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Coalition for Responsible Environmental

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Comfort Neighbors

Congregation of Divine Providence **Dry Comal Creek Neighbors**

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First Universalist Unitarian Church of SA

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Friends of Canyon Lake

Friends of Castroville Regional Park

Friends of Government Canyon

Fuerza Unida

Green Society of UTSA

Guadalupe Riverkeepers

Guadalupe River Road Alliance

Guardians of Lick Creek

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Headwaters at Incarnate Word

Helotes Heritage Association

Hill Country Alliance

Kerr County Water Alliance

Kendall County Well Owners Association

Las Moras Springs Association

Leon Springs Business Association Llano River Watershed Alliance

Native Plant Society of Texas -- NB

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

River Aid San Antonio

San Antonio Conservation Society

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 (SAFE)

SEED Coalition

Signal Hill Area Alliance

Texans for Environmental Awareness Texas Cave Management Association

Trinity Edwards Spring Protection Assoc.

Water Aid – Texas State University

Watershed Association

Wildlife Rescue & Rehabilitation

September 29, 2025

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.tceg.texas.gov/epic/eComment/

Re: Comments and Contested Case Hearing Request Regarding Allied Development's proposed wastewater direct discharge permit WQ0016475001

Please accept the attached comments on behalf of the sixty-three member groups of the Greater Edwards Aquifer Alliance (GEAA).

1. Background. Allied Development LLC, 16430 North Scottsdale Road, Suite 210, Scottsdale, Arizona 85254, has applied to the Texas Commission on Environmental Quality (TCEQ) for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016475001, to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 45,000 gallons per day for their proposed Madelynn Estates development.

The facility would be located approximately 1.5 miles southeast of the intersection of Farm-to Market Road 150 and Ranch Road 12, in Hays County, Texas 78620. The treated effluent would be discharged to an unnamed tributary, thence to Onion Creek in Segment No. 1427 of the Colorado River Basin.

2. Greater Edwards Aquifer Alliance (GEAA). GEAA submits the following comments on behalf of its sixty-three member organizations and requests a contested case hearing regarding this permit application. GEAA is a 501(c)(3) nonprofit organization that promotes effective, broad-based advocacy for the protection and preservation of the Edwards and Trinity Aguifers, their springs, watersheds, and the Texas Hill Country that sustains them. GEAA has multiple members who would be adversely affected by the proposed application by Allied Development.

GEAA's members have serious concerns regarding the permit application, relating to the degradation of Onion Creek, the Trinity and Edwards Aquifers, and area water wells that will likely occur with the discharge of treated sewage in the proposed development area. We ask to be recognized with standing to contest this permit.

- **3. Specific Concerns Regarding the Permit Application:** GEAA has multiple areas of concern regarding this ill-advised draft wastewater permit, relating to high nutrient limits, problematic slope characteristics of the proposed effluent channel, public safety issues relating to the proposed effluent channel, concerns over the high density/excess impervious cover, Allied Development's role as a land entitlement company as opposed to actual developer, Allied Development's misrepresentations in the permit application, and violation of the Texas Water Code's regionalization rule.
- **3.1 Concerns Regarding High Nutrient Limits**. The draft permit has effluent limits of 5 mg/L CBOD, 5 mg/L TSS, 2 mg/L Ammonia Nitrogen, .15 mg/L Total Phosphorus, and 6 mg/L Total Nitrogen.

As with many of TCEQ's direct discharge permits, the proposed outfall receiving channel is mostly dry. It is not so much an "unnamed tributary" as it is a "wide wash" (see Fig. 1 below). The "unnamed tributary" has zero flow most of the year and low flow the rest of the year, with the



Fig. 1: The "unnamed tributary" TCEQ references in the Allied Development draft permit is actually a flat, dry wash that's over 300 feet wide.

exception of flooding events. The wide channel would therefore contain mostly effluent as it winds its way towards nearby Onion Creek.

Onion Creek, which is approximately 1000 feet from the proposed Madelynn Estates wastewater treatment plant site, is located in the EPA's nutrient ecoregion IV, sub-ecoregion 30¹. Nutrient data aggregated by the EPA from streams in sub-ecoregion 30 shows that instream concentrations of total phosphorus should be kept at or below 8 micrograms per liter (.008 mg/l) to avoid harmful ecological changes and that instream total nitrogen concentrations should be maintained at or below 550 micrograms per liter (.55 mg/L) to avoid harmful ecological changes.

