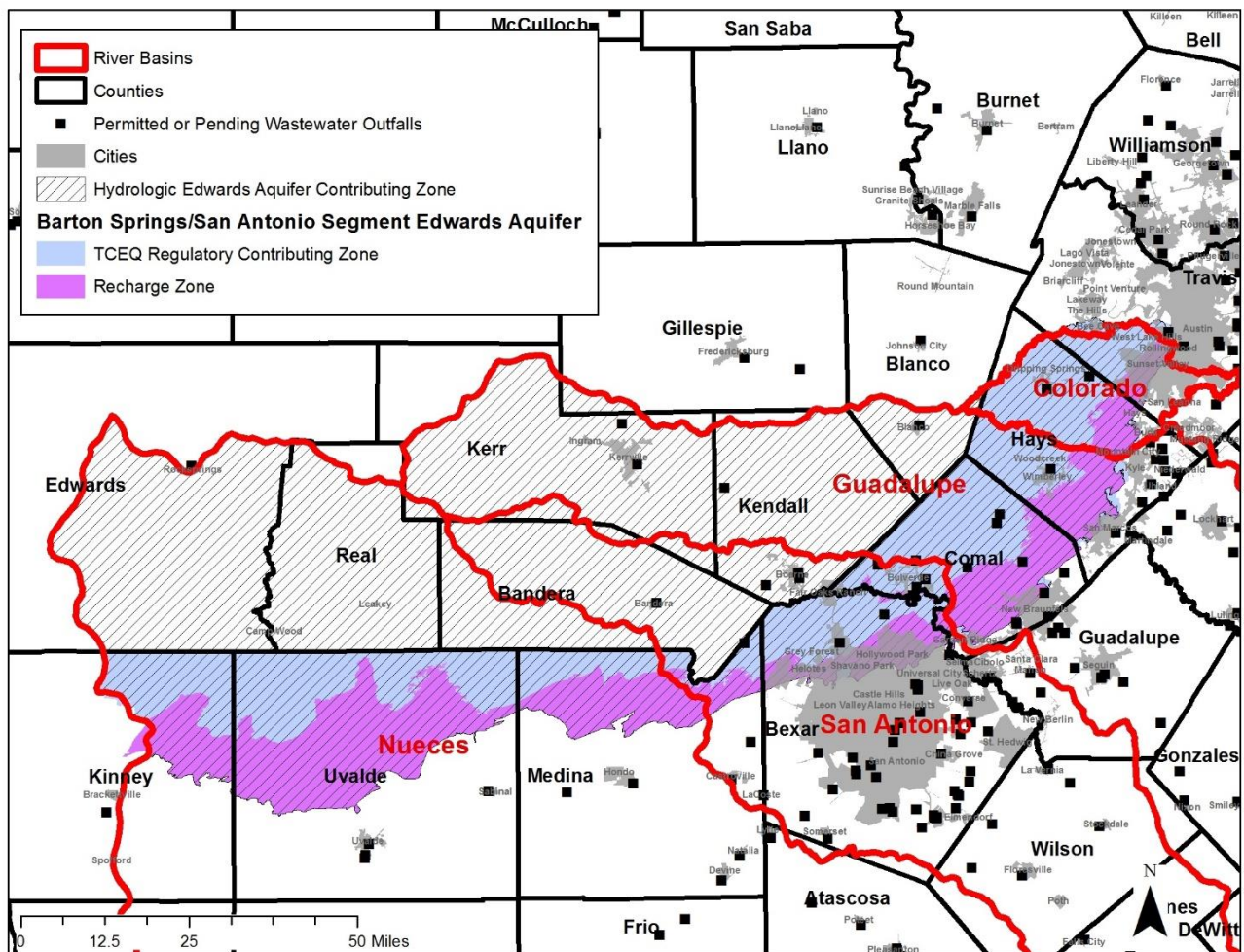


Wastewater Discharge Regulations and Impacts on Surface Waters and Edwards Aquifer Recharge in the Texas Hill Country

OVERVIEW: The surface waters of the Texas Hill Country are of world renowned quality, providing exceptional recreational opportunities for Texans, young and old, local and statewide. These waters are a major component of the value of ranches, parks, and local communities through which these surface waters flow. Unfortunately, current government action can impose wastewater (sewage system) discharges within these Texas Hill Country waters, resulting in profound degradation in water quality, severe damage to waterfront property values and diminished recreational opportunities. In turn, these surface waters are the primary source of recharge of Edwards Aquifer through cracks in limestone riverbeds. Scientists confirm surface waters degraded by sewage system effluent also degrade the Edwards Aquifer, threatening pure water supplies. In 2017 Senate Bill 1796 (Menendez) and House Bill 3036 (King) proposed to end wastewater discharges in streams and rivers in the Contributing Zone of the Edwards Aquifer and, by amendments, replace the outmoded practice with land applications systems recycling and reusing wastewater effluent.

