

# Proposed Desired Future Condition(s) for Aquifer(s) in GMA 12

Environmental Stewardship

Requesting that water budgets be used in  
presenting "recharge" scenarios for the next meeting.

Consideration 3

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**Proposed Desired Future Condition(s):** Environmental Stewardship has but one interest in this GMA-12 DFC review process; to protect the integrity and functioning of the ecological systems that form the basis of the Colorado and Brazos river basins and the Carrizo-Wilcox and associated aquifers for current and future generations. **In conformance with the Conservation Amendment of the Texas Constitution, it is the duty of the Texas Legislature and Groundwater Conservation Districts to conserve and preserve the natural resources of the state -- our groundwater, our rivers, our springs, and our ecosystems -- by passing laws, rules, and for the purposes of this effort, adopting desired future conditions, that achieve a balance between conservation and development of those resources *in perpetuity*. To protect our aquifers as we found them while respecting the ownership rights of landowners. Though the ability to preserve an aquifer for future generations is not totally in our control -- its rate of replenishment, and its hydrologic characteristics, are largely a function of Mother Nature and must be accepted and respected - - development of an aquifer, and ultimate depletion of an aquifer and/or the surface water and ecosystems which depend on groundwater, *is the voluntary human action in which we are currently engaged.***

The essence of conservation and preservation of an aquifer resource is that the rate at which we deplete our aquifers must be in balance with the conservation of the aquifer. That the depletion not be driven only by the desire for development, against which we simply wait for damage to the aquifer's sustainability before attempting to bring it back "in balance". Only as a bright "conservation standard" describing a sustainable aquifer is established -- an aquifer that is preserved in perpetuity -- can we then determine how much of that aquifer we can develop in balance with the conservation standard. Conservation and protection of an existing aquifer for the *common good of future generations* must be the priority, not the *development* of an aquifer to satisfy every current and speculated human demand on it. Civilizations that have disappeared have failed to realize this distinction when they exploited natural resources.

**ES recommends that the GMA-12 districts debate and adopt its own version of this conservation standard to guide in adopting desired future conditions during this cycle.**

Please be as detailed as possible in describing your proposed DFC. Include the quantifiable value and a description of the method for measuring or calculating the value. Attach additional pages as needed.

Aquifer	Proposed DFC and Measuring/Calculating Method
Carrizo Aquifer	
Calvert Bluff Aquifer	
Simsboro Aquifer	
Hooper Aquifer	
Queen City Aquifer	
Sparta Aquifer	
Yegua-Jackson Aquifer	
Brazos Alluvium Aquifer	
Colorado Alluvium Aquifer	

## Consideration of Proposed Desired Future Condition(s)

The Texas Water code requires that the GMA develop DFCs that “provide a balance between the highest practicable level of groundwater production and the conservation, preservation, protection, recharging, and prevention of waste of groundwater and control of subsidence in the management area.” In the space below, or on additional attached pages<sup>1</sup>, please provide your considerations with regard to the nine items that must be considered, per the Texas Water Code, for the proposed DFC(s).

CONSIDERATION 3 – “Hydrological conditions, including for each aquifer in the management area the total estimated recoverable storage as provided by the executive administrator, and the average annual recharge, inflows, and discharge:”

Environmental Stewardship appreciates that GMA-12 is now in the process of developing the “pumping file” to inform the new up-dated GMA-12 GAM. We also appreciate that the GMA-12 Representatives have instructed the consultants to run pumping scenarios that include several “recharge” model runs to evaluate how pumping during extreme drought conditions impact the availability of groundwater. The current model uses only/simply the “average” of recharge over the entire planning cycle. The consultants have been authorized to make and present six runs (3 pumping levels x 2 recharge levels) that apply “average” and some form of Drought of Record (DOR) recharge to the “pumping” file. The pumping files are 1) permitted pumping, 2) “ramp up” estimated by each GCD, and 3) 50% of ramp up.

Environmental Stewardship wishes to support the instructions from the diesis that the outputs from the six pumping runs be presented in the format of water budgets. We are requesting that the water budgets be presented in the same or similar format as used to present the PS4 runs at the May 28, 2015 meeting. The water budget format provides essential information necessary to get a through understanding of how the model is handling inflows, outflows and changes in storage during the pre-pumping calibration period and as a result of pumping in the post-calibration period.

CONSIDERATION 4 – “Other environmental impacts, including impacts on spring flow and other interactions between groundwater and surface water:”

CONSIDERATION 8 – “The feasibility of achieving the desired future condition:”