Comprehensive sampling of Onion Creek conducted in 2019 by Dr. Ryan King and Dr. Jeffrey Back at Baylor University² showed that Onion Creek has nutrient concentrations consistent with high quality reference streams in Central Texas.³ Total phosphorus concentrations in Onion Creek were at 10 micrograms per liter (.01 mg/l), consistent with a minor amount of nutrient pollution in the watershed), and total nitrogen concentrations were measured at 300 micrograms per liter (.30 mg/l). Concentrations for total phosphorus must be kept below 20 micrograms per liter and concentrations for total nitrogen must be below 500 micrograms per liter in order for Onion Creek to maintain its current low nutrient levels.

The concentrations of both total phosphorus and total nitrogen in the draft permit, 150 micrograms per liter and 6000 micrograms per liter, respectively, are much higher than recommended limits. As a result, changes would occur in Onion Creek that would violate both the Texas Surface Water Quality Standards and the Antidegradation Rules. And with the low to zero flow in the receiving "unnamed tributary", there would be little to no dilution of nutrient pollution in the discharged wastewater.

There is no evidence in the record to show that the total phosphorus and total nitrogen limits in the draft permit are protective of the water quality in the receiving waters; nor is there any evidence to show that the receiving waters will be able to assimilate the pollutants and maintain water quality. There is also no published scientific literature to support TCEQ's proposed total phosphorus or total nitrogen limits in the draft permit. There are, however, several studies that reaffirm the need for extremely low total phosphorus and total nitrogen limits, including from the U.S. Environmental Protection Agency (EPA)⁴.

3.2 Problematic Slope Characteristics of the Proposed Effluent Channel

Most sources recommend the minimum slope over land for adequate drainage to be at least 2%⁵. This is the minimum slope recommended for land that has a consistent slope over the drainage course. It would stand to reason that a drainage course that is inconsistent in its slope characteristics should have an average slope somewhat higher than 2% to prevent pooling.

The proposed Allied Development effluent drainage channel has this inconsistent slope characteristic, with varying slopes over its proposed 925-meter course. Furthermore, the average

slope of the proposed Allied Development effluent channel is just 1.5% (3000 feet distance divided by 45 feet elevation drop= 1.5%, see Fig. 2 below). This is well below the 2% recommended slope for water drainage across turf or landscaped areas by universal building codes to ensure adequate drainage. Additionally, the proposed Allied Development effluent channel is not turf or landscaped area but rocky, uneven sections containing numerous impediments such as trees, brush, native plants, small natural berms, and Trinity Aquifer recharge features such as rocky outcrop structures.



Fig. 2: The "unnamed tributary" proposed for receiving treated sewage discharge has little elevation change over its course, as shown in this topographic elevation map.

The developer could conceivably re-grade the proposed effluent channel, but they would still be limited to the 1.5% average slope. When combined with the relatively low effluent flow of ½ gallon per second (45,000 gal/day), the low slope would likely result in pooling of effluent. This would create stagnant areas of high-nutrient effluent that would experience heavy eutrophication, especially during warm weather months when there is zero natural water base flow in the channel and plenty of sun and heat to promote algae growth. Evaporation would also become a concern, as pooled water evaporates from the stagnant low-slope effluent channel, and the nutrients Nitrogen and Phosphorous are left behind to promote algae growth. Given such conditions, it

would not be surprising if toxic algae eventually proliferated in the proposed effluent channel.

In summary, the Madelynn Estate tract's relatively flat slope characteristic may be ideal for building houses upon, but it is ill-suited for proper drainage of treated sewage effluent.

