

Alamo, Austin, and Lone Star chapters of
the Sierra Club
Bexar Audubon Society
Austin, Bexar and Travis Green Parties
Bexar Grotto
Boerne Together
Bulverde Neighborhood Alliance
Bulverde Neighbors for Clean Water
Cibolo Center for Conservation
Citizens for the Protection of Cibolo Creek
Comal County Conservation Alliance
Environment Texas
First Universalist Unitarian Church of SA
Friends of Canyon Lake
Friends of Dry Comal Creek
Friends of Government Canyon
Fuerza Unida
Green Society of UTSA
Guadalupe River Road Alliance
Guardians of Lick Creek
Headwaters at Incarnate Word
Helotes Heritage Association
Hill Country Alliance
Kendall County Well Owners Association
Kinney County Ground Zero
Leon Springs Business Association
Native Plant Society of Texas – SA
Northwest Interstate Coalition of
Neighborhoods
Pedernales River Alliance – Gillespie Co.
Preserve Castroville
Preserve Lake Dunlop Association
Preserve Our Hill Country Environment
RiverAid San Antonio
San Antonio Audubon Society
San Antonio Conservation Society
San Geronimo Valley Alliance
San Marcos Greenbelt Alliance
San Marcos River Foundation
Save Barton Creek Association
Save Our Springs Alliance
Scenic Loop/Boerne Stage Alliance
Securing a Future Environment
SEED Coalition
Signal Hill Area Alliance
Sisters of the Divine Providence
Solar San Antonio
Texas Cave Management Association
Trinity Edwards Spring Protection Assoc.
Water Aid – Texas State University
Wildlife Rescue & Rehabilitation
Wimberley Valley Watershed Association

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February 12, 2024

Texas Commission on Environmental Quality
Office of the Chief Clerk, MC 105
P.O. Box 13087
Austin, Texas 78711-3087

Submitted electronically at <http://www14.tceq.texas.gov/epic/eComment/>

Re: Comments and Contested Case Hearing Request Regarding Clancy
Utility Holdings LLC proposed Texas Land Application Permit (TLAP)
No. WQ0016335001

Please accept the attached comments on behalf of the fifty-seven
member groups of the Greater Edwards Aquifer Alliance.

1.0 Background

Clancy Utility Holdings LLC, 4143 Maple Avenue, Suite 400, Dallas, Texas
75219, has applied to the Texas Commission on Environmental Quality
(TCEQ) for a new permit, Proposed TCEQ Permit No. WQ0016335001, to
authorize the disposal of treated domestic wastewater at a daily average
flow not to exceed 39,000 gallons per day via public access subsurface
area drip dispersal system with a minimum area of 16.20 acres.

The wastewater treatment plant would service the proposed Mirasol
Springs development. The wastewater treatment facility and disposal
site would be located approximately 0.8 miles southwest of the
intersection of Hamilton Pool Road and Stagecoach Ranch Road, in Hays
County, Texas 78620. The wastewater treatment facility and disposal
site would be located in the drainage basin of Pedernales River in
Segment No. 1414 of the Colorado River Basin.

2.0 Greater Edwards Aquifer Alliance (GEAA)

GEAA is a 501(c)(3) nonprofit organization that promotes effective
broad-based advocacy for protection and preservation of the Edwards
and Trinity aquifers, their springs, watersheds, and the Texas Hill
Country that sustains these groundwater systems. GEAA has multiple
members who would be adversely affected by the permit application of
Clancy Utility Holdings LLC.

While we greatly appreciate the conservation minded, low density site
plan for the Mirasol Springs development, GEAA has serious concerns
regarding the permit application, relating to the degradation of the
Pedernales River and the downstream Highland Lakes (Lake Travis, Lake

Austin, and Lady Bird Lake). We also have serious concerns regarding potential contamination of area water wells that will likely occur with the irrigation of treated sewage and wastewater/stormwater runoff at the proposed site (Fig. 1). We therefore recommend that the Clancy Utility Holdings wastewater permit be modified or denied, for the reasons presented in these comments.

