | | | | | |
|--|-------------------------|--------------|-------------|---------------------|-------------|
| | Lafourche Parish | Total | SFHA | X-STD/AR/A99 | PRP |
| | PIF | 11,024 | 3,509 | 2,927 | 4,588 |
| | Premium | \$7,693,817 | \$3,926,007 | \$2,102,142 | \$1,665,668 |
| | Average Premium | \$698 | \$1,119 | \$718 | \$363 |
| CRS Class | | | | | |
| 9 | Per Policy | \$27 | \$56 | \$36 | \$0 |
| | Per Community | \$301,409 | \$196,300 | \$105,109 | \$0 |
| 8 | Per Policy | \$45 | \$112 | \$36 | \$0 |
| | Per Community | \$497,710 | \$392,601 | \$105,109 | \$0 |
| 7 | Per Policy | \$63 | \$168 | \$36 | \$0 |
| | Per Community | \$694,010 | \$588,901 | \$105,109 | \$0 |
| 6 | Per Policy | \$90 | \$224 | \$72 | \$0 |
| | Per Community | \$995,416 | \$785,202 | \$210,214 | \$0 |
| 5 | Per Policy | \$108 | \$280 | \$72 | \$0 |
| | Per Community | \$1,191,717 | \$981,502 | \$210,214 | \$0 |
| 4 | Per Policy | \$126 | \$336 | \$72 | \$0 |
| | Per Community | \$1,388,017 | \$1,177,803 | \$210,214 | \$0 |
| 3 | Per Policy | \$144 | \$392 | \$72 | \$0 |
| | Per Community | \$1,584,318 | \$1,374,103 | \$210,214 | \$0 |
| 2 | Per Policy | \$162 | \$448 | \$72 | \$0 |
| | Per Community | \$1,780,618 | \$1,570,404 | \$210,214 | \$0 |
| 1 | Per Policy | \$179 | \$503 | \$72 | \$0 |
| | Per Community | \$1,976,919 | \$1,766,704 | \$210,214 | \$0 |

Data provided by ISO; October 2017

CRS Policy Recommendations

The recommendations below detail policies the parish could implement for additional CRS credit. The first four categories would entail additional language in a community’s floodplain management regulations, building code, or other ordinance.

1. Regulatory floodplain data

1.1. Flood of record: The highest flood of record is used to determine the extent of the regulatory floodplain and the regulatory flood elevation where there is no base flood elevation (BFE) shown on the Flood Insurance Rate Map (FIRM) or where the flood of record is higher than the BFE. (CRS credit: Activity 410 (Floodplain Mapping), NS New Study)

1.2. Best available data: Where there is no BFE shown on the FIRM, the BFEs in another acceptable study are adopted for regulatory purposes. (410, NS New Study)

2. Building protection

2.1. Freeboard: New buildings and substantial improvements of existing buildings will be protected to at least one foot above the base flood elevation. (430, FRB Freeboard)

2.2. Substantial improvement tracking: Improvements and repairs to existing buildings are tracked for five years or more. If during that time the total improvements exceed 50% of the value of the building, the building must be brought up to the flood protection standards for a new building. (430, CSI Cumulative Substantial Improvements)

2.3. Non-conversion agreements: An applicant for a permit to elevate or improve a building on elevated walls must sign an agreement that the areas below the flood protection elevation will not be converted to an incompatible use or with materials subject to water damage. The regulation should include a provision that allows for periodic inspections by the parish. (432.g. Enclosure limits)

2.4. Critical facilities: To the extent possible, new critical facilities are located outside the limits of the base floodplain. If they are in the base floodplain, they will be protected from damage and loss of access to the 500-year flood level or the base flood elevation plus three feet, whichever is higher. (430, PCF Protection of Critical Facilities)

3. Other floodplain development standards

3.1. Filling restrictions: In order to maintain the floodplain's capacity to store flood waters in riverine areas, any filling must be compensated by removal of an equal amount of fill. (430, DL1 Development limitations)

3.2. Hazardous materials: Hazardous materials are prohibited from the regulatory floodplain. This does not apply to small quantities of these materials kept for normal household use or to the continued operations of existing facilities. (430, DL3 Development limitations)

4. Stormwater management

4.1. Manage the 100-year storm: Retention/detention basins in new developments must be designed and sized to ensure that the 100-year storm leaving the property is no greater than it was under pre-development conditions. (450, DS Design Storm)

4.2. Low impact development: The measures used to manage stormwater runoff and drainage are required to use or mimic natural processes that result in the infiltration, evapotranspiration, or other measures to protect water quality and associated aquatic habitat and to minimize adverse impacts downstream. (450, LID Low Impact Development)

5. Loss reduction measures

5.1. Property protection measures: Buildings are elevated, floodproofed, or otherwise retrofitted to protect against flood damage. The protection standard is the same as for new construction, preferably with at least one foot of freeboard above the BFE. (530 (Flood Protection))

5.2. Acquisition: Where retrofitting measures are not effective or feasible due to an extreme flood hazard or the buildings' conditions, the buildings are purchased and the sites are cleared. The properties are kept as open space or other use compatible with the hazard. (520 (Acquisition and Relocation))

5.3. Drainage maintenance: Local streams, and retention/detention basins are periodically inspected for obstructions to flow or loss of storage. When problems are found, they are quickly remediated so the channels and basins can continue to operate to their full capacity. (540 (Drainage System Maintenance))

5.4. Address repetitive loss: Each of the community's repetitive loss areas are examined and a list of site-specific loss reduction measures are developed. (510, RLAA Repetitive Loss Area Analysis)

6. Support to individual protection measures

6.1. Outreach: Various measures are used to make people aware of the hazard they face, how they can protect themselves and their properties, and flood insurance. (330, OP Outreach Projects, PPI Program for Public Information)

6.2. Technical information: Detailed information and references are provided for those who want to know more than the simple outreach messages. The information would be provided through libraries and websites. (Activity 320 (Map Information Service) and Activity 350 (Flood Protection Information))

6.3. Technical assistance: Knowledgeable staff meet with interested property owners to help them determine the best approach to reduce their exposure to the danger and damage caused by storms and floods. (360, PPA Property Protection Advice, PPV Protection Advice provided after a site Visit)

6.4. Financial assistance: Owners are advised of outside sources of funding support for a retrofitting or other protection project. Where feasible, the community funds the project or manages a grant to help fund a project, usually cost-shared with the owner. (360, FAA Financial Assistance Advice, Activities 520 and 530).