

Matagorda Bay Health Study Fact Sheet

What is it?

The Matagorda Bay Health Study will assess the potential impact of the LCRA-SAWS Water Project on the health and productivity of the Bay. It is one of several technical studies being conducted by LCRA and the San Antonio Water System to evaluate the viability of the LCRA-SAWS Water Project.

What will the study do?

Scientists and engineers will research the habitat and ecology of Matagorda Bay in an effort to find relationships that help identify impacts of the Project on the Bay. The Study will develop models to help predict the potential effect of the Project on the bay's health and productivity.

How will it do that?

The Study will:

- Define what changes in inflow will result from the Project, both in the main stem of the Colorado River and tributaries flowing into marshes on the north shore of the bay. Changes in the volume, timing and location of freshwater inflows can affect conditions in the bay.
- Seek to understand any Project-induced changes in sediment and nutrients in the bay.
- Develop a model to predict salinity changes resulting from inflow changes. Inflows affect salinity distribution, which is an important driver of bay health and productivity.
- Map and characterize habitats in Matagorda Bay to provide a baseline for assessing changes in the volume and quality of inflow. Understanding the role of habitat will help provide a basis for potential enhancement of the Bay through proper water management.
- Develop statistical relationships between inflows and productivity, as measured by significant biological species, based on long term data collected by Texas Parks and Wildlife Department and other sources.

Why is the Matagorda Bay Health Study being done?

State legislation authorizing the Project provides that “beneficial inflows remaining after any water diversions will be adequate to maintain the ecological health and productivity of the Matagorda Bay system.” This and other legislative

criteria require the Project to protect and benefit the lower Colorado River Watershed if it is to go ahead.

No widely accepted methodology exists for determining the impacts of projects such as the LCRA-SAWS Water Project on Matagorda Bay. The Bay Health Study will provide a more complete understanding of the bay ecosystem and how changes in freshwater inflows might impact it than previously available.

What's the schedule?

The Bay Health Study began in mid-2004 with an extensive evaluation of available data and models and development of a comprehensive approach to assessing potential effects of the Project. Technical analysis began early in 2005 and will continue until late 2006. Evaluation of Project alternatives will be conducted into mid 2007, with permit applications to follow.

What about the technical integrity of the studies?

LCRA has assembled an independent group of estuarine experts who serve on the Project's Science Review Panel. This Panel regularly reviews and comments on the design and implementation of the Project, including the Bay Health Study. In addition, several government agencies have reviewed the Bay Study approach and will be involved in issuing various permits.

How can I provide input on the Bay Study?

You are invited to participate in regularly scheduled meetings of the Advisory Group of the LCRA-SAWS Water Project and the Sub-Group on Bay Health. Please sign up for these groups and get regular updates at www.lcra.org/lswp.