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## **The History and Issues Associated with MUD's and WCID's**

Municipal Utility Districts (MUD's) and Water Control and Improvement Districts (WCID's) have been a growing concern for the communities of the Texas Hill Country. There are several problems associated with MUD's and WCID's that impact the quantity and quality of resources from the Edwards Aquifer and the Trinity Aquifer. The following narrative discusses what exactly MUD's and WCID's are, the specific problems associated with them, and the recommendations to the legislature that could help alleviate some of these problems.

What exactly are Municipal Utility Districts(MUD's)? MUD's are a type of conservation and reclamation district that were created under the Conservation Amendment which was passed by Texas voters in 1917. This amendment gave the Texas Legislature the power to create these districts for purposes such as flood control, irrigation, and water supply. The Conservation Amendment also declares that the conservation and reclamation of Texas water are "public rights and duties." At this time, the main purpose of the MUD's was to assist residents who lived in unincorporated areas where no water and sewage or utility district existed. Several decades after the Conservation Amendment was passed, the Texas Legislature created several Municipal Utility Districts around the state. Most of these first MUD's covered multiple counties and were organized by watersheds and other natural features. In the early 1970's, the Texas Legislature began creating districts that only covered a single land owner's property. From the 1970's to the present, most MUD's have been created for the sole purpose of assisting developers in suburbanizing areas.

More than 1,000 Municipal Utility Districts have been created through voter approved bond elections. To regulate the creation of these districts, the Texas Legislature created a process by which the Texas Commission on Environmental Quality (TCEQ) approves the creation of the MUD's. The TCEQ approves the creation of the MUD after a petition is submitted and reviewed. Then, if a neighboring property owner, county, or other adjacent municipality objects to the creation of the district, an opportunity for an administrative hearing before an administrative law judge is given. The TCEQ is responsible for the general supervision and oversight of the districts; however, once a MUD is established, it functions as a separate governmental entity without any oversight from the TCEQ.

MUD's provide a number of different services to their residents. MUD's engage in the supply of water, conservation, irrigation, drainage, fire fighting, solid waste collection and disposal (including recycling activities), wastewater treatment, and recreational facilities, such as parks and pools. MUD's can require their customers to use their solid waste services as a condition for which they receive other MUD services. A MUD may also provide solid waste and recycling services through a private company other than itself. Even though MUD's are allowed to develop recreational facilities, they are prohibited from issuing any bonds to pay for these facilities.

Chapter 54 of the Texas Water Code specifically states each purpose for why a MUD should be created. They are as follows:

- 1. the control, storage, preservation, and distribution of its storm water and flood water, the water of its rivers and streams for irrigation, power, and all other useful purposes;*
- 2. the reclamation and irrigation of its arid, semiarid, and other land needing irrigation;*
- 3. the reclamation and drainage of its overflowed land and other land needing*

- drainage;*
4. *the conservation and development of its forests, water, and hydroelectric power;*
  5. *the navigation of its inland and coastal water;*
  6. *the control, abatement, and change of any shortage or harmful excess of water;*
  7. *the protection, preservation, and restoration of the purity and sanitary condition of water within the state; and*
  8. *the preservation of all natural resources of the state.*

Similar to MUD's are Water Control and Improvement Districts (WCID's). These districts were authorized by the Texas Legislature in 1925 and 1927 and have been organized under either the 1917 Conservation Amendment or the 1904 Amendment. WCID's that have been organized under the 1917 Conservation Amendment are allowed to engage in flood control, irrigation, drainage, reclamation, preservation of water resources, development of forests, development of hydroelectric power, navigation, and prevention overflows. Other WCID's are organized under an amendment in 1904 which limits them only to be able to provide irrigation, drainage, navigation, and prevention overflows. Similar to MUD's, WCID's also have an elected board of five directors who oversee the districts' activities. If a WCID grows to encompass more than 30,000 people and an estimated real estate value of \$50 million, then it may become a municipal district.

By definition, municipal utility districts and water control and improvement districts seem to be very beneficial to the areas they serve.

Once a MUD or WCID is created, the state law gives the district power to establish whatever authority, rights, and duties it feels necessary in order to accomplish the purposes for

which it was created. These powers include the right to incur debt, to levy taxes, to charge for services and adopt rules for those services, to enter into contracts, to obtain easements, and to condemn property.

