



COMPREHENSIVE RESILIENCY PROGRAM

Application Number Assigned by LRA/OCD-DRU:

Date Submitted to LRA/OCD-DRU:

Date Reviewed by LRA/OCD-DRU:

Applicant Contact Person

| | | | | | |
|-------------------------------------|--|----------------------------------|---|-------------------|--|
| Name Michael J. LeBlanc, AICP | Title Planning Manager, Special Projects | Telephone Number 337-291-7179 | Email Address mleblanc@lafayettela.gov | | |
| Street or P.O. Box PO Box 4017-C | City Lafayette | Parish Lafayette | State LA | Zip Code 70502 | |

SUBMIT AN ORIGINAL AND ONE COPY OF THE APPLICATION TO:

Louisiana Recovery Authority
Office of Community Development
Disaster Recovery Unit
1515 Poydras Street, Suite 1100
New Orleans, Louisiana 70112
ATTN: Alexandra Norton

AND

EMAIL A PDF VERSION TO:

Alexandra.Norton@la.gov

Section I - General Information

- 1. Proposal title: **Model Community Watershed Development**
- 2. Lead public entity applying: **Lafayette Consolidated Government**
- 3. All other public entity applying as part of this proposal: **None**
- 4. Jurisdictions within the proposal area: **Lafayette Parish**
- 5. Contact information

Name: **Mike LeBlanc, AICP, Planning Manager, Special Project Division**

Address: **PO Box 4017-C, Lafayette, LA 70502**

Phone: **337-291-7179**

Mobile:

Email Address: **mleblanc@lafayettela.gov**

6. Activities will be conducted by (check all that apply and indicate estimated share of work)

In-House (including new hires) 61%

Private Consultant 39%

Other (please identify) 0 %

7. Background information

(i) State Planning and Development District:

(ii) Metropolitan Planning Organization (if applicable):

Contact person: **Stan McGee, Exe. Director**

Contact person: **Mike Hollier, AICP, Planning Manager**

Address: **PO Box 90070, Lafayette, LA 70509**

Address: **PO Box 4017-C, Lafayette, LA 70502**

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Phone: **337-291-8016**

Email Address: **smcgee @ ardd.org**

Email Address: **mhollier@lafayettela.gov**

8. Applying for assistance in the following categories (check up to two):

Category 1 – Plan or Zoning Ordinance Development: \$423,022

Category 2 – Code Enforcement Staff Ramp Up: \$ _____

9. Has the jurisdiction adopted the DFIRMs or Advisory base Flood Elevations (whichever is most current) and the Louisiana State Uniform Construction Code? Yes No (if no, application will not be considered)

Section II – Category 1 Plan or Zoning Ordinance Development

A. Overview

The current drainage system in Lafayette Parish is often ill-equipped to handle hurricane weather and record rainstorm events. Greater impervious surfaces from increasing development, a relatively flat geography, and too much rainfall too fast result in flooding. The preliminary Floodway Maps developed by the Federal Emergency Management Agency (FEMA) indicate that of the 270.64 square miles in Lafayette Parish, 24.46 square miles are floodway (9% of total Parish area), 99.33 square miles are floodplain (36% of total Parish area), which equals 123.79 square miles in regulated flood zones (45% of total Parish area). See Map 1 - Inset 2.

The proposed Model Community Watershed Development (MCWD) aims to provide an alternative approach to flood protection that balances both the management of growth impacts on watersheds along with investments to minimize impacts of flooding on specific neighborhood and business areas. With close to half of Lafayette Parish land in regulated flood zones, an array of non-structural strategies need to be developed to protect people and property from flood damages. Non-structural approaches focus on retaining the natural floodplain as an area for flood waters to inundate during times of high water flow, but also allowing for limited development. This may mean that floodplain areas are developed with provisions for on-site floodwater retention or detention and regional storm water management. The non-structural approaches and their associated storm water management practices can be modeled with an existing parish-wide computer hydrological model developed through a collaboration of all municipalities and parish governmental entities with the US Army Corps of Engineers (COE) and Federal Emergency Management Administration (FEMA). The model with two foot elevation contours is the basis of the preliminary flood insurance rate maps in Lafayette Parish. Implementation of these maps is expected within 4 months. This model was developed prior to 2005 and is nearing regulatory approval by COE. See Map 2 – Inset 1 for local participants.