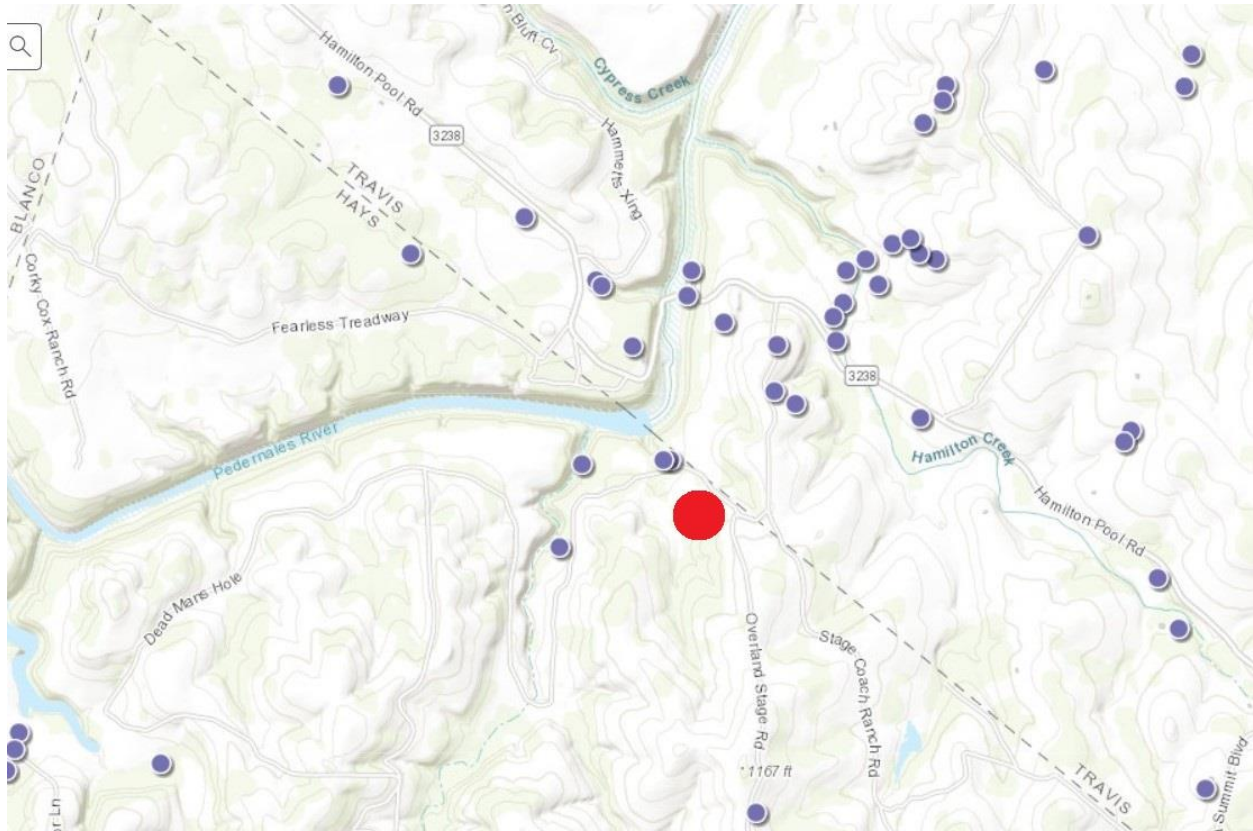


Fig. 1: The proposed location of the Mirasol Springs wastewater treatment plant and effluent land application areas (red circle) are shown in relation to numerous area wells (purple circles).

The treatment disposal facility is located in an environmentally-sensitive area that is home to several species classified as endangered or potentially endangered under the federal Endangered Species Act. The treatment and disposal facility are also near and uphill of several sensitive springs and in an area with thin soils that are unsuitable for a subsurface area drip dispersal system.

3.0 Specific Concerns Regarding the Permit Application

Under the federal Clean Water Act, TCEQ is charged with maintaining the quality of our state's waters and protecting their existing uses. The Mirasol Springs wastewater treatment plant as currently proposed would likely degrade the Pedernales River and local groundwater quality in violation of the Clean Water Act and state law, through likely off-site migration of treated sewage runoff.

3.1 Topography/Layout Issues

The topography and layout of Mirasol Springs are problematic for any development that uses a wastewater treatment plant and irrigates treated sewage over land, as Mirasol Springs would under the current plan. Aside from the fact that there's no reliable year-round water supply in this area for such a development, the topography itself consists of steep hills sloping down towards the Pedernales River, thereby assuring rapid overland flow of stormwater (and land-applied wastewater) during rain events (Fig. 2 and Fig. 3).