Unfortunately, there have been several different problems that have resulted from the creation of MUD's and WCID's in the state of Texas. Most of these problems come from their use in funding large scale development projects. The main point in understanding why MUD's and WCID's present such a problem to the Texas Hill Country is because they are completely developer-driven. The structure by which MUD's and WCID's are created for developers leaves the community with several different financial burdens. Developers are constantly seeking different ways to lower their investment. A common method for developers is to build MUD's and WCID's using old and less efficient technology in order to lower the cost of the development. Once the developers make their money back from the MUD or WCID, they pass down the district to the community whether it was built well or not, or buy lower technology. In the case of the poorly built districts, the community is then left with the financial burden to operate and maintain the cheap, less efficient MUD's and WCID's created by the developer.

Another reason why developer-driven MUD's and WCID's present a problem to the Texas Hill Country is the sheer size of the communities that are being developed. Many of these developments have high density and are located in environmentally sensitive areas. One of these areas is Kendall County which is experiencing high density developments that have already been causing strained groundwater resources. Kendall County has had five proposed MUD's by five different developers. According to the Guadalupe-Blanco River Authority, the new development could add over 7,200 water connections in the county.

The increased development in the Hill Country is affecting the availability of groundwater resources. Milan J. Michalec, President of the Kendall County Well Owners Association, believes the developments taking place in Kendall County may exhaust the available groundwater. According to the Regional "L" Plan, the total estimated groundwater available for production in Kendall County is 4,840 acre feet per year (acft/yr.). The City of Fair Oaks Ranch reports operating 33 wells in the Cow Creek level of the Trinity Aquifer and estimates the demand for these wells is 674 acft/yr. The Bexar Metropolitan Water District produces and delivers an estimated 1,095 acft/yr. from wells drilled into the Trinity Aquifer. San Antonio Water System (SAWS) began pumping from Oliver Ranch/BSR well fields in 2002, which is the first source of non-Edwards water for the City of San Antonio. In 2003, SAWS estimated pumping 1,668 acft/yr.; while in 2004, it increased to 3,738. The total estimated sustainable production from this part of the Trinity Aquifer has been calculated to be 5,000 acft/yr. Therefore, if production continues and demand increases over this area, the needs for rural groundwater consumers will be sacrificed in order to serve the growing municipal systems.

Much more groundwater is pumped from the developments with higher density, and this produces more effluent that needs to be treated. Since developers are constantly looking for new ways to save costs, they do not invest any more money than they need to for treating and disposing wastewater. Several of these MUD's and WCID's are releasing or are seeking to release treated effluent into creeks such as Bear, Cibolo, and San Geronimo, which all drain into recharge zones for the Edwards Aquifer.

The recharge zones of the Edwards Aquifer are where there are holes in the creek that go down into the aquifer. Watersheds of the streams that eventually flow to the recharge zone contribute additional water to the streams, then go down into the aquifer. Therefore, the quality

of the water that flows to these recharge zones affects the quality of the water in the Edwards Aquifer. As development increases along the sensitive recharge zones, there is going to be less and less clean, clear, crystal water unless developers are extremely careful.

An example of this can be found with the development of Belterra in Hays County. The community of Belterra currently has 450 houses built, and treated effluent is dripped into the soil under a “no discharge” zone with TCEQ. The developers are hoping to build an additional 2,300 houses. In order for this to happen, the Hays County WCID #1 is seeking a permit from the TCEQ to be able to treat and discharge 800,000 gallons of effluent every day directly into headwaters and/or banks of Bear Creek. Whether through the creek’s recharge to the groundwater, the faulty plant design, system malfunction, or human error, the Hill Country Alliance believes that this poses a risk to the drinking water of both Trinity and the Edwards Aquifer. They also believe it will affect the balance of aquatic life, the recreational enjoyment already provided by Bear Creek, and the value of all the properties along the creek’s banks.

Medina County is another area of concern for the Texas Hill Country. BP Real Estate Investments is planning on developing a subdivision called Hills at Castle Rock that will have 3,000 homes over 1,766 acres. This development has perpetuated the fears that the Trinity Aquifer will be depleted. However, it is once again the developers’ plan to release treated effluent that has brought up much more distress. The developers are seeking a permit to release 225,000 gallons of treated effluent in ponds on site and also in the San Geronimo Creek which runs across the Edwards Aquifer Recharge Zone. The actual development is only 11 miles away from the recharge zone, so run-off from this 1,766 acre development will most likely make its way into the Edwards Aquifer.

