RESTORE ACT Direct Component Multiyear Plan Narrative

Department of the Treasury

OMB Approval No. 1505-0250

Directions: Use this form for the Initial Multiyear Plan and any subsequent amendments to an accepted Multiyear Plan. For amendments, include only new and/or materially modified activities.

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<th>Multiyear Plan Version (Initial or Amendment Number):</th>
<th>Amendment No. 1</th>
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<td>Date of Initial Multiyear Plan Acceptance:</td>
<td>November 13, 2017</td>
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<td>Date of Last Multiyear Plan Acceptance:</td>
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Eligible Applicant Name: Terrebonne Parish Consolidated Government

Name and Contact Information of the Person to be contacted (POC) on matters concerning this Multiyear Implementation Plan:

POC Name: Mart J. Black, AICP

POC Title: Director, TPCG Office of Coastal Restoration and Preservation

POC Email: mblack@tpcg.org

POC Phone: 985.873.6889

NARRATIVE DESCRIPTION:

1. A description of each activity, including the need, purpose, objective(s), milestones and location. Include map showing the location of each activity.

Terrebonne Parish is removing the North Lake Boudreaux Forced Drainage/Flood Risk Reduction Project from its Multiyear Implementation Plan (MYIP) and is adding another project in this amended MYIP (Amendment No. 01). The North Lake Boudreaux Forced Drainage/Flood Risk Reduction Project is being removed because of a lack of sufficient local and state funds necessary to supplement available RESTORE Act funding to undertake and complete this project.

Amendment No. 01 of this Multiyear Implementation Plan contains one project which is eligible for RESTORE Act Direct Component funding. This project is the Bayou Little Caillou Flood Risk Reduction System (Pump Station and Conveyance Channel).

Bayou Little Caillou Flood Risk Reduction System (Pump Station and Conveyance Channel):

Description: This project entails the construction of a new conveyance channel and drainage pump station in the Lower Little Caillou (S-1A) Forced Drainage Basin as part of the Terrebonne Parish Hurricane/Flood Risk Reduction Levee and Forced Drainage System. This basin has been closed in by a series of levees and a floodgate that in tandem prevents excessive rainfall runoff from escaping the basin. When storms, such as hurricanes and other severe weather events approach the area, floodgates, including the one on Bayou Little Caillou, are closed to prevent storm surge flooding and saltwater intrusion. When such closures are coupled with excessive rainfall events, the existing pumping capacity within the S-1A system is insufficient to prevent flooding in the basin. The proposed conveyance channel and pump station will divert freshwater from Bayou Little Caillou into the Lake Boudreaux basin to the west, thus reducing the threat of backwater flooding from an excessive rainfall event within the S-1A system. This project will also have a secondary beneficial effect. The introduction of freshwater into the Lake Boudreaux basin will help to move the salinity gradient further to the south in this lake and spur the growth of freshwater vegetation in this area and eventually reduce the amount of open water in the lake.

This project represents critical coastal flood protection and related infrastructure that is designed to provide the affected coastal community with redundant flood risk reduction and protection. The proposed project will consist of a pump station with four (4) 48-inch vertical axial pumps with electric motors with the ability to move 450 cubic feet of water per second. The project also includes a 20 ft. wide conveyance channel from Bayou Little Caillou to the pump station, four (4) box culverts and sluice gates to convey flow from Bayou Little Caillou under LA Hwy 56 to the pump station, and an access road to the pump station. See Site Map.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1505-0250. Comments concerning the time required to complete this information collection, including the time to review instructions, search existing data resources, gathering and maintaining the data needed, and completing and reviewing the collection of information, should be directed to the Department of the Treasury, Office of Gulf Coast Restoration, 1500 Pennsylvania Ave., NW, Washington, DC 20220.
Need: With its location along the Louisiana coast, Terrebonne Parish is susceptible to tidal flooding from storm surge generated by Gulf of Mexico hurricanes and other storm events. Such flooding events are common and have been frequent. For nearly 50 years, therefore, Terrebonne Parish as worked to build flood protection systems and infrastructure for its citizens. This is the general need for this project, but the specific need for this project is seen in the fact that the Little Caillou Basin has been closed in over the years by a series of levees and floodgates that are designed to prevent storm surge from flooding the structures and homes behind these protective structures. When all existing flood risk reduction components have been activated, however, the basin does not have the ability to drain excess water from the protected areas in the event of a concentrated rainfall event. This has led to flooding in the basin as water becomes trapped. Engineering analysis has been undertaken to evaluate peak runoff conditions in the 5-1A drainage basin, concluding that the conveyance channel and its pump station are necessary to prevent this type of flooding under the conditions described that also includes runoff from the Smithridge, Ward 7, Aragon, and LaCache Drainage Basins all of which pump directly into Bayou Little Caillou.

