

Louisiana Watershed Initiative Region 4 Steering Committee Meeting Minutes for November 30, 2022

ATTACHMENT B

SOUTHWEST LOUISIANA REGIONAL PLANNING COMMISSION (RPC)
Proposed “Seven Spokes of the Wheel” for the Southwest Louisiana Planning District
and the
LOUISIANA WATERSHED INITIATIVE (LWI) REGION 4

PURPOSE AND PROSPECTUS:

Recent decades have revealed how susceptible Louisiana is to flood. Over the past thirty years there have been over forty declared flood related disasters. In 2018, the State launched the Louisiana Watershed Initiative, introducing a new watershed-based approach to reducing flood risk in Louisiana, guided by the following: Using scientific tools and data, enabling transparent objective decision making, maximizing natural function of flood plain and establishing regional watershed-based management of flood risk.

Cause and effect of floods is multilayered and cannot be mitigated by a single solution. The “Watershed” approach to identifying causes and solving problems is both practical and desirable in providing coordination and leverage of scarce local, regional and state resources. Stepping away from a single solution to a recognized problem and identifying multiple common objectives of the seven purposed wheel spokes defined for the Louisiana Region 4 District will move the Watershed concept forward with viable programs addressing the most critical impacts.

Purpose No. One

Managing flood waters.

Reference: The Louisiana Watershed Initiative (LWI)

There is a great deal of data and information on topography, water hydrology, human infrastructure, soil types and characteristics, public and private investments, Louisiana weather patterns, and vegetation. Documenting and corralling many moving factors is both challenging and critically important for the region and its inhabitants. The Louisiana Watershed Initiative is a strong positive step forward but is a limited resource in planning and programming solutions needed. If flood generating weather events could be suspended for approximately seventy years, there might be adequate monies available to build necessary improvements and prepare and manage excessive water. Reality is different and the region must work with means and strategies that are obtainable. Taking inventory of what problems exist and determining what is needed begins a transition to resolving current critical short-term and long-term flooding difficulties or, at very least, prevents swelling or growing the critical challenges. There is no single solution or remedy to the task. Multiple factors must be evaluated, and options defined to select courses of action. The Louisiana Watershed Initiative and the Region 4 Watershed Steering Committee are a start in mitigating flooding problems in the region. It is incumbent on private and public entities to rally and implement a pragmatic and effective flood management plan.

Goals: Primary goal is to develop a comprehensive flood management plan for the Region utilizing the latest available science and data. The Secondary goal is to develop implementation strategies affecting infrastructure and operations for short-term and long-term deliverables and continuity.

Purpose No. Two

Retaining, generating, and utilizing clean water.

Reference: Louisiana Department of Environmental Quality

Louisiana is well known for water – high above, in the air, on the ground and down below - - and plenty of it. But not all is sweet in the bountiful. Saltwater intrusion, toxic chemical spills, hazardous waste, urban development contamination,

agricultural runoff, oxygen depletion, vegetation decomposition, acid rain, etc. contribute to lower water quality across the state and Region 4. Drought is not unknown. Water quality is essential to life and livelihood. Is there a problem? The answer is yes. Urban development aggravates the contamination situation and at the same time demands greater amounts of clean quality water. Agricultural rice production, aquatic farming, and herd ranching place significant demand on fresh clean water. Refining, manufacturing, mining, and most industry require fresh water in abundance for continued economic development. Problems abound when there is too much water in a short period of time or in a long period of time either contaminated or not. Louisiana Region 4 Watershed encompasses all or parts of nine parishes from northern DeSoto Parish to coastal Cameron Parish. There is a significant and growing need to generate, retain, and manage clean water throughout the region for all the above stated reasons. Clean water is a clear and critical commodity and asset the region should take cognizance of and responsibility for in developing long term health and economic sustainability.

Goals: The Primary goal is to develop a regional clean water program that generates, retains, and utilizes this valuable resource. The Secondary goal is to assess current value to the clean water commodity and manage distribution.

Purpose No. Three

Promoting and facilitating local and regional economic development integrated with watershed initiatives.

