

**Design Strategy ~~and Outline~~ for a
~~Comprehensive~~ Statewide
Water Resources Management Plan**

Draft Scope of Services

Background and Purpose

At its 2nd regular meeting on June 5th, 2013, the Louisiana Water Resources Commission (LWRC) approved by unanimous vote a resolution requesting funding for the development of a ~~comprehensive~~-statewide water resources management plan that provides for water resource stewardship and for sustainable supplies for all uses. Citing the expanded understanding of the value of Louisiana's water resources, an expected increase in demand, and a progressively more complex economic and environmental matrix ~~anchored by the needs of~~ illustrated by the recently adopted Comprehensive Master Plan for a Sustainable Coast, the LWRC established the definite need for such a long-term plan.

Much work and effort already has been poured into the creation of a viable water resources management infrastructure, and Louisiana today is much farther along the path towards responsible and pro-active management than even just 10 years ago. The purpose of this Scope of Services is not to create the fully realized plan as called for by the LWRC, but rather to establish the outline or framework for the development of this plan at a later date. This is the next step towards the refinement of a balanced, flexible program that fits within the existing management framework and provides processes for the considered development and conservation of the state's water resources to meet future needs for public supply, agricultural and industrial use, transportation, recreation, environmental and wildlife conservation, and coastal restoration and protection.

The broad concepts and specific issues inherent in such a design strategy were discussed in a LWRC workshop held in Baton Rouge on October 17, 2013. The Office of Conservation took further public comments on the subject through November 4, 2013. Below is a revised scope of services that includes suggested changes as offered through these forums

Draft Scope of Services

Phase I – Assessment of ~~Louisiana's Water Budget Planning Tools, Water Resource Demand, and Water Resource Availability in Louisiana~~

1. Identify sources of water quality and quantity information, and any gaps in data that may have a substantial impact on planning. Provide recommendations on how to account or project for the absence of such data, or otherwise remedy such deficiencies.
- 4.2. Utilizing all available, relevant, sound, and objective resources, ~~E~~establish a firm understanding of the current and projected water demands in the state for all uses (as listed above), including coastal restoration, by region and watershed.

- a. Detail what amounts and sources of water are necessary and/or achievable to meet the goals as established by the Comprehensive Master Plan for a Sustainable Coast.
- b. Assess the projected impact of these coastal restoration demands on the allocation of the state's water resources for all current and projected uses, including for economic development or navigation needs, and for sustaining ecological systems.

~~2.3.~~ Assess the sustainability of current and projected water usage in Louisiana by region and watershed, including available resources, capacity, and limitations. This assessment will include a comprehensive review of published data and research, including that found in the U.S. Geological Survey's annual state water use report, DOTD's Reservoir Priority Program report, and The Nature Conservancy's Freshwater Assessment project, among others, and will build upon work previously conducted by Fenstermaker and others.

- a. Evaluate current sustainability challenges in Louisiana and the impact of, as well as current and projected demands for water usage upon them. ~~by stakeholder groups (industry, agriculture, power generation, public supply, etc.) by building upon work previously conducted by Fenstermaker and others.~~

b. Provide projections on undersupply and/or oversupply of water resources by region and watershed based upon sustainability issues and current and projected demand.

c. Evaluate the impact of future economic growth and potential emergency situations, such as droughts or floods of a historic or established tendency in Louisiana, on water resource availability and sustainability of use by region and watershed.

~~b.d.~~ Assess competing demands for water usage in Louisiana and provide recommendations for long-term solutions both within the state's existing legal framework and with any suggested alterations to this framework based upon sound science and recognized, widely accepted management practice.

~~e.c.~~ Assess the availability of Louisiana's shared water resources with other states and ~~P~~provide specific definitions of Louisiana's rights to such shared water resources (lakes, bayous, rivers, etc.) ~~with other states,~~ along with and recommendations on articulating and protecting these rights.

Phase II – Planning and Allocation

- 1. Provide recommendations on developing a strategic interface flexible prioritization or budgeting program that will ensure resource sustainability and meets the needs for safe drinking water, coastal restoration, environmental and wildlife conservation, between

~~ground and surface water usage priorities and the needs of~~ reservoir and port development, flood protection, and economic growth. and coastal restoration.

2. Identify and assess tools and/or processes currently utilized or available for water allocation and water infrastructure development policy-making, and provide recommendations for improvements. Such tools or processes may weigh any number of factors including water demand, water level and quality requirements, minimum flows, coastal restoration priorities, environmental protection, economic development opportunities, and sustainability.
3. Provide recommendations and cost expectations for 10-, 25-, and 50-year predictive models for water use growth, resource allocation, and infrastructure development by specific region, aquifer, watershed, or priority need.
4. Provide recommendations for a feasible capital improvement infrastructure program that addresses major priorities for water resources management in Louisiana (as established in Phase I of this scope), including alternative use scenarios, incentive programs, public/private partnerships, ~~economic incentives,~~ tax levies, and other options.