Proposal: Support a bill relating to a restriction on permits authorizing direct discharges of waste or pollutants into water in certain areas of the Edwards Aquifer.

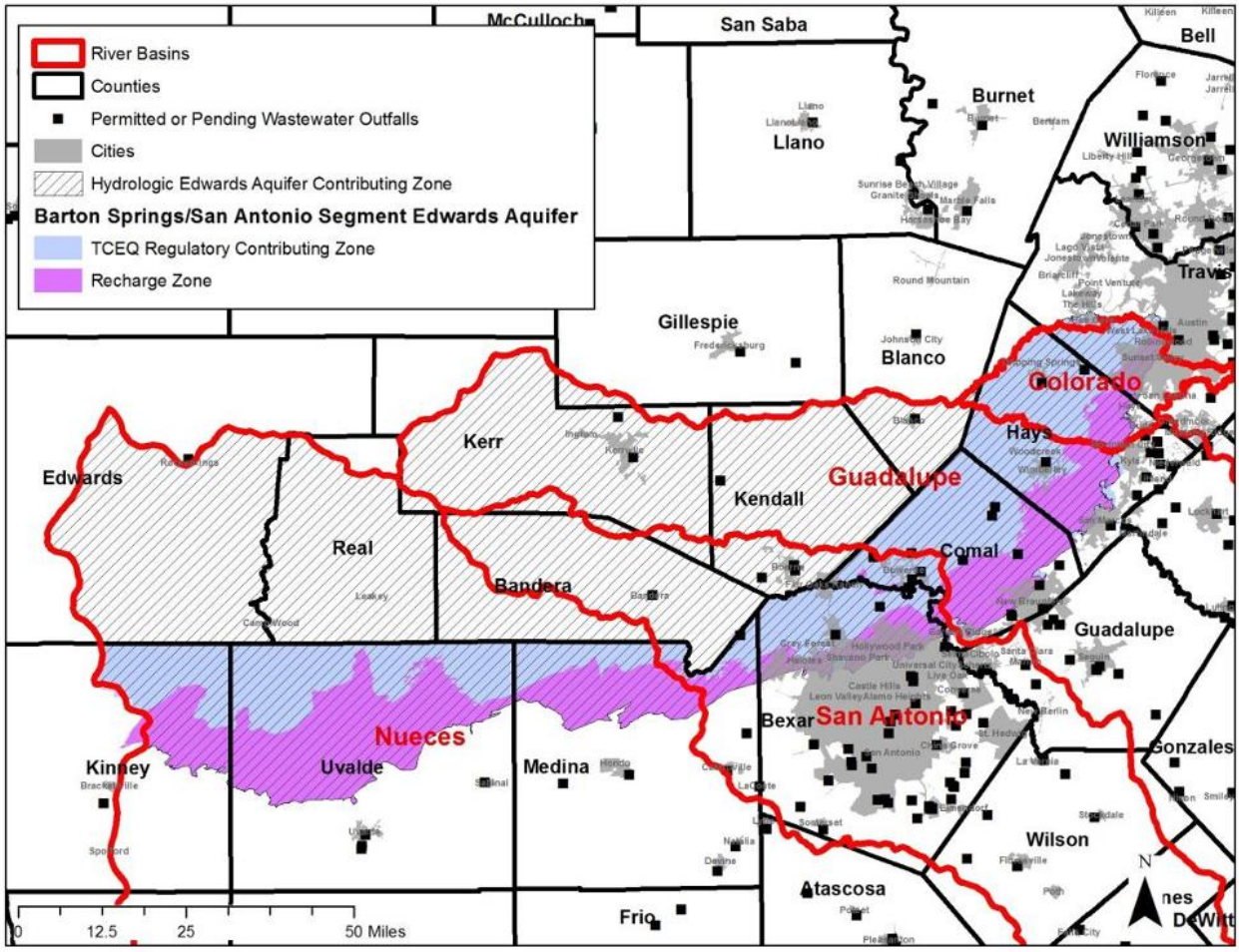
Rationale: More than 2 million people rely on the water supplies of the Edwards and Trinity Aquifers – karst limestone aquifers that are highly susceptible to pollutants and contamination. Wastewater discharges into waters of the state are already prohibited by rule within the Edwards Aquifer Recharge Zone (EARZ) by 30 TAC 213.8, but there are currently no prohibitions on discharge within the Contributing Zone of the Edwards Aquifer or the Recharge Zone of the Trinity Aquifer. The bill should place a restriction on permits authorizing discharges of sewage effluent into waterways that recharge the San Antonio or Barton Springs segment of the Edwards Aquifer. Texas Pollutant Discharge Elimination Systems permits would no longer be authorized in waterways that recharge the Edwards or Trinity aquifers. The bill should also prohibit the Texas Commission on Environmental Quality (TCEQ) from amending an existing permit issued before a certain date to authorize an increase in the amount of sewage effluent that may be discharged into the designated areas. Wastewater could still be disposed through land applications systems or through recycling and reusing the effluent for beneficial purposes.