3.3 Public Safety Issues Relating to the Proposed Effluent Channel. Fig. 3 below shows a conceptual site plan produced by Allied Development for the Madelynn Estates tract, with a 100-foot wide "creek offset" shown (i.e. "wastewater ditch"). The developer of the tract would have 3 options for this effluent channel: 1) leave existing vegetation and flow impediments in place, 2) regrade the channel and dig a dirt ditch several feet deep to enhance effluent flow, or 3) pour

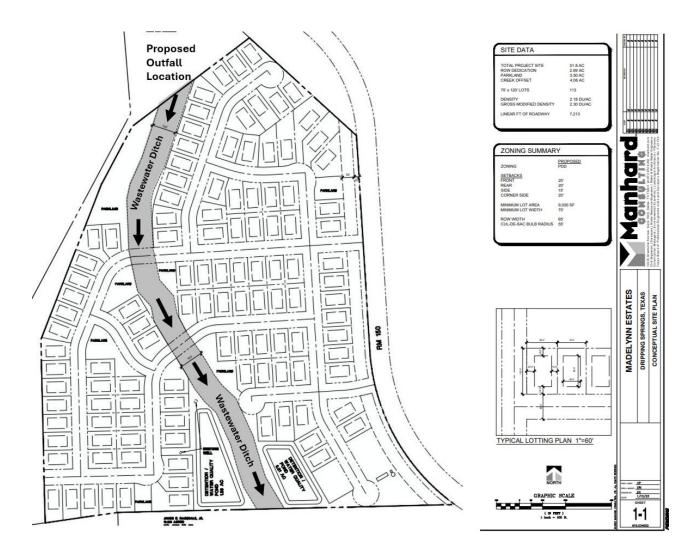


Fig. 3: Due to the flat topography of the tract and the fact that the drainage channel runs through the center of it, direct discharge of effluent on the northwest side of the Madelynn Estates development would necessitate a "wastewater ditch" through the middle of the tract, creating numerous public safety issues.

concrete into the channel. The latter approach would maximize flow but not likely enough to completely mitigate effluent pooling, due to the low slope issues discussed in section 3.2. Each of these 3 approaches would involve significant public safety hazards.

From an environmental standpoint, the preferable approach or "lesser of three evils" for the "wastewater ditch" would be the first one described in the preceding paragraph, where the effluent channel is left mostly "as is". Existing vegetation and other flow impediments would be left in place. This would minimize the amount of impervious cover associated with the effluent channel and the development itself, plus allow for limited absorption of effluent into soil. But it would still likely result in effluent pooling due to the low slope and the wide channel, creating a public safety hazard of effluent pools scattered down the channel. Once it rains, the effluent contained in these pools would be washed into nearby Onion Creek.

If the developer were to take the second approach and grade the effluent channel with a dirt ditch so that flow down the channel is more consistent, it would have the negative impact of reducing the surface area for effluent absorption versus the "as is" approach. Pooling of effluent would increase due to limited effluent absorption in the narrower channel. The dirt ditch approach would also require substantial ongoing maintenance of the effluent channel, which would likely erode over time due to flow characteristics which range from dry channel to flooded channel.

If the developer chose the third approach and poured concrete into the bottom of the channel, there would be no absorption of effluent at all. Treated sewage would flow gradually into Onion Creek, contaminating that important waterway with nutrient pollution and emerging contaminants of concern. Pooling of effluent would likely still take place.

Regardless of which of the three approaches is taken for the effluent channel, children and pets living in the development would likely want to "play in the creek", not knowing that it contains treated sewage with high nutrient levels and emerging contaminants of concern. Given that the Madelynn Estates development consists of large houses on small lots with no land set aside for parks or recreation, the path of the wastewater ditch would be the only open space amenable to recreation within this subdivision. The concept of running a "wastewater ditch" through the middle of a development is not well-thought out by TCEQ or Allied Development and could be potentially dangerous to Madelynn Estates residents.

Given all these issues, one might wonder why exactly TCEQ directed the developer to locate the effluent outfall at the northwest boundary of the development, necessitating the need for a "wastewater ditch" running through the middle of the property. This is especially puzzling given the fact that the proposed wastewater treatment plant is located near the southeast boundary of the property. Under the proposed plan, the developer would have to pipe treated sewage back uphill across the center of the property, only to have that effluent discharge at the north end and flow back down through the middle of the tract, past the wastewater treatment plant. While it is understandable not wanting the direct discharge of treated sewage so close to Onion Creek and adjacent property owners on the southern property boundary, the "wastewater ditch" proposed by the developer and TCEQ creates an entirely different set of issues, as previously described.