A.1 Tools

The proposed MCWD will develop a set of innovative environmental, regulatory, and financial tools that can be implemented in various watersheds in flood-prone regions throughout Louisiana. It is a way to allow for upstream development (minimizing future intensifications in high-risk areas) that will not undermine efforts to mitigate flooding downstream.

- 1. Environmental Tools** – Using the computer hydrological model developed for the Parish, floodway and floodplain areas suitable for the creation of a chain of wetlands and retention/detention areas will be identified within the sub-watersheds in Lafayette Parish and adjoining areas. See Map 1 – Inset 1 for parish watershed maps. Consideration will be given to population densities and existing structures in flood areas (as shown in Map 2 – Inset 3) as well as depth of water in the floodplain, and perviousness/imperviousness (as shown in Map 1 – Insets 3 and 4). The aim is to develop a replicable methodology that can be adapted to similar areas in Louisiana.

The preservation of wetlands, flood protection, and the removal of pollutants from runoff provides obvious environmental benefits. The high quality wildlife habitat that it may provide is another direct benefit that a wetland creation project will have for the environment. The interpretation of wetlands and their functions can be presented to the public through a series of pedestrian trails and bikeways that will be planned as part of the project. The public participation may have a significant impact on the improvement of public health

through encouraging exercise and public education by providing an understanding of the ecology of Louisiana. See Maps 3 and 4. A further discussion of these tools is in Section A.2, Pilot Area.

2. Regulatory Tools - Local, State and Federal regulatory tools will be identified and alternative options will be developed for the establishment of a MCWD area.

a. Land Use Controls: A model ordinance will be developed that integrates other regulatory tools through the use of options: pyramidal zoning, performance-based zoning, buffer-based zoning, and form-based zoning.

b. Mitigation Banks: The concept of mitigation banking has been around since the 1970s. Basically, mitigation banking creates an economic incentive for restoring, creating, enhancing and/or preserving wetlands. Some of the areas for potential MCWDs could be mitigation banks. Mitigation banks typically involve the consolidation of many small wetland mitigation projects into a larger, potentially more ecologically valuable site. Such consolidation encourages greater diversity of habitat and wetland functions. In particular, an Interagency Review Team (IRT) is usually chaired by the COE and provides regulatory review, approval, and oversight of the documents needed to create the mitigation banks. Typically, membership includes the US EPA, the US Fish and Wildlife Service, Louisiana Department of Natural Resources – Coastal Management Division, Louisiana Department of Environmental Quality – Office of Water Resources, and Louisiana Department of Wildlife and Fisheries. FEMA does not usually participate in the IRT, but in this case, FEMA may participate because much of the project lies within a regulatory floodway.

The team seeks to develop two formal documents: a prospectus which analyzes both the physical and legal planning requirements of the mitigation bank; and wetland mitigation agreement that allows the actual transmission of mitigation credits between a developer and the owner of the mitigation bank. As these agreements are being evaluated, an environmental impact study (EIS) with a model outline can be developed so that the best alternative for the social and biological environment is selected.

c. Local Governmental Regulations: Four model tools that can be developed are landscaping ordinances, building codes, subdivision regulations, and impact fees, applicable in MCWDs. The landscaping ordinance can create areas that improve wetland functioning and water quality. Building codes and subdivision regulations can be applied to flood prone areas so as to prevent property losses and social disintegration. Affordable housing can be required as part of the review process so that a range of incomes and ethnicities may reside and work within MCWDs.

