

450 Laurel Street, Baton Rouge, LA 70804 | coastal@la.gov | www.coastal.la.gov

2017 Coastal Master Plan Project Development Program

Introduction

Louisiana is in the midst of a land loss crisis that has claimed 1,880 square miles of land since the 1930's. 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 every five years.

The 2012 Coastal Master Plan (http://www.coastalmasterplan.la.gov/) was based on a two year analysis involving some of the state's best scientists as well as national and international specialists. The state used this analysis to select 109 high performing projects that if fully funded, at a price tag of \$50 billion, could substantially increase flood protection for communities and create a sustainable coast.

The 2017 Coastal Master Plan will build upon the 2012 plan through refinement of previously selected projects (http://coastal.la.gov/2017-coastal-master-plan/) and/or inclusion of new projects. Herein CPRA will accept proposals for new projects to be included in the 2017 Coastal Master Plan. New projects can be proposed by CPRA or by any external source, including academia, parishes, elected officials, agencies, NGO's, landowners, business/industry and the general public.

New projects can be proposed:

- 1) That build and/or sustain land, through project types identified in the 2012 Coastal Master Plan, such as Bank Stabilization, Barrier Island/Headland Restoration, Diversion and Channel Realignment, Hydrologic Restoration, Marsh Creation, Oyster Barrier Reef Creation, Ridge Creation/Restoration, and Shoreline Protection.
- 2) That provide significant Flood Risk Reduction, through structural projects, such as the construction and maintenance of levees, or non-structural projects, such as the elevation, flood-proofing, or acquisition of properties.
- In response to radical shifts in the coastal landscape, resulting from hurricanes or other disasters that have occurred since the 2012 Coastal Master Plan was developed.
- 4) That address future uncertainty challenges, such as climate change.



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Screening Criteria

Like the 2012 plan, a screening process will be used to determine whether a project has the potential to be included in the 2017 analysis:

- 1) Size Threshold: For Marsh Creation projects, a minimum size threshold of 500 acres (i.e., the expected project effect on the coastal landscape) will be required for a project to be considered for inclusion in the 2017 Coastal Master Plan analysis. Like the 2012 Coastal Master Plan, the 2017 plan will involve a large-scale, regional approach to coastal risk reduction and restoration. The heart of the master plan's analysis is an interconnected suite of predictive models that estimate restoration and risk reduction effects of candidate projects on various aspects of the coastal system. These models were developed for a system-wide, planning scale analysis, and consequently in some cases are unable to capture the effects of small-scale, localized projects in the coastal system.
- 2) Geographic Area: The 2012 Coastal Master Plan 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 produce similar results, and investment in restoration projects in these areas would be unnecessary. Based on the current state of the Louisiana coast, the 2017 plan will likewise screen out projects where natural processes are already producing the desired effects.
- 3) 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). Please see "Submittal Details" on page 3 for minimum attributes required for each project type.
- 4) 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 (http://www.coastalmasterplan.la.gov/; pp. 43-63) 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.
- 5) **Duplicative Effects:** Many project concepts have overlapping scopes, goals, and physical locations. New projects must be significantly different than any project analyzed through the 2012 master plan process, including those that were not



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selected in the final plan (http://www.coastalmasterplan.louisiana.gov/2012-master-plan/projects/candidate-projects/). Thus, a new project is not renaming, resizing, or relocating a previous project that was screened out of the 2012 Coastal Master Plan.

Submittal Details

All proposals must be delivered electronically, in .pdf format, to MasterPlan@la.gov, by August 21, 2014. Questions may be directed to this email address as well. CRPA staff will be available to help develop and refine project details and attributes. Please include "2017 Coastal Master Plan Project Development" in the subject line of the email. Proposals should be no more than 7 pages (1-2 pages for the Cover Sheet and Contact Information, 2 pages for Project Description, 1 page for the Map, and 1-2 pages for Project Attributes). 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. Project Summary: Brief description of project goals and objectives, features, and intent, not to exceed 2 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. Only project types listed below (a-j) will be considered.
- b. Map: 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. Shapefile (if available): Please provide a shapefile of the project area and/or location(s) of project features if one is available.
- Project Attributes: Project attribute details and definitions are located in Appendix A
 of the 2012 Coastal Master Plan (http://www.coastalmasterplan.louisiana.gov/2012-master-plan/master-plan-appendices/).

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



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quantities and unit costs is encouraged. CPRA will develop project costs for all projects that are selected to move forward in the 2017 Coastal Master Plan analysis.

- a. **Bank Stabilization:** Location, Length (ft), Width (ft), Borrow Source, *Fill Volume (cubic yards), Cut Volume (cubic yards)*
- b. Barrier Island/Headland Restoration:
 - <u>Beach</u>: Location, Created Acres, Length (ft), Width (ft), Borrow Source, Beach Elevation (ft NAVD 88), *Fill Volume (cubic yards)*, *Cut Volume (cubic yards)*<u>Dune</u>: Location, Created Acres, Length (ft), Width (ft), Borrow Source, Dune Elevation (ft NAVD 88), *Fill Volume (cubic yards)*, *Cut Volume (cubic yards)*<u>Marsh</u>: Location, Created Acres, Length (ft), Width (ft), Borrow Source, Marsh Elevation (ft NAVD 88), *Fill Volume (cubic yards)*, *Cut Volume (cubic yards)*
- c. **Diversion and Channel Realignment:** Location, Diversion Structure Type, Diversion Discharge Location, Operational Regime, Maximum Discharge (cfs), Diversion Channel Length (ft), Diversion Channel Width (ft)
- d. **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)
- e. **Marsh Creation:** Location, Created Acres, Length (ft), Width (ft), Borrow Source, *Fill Volume (cubic yards), Cut Volume (cubic yards)*
- f. **Oyster Barrier Reef:** Location, Acres of Reef Area Created (Note: reef area could be underwater), Length (ft), Width (ft), Reef Elevation (ft NAVD 88 at crest)
- g. Ridge Creation/Restoration: Location, Created Acres, Length (ft), Width (ft), Ridge Elevation (ft NAVD 88 at crest), Fill Volume (cubic yards), Cut Volume (cubic yards)
- h. **Shoreline Protection:** Location, Length (ft), Width (ft), Elevation (ft NAVD 88 at crest), *Fill Volume (cubic yards)*
- i. **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)
- j. Nonstructural Protection:



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<u>Elevation</u>: Location, Property Type (Residential: Single Family, Small multifamily, Large multi-family, or Manufactured; Nonresidential: Commercial, Industrial, or Institutional), 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>Floodproofing</u>: Location, Property Type (Residential: Single Family, Small multi-family, Large multi-family, or Manufactured; Nonresidential: Commercial, Industrial, or Institutional), Size (square feet), Total building footprint (square footage of bottom floor), *Parcel level data*<u>Acquisition</u>: Location, Property Type (Residential: Single Family, Small multifamily, Large multi-family, or Manufactured; Nonresidential: Commercial, Industrial, or Institutional; Vacant Lot), *Parcel level data including size*(square feet)