This perplexing topographical design decision by TCEQ and Allied Development shows how ill-suited a high-density development is for this environmentally-sensitive location along Onion Creek. TCEQ should have told Allied Development that a direct discharge permit wouldn't be viable for this tract and that Allied Development should contact the City of Dripping Springs for a wastewater service extension from the Dripping Springs wastewater plant ¾ mile away. Instead, TCEQ signed off on a bewildering design concept which puts public safety at risk and likely won't significantly mitigate polluted wastewater/stormwater flow into Onion Creek, especially if a concrete channel for conveying the effluent is employed.

TCEQ seems to not have learned any lessons from the similar "wastewater ditch" concept they allowed for the Johnson Ranch development near Bulverde, TX over a decade ago (TCEQ wastewater permit number WQ0014975001). For that development, TCEQ approved and even defended in court their decision to route treated sewage through Johnson Ranch. This ultimately resulted in a disgusting, smelly, algae-filled ditch that eventually flows into Cibolo Creek and the Edwards Aquifer Recharge Zone, risking public safety of residents who rely on area wells for drinking water (see Figs. 4 and 5).



Fig. 4 This "wastewater ditch" flows through the Bulverde, Texas Johnson Ranch development, a result of the direct discharge of treated sewage from the Johnson Ranch wastewater treatment plant upstream.



Fig 5: The Johnson Ranch "wastewater ditch" is an eyesore and a public health hazard. Heavily polluted wastewater seeps into groundwater and flows into the Edwards Aquifer Recharge Zone just downstream, potentially contaminating area wells. A similar "wastewater ditch" is proposed for Madelynn Estates.

3.4 Concerns Regarding Density of the Proposed Development

There is already very high impervious cover proposed in the Allied Development conceptual site plan shown previously in Fig. 3, with 113 houses sited on individual 1/5 acre lots and relatively little parkland set aside. Those 113 houses from the conceptual site plan have been increased in number by Allied Development to 140 houses in the permit application, likely to increase profit on the future sale of the property. But more homes typically equate to more impervious cover. High impervious cover developments, especially those containing wastewater treatment plants, are ill-suited for this environmentally sensitive karst area of the Texas Hill Country, due to effluent/stormwater runoff concerns.

140 houses laid out on the available 51 acres translates into mostly 1/8 acre lots, incongruent with other development in this area of Hays County, which typically feature 1/5 acre as the very smallest lot size. With 140 houses and all the driveways, connecting roads, cul-de-sacs, and sidewalks, it would be difficult if not impossible for such a development to meet the City of

Dripping Springs 35% impervious cover restriction. We share the concerns that the City of Dripping Springs has in contesting the Allied Development wastewater permit.

Allied Development's proposed "wastewater ditch" would act as the perfect conduit for collecting motor oil, asphalt sealants, fertilizers, pesticides, herbicides, and other pollutants from the 140 surrounding homes that would all drain into this channel. Combine these pollutants with the proposed treated sewage effluent that would already be present in the channel, and the threat to Onion creek and groundwater supplies is clear. Every moderate rain or flooding event would wash these pollutants directly into Onion Creek, located approximately 1000 feet away from the southern property line of the proposed development. Onion Creek not only flows eastward and eventually recharges the Edwards Aquifer, it also contains numerous sinks, seeps, springs, and whirlpools that connect the creek to groundwater and Trinity Aquifer wells in the area (see Fig. 6 below).



Fig. 6: Karst features like this whirlpool on Onion Creek allow surface water to flow to groundwater

3.5 Concerns Regarding Allied Development's Role as a Land Entitlement Company as Opposed to an Actual Developer

Allied Development is in the business of obtaining entitlements such as water/wastewater permits to increase the value of a given tract of land. They never actually purchase the property or take ownership of it but instead sign a contract with the landowner stipulating that they will obtain the necessary entitlements/permits to increase the land's value. Once these entitlements are obtained, they arrange for sale of the land to an actual land developer. After the land is sold, Allied Development takes a significant portion of the proceeds from that sale and gives the rest to the original landowner/seller. This business model is described in detail by Allied Development CEO Cody Bjugen in this video interview, where he said:

"We never actually own the land. I get the development approved through the entitlement process <including wastewater permit approval>, and at that point I bring in a public home builder. They pay me whatever our agreed-upon price is. I then use my buyer's money to pay the seller, the landowner, and then I make my profits out of the middle."