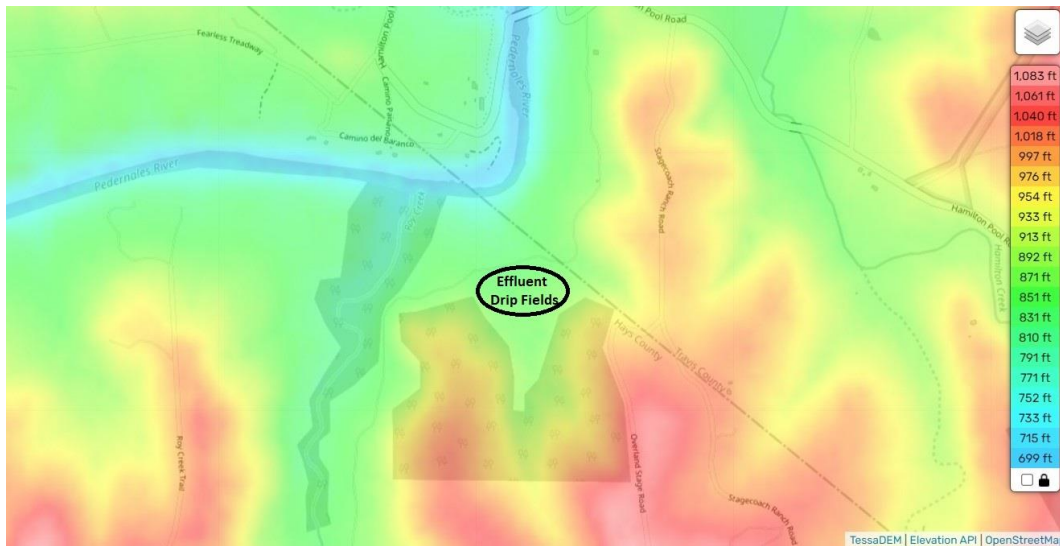


Fig. 2: The Mirasol Springs effluent drip fields would sit between areas of higher elevation (red) and the lower elevation Pedernales River (blue), creating problematic stormwater/wastewater runoff into the river during rain events



Fig. 3: This photo shows the location of the largest of the proposed Mirasol Springs effluent drip fields, in close proximity to and upslope from the Pedernales River (foreground)

The proposed effluent drip fields are located between steep surrounding hills and the Pedernales River, with a small drainage ditch bisecting these effluent fields. This small drainage ditch would collect combined stormwater/effluent runoff during rain events and deposit this runoff into the Pedernales River (Fig. 4).

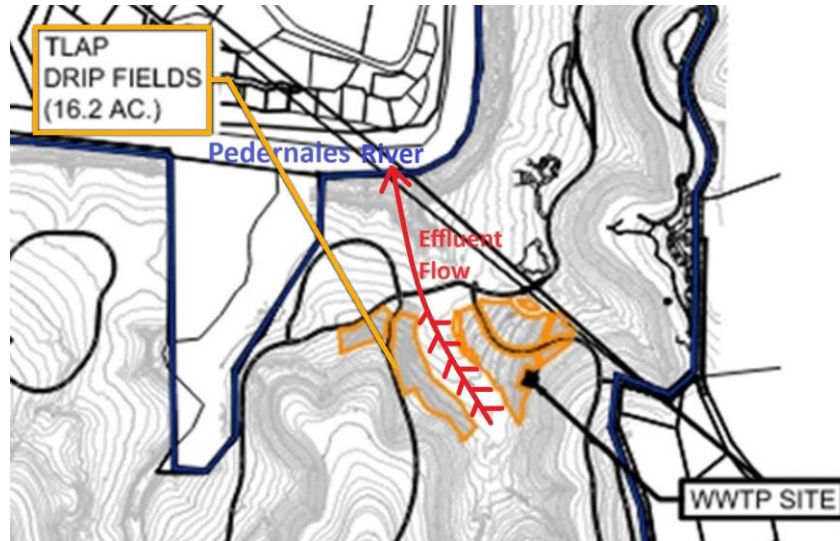


Fig. 4: A small drainage ditch, shown in red, bisects the proposed effluent drip fields (shown in dark orange) and provides a direct flow path from these fields to the lower-elevation Pedernales River.

Because of the 105-foot elevation difference between the Pedernales River and the edge of the proposed effluent fields, the soils in the fields themselves are not absorbent alluvial deposits but rather a thin rocky, sandy soil type that is ill-suited for land application of treated sewage (Fig. 5). Such a soil type would become saturated relatively quickly during subsurface drip irrigation of treated sewage, failing to hold the effluent and instead allowing it to flow into the nearby drainage ditch and then into the Pedernales River, polluting the waterway.



Fig. 5: This close-up photo shows the rocky, sandy soil of the one of the proposed effluent drip fields

Another major issue with the proposed Mirasol Springs layout is the location of 10 proposed “Hillside Conservation Lots” on the far side of Roy Creek Canyon. Because the houses on these lots would be located across the canyon from the proposed wastewater treatment plant, a raw sewage pipe would need to be laid across Roy Creek Canyon between these 10 houses and the wastewater treatment plant. In the event of a pipe leak, raw sewage would then spill into pristine Roy Creek and the Pedernales River, fouling this sensitive, important habitat and putting native species at risk.

4.0 Draft Wastewater Permit Issues

Given the potential for sewage effluent leaving the proposed development site and flowing into the Pedernales River, we are concerned that the draft wastewater permit issued by TCEQ does not require Phosphorous removal and is extremely lax, especially given the environmentally-sensitive nature of the area.