Another very serious concern for the Texas Hill Country is the power given by the legislature for some MUD's to be able to annex territories outside its territory and then divide the territory into two districts and create another MUD for more development. This is a problem because the new MUD's are not created by the legislature or by TCEQ where proper public notification is made. This has already happened with the Bright Family's Castle Hills Development in Denton County with its Fresh Water Supply District #1. This area has contributed to a vast amount of high density development. In this area, developers pay money for a few people to live as residents in unincorporated areas of the special districts so they are the only ones who vote for the creation of the new MUD. In the eastern part of Denton County, there were three trailers clustered together that voted on \$71 million dollars worth of development. It is clear that future homeowners will be repaying the bonds through property taxes long after the original voters have moved on. About twelve of these MUD's that have been created by the legislature and have these additional powers exist. The ability for a MUD to annex territory and create a new MUD for additional high density development poses a very significant threat to the Texas Hill Country due to its sensitivity discussed earlier.

MUD's also have the power to build recreational facilities such as parks and swimming pools. These MUD's also have the ability to build roads under road district powers. In the past, developers paid for these facilities and then incorporated the cost into the price of the homes. MUD's are now incorporating the facilities' price, both in the value of the house, and through property taxes. In essence, the developers are getting paid twice for these developments and are operating at very low risk since people are going to want to move into an area if it has an Olympic size public swimming pool.

Some people believe that little concern should be made about the disposal of treated effluent by MUD's and WCID's because they are confident that the rules that TCEQ has in place to protect the Edwards Aquifer will be sufficient. Charles O'Dell, President of Hays CAN, thinks otherwise. O'Dell believes that the TCEQ is one of the poorest examples of enforcing public health. O'Dell argues that the agency is under-funded and unorganized. TCEQ relies on information from licensed engineers who are bound by a code of ethics. O'Dell says that, since the engineers are bound by the code of ethics, TCEQ will quickly approve certain permits that are requested by engineers hired by the developers. O'Dell also explains how developers will sway public policy in their favor through financial contributions to the legislature and the governor's office. There are too many high density MUD's and WCID's in the Texas Hill Country that are being proposed along with many troubles associated with them. Given the problems that exist, what recommendations can be made for this coming year's legislature?

One solution to problem is preventing a MUD or WCID from being created. According to the Texas Water Code, the seven-county area known as the Hill Country Priority Groundwater Management Area (PGMA) must form local groundwater conservation districts in all portions of this area. Travis County and northwest Comal County both have not done so, and this would create Comal County's first WCID for the specific purpose of developing Johnson Ranch. Regarding this, Milan J. Michalec recommended that the designation process be completed for the Hill Country PGMA and that they proceed to establish the Groundwater Conservation Districts.

Regarding the risk that these proposed MUD's and WCID's have on the groundwater resources of the Hill Country, Milian J. Michalec believes that the approval process should reflect the hydrological relationships the areas have on the Trinity and Edwards Aquifers instead

of using political boundaries. Michalec also suggests finding a process in which groundwater resources are shared by both urban and rural (domestic and livestock wells) areas. As for the proposed MUD's in Kendall County, Michalec suggests that guidance must be developed that compels a Wholesale Water Provider, such as the Guadalupe-Blanco River Authority, to work with local elected officials before water is promised to developers.

For Charles O'Dell, the answer to improperly run, less efficient MUD's and WCID's is a fairly simple one. There needs to be a way to have effective public policy, ordinances, and rules so that the developers and the community are on the same playing field. This may rely on funding to improve TCEQ's practices or to institute some new type of agency.

Another good recommendation came from a Lerin Hills development hearing on 10-31-06. The Lerin Hills' developers want to release treated effluent into Deep Hollow Creek. Rick Wood, a senior vice-president at Pape-Dawson which has been in the forefront of developing land over the Edwards recharge zone in Bexar County, was in attendance at the hearing. Wood lives downstream from Deep Hollow Creek and asked the TCEQ staff whether any studies were conducted to determine any baseline data to evaluate the impact of the imposed treatment plant. The TCEQ staff said that no such studies were done, and they were relying solely on aerial photography and formulaic models to evaluate the permit application. This begs the question of how TCEQ can evaluate the impact of groundwater in these areas from aerial photography. More efficient studies need to be done in the developments in the Hill Country because these areas are so environmentally sensitive.

Sarah Baker's (attorney for SOS Alliance) recommendations for these problems with MUD's and WCID's is straight and to the point. The legislature can let MUD's annex territories into their MUD's but must restrict them from creating new districts. The legislature must deny

MUD's the ability to apply for direct discharge permits, and there should be restrictions placed on the recreational facilities that are being developed.

The Texas Hill Country is a very sensitive landscape that needs more protection from Municipal Utility Districts and Water Control and Improvement Districts through the legislative process and through public policies. Hopefully, this report will give some insight into some of the concerns about MUD's and WCID's in the Texas Hill Country, and what can be done to alleviate the problems associated with them.

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Interviews Conducted with:

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Sarah Baker, SOS Alliance Attorney