While this approach may be legal, it creates numerous potential environmental issues for any proposed development and especially the Madelynn Estates proposed development. There is no reliable site plan to review prior to the issuance of a wastewater permit. The conceptual site plan shown previously in Fig. 3 is already out of date since Allied Development decided to add an additional 27 homes to that plan. Any Edwards Aquifer Protection Plan that's submitted would be fluid and subject to change as the tract of land changes hands, possibly multiple times.

Perhaps most importantly, a land entitlement company like Allied Development has no actual connection to the land, other than trying to turn a quick profit from it. They have no vested interest in seeing the eventual development succeed, or for the area environment to be protected during and after development, or for purchasers of homes in the development to be satisfied with their purchase, since they will have long since taken their cut and moved on to the next entitlement deal.

TCEQ should re-evaluate their current policy as it relates to issuance of wastewater permits to land entitlement companies who have no vested interest in a property outside of profiting from their role in obtaining the necessary permits. TCEQ should require any permit applicant to be either 1) the current owner of the property, 2) a home developer who has a contract with the landowner for eventual sale and development of the property, or 3) an actual wastewater treatment plant operator. Allied Development fits none of these categories.

Companies like Allied Development are monetizing TCEQ's wastewater permit approval process to the detriment of local municipalities, area landowners, and the environment.

3.6 Concerns Regarding Allied Development's Misrepresentations in their Permit Application

In the wastewater permit application and other documents submitted to TCEQ, Allied Development makes representations to TCEQ that they own the land where the wastewater treatment facility would be built. In fact, they do not own this land (see Fig. 7 below showing the online Hays County property map with the owner of the land listed as Central Texas landowner Mr. Reed Burns). As stated in section 3.5 of these comments, Allied Development never takes ownership of the land for which they are obtaining entitlements such as wastewater permits, they simply act as a middleman for the purpose of gaining land entitlements.



Fig. 6: The three parcels of land that make up the proposed tract for Madelynn Estates are owned by local landowner Reed Burns, not by Allied Development. Allied Development claimed in their permit application to be sole owner of these parcels.

The following sections of Allied Development's permit application contain misrepresentations regarding ownership of the land in question and other misrepresentations of fact:

<u>Section 9D</u> of the wastewater permit application states that Allied Development is the owner of land where treatment facility would be located, when in fact Mr. Reed Burns is the current owner, not Allied Development.

<u>Section 3B</u> ("Buffer Zone Map") of the Domestic Administrative Report 1.1 states "Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply." Allied Development checked the "Ownership" box, indicating that they are the owner of the property when they are not.

In <u>Section 10</u> of the wastewater permit application, Allied Development states "The proposed wastewater facility will be located approximately 2.75 miles Southeast of the intersection of U.S. Highway 290 and Farm to Market 12 in Hays County." This contradicts other representations made by both TCEQ and Allied Development that the proposed wastewater facility would be located approximately 1.5 miles Southeast of the intersection of U.S. Highway 290 and Farm to Market 12 in Hays County.

In a letter included in the technical package, from Allied Development's engineering firm Wasteline Engineering, Inc. to the City of Dripping Springs dated January 26, 2024, the letter states "The development is located approximately 2.75 miles Southeast of the intersection of U.S. Highway 290 and Farm-to-Market 12, which to the best of our knowledge, is not within Dripping Springs city limits." This contradicts other representations made by both TCEQ and Allied Development that the proposed wastewater facility would be located approximately 1.5 miles Southeast of the intersection of U.S. Highway 290 and Farm to Market 12 in Hays County. It is notable that this "mistake" in location moves the development site out of the Dripping Springs ETJ jurisdiction and into Hays County jurisdiction — notable because Hays County has no current impervious cover restrictions on new developments, while Dripping Springs does.

The following sections of the Allied Development wastewater permit application package contain misleading statements regarding ownership of the land in question:

<u>Section 3A</u> of the wastewater permit application states "The owner of the facility must apply for the permit", yet Allied Development doesn't own the land and will never be an owner of the wastewater facility, since the land will be sold to a home builder before the wastewater facility is ever built.

