



2023 Coastal Master Plan

New Project Development Guidelines and Criteria

Introduction

Louisiana is in the midst of a land loss crisis that has claimed approximately 2,000 square miles of land since the 1930s. To address this crisis, the Louisiana Legislature passed Act 8 in 2005, which created the Coastal Protection and Restoration Authority (CPRA) and required it to develop a coastal master plan and update it on a regular basis (was originally every five years but recently changed to every six).

The 2023 Coastal Master Plan will build upon previous master plan efforts and strive to ensure the collective effects of project investments reduce storm surge-based flood risk to communities, provide habitats to support an array of commercial and recreational activities, and support infrastructure critical to the working coast. This will be achieved by harnessing natural processes, focusing protection on key assets, and adapting to changing coastal conditions.

The 2017 Coastal Master Plan predictions of future coastal land loss and storm surge-based flood risk, even with plan implementation, demonstrate that isolated project investments often provide minimal benefits beyond their immediate footprint or local area. Synergistic interactions among projects of different types affecting the same region have been shown to produce greater and more sustainable benefits. Moreover, future predictions show the scale of the challenge facing coastal Louisiana and reinforce the need for the master plan process to focus on investments with beneficial effects at the sub-basin to regional scale (for example, at the scale of USGS HUC-12 to HUC-10 hydrologic units or greater - learn more at https://water.usgs.gov/GIS/huc.html). CPRA will accept proposals for new projects or project concepts to be included in the 2023 Coastal Master Plan that meet this challenge.

New projects can be proposed by any source, including academia, parishes, elected officials, agencies, NGOs, landowners, business/industry, and the general public. Emphasis should be on projects that continue to provide benefit in the face of sea level rise and subsidence without continued maintenance, those that make a contribution to maintaining estuarine gradients in future decades (e.g., by increasing freshwater inflow, hydrological restoration, and/or the strategic placement of a ridge-marsh complex to modulate marine incursion), and those that provide risk reduction at the community or regional scale.

New projects can be proposed that:

- 1. Build and/or sustain land, through project types such as Diversions, Hydrologic Restoration, Marsh Creation, and Ridge Restoration. Integrated Projects that incorporate multiple project approaches (only those consistent with the types mentioned above) that function synergistically will also be accepted. Integrated Projects could include new project elements (only those consistent with the types mentioned above) that are expected to work with restoration projects included in the 2017 Coastal Master Plan. Proposals for other project types (e.g., barrier island restoration, shoreline protection, and oyster reef restoration) are not being solicited as it is anticipated that these projects will be evaluated programmatically rather than individually through the master plan process.
- 2. Provide significant storm surge-based flood risk reduction, through structural projects, such as the construction and maintenance of levees, or nonstructural projects, such as the floodproofing of non-residential structures or the elevation or acquisition of residential structures.
- 3. Respond to dramatic changes in the coastal landscape (e.g., resulting from hurricanes or other disasters that have occurred since the 2017 Coastal Master Plan was approved).
- 4. Address future uncertainty challenges, such as climate change, or directly support future transitions in the coastal ecosystem.

Screening Criteria

Similar to the process used for the 2017 plan, a screening process will be used to determine whether a newly proposed project has the potential to be included in the 2023 analysis:

- 1. Consistency with Master Plan Objectives and Principles: Project concepts need to clearly contribute and be consistent with the principles and objectives of the master plan (2017 Coastal Master Plan; pp. 47-49) to be considered for inclusion. Projects that do not meet these criteria will be eliminated from consideration. Furthermore, as stated in our master plan principles, we will strive to use sediment from renewable sources, such as the Mississippi River, or from outside the coastal system, such as the Gulf of Mexico, for marsh creation projects.
- 2. **Magnitude of Expected Effects:** For a restoration or structural protection project concept to be considered for inclusion in the 2023 Coastal Master Plan analysis, it must be expected to produce benefits at a sub-basin to regional scale. As with previous master plans, the 2023 plan will involve a large-scale, regional approach to coastal risk reduction and restoration. The 2017 Coastal Master Plan has shown that the challenges facing coastal populations, businesses and ecosystems require a regional-scale response. Proposals for nonstructural

protection must be for community-level projects (i.e., not only for single structures).

- 3. **Geographic Area:** CPRA is seeking project concepts that will address areas of greatest projected storm surge-based flood risk and land loss in later decades of the 50 year planning horizon, in addition to providing near-term benefits. The 2012 and 2017 Coastal Master Plans screened out certain types of project concepts in some locations (e.g., marsh creation projects in the lower Atchafalaya or Wax Lake Deltas) because natural processes in those locations could be expected to lessen the effects of future land loss. Projects must focus on areas of future risk or land loss not addressed by the 2017 plan.
- 4. Duplicative Effects: Many project concepts considered in previous plans had overlapping scopes, goals, and physical locations. New projects must be significantly different than any project analyzed through the 2012 and 2017 master plan processes, including those that were not selected in the final plan, unless they are included as parts of Integrated Projects that are expected to provide sub-basin to regional benefits. Thus, new restoration or structural protection projects that only rename, resize, or relocate a previous project that was screened out of the 2012 or 2017 Coastal Master Plans, will not be considered. Similarly, nonstructural projects must represent new locations or attributes (amounts or types of structures) in order to be considered. See the following documents for maps and lists of projects analyzed through the 2012 and 2017 master plan processes: 2012 Coastal Master Plan (pp 68-69), 2012 Appendix A. Project Definitions, 2012 Appendix A1 Projects Screened out of Consideration, 2017 Coastal Master Plan (pp 68-69), and 2017 Appendix A: Project Definition.
- 5. **Adequate Information:** Project concepts need to be described in sufficient detail so that they can be evaluated using the master plan models. Adequate information typically includes specific geospatial location data (for all project concepts), elevations (for risk reduction projects), and, where applicable, information on proposed operational regimes (for restoration projects). See "Submittal Details" below for minimum attributes required for each project type.