Purpose: This project will address several critical purposes in the Terrebonne Basin. It consists of construction of a pump station and the dredging of a conveyance channel to convey storm water from Bayou Little Caillou and the protected areas of Terrebonne Parish to Lake Boudreaux and eventually to the Houma Navigation Canal. The addition of a new pump station in the Lower Little Caillou Forced Drainage area will serve two main purposes. First, it will serve as a bypass pump station to convey storm water from Bayou Little Caillou that is discharged from the various basins mentioned above. All of these basins are served by pump stations. The proposed pump station and conveyance channel, in the event of floodgate closure in advance of storm surge AND a significant rain event inside the system, will provide for the protection of life and property in the area by greatly reducing the chances of flooding which will afford the impacted communities and the parish a higher level of resiliency. This project will also lower the risk to life and property associated with relative sea level rise, subsidence, and tropical events that impact this area from time to time. In general, it will improve the long-term economic health of the parish and region.

Objectives: Construction of the proposed Bayou Little Caillou Flood Risk Reduction Project (both pump station and conveyance channel) will be critical to the overall success of the project. To that end, the project will aim to maximize benefits to life and property. The objectives of the project are the following: 1) Alleviate back water flooding within the levee system by constructing the pump station/conveyance channel. 2) Provide a vital link in the parish's overall flood risk reduction system, this reducing vulnerability to life and property from storm-related flooding. And 3) Increase resiliency and sustainability in the parish. In order to meet these important objectives, the pump station will be constructed at an elevation of +11.00 feet and will consist of four (4) 48-inch vertical axial pumps with electric motors supplemented with diesel back-up generators. The construction of the station includes sheet piling and slab, a 20 ft. wide conveyance channel from Bayou Little Caillou with box culverts under Hwy 56. The box culverts will be fitted with sluice gates to control the flow of water into the conveyance channel. The pump station will be access by a 15 ft. wide gravel road which will be gated to exclude unauthorized access. The pump station is being designed to discharge water into Lake Boudreaux at a rate of 450 cfs that will offset the amount of water that is pumped into Bayou Little Caillou from the drainage basins located upstream. The proposed project (pump station and conveyance channel) will prevent flooding of adjacent areas during storm events which precipitate the closure of the Bayou Little Caillou Sector Gate.

Milestones: The high level milestones for the proposed Bayou Little Caillou Flood Risk Reduction project (pump station and conveyance channel) will be the completion of the following:

1. Advertisement for Bids
2. Award of Construction Contract
3. Issuance of Notice to Proceed
4. Construction Period of 400 Calendar Days
5. Issuance of Substantial Completion

Location: The project site for this proposed flood risk reduction project (pump station and conveyance channel) is located in the community of Chauvin, LA at the address of 4872 Hwy 56, Chauvin, LA. The site is adjacent to and runs perpendicular to Bayou Little Caillou and is situated between the existing Little Caillou redundant levee protection system and Bayou Little Caillou. The Little Caillou Basin Watershed is located southeast of Houma and is enclosed by manmade levees and structures. The proposed pump station is located within the enclosed system and situated to facilitate the conveyance of floodwaters into Lake Boudreaux. The location of the proposed project is shown on the enclosed map as Project No. 01 and can be seen at coordinates 90° 36' 14.13" W and 29° 25' 05.78" N.
2. How the applicant made the multiyear plan available for 45 days for public review and comment, in a manner calculated to obtain broad-based participation from individuals, businesses, Indian tribes, and non-profit organizations, such as through public meetings, presentations in languages other than English, and postings on the internet. The applicant will need to submit documentation (e.g., a copy of public notices) to demonstrate that it made its multiyear plan available to the public for at least 45 days. In addition, describe how each activity in the multiyear plan was approved after consideration of all meaningful input from the public and submit documentation (e.g., a letter from the applicant’s leadership approving submission of the multiyear plan to Treasury or a resolution approving the applicant’s multiyear plan).

Availability of the Amended Plan for Public Comment:
This section of the Narrative will be updated following the 45-day public comment period.

3. How each activity included in the applicant’s multiyear plan narrative meets all the requirements under the RESTORE Act, including a description of how each activity is eligible for funding based on the geographic location of each activity and how each activity qualifies for at least one of the eligible activities under the RESTORE Act.