3. Financial Tools – The key to the implementation of a MCWD is identifying the funding sources for actions to be implemented.

a. Community Development Districts: One option is a special taxing district to provide for infrastructure funding. A goal of the comprehensive master plan for Lafayette Parish states that floodwater and storm water plans, programs, and management shall be declared a public utility and administered as such. The community development district (CDD), although often initiated by developers, is proposed to be initiated by local government. CDDs require written consent of all landowners as well as local government approval.

b. Soil. A practice used in other parts of the United States to finance the creation of regional retention-detention facilities is to excavate soil in low flood-prone areas (thereby increasing the storage capacity of excavated zones) and building up adjacent floodplains above flood levels to allow for limited development. Some of the excavated soil can also be sold for use outside the planning area. In south Louisiana the selling

of fill soil is common practice and can be quite profitable. A current price for soil from a one-acre pond that is three feet deep is \$174,000.

c. Developer Incentives: Mitigation banks may increase property values in areas that are in close proximity to floodways and floodplains. In order to maximize the impact of increased property values, compact high density residential option might be considered. Multistory residential buildings may provide views of the mitigation banks with lakes, ponds, walking trails, and wildlife areas. Additionally, rather than charging impact fee for individual developments, these fees could be lessened when a watershed wide approach is used in drainage planning. See Maps 3 and 4.

d. Grants: Various government funding programs will be inventoried such as congressional funding for the Southeast Louisiana Urban Flood Control Project (SELA); Land and Water Conservation Fund; Recreational Trails Program; Forest Legacy Program; and North American Wetlands Conservation Act. State funding can be likewise modeled: federal drainage funds coordinated by the DOTD Public Works and Water Resources Section and funding through the Capital Improvement Program. Private funding is also available from Bikes Belong and American Hiking Society. Additionally, the Trust for Public Land can provide large transitional temporary loans for the purchase of properties that are to be converted into public parks. The Nature Conservancy actively purchases and manages conservation areas some of which are then transferred to local and state governments. Local landowners may forgo the selling of their property as part of the plan. Instead, land owners may donate their property to a land bank at a loss for federal and state tax purposes.

e. Tax Increment Financing (TIF) Districts: Louisiana law allows for the creation of TIF districts by local governments. Two TIF districts were created near MCWD area by the City of Scott. Preliminary discussions with local officials indicate that these districts may be enlarged so as to finance the proposed water management improvements. These two districts are established through placing an additional one cent sales tax on retail purchases within the district.

f. Community Land Trust (CLT): A CLT, as a non-profit, acquires multiple parcels of land throughout a targeted geographic area with the intention of retaining ownership of these parcels forever. Any building already located on the land or later constructed on the land is sold off to an individual homeowner, a cooperative housing corporation, a nonprofit developer of rental housing, or some other nonprofit, governmental, or for-profit entity. The property may be retained within multiple family generations of owners. However, the CLT retains an option to repurchase any residential (or commercial) structures located upon its land, should their owners ever choose to sell. The resale price is set by a formula contained in the ground lease that is designed to give present homeowners a fair return on their investment, while giving future homebuyers fair access to housing at an affordable price.

A.2 Pilot MCWD Area

The above tools will be developed with a specific focus on a pilot area identified by the preliminary FEMA Floodway Maps. The pilot MCWD is located in the western portion of Lafayette Parish between City of Scott and Town of Duson in the Ile des Cannes Watershed (See Map 1 – Inset 1). Roadways are laid out in large one mile grids (See Map 2 – Inset 4). The floodway is shallow, being between 1 and 3 feet deep (See Map 2, Inset 3). Since this area was converted prior to agriculture before the establishment of the wetland regulations, the area may not be considered a regulatory wetland, thus not requiring extensive wetland permitting by the COE.

The pilot MCWD would contain a regional stormwater retention-detention facility several hundred acres in size designed for high stormwater storage capacity, with elevated on-site areas using excavated dirt from lakes for amenities, and would reduce the risk of flooding in downstream areas by containing excess stormwater until it

can be recharged into the aquifer or control-released when over-burdened infrastructure can accept it. Some of the environmental tools of the pilot MCWD are shown in the exemplified design in the northern and southern design areas on Maps 3 and 4. Some of the most important tools are described below:

