

By hand at Joint Planning Meeting and by email

District Representatives
Groundwater Management Area-12
Post Oak Savannah GCD
Fayette County GCD
Lost Pines GCD
Mid-East Texas GCD
Brazos Valley GCD

Re: Data and information regarding groundwater-surface water interactions between the Carrizo-Wilcox Aquifer Group and the Colorado and Brazos river basins.

Dear District Representatives:

Environmental Stewardship hereby provides District Representatives of the Groundwater Conservation District's composing Groundwater Management Area 12 with data and information contained in the attached paper to be considered under Section 36.108(d)(3), (4) and (7) of the Texas Water Code. Environmental Stewardship further requests that the District Representatives provide a response to Environmental Stewardship discussing the reasons why these public comments are or are not incorporated into the next revision of the desired future conditions as provided under Section 36.108(d-3)(5) of the code.

The attached paper, "Review of Groundwater-Surface Water Interactions between the Carrizo-Wilcox Aquifer Group, the Colorado and Brazos Rivers" documents that these rivers are "gaining" streams, and that these rivers are threatened by the planned pumping of the GMA-12 Districts. The paper concludes (in part):

The Colorado and Brazos rivers gain water from the Carrizo-Wilcox and related aquifers as they flow over aquifer outcrops, seeps, and springs that contribute water to the rivers. However, groundwater pumping, as contemplated in Groundwater Management Area 12's adopted Desired Future Conditions, threaten to reverse the "gaining" relationship of the river making it a "losing" stream by mid-late this century. This has implications on management of the Highland Lakes and threatens the water flows in the river and into Matagorda Bay during extreme drought conditions. Water budgets and MODFLOW analyses of the GMA-12 DFC/GAM tend to support the likelihood of this trend.

Though a substantial body of literature, both published and unpublished, has been provided to the groundwater conservation districts in Groundwater Management Area 12 to substantiate these findings, they continue to ignore such information claiming that they do not have adequate tools to inform sound management practices. The following recommendations are intended to improve on this situation:

RECOMMENDATIONS

- 1. Review recharge and precipitation assumptions in GMA-12 DFC GAM.
- 2. Collect Base flow gain/loss data to calibrate GAMs and WAMs.
- 3. Use GAM MODFLOW data to inform WAM analyses.
- 4. Improve GAMs and WAMs to include more robust groundwater-surface water interface.
- 5. Designated the Colorado River alluvium as a minor aquifer.
- 6. Monitoring to provide early warning and adaptive management.

Environmental Stewardship and its supporters look forward to having an ongoing dialogue with the District Representatives regarding these issues. We believe the information provided represents a substantial body of information that has not been fully evaluated by the District's of GMA-12. Thank you for your attention to these important issues.

Respectfully submitted, Environmental Stewardship

Steve Box

Executive Director

Attachment: Review of Groundwater-Surface Water Interactions between the Carrizo-Wilcox Aquifer Group, the Colorado and Brazos Rivers

Environmental Stewardship is a charitable nonprofit organization whose purposes are to meet current and future needs of the environment and its inhabitants by protecting and enhancing the earth's natural resources; to restore and sustain ecological services using scientific information; and to encourage public stewardship through environmental education and outreach. We are a Texas nonprofit 501(c) (3) public charity headquartered in Bastrop, Texas. For more information visit our website http://Environmental-Stewardship.org/.