Reference: Louisiana Economic Development (LED) and U.S. Dept. of Commerce

Economic development is generally a primary objective and standard element of a community, municipal, parish, and regional comprehensive master plans. The purpose of an official plan is to provide a comprehensive, coordinated, continuous, cooperative and consensus developed vision (sometimes referred to as the "5-C Process"). Planning districts prepare and adopt Comprehensive Economic Development Strategies (CEDs) to provide focus for implementation and maximum efficiency in the use of public and private dollars. Louisiana Region 4 Watershed identified needs and planned infrastructure should not be for sole intent of flood water management but integrated with several concurrent economic development goals for the nine-parish geography. Demonstrable and quantitative programs and projects can and should be leveraged, which enhance and facilitate implementation of multiple plans simultaneously. The term economic development can encompass a broad range of definitions, but primarily the meaning is based on viability of workforce and employment growth and support. The Steering Committee for the Louisiana Region 4 Watershed is comprised of nine members representing nine parishes who determine the best mechanisms for achieving and operating the "5-C Process" which is central to and a critical element in the Watershed Region 4 "Spokes of the Wheel". Economic development is and should be a concerted effort by municipalities and parishes to influence the direction of private sector investment for sustainable growth. Infrastructure support must be sustained by profitable business opportunities throughout the Region 4 Watershed.

Goals: The Primary goal is to organize and establish a nine-parish economic development entity for purpose of facilitating, enhancing, and leveraging opportunities for scarce public resources to achieve new job creation and business/industry growth while working the "Seven Spokes of the Wheel" objectives. Secondary goal is to identify and implement multi-jurisdictional resources to support the entity and adopted objectives for plan implementation.

Purpose No. Four

Preventing and extricating repeat flooding residential structures.

Reference: Watershed Region 4 Steering Committee Meeting held November 6, 2020.

One of the primary objectives identified by the Louisiana Watershed Region 4 Steering Committee is mitigating thousands of repeat flooding residential units throughout length and breadth of the nine (9) parish district. Challenges to mitigate or replace repeat flooding housing is correlated with preventing new housing being built in flood hazard locations. Federal and state resources are sometimes available to provide funding grants for elevating residential units out of harms way or offering limited buyouts. Local funding is rarely a resource for mitigating or replacing repeat flooding housing. The Southwest Louisiana Regional Planning Commission has initiated a regional housing system with comprehensive and

resilient components that incorporate both public and private funding, manufacture, and incremental construction options for maximum flexibility and feasibility called the “Centerpiece Housing Program”. Centered on core construction units (and financing) the Centerpiece Housing Program (CHP) can be responsive to regular housing demand, context sensitive needs, affordability factors, and temporary disaster housing. Based on a Texas disaster recovery proposal called Rapido, the Centerpiece Housing Program is a significantly expanded initiative.

Goals: The Primary goal is to review and adopt a multijurisdictional housing program to remediate existing repeat flooding residential units throughout the region (CHP). The Secondary goal is to review and adopt current inventory of recognized restricted areas for new housing and the local mechanisms to support restrictions and/or prohibitions.

Purpose No. Five

Expanding and enhancing outdoor recreational opportunities

Reference – National Park Service (NPS) has a long history and experience in recreational park development nationally. Louisiana has recently published the Statewide Comprehensive Outdoor Recreation Plan (SCORP)

There are multiple factors affecting Louisiana Watershed Region 4 and flood management infrastructure is certainly a primary and purposeful one. Recent years have experienced and demonstrated a new and significant factor that can outweigh most. A Covid-19 reality check (and subsequent variants) have challenged society and local/regional economies to develop safe and affordable outdoor recreational opportunities generally and specifically. The Region 4 Watershed provides an ideal venue to potentially foster recreational development through an interconnected network of infrastructure projects and intergovernmental management. Outdoor recreation comes in various forms and can generate economic incentives to sustain a variety of business resources on land and water that has a positive effect on local employment, income, and fiscal solvency. Where there is a purpose and economic strategies there should be a plan of action. A comprehensive integrated nine parish outdoor recreation plan can and should be a foundation layer to achieving many of the goals established for the Watershed Region. Simultaneously, there are numerous prospects for instituting a variety of support services to help mitigate flooding impacts - economically. No magic formulas or miracle funding can be anticipated, but through a multitude of approaches concurrent goals are achievable. Outdoor recreation planning and development is essential and indispensable for the nine-parish region and should be incorporated into the framework of the Watershed.