1. **Lakes with Adjoining Greenways** – buffering of adjacent land uses, providing recreation, improving water quality through biofiltering, creating wildlife habitat.
2. **Coulee By-Pass Structures** – passive diversion of water from existing coulees when flood stage is reached and then conveying water to storage areas (lakes and wetlands).
3. **Terraced, Natural Coulees** – planted with trees and vegetation thereby slowing stormwater discharge, filtering out sediments and pollutants, reducing erosion, reducing water temperature, and increasing water oxygenation. The design of shallow multi-terraced slopes allow for easy access and easy maintainance, aesthetic interest when not conveying stormwater, and providing high-capacity channels when stormwater is at peak levels.
4. **Dry Retention Areas** – can be used for recreation areas such as golf, soccer, baseball, football fields etc., that are unaffected by periodic inundation. They can also provide buffers between land uses.
5. **Constructed Wetlands** – improves water quality, provides access to educational and eco-tourism opportunities, provides area to preserve wildlife, and promotes healthy biodiversity.
6. **Water Front Mixed Use Development** – allows for urban densities in close proximity to a constructed natural and parklike development in limited areas.

It should be noted that the pilot MCWD will not be constructed with funds requested from this grant proposal. The aim of this proposal is to develop model tools to initiate the construction of this and other pilot MCWD area projects. The tools will help clear the environmental, regulatory, and financial hurdles to initiate such a development and will help garner political and public support.

B. How project will minimize business, housing, and infrastructure damage in the future?

The drainage infrastructure will prevent flooding locally as well as watershed-wide through the use of retention and detention systems integrated into mitigation banks and recreational trails and boatways. This project seeks to integrate flood management practices so that areas in FEMA floodways and floodplains may be created with mixed use developments. These low impact developments typically contain a much smaller architectural footprint, than traditional developments, yet provide for nearly the same amount of residential units. Much of South Louisiana has land that is similarly mapped and regulated. The land was low lying and prior converted to agriculture. Throughout the 20th century, residential and business development bypassed these areas below the one hundred year flood plain and areas in the floodway. The MCWD development seeks to utilize this type of marginal land in ways that seeks large scale regional or watershed wide solutions.

The financial tools are robust, allowing for funding through a mix of private and public sector investments. The sale of fill dirt and mitigation credits along with reducing impact fees by large scale retentions and detentions ponds are viable economic approaches to flood management. The urban areas created have many public amenities that make living and working in a MCWD development aesthetically pleasing by integrating nature into the urban fabric. The goal is a range of economic classes and ethnicities within this urban environment by requiring a percentage of affordable housing through the use of Community Land Trusts.

C. Plan Implementation

These project model tools will require the work of existing staff and four groups of consultants: hydrologist, an ecologist, civil engineer, and financial analyst. Existing staff include two city planning managers with nearly combined 60 years of professional experience; several city planners with neighborhood and public participation as their specialties; a landscape architect with more than 20 years experience; an architect with over 60 years experience, who was a chairperson at the school of Architecture and Design at the University of Louisiana at Lafayette (ULL); and an urban designer with 10 years experience. The hydrologist has an endowed professorship in civil engineering at ULL with many years experience working with the COE and local governments. The ecologist will work to create model micro-niches within the project planning area that are compatible with human habitation. The civil engineer will develop model water management structures. The financial analyst will evaluate economics of the plan.

These design professionals will develop three sets of tools (environmental, regulatory, and financial) that enable local governments to select options which are the most effective in their local area. These three sets of tools are integrated so as to provide significant private sector funding through the sale of fill dirt and mitigation credits. Significant institutional stakeholders are identified through the process of creation of mitigation banks to implement the plan. Additional grant funding from federal, state, and local government sources may be sought to enhance private sector funding. Many of the tools are constructed so as to make the development appeal to the private sector through Community Land Trusts, Developer Incentives, and Community Development Districts.

D. How will the applicant manage the grant and complete project with 36 months?

The project is divided into three phases of one year duration: (1) data collection and stakeholder identification, (2) analysis, and (3) completing the project deliverables. In the first year, data collection and stakeholder identification go hand in hand towards collecting reliable data and developing good relations with existing agencies with a purview on the project. This is particularly true with the COE and FEMA as well as those agencies identified in the Interagency Review Team (IRT) in Section A.1.2.B. In the second year, the analysis will require the use of staff specialist and consultants identified in Section C. In the third year, the project deliverables will be completed as identified in Section A.1 Tools. Some overlap may occur as some of the tools are completed faster than anticipated.