<u>Section 9C</u> of the wastewater permit application also states that Allied Development is the owner of the treatment facility, when in fact they are not and will never be owner of this facility.

<u>Section 9D</u> of the wastewater permit states: "If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions." No lease agreement or deed recorded easement was attached to the permit application, even though Mr. Reed Burns is the current landowner and is not the same person

<entity> as the facility owner (purported to be Allied Development in the permit application but will likely be a land developer or wastewater treatment plant operator).

3.7 Concerns Regarding Violation of the Texas Water Code's Regionalization Rule.

It is the policy of the state of Texas to promote the use of regional wastewater collection, treatment, and disposal to prevent pollution and maintain water quality in the state (see Texas Water Code § 26.081). Section § 26.0282 of the Texas Water Code allows TCEQ to deny or alter the conditions of a proposed TPDES based on regionalization considerations. As Fig. 8 below shows, the City of Dripping Springs wastewater treatment plant is just ¾ mile away from the proposed Madelynn Estates wastewater plant. TCEQ should therefore deny the Application and draft permit based on the regionalization policy set out in the Texas Water Code to prevent needless pollution of Onion Creek and local area wells.



Fig. 8: Allied Development's proposed Madelynn Estates wastewater treatment plant is close enough to the City of Dripping Springs wastewater treatment plant as to be deemed unnecessary and potentially harmful to the environment under the rules of Texas Water Code § 26.081

The City of Dripping Springs has received from TCEQ a TPDES permit as well as a Texas Land Application Permit and a Section 210 Beneficial Reuse permit for their Dripping Springs

wastewater treatment plant shown in Fig. 8 above. Because most of Dripping Springs' effluent is either land-applied or beneficially reused to water city common areas including parks, it would be highly preferable if Madelynn Estates utilized the Dripping Springs wastewater plant rather than directly discharging their treated sewage into a mostly dry Onion Creek tributary. TCEQ denial of the Allied Development wastewater permit would be consistent with implementing the regionalization policy's goal to protect water quality, requiring Madelynn Estates to tie into a system that does not discharge into Onion Creek. Moreover, the City of Dripping Springs has indicated that it is willing to serve the applicant's new development with a wastewater service extension.

4.0 Conclusions and Recommendations. In summary, we believe that the inconsistencies, technical issues, and inaccurate statements in the Allied Development wastewater permit application justify TCEQ's denial of this TPDES permit. The low-slope Madelynn Estates tract sited in such close proximity to pristine Onion Creek is not an appropriate location for construction of a wastewater treatment plant. This is especially true given the fact that Dripping Springs' wastewater plant is less than a mile away and can easily service this area. We therefore encourage TCEQ to reject this permit in its entirety.

Thank you for the opportunity to submit these comments.

Respectfully,

Annalisa Peace Executive Director

Greater Edwards Aquifer Alliance

1 U.S. EPA, Ambient Water Quality Criteria Recommendations, Information Supporting the Development of State and Tribal Nutrient Criteria, Rivers and Streams in Nutrient Ecoregion IV (2001) available at: https://www.epa.gov/sites/default/files/documents/rivers4.pdf.%20

2 Dr. Ryan King and Dr. Jeffrey Back are the same researchers appointed by the U.S. Supreme Court to study nutrient enrichment in the landmark Arkansas v. Oklahoma, 503 U.S. 91 (1992) wastewater case.

3 Ryan King and Jeffrey Back, Bioassessment of four Hill Country streams threatened by proposed municipal wastewater discharges (2020) available at:

https://watershedassociation.org/wpcontent/uploads/2020/10/DrRyanKing final report from baylor university to sosa final 10.23.20.pdf

4 U.S. EPA, Action towards Limiting Total Nitrogen, Total Phosphorus, and Total Inorganic Nitrogen Loads from NPDES-Permitted Facilities https://19january2017snapshot.epa.gov/nutrient-policy-data/action-towards-limiting-total-nitrogen-total-phosphorus-and-total-inorganic .html

5 2021 International Residential Code for drainage https://codes.iccsafe.org/s/IRC2021P3/chapter-4-foundations/IRC2021P3-Pt03-Ch04-SecR401.3