Submittal Details

All proposals must be delivered electronically, in .pdf format, to MasterPlan@la.gov or mailed to the 2023 Coastal Master Plan Project Development Program at P.O. Box 44027, Baton Rouge, Louisiana, 70804 and received **by March 1, 2019.** Questions may be directed to MasterPlan@la.gov as well. CPRA staff may be available to help develop and refine project details and attributes. Please include "2023 Coastal Master Plan Project Development" in the subject line of the email. Proposals should be no more than 7 pages (1 page for the Cover Sheet and Contact Information, 3 pages for Project

Description, 1 page for the Map, and 1-2 pages for Project Attributes). After the close of the solicitation period, projects that meet screening criteria will be considered in the evaluation process for the 2023 Master Plan.

All proposals must include the following:

1. Cover Sheet:

- a. Project Title
- b. Full Contact information (name, address, email, phone number)

2. Project Description:

- a. <u>Project Summary</u>: Brief description of project goals and objectives, features, and intent (including a description of how the project concept meets Screening Criteria 1-3), not to exceed 3 pages, including all figures, tables, links (i.e., project specific feasibility reports, engineering design reports, etc.), and references. Please include Project Type, Planning Unit, and Parish(es) in which the project will be located and where the benefits are expected to be delivered. Only project types listed below (A-G) will be considered.
- b. <u>Map</u>: Please provide a map with details of the project location, geographic coordinates for each project feature (marsh creation area, structure location, etc.), and overall influence area regardless of project type.
- c. <u>Shapefile</u> (if available): Please provide a shapefile of the project area and/or location(s) of project features if one is available.
- 3. **Project Attributes:** Project attribute details and definitions are located in <u>Appendix A</u> of the 2017 Coastal Master Plan (http://coastal.la.gov/our-plan/2017-coastal-master-plan/)

Attribute requirements for specific project types are listed below. *Italicized* attributes are not required for submission, but should be provided if available. Construction costs are not required, although providing cost estimates with quantities and unit costs is encouraged.

- A. **Diversion:** Location, Diversion Structure Type, Diversion Discharge Location, Operational Regime, Maximum Discharge (cfs), Diversion Channel Length (ft), Diversion Channel Width (ft)
- B. **Hydrologic Restoration:** Location, Structure Type, Structure Location, Operational Regime, Structure Length (ft), Structure Width (ft), Structure Opening Area (ft²), *Structure Invert Elevation (ft NAVD 88)*

- C. **Marsh Creation:** Location, Created Acres, Length (ft), Width (ft), Borrow Source, *Fill Volume (cubic yards), Cut Volume (cubic yards)*
- D. **Ridge Restoration**: Location, Created Acres, Length (ft), Width (ft), Ridge Elevation (ft NAVD 88 at crest), *Fill Volume (cubic yards)*, *Cut Volume (cubic yards)*
- E. **Integrated Projects:** Location and details of relevant features as noted under A-D
- F. **Structural Protection:** Location, Alignment, Levee Footprint (acres), Targeted Protection Level (50, 100, or 500 year), Levee Length (ft), Levee Top Height (ft NAVD 88), Levee Top Width (ft), Levee Side Slope, Levee Fill Volume (cubic yards), Existing Average Elevation (ft NAVD 88), Design Elevation (ft NAVD 88), Number of Concrete T-Walls (if necessary), T-Wall Height (ft), T-Wall Length (ft), T-Wall Thickness (ft), T-Wall Base Width and Thickness (ft), Number of Floodgates (if necessary), Gate Type, Gate Length (ft), Gate Height (ft), Number of Pumps, Pump Type, Pump Capacity (gallons/minute)
- G. **Nonstructural Protection:** Location and relevant features

 Floodproofing: Property Type (Nonresidential: Commercial, Industrial, or

 Institutional), Size (square feet), Total building footprint

 (square footage of bottom floor), *Parcel level data*
 - Elevation: Property Type (Residential: Single Family, Small multi-family, Large multi-family, or Manufactured), Elevation Height (ft NAVD 88), Parcel level data, Foundation Type (e.g., slab vs. pier), Construction Type (e.g., frame vs. brick veneer), Soil Type (if known), Number of Stories, Age and Condition of Structure, Utilities, Need for Elevators

<u>Acquisition</u>: Property Type (Residential: Single Family, Small multifamily, Large multi-family, or Manufactured; Vacant Lot), Parcel level data including size (square feet)