E. How is there no other suitable sources of funding available?

Lafayette Consolidated Government has expended in direct cost more than two million dollars to develop the Drainage Element of the Lafayette in Century (LINC) Comprehensive Plan over an eleven year period. These costs include developing a computer hydrological model using the hard science of hydrology paired with extensive public participation and staff research in how to make Lafayette a community in harmony with its environment. Long before Hurricanes Katrina, Rita, Ike and Gustav hit Louisiana, Lafayette gave drainage the highest priority in developing their comprehensive plan because it is this element upon which all other development is built upon. Because of these expenditures, we are seeking additional funds to augment and leverage these local funds, which are extremely limited and must be accumulated over a period of more than a decade. This grant will go long way towards completing the LINC drainage element in such as way as to provide replicable tools to be used in other localities which can benefit from this long experience with drainage planning.

Project No. 06050-017-01; Draft 5-1.

Section III Budget Detail

Table 1
Lafayette Consolidated Government
Proposed Three Year Budget, Louisiana Recovery Authority's CRP Grant

| Activity | Base Rate | Benefits | Adjusted Rate | Annual Hours | Year 1 | Year 2 | Year 3 | Total | Source |
|----------------------------|-----------|----------|---------------|--------------|----------------|----------------|----------------|----------------|-------------------------------|
| Project Manager 1 | 36.73 | 0.295 | 47.57 | 200 | 9,513 | 9,513 | 9,513 | 28,539 | CRP Application |
| Project Manager 2 | 27.29 | 0.295 | 35.34 | 500 | 17,670 | 17,670 | 17,670 | 53,011 | CRP Application |
| Architect, AIA | 35.00 | 0.295 | 45.33 | 200 | 9,065 | 9,065 | 9,065 | 27,195 | CRP Application |
| Urban Designer | 21.96 | 0.295 | 28.44 | 400 | 11,375 | 11,375 | 11,375 | 34,126 | CRP Application |
| Landscape Architect | 19.38 | 0.295 | 25.10 | 400 | 10,039 | 10,039 | 10,039 | 30,117 | CRP Application |
| City Planner 1 | 21.32 | 0.295 | 27.61 | 500 | 13,805 | 13,805 | 13,805 | 41,414 | Pending LCG Funds |
| City Planner 2 | 21.32 | 0.295 | 27.61 | 400 | 11,044 | 11,044 | 11,044 | 33,131 | CRP Application |
| City Planner 3 | 18.00 | 0.295 | 23.31 | 150 | 3,497 | 3,497 | 3,497 | 10,490 | CRP Application |
| Consult. Hydrologists | 125.00 | 0.00 | 125.00 | 110 | 13,750 | 13,750 | 13,750 | 41,250 | CRP Application |
| Consult. Ecologists | 125.00 | 0.00 | 125.00 | 110 | 13,750 | 13,750 | 13,750 | 41,250 | CRP Application |
| Consult. Civil Engin. | 125.00 | 0.00 | 125.00 | 110 | 13,750 | 13,750 | 13,750 | 41,250 | CRP Application |
| Consult. Financial | 125.00 | 0.00 | 125.00 | 110 | 13,750 | 13,750 | 13,750 | 41,250 | CRP Application |
| Sub-Total CRP Funds | | | | 2,580 | 127,203 | 127,203 | 127,203 | 381,608 | REQUESTED FROM CRP |
| Sub-total LCG Funds | | | | 500 | 13,805 | 13,805 | 13,805 | 41,414 | PENDING MATCH FROM LCG |
| Grand Total | | | | 3,080 | 141,007 | 141,007 | 141,007 | 423,022 | GRANT TOTAL |

NAME AND SIGNATURE OF CHIEF REPRESENTATIVE

L.J. Durel, Jr 3/11/10

L.J. Durel, Jr

Signature

City-Parish President

Title

L.J. "Joey" Durel, Jr

March 11, 2010

Name Typed

Date

Attach board resolution or other evidence of signatory authority to submit grant application.