Goals: The Primary goal is to develop a comprehensive outdoor recreation plan for the Region. The Secondary goal is to develop a multijurisdictional implementation strategy affecting infrastructure and operations for short-term and long-term use.

Purpose No. Six

Protecting and recharging the Chicot Aquifer.

Reference - Louisiana Sea Grant sponsored “Chicot Aquifer Groundwater Availability Study”

The Chicot Aquifer is the most important aquifer in Louisiana and a major water resource in the southwest part of the state supplying water for agriculture, aquaculture, industry, and public sector entities. Tapped by more than 2300 pumping wells, Chicot aquifer provides approximately 400 million gallons of water per day (MGD) mostly used for irrigating rice, soybean and corn fields as well as growing crawfish. Since the Chicot area is the major producer of rice in the state and Louisiana is ranked third in the entire nation for its rice, the Chicot Aquifer plays a vital role economically. Intensified water abstraction from the aquifer during the last decade has caused serious problems such as saltwater intrusion from the Gulf of Mexico and soil subsidence. These issues eventually lead to loss of freshwater resources in addition to land loss in the gulf side of the region. Focusing on groundwater modeling, Louisiana Sea Grant investigators have processed more than 30,000 well log data from three sources of electrical logs, screen information from USGS, and drillers’ logs and developed the very first complex groundwater model for the Chicot aquifer. Groundwater flow directions and patterns, recharge zones, head variations, and cones of depression in the aquifer can be identified through the groundwater model. The model can also

bring insight into saltwater fronts and recognize the areas encountering the thread of land loss. In order to further investigate water resources in the region, the groundwater model contributes to an Aquifer Storage and Recovery (ASR) project in collaboration with the University of Louisiana at Lafayette. The study links two surface water and groundwater models and aims to look for a feasible solution where saltwater intrusion encroachment and land subsidence impacts are counteracted in the aquifer system. Harvesting the surface runoff and conveying it into the aquifer system through injection wells to create a freshwater buffer is the underlying idea of the project. In addition to combating the adverse effects of water over-drafting from the groundwater system, the ASR project can help to augment the freshwater storage in the aquifer.

Goals: The Primary goal is to develop a Chicot Aquifer alternative draw initiative within the Region. The Secondary goal is to develop a Chicot Aquifer Recharge Program among multiple jurisdictions.

Purpose No. Seven

Preservation and restoration of coastal ecosystem

Reference: Louisiana Coastal Protection and Restoration Authority

Everyday Louisiana citizens are affected by our land loss catastrophe. Whether it is a family forced to leave a cherished community to move out of harm's way, a local business that has trouble obtaining insurance, or investments that lose value because of uncertainty about the future of our landscape, Louisiana's land loss disaster takes a heavy toll. Land loss in Louisiana is caused by many different factors, both natural and man-made. Levees, floodgates, and drainage canals provided national flood control and economic benefits, but these forms of waterway management have also channeled rivers, bayous, and coulees into the Gulf of Mexico, depriving the coastal ecosystem of the freshwater and sediment it needs to survive. Sea level rise, subsidence, storms, and invasive species add further stress.

The national significance of the Southwest Louisiana coast is centered on the Gulf Intracoastal Waterway, Calcasieu River Ship Channel and pipeline infrastructure providing an extensive transportation system for commodity flows to the entire world. Billions of dollars in exports, oil and gas production and distribution, waterborne commerce and commercial fisheries landings are critical economic impacts requiring resiliency and development support.

Goals: The Primary goal is to develop a Southwest Louisiana Support Program for the Louisiana Coastal Protection and Restoration Authority Plan in coastal Cameron Parish. The Secondary goal is to formulate an alternative redevelopment plan for public and private infrastructure reinvestment in coastal Cameron Parish.

Submitted to the LWI Region 4 Steering Committee on November 30, 2022.