Environmental Stewardship

Re: LCRA Water Management Plan (WMP)

Deputy Director Stepney, Ms. Alexander and TCEQ Staff.

As Lyndon Johnson once said, "Saving the water and the soil must start where the first raindrop falls." Most of my comments are directed toward seeking to have that vision be a guiding principle in the development of the LCRA's Water Management Plan.

Management of the Colorado River basin in a manner that will sustainably provide for the human and environmental needs of the basin will require a broader and more ecologically sound platform. We must find, and agree upon, a new paradigm. In 2013 a working group convened with the specific objective of developing water planning and management principles (Attachment 1 of my letter). Environmental Stewardship was a signatory to the resulting principles and those principles form the foundation of our comments today and in our letter which was submitted electronically yesterday.

Environmental Stewardship has attempted, through our letter, to provide you with enough documentation of our concerns to make it worthwile for you to make further investigations to confirm or refute our findings. I hope the testimony of others will futher encourage you to conduct such reviews.

Our findings show that:

- A1. External factors have had catastrophic impacts on the basin:
- A2. The extent and severity of this drought is, for the most part, man-made:
- A3. Conjunctive management of the natural resources of the basin is needed:
- A4. Environmental flows are essential:

To address these issues, Environmental Stewardship urges the TCEQ and LCRA to jointly provide the leadership necessary to recognize, understand and address the critical issues facing the basin by taking the following steps:

- B1. <u>Investigate rainfall and rainfall trends over the contributing</u> watershed:
- B2. Investigate land use practices and trends in the contributing watershed:
- B3. Incorporate groundwater into the water management plan:
- B4. Incorporate conjunctive management of land, surface water and groundwater into the water management plan:
- B5. Guarantee essential environmental flows to the Colorado River

 Basin and Bay in the water management plan.

A1. External factors have had catastrophic impacts:

Data are presented that shows that rainfall in the contributing watershed is up as much as 20 - 30% while inflows to the Highland Lakes are off by as much as 55%.

This drastic reduction in inflows has had *catastrophic* impacts on the Highland Lakes, the economy of the basin, FIRM and interruptible customers, and on the environment.

Simply stated, rainfall in the watershed is not being converted to inflows to the Highland Lakes. Rainfall, therefore, is not the entire problem, nor the ultimate solution to the challenge of managing the Highland Lakes system and the basin.

The current drought has also demonstrated that the current WMP has not adequately addressed external factors such as changing land use practices, the lack of brush control, increases in irrigation, small surface water impoundments, and other practices that have combined to have catastrophic impacts on the basin.

If left unchecked and unmanaged, these factors will sabotage any attempt to meet the WMP's objectives.

A2. The extent and severity of this drought is man-made:

The drought has demonstrated that, though the lack of "normal" rainfall has brought us to this condition, the extent and severity of the current drought is likely significantly worse due to man's management practices just mentioned,

and engineering problems such as oversized water treatment and distribution systems that cannot function properly during low-flow drought conditions.

Further, we need to ask the question, is it reasonable to expect that water supply will be adequate in drought and severe drought conditions to enable the supply and use of the same amount of water for FIRM customers as these customers receive during wet conditions? There needs to be a means of recognizing and supplying "essential needs" while reducing and/or eliminating non-essential uses that many consider wasteful during drought conditions.

A3. Conjunctive management of land, surface water and groundwater is needed:

If the conditions just discussed are found to have led to significant impacts on the extent and severity of the drought in the basin, then there is direct evidence of the need to conjunctively manage the land, surface water and groundwater systems of the basin.

Operating each system in an isolated "silo" has resulted in unanticipated, and unwanted impacts on the basin that were not considered in the previous WMP, and are not anticipated in the current WMP. Recognizing that these systems are intimately connected is the first step in managing the entire system for the benefit of the people, businesses, cities, and environment. The "Highland Lakes" are not a "silo system" that can be managed without regard to the impact of its management on other systems "outside the silo", and likewise the impact of "other silos" on this system.

Conjunctive management will be complicated given the governance structures in our state. But the first step must be to get the two regulatory entities working together: river authorities and groundwater conservation districts (GCD); in this case LCRA and multiple GCDs.

Land use practices need to be included in the management strategy. As Lyndon Johnson once said: "Saving the water and the soil must start where the first raindrop falls." With 95% of the land in the state privately owned, it is essential to develop a meaningful working relationship with the landowners and the state agencies associated with land management.

We recognize that conjunctive management will require decision-making outside the jurisdiction of the LCRA (except for systems managed wholly by LCRA). To manage at this level will require a management structure that enables multi-agency decision-making with individual implementation.

A4. Environmental flows are essential:

This WMP must guarantee a solid base of environmental flows to meet the essential flow needs of the river and bay. The TCEQ has established environmental flow standards for the Colorado River and Matagorda Bay. Subsistence and threshold environmental flow levels have been established as the essential levels to provide a safety net for river and bay health during periods of low flow.

The Legislature has spoken on this issue and has established that "maintaining the biological soundness of the state's rivers, lakes, bays, and estuaries is of great importance to the public's economic health and general well-being." The Legislature established environmental flows as the means to provide "the freshwater flows necessary to maintain the viability of the state's streams, rivers, bay and estuary systems."

As such it is necessary and appropriate that the LCRA WMP guarantee essential instream and freshwater inflow needs

The stakeholder process last summer led to very minor improvements in attainment frequency for environmental flows for the bays during drought conditions. The bay and estuaries are still at significant risk.

Statistically, attainment of threshold flows is only at 86% and bay salinity is above the target for 17 consecutive months during a repeat of the DOR.

A stated objective of the WMP is to "provide threshold flows to the bay every month. " This plan does not meet that objective. We must do better."

Now is the time to do the work necessary to ensure that *essential* environmental flows are protected in the WMP.