The project described herein and included in this amendment to the Parish MYP for the use of its Direct Component RESTORE Act funds is designed to generate benefits that will accrue to a Louisiana parish located along the Gulf of Mexico that was impacted by the BP/Deep Water Horizon Oil Spill in 2010. Not only is Terrebonne Parish located in the Louisiana Coastal Zone, but it is also situated on the Gulf of Mexico. This makes projects that are otherwise eligible for funding under the RESTORE Act also eligible by virtue of their geographic location.

The Bayou Little Caillou Flood Risk Reduction System (Pump Station and Conveyance Channel) is an eligible activity since it is a coastal flood protection and related infrastructure project. The construction of the proposed 450 cfs pump station and conveyance channel will provide for the protection of life and property in the area by greatly reducing the chances of flooding, thereby providing the impacted communities and the parish a higher level of resiliency. This project will also lower the risk to life and property associated with relative sea level rise, subsidence, and tropical events that impact this area from time to time. In general, this project will improve the long-term economic health of the parish and region.

4. Criteria the applicant will use to evaluate the success of the activities included in the multiyear plan narrative in helping to restore and protect the Gulf Coast region impacted by the Deepwater Horizon oil spill.

Bayou Little Caillou Flood Risk Reduction System (Pump Station and Conveyance Channel):
The success of this project will be evaluated by construction of the 450 cfs pump station and conveyance channel that will lead to the reduction in flood events from storm surge and storm-related flooding events in this region of the parish.

5. How the activities included in the multiyear plan narrative were prioritized and list the criteria used to establish the priorities.

Bayou Little Caillou Flood Risk Reduction System (Pump Station and Conveyance Channel):
Flood risk reduction has always been an overarching priority for Terrebonne Parish for a very long time. It continues to be an important priority since all the components of our flood risk reduction system are not yet in place. Terrebonne Parish Administration, with the full support of the Parish Council, has budgeted funds on an annual basis to address this important priority. Virtually every annual parish budget contains funds to address one or more components of our flood risk reduction system. With the completion of the Bayou Little Caillou Sector Gate designed to stop storm surge and reduce saltwater intrusion, the potential for backfill flooding in the Bayou Little Caillou basin is significant. Other storm water drainage systems pump water into Bayou Little Caillou, but when the sector gate is closed to counter storm surge, water in the system generated by a rain storm cannot be removed. In these circumstances homes and businesses in this basin are susceptible to flooding. To alleviate this situation, the parish hired an engineering firm to design and engineer the pump station and conveyance channel. Although Terrebonne Parish has invested parish funds and has budgeted additional parish funds towards this project, these funds are insufficient to complete it. The parish’s currently allocated RESTORE Act Direct Component funds will allow the parish to complete this high priority flood risk reduction project.
Bayou Little Caillou Flood Risk Reduction System (Pump Station and Conveyance Channel):
   The all-inclusive project cost estimate for this flood risk reduction project is $11,874,832, which includes $250,000 in compensatory mitigation to be paid with local funds. Third party funding sources, both state and local, amount to $9,189,307. These funds have been committed. The components of this project to be paid for with RESTORE Act Direct Component funds include the Conveyance Channel and its Access Road ($845,525) and the Electrical Vertical Axial Flow Pumps ($1,640,000) which equals $2,685,525.
| Coastal flood protection and related infrastructure | Riparian land east of LA Hwy 57 and northwest of Lake Boudreaux in Section 11, T18S-R17E, Terrebonne Parish, Louisiana | $2,450,386.04 | $2,558,039.96 | $4,658,752.00 | $9,667,178.00 | 12-2018 | 06-2020 | Initial MYIP Activity - Deleted in Amendment #01 |
| Coastal flood protection and related infrastructure | Riparian land east of LA Hwy 57 and northwest of Lake Boudreaux in Section 11, T18S-R17E, Terrebonne Parish, Louisiana | -$2,450,386.04 | -$2,558,039.96 | -$4,658,752.00 | -$9,667,178.00 | Initial MYIP Activity - Funded Activity |
| Workforce development and job creation | Fletcher Technical Community College Water Management/Coastal Restoration Curriculum/Coastal Restoration and Protection Institute | $250,000.00 | $0.00 | $0.00 | $250,000.00 | 10-2018 | 12-2021 |
| Coastal flood protection and related infrastructure | Bayou Little Caillou Flood Risk Reduction System (Pump Station, Conveyance Channel and Access Road) | $2,685,525.00 | $0.00 | $9,189,307.00 | $11,874,832.00 | 03-2019 | 04-2020 | Amendment #01 - New Activity |

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