Map of Area Impacted by H.B. 3036



KEY POINTS:

- 1. The Edwards Aquifer (and the interconnected Trinity Aquifer) are critical sources of pure water supplies for ranchers and communities in the Texas Hill Country.**
 - Many central Texans rely on wells in the [Edwards Aquifer](#) as their sole source of drinking water.
 - [Recently defined areas](#) which recharge the Trinity Aquifer occur in the Contributing Zone of the Edwards Aquifer, and there may be underground connections between the Trinity and Edwards aquifers. The contributing zones are the surface waters flowing upstream of defined recharge areas.

- 2. The TCEQ definition of the Edwards Aquifer Contributing Zone is not the entire contributing zone**
 - The Texas Commission on Environmental Quality defines the [Contributing Zone of the Edwards Aquifer](#), but it does not include all of the watershed that feed streams in the Contributing Zone.

- 3. The quality of water in the aquifer is driven by the quality of surface water in the contributing zone**
 - Water quality in the aquifer is largely determined by the quality of surface water in the streams flowing over the Recharge Zone and underground into the aquifer.
 - During dry periods, streams in the Contributing Zone may naturally stop flowing. With wastewater discharge, the only water in streams under those conditions would be wastewater effluent so no dilution of contaminants would occur.
 - To preserve the water quality in the Edwards Aquifer, water quality in the Contributing Zone must also be protected.

- 4. Scientific evidence clearly demonstrates the sensitivity of the Edwards Aquifer to wastewater discharge**
 - Streams in the Contributing and Recharge zones of the Edwards Aquifer currently have exceptionally high water quality and clarity, and are [very sensitive to wastewater discharge](#). Even highly treated wastewater will have extreme adverse water quality impacts due to phosphates and nitrates in treated effluent. These chemicals function as “fertilizer” in clear streams and rivers, causing microbial growth, algae blooms and choking moss beds.
 - Additional contaminants like pharmaceutical and personal care products in wastewater effluent may impact human health but are not currently regulated by the EPA or TCEQ.
 - Water can move rapidly in the aquifer, spreading contamination quickly over a large area, and there is little to no assimilation of wastewater contaminants inside the aquifer.

- 5. There is no prohibition on wastewater discharge in the Contributing Zone**
 - Wastewater discharges are prohibited by rule within the Recharge Zone of the Edwards Aquifer by [30 TAC 213.8](#) (Edwards Aquifer).
 - There are currently no prohibitions on discharge in the Contributing Zone of Edwards Aquifer or the recharge zone of the Trinity Aquifer.
 - Contesting a wastewater discharge permit application is an enormous burden for ranch owners and other landowners, public and private, consuming large amounts of time and money to challenge one of the most serious threats a landowner or community could ever experience.

6. Land application is the primary alternative to direct discharge of wastewater

- Land application of wastewater effluent is more protective of water quality than discharge.
- Land application of treated wastewater effluent is currently required for wastewater disposal in the contributing zone of the Barton Springs Segment of the Edwards Aquifer and in the vicinity of the Highland Lakes.
- TCEQ is currently in the process of [rule-making](#) to make land application of wastewater more cost-effective and to further incentivize beneficial reuse of effluent which will be an important water conservation strategy, **thus accommodating growth**.

LEGISLATION: S.B. 1796 and H.B. 3036, filed during the 85th Legislative Session, were supported by landowners throughout the Texas Hill Country who have fought to protect their properties and surface waters by challenging proposed discharges of treated effluent into pristine streams and rivers. Conservationists joined with these landowners to provide the scientific expertise to support new rule-making which conserves treated effluent as a resource to maintain green spaces in the Hill Country through land application systems, thus expanding available pure water supplies for community and private landowner needs.

H.B. 3036 was placed on the calendar for a vote of the Texas House but, time ran out on us. We invite every Texan who sees the Texas Hill Country as a jewel with waters to be preserved for generations will support refiling this legislation during the 86th Session.

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