With the number of springs in the area downslope from the proposed treated sewage irrigation fields, the potential for treated sewage runoff into the Pedernales River, and the direct path in this area of surface pollutants to groundwater/drinking water, one might expect a permit with strict limits set for Phosphorous, Biochemical Oxygen Demand (BOD), and Total Suspended Solids (TSS), yet the draft permit contains no such strict limits. The draft permit contains no limits for Phosphorous, known to cause eutrophication of waterways, which threatens aquatic life. The Pedernales River is already under nutrient stress in this area, with significant eutrophication present, especially during warm weather months (Fig. 6).



Fig. 6: The Pedernales River near Stonewall shows heavy eutrophication from excessive nutrients

Phosphorous is not only a driver of algae growth, but given the right conditions of abundant sunshine and warm, still water, could result in toxic algae growth. Toxic algae first appeared in the Highland Lakes in 2019 when it was discovered at three Lady Bird Lake locations. Several

area hydrogeologists believed that the flooding rains in the fall of 2018 may have stirred up nutrient-rich sediments from the lake bottom, which in turn led to toxic algae blooms the summer after the floods. By early 2021, cyanobacteria were confirmed for the first time in Lake Travis, and by the end of that year, toxic algae blooms had been found in all seven of the Highland Lakes. Recurring toxic algae blooms occurred in 2022 and 2023, driven by excess nutrients and particularly Phosphorus from numerous point and non-point sources around the Highland Lakes and their tributaries. Point sources include the Fredericksburg wastewater treatment plant, the Johnson City wastewater treatment plant, and the Llano wastewater treatment plant. Lake Travis, Lake Austin, and Lady Bird Lake, all located downstream of the proposed Clancy treated sewage irrigation area, [are already among the worst U.S. lakes for toxic algae blooms, according to a recent report](#). The Pedernales River is a key tributary of the Colorado River, whose impoundments create the Highland Lakes chain.

In July of 2022, the [Texas State Parks Department issued a warning to the public to stay out of the Pedernales River at Pedernales Falls State Park](#), due to toxic algae concerns. This section of the river is just 2 miles upstream from the proposed Mirasol Springs development location. Adding 39,000 gallons per day of irrigated treated sewage to this area around the Pedernales River, with insufficient nutrient limits or testing required, would be not just irresponsible but potentially dangerous to public safety.

The draft permit limits of 15 mg/l for Total Suspended Solids (TSS) and 10 mg/l for Biochemical Oxygen Demand (BOD) are also very lax and would result in pollution of The Pedernales River and Lake Travis during saturation/runoff conditions. One would expect a wastewater permit being issued in such close proximity to vital springs, area wells, and an important Hill Country waterway to stipulate a maximum limit of 5 mg/l for both TSS and BOD, but the draft permit limits are two to three times that amount.

As a bare minimum, GEAA recommends a 5-5-2-0.15 permit for the Clancy Utility Holdings wastewater treatment plant: 5 mg/l TSS, 5 mg/l BOD, 2 mg/l Ammonium Nitrate, and 0.15 mg/l Phosphorous, rather than the very lax 15/10 permit levels for TSS/BOD that were given in the draft permit (with no Phosphorous limits).

5.0 Opportunities for Beneficial Reuse

We note that no effort has been made to beneficially reuse the effluent from the proposed treatment plant. There are opportunities to beneficially use the effluent in order to reduce the likelihood of oversaturating the drip irrigation fields while also reducing the need for water drawn from the Pedernales and Hays Trinity Aquifer. For example, the developer could design the Inn and the Hill Country Field Station to employ “One Water” techniques that recycle effluent produced on-site for all non-potable uses within those structures and on the surrounding grounds.

6.0 Conclusions and Recommendations

In summary, TCEQ needs to stop issuing draft TLAP permits with little or no nutrient limits and high pollutant limits for BOD and TSS, such as the Clancy draft permit. An even more lax draft permit was recently released by TCEQ for California developer Blizexas' Fitzhugh Amphitheater, also in Hays County, and also in an environmentally-sensitive location, near Barton Creek.

While requiring little or no nutrient limits assures a low-cost wastewater treatment plant for the developer, padding their bottom line, it comes at the expense of Central Texas' water resources. Excessive algae proliferation and toxic algae proliferation in the Highland Lakes as well as area waterways such as Barton Creek and the Pedernales River are strong evidence that TCEQ's leniency on numerous wastewater permits issued is having a dire effect on Texans' water. Lax wastewater permits go against TCEQ's charter and mandate to protect the quality of Texans' water. We therefore encourage TCEQ to modify the permit as per our recommendations or, to reject the Clancy wastewater permit in its entirety.

Thank you for the opportunity to submit these comments.

Respectfully,

A handwritten signature in black ink, appearing to read "Annalisa Peace", with a long horizontal line extending to the right.

Annalisa Peace
Executive Director
Greater Edwards Aquifer Alliance