



LCCN Remarks to Board of Lone Star GCD¹

January 28, 2015

As spokesman² for the Lake Conroe Communities Network (LCCN), I am here to lend support to those who are calling for a formal delay in the passage of any amendments to existing rules and regulations.

Introduction

Since 2007, LCCN has been educating, advocating for and championing the community's engagement in water resource management. In 2014 well over 500 members of our Greater Lake Conroe Region community, including many people in the audience here today, attended our election forums to hear and dialog with candidates on their views. LCCN's forums and workshops this year will engage our community in education by dialog with experts on the details, status, issues and needs surrounding water resource management. Interest and frustration with this subject continues to run very high. Accordingly, we are planning for multiple venues to accommodate what we anticipate will be participation by Upwards of a thousand members of our community. My comments today reflect the knowledge LCCN has acquired and organized in preparation for this series. In its efforts, it has worked closely with experts, community managers and government representatives throughout our region, many of whom are in the audience today.

LCCN believes strongly that current rules and regulations need to be revised. However, as currently written, proposed changes:

- WILL NOT actually contribute to the health of our aquifer system;
- WILL severely damage the economic development health of the Greater Lake Conroe Region and all of Montgomery County

We see NO immediate problem or crisis that that would be exacerbated by a delay to allow responsible further discussion, real collaboration and community-wide consensus around a revised set of rules.

¹ The Rules and Bylaws Committee of the Lone Star Groundwater Conservation District (GCD) hosted a public workshop dedicated to receiving public input on the pending proposed amendments to the District Rules and District Regulatory Plan.

² Dr. Michael J. Massey, Treasurer and Director, Lake Conroe Communities Network.



Framing of Regulatory Proposals Flawed

As the GMA14 that Lone Star chairs makes clear in its Desired Future Conditions (DFC) Resolution of August 2010,

“DFC is primarily an **aquifer water-level** based approach to describe the regional local desires for the aquifers beneath them.”

As a result, proposed amendments are organized around:

- Actual measurements of only the single parameter of well water levels to characterize conditions in our groundwater systems;
- Reliance on mathematical modeling for the other parameters that are required;
- Capping of aquifer water levels and water production at or near current levels for the next 50 years.

LCCN believes that this is the wrong approach and that it has led to

- Focus on problems the region does not have
- Formulation of a narrow resource management strategy that does not reflect the actual status of our groundwater water resources and their true capacity to responsibly meet the economic development needs of our region.

Targeted Problems, Urgency Misguided

Lone Star’s consistent messaging since its formation in 2001 has been that Montgomery County and the entire GMA14 has, in their order of importance, two problems

- Subsidence
- Depletion

and that both are already at critical crisis levels that compel IMMEDIATE AND DRACONIAN regulatory action:

- Capping of aquifer static water well levels and
- Limiting of aquifer water production rates to a known and fixed recharge rate.

From the beginning their umbrella summary for these actions has been: regulation of the region’s aquifers to their sustainable usage rate.

LCCN and everyone it has consulted with contend that Montgomery County does not have a subsidence problem and that the County’s Greater Lake Conroe Region has no potential to develop one. Accordingly, well water level capping – a major longstanding component of aquifer management in the subsidence districts to the south of us – is not applicable to aquifer management in our County. Currently fully 2/3 of Montgomery County groundwater (virtually all in the Greater Lake Conroe Region) comes from deep aquifers, notably the Jasper. Virtually all population driven demands for more groundwater use



will be met from deep aquifers. Development of deep aquifers (750 to >3,000 ft) such as the Jasper pose no threat of subsidence.

LCCN and everyone it has consulted with do not see any, let alone actionable, evidence of depletion as a problem in the County's aquifer system. To the contrary, we all see a robust and healthy system blessed with enormous untapped capacity that needs to be and can be used responsibly by Montgomery County to fuel job creation and the achievement of the region's full economic development potential. Accordingly, no one sees the basis or logic for regulation that restricts production from the County's aquifers, particularly its deep aquifers like the Jasper. There is NO evidence that any measurable depletion of the Jasper aquifer has yet occurred. We have plenty of time to develop a meaningful monitoring program and establish early warning of any impending significant depletion of each of our aquifers including the Jasper. Until then, considering the enormous negative impacts on economic development, no action to control aquifer use is justified.

Fears Regarding Usable Storage and Recharge Unfounded

Despite steadily increasing evidence to the contrary over the years and without specific peer reviewable counter evidence of its own, Lone Star has taken and held firmly to the position that:

- Safely useable component of our aquifer system is extremely small (< 0.5%),
- Current usage is already stressing that usable component of the system;
- Sustainability requires that future usage be capped at fixed rates claimed to be the replenishment or recharge rates of the aquifer system.

LCCN and everyone it has consulted with finds Lone Star's position seriously if not fatally flawed. And the scale of its negative impact on the availability of the true capacity of the County's aquifer system has in no way been properly measured and accounted for.

Responsible evidence is now overwhelming that current, usable Jasper water storage under Montgomery County conservatively exceeds by a factor of at least 50 any reasonable 20 year projection of future, unregulated groundwater production. And until there is a measurable and monitored evidence of downward movement in aquifer outcropping water levels, there is no evidence to suggest that any actionable imbalance has yet occurred or will develop in the future between continued, unrestricted aquifer production and natural recharge. Only a permanent, well-conceived long term program of aquifer outcrop zone monitoring and analysis will provide the evidence first to assert a stress and then to define a meaningful regulatory response.

Interpretations/Fears of Declining Well Water Levels Misguided

Lone Star relies on static water level data from the USGS for its monitoring of the health of aquifer well systems. It interprets clear long-term downward trends in water levels across the County's well systems as evidence of stress and the unsustainability of current let alone a future that would involve expansions of current production operations.



LCCN, and everyone else it has consulted, finds reliance on a single parameter for assessments and control of well and aquifer operations at best misguided at worst fraught with the potential for completely erroneous conclusions. In its research for its education series, LCCN recently collaborated with the City of Conroe – it operates the largest Jasper aquifer based well system in the County – and with Walden’s MUD 8 to gather and analyze operating data on an expanded set of parameters that more realistically would enable assessment of the health and safe and practical expandability of their well systems. In addition to static well water levels, these data included water production data, drilled maximum operating well water level potential and estimated maximum potential well production depth should revamping of current well depths be justified in the future. Results make clear that the region’s major well systems:

- Are operating robustly, reliably and with resilience, with no signs of operating stress at current water levels of about 350 to 450 ft
- Have the existing bored well capability to double and in some cases nearly triple current operating water depths in response to steadily rising needs for increased water production
- Have total productive aquifer depths that would support revamping of existing wells to further expand maximum operating depths.

In effect, there is no evidence that either current well water operating depths or continued major expansions those depths to meet rising County water demand pose ANY threats to the safe and responsible use of the County’s aquifer system. Lone Star needs to expand its operating parameters and analyses to form a more meaningful well system and aquifer monitoring program and refrain from proposing regulations until there is clear evidence of the stress that calls for and that regulation will specifically resolve.