Issue: Texas Hill Country rivers and creeks are pristine, provide exceptional recreational opportunities, and are a major component of the value of ranches, parks, and local communities through which they flow. Most of the water that recharges the Trinity and Edwards aquifers flows through these streams that originate in the Edwards Aquifer Contributing Zone (EACZ) – which overlies the Trinity Aquifer Recharge Zone – and subsequently crosses the EARZ. They include the Blanco, Frio, Guadalupe, Medina, Nueces, and Sabinal rivers. The quality of water in the Edwards and Trinity aquifers is driven by the quality of surface waters that flow through the EACZ. Many central Texans rely on wells in the Edwards and Trinity aquifers as their sole source of drinking water.

Within the designated EACZ and within the hydrologic contributing zone, TCEQ is currently able to grant permits for the discharge of treated wastewater into their waterways (see map below). Even highly treated wastewater could have adverse water quality impacts due to the phosphorus and nitrogen present in the effluent. Phosphorus and nitrogen act as fertilizers in pristine streams, causing microbial growth, moss beds, and algae blooms potentially toxic to aquatic life, wildlife, and pets. Treated wastewater can include contaminants of emerging concern, such as unmetabolized pharmaceuticals and personal care products, and harmful per- and poly-fluoroalkyls (PFAS). Surface waters containing any of these pollutants that flow over the EACZ and into the EARZ are not filtered as they enter the aquifers. Water can then move rapidly through the aquifer, spreading any potential contamination quickly over a large area, placing private and municipal wells at risk. The rapid conduit flow within the Edwards system could result in severe threats to public health in the event of a sewage spill.

Benefits:

- Past bills related to this issue (SB 1796 / HB 3036 in 2017 and SB 822 / HB 595 in 2009), though they didn't pass at the time, were widely supported by landowners and downstream residents throughout the Texas Hill Country who continue to have to challenge proposed discharges of treated effluent into pristine streams and rivers.
- Land application and beneficial reuse practices are far more protective of water quality than discharge into waterways; lessen pressure on existing supplies constrained by drought and population growth; and have successfully been implemented in communities throughout Texas.
- In areas where wastewater discharge into streams is already prohibited, such the Highland Lakes area, water quality downstream is consistently shown to be higher than other regional supplies.
- Prohibiting discharge of effluent into the hydrologic Edwards Aquifer contributing zone waterways will help to ensure the quality of water Central Texans drink and use every day stays as safe as possible without hampering responsible growth and development.


River Basins
Counties
Permitted or Pending Wastewater Outfalls
Cities
Hydrologic Edwards Aquifer Contributing Zone
Barton Springs/San Antonio Segment Edwards Aquifer
TCEQ Regulatory Contributing Zone
Recharge Zone
McCulloch
San Saba
Llano
Burnet
Bell
Williamson
Travis
Gillespie
Blanco
Colorado
Hays
Kerr
Edwards
Kendall
Guadalupe
Real
Bandera
Comal
Guadalupe
Bexar
San Antonio
Gonzales
Nueces
Kinney
Uvalde
Medina
Wilson
Atascosa
Frio
DeWitt
0
12.5
25
50 Miles
N