

October 30, 2021

City of Blanco  
Attn: Kelly Kuenstler, Interim City Administrator  
300 Pecan Street  
Blanco, TX 78606

RE: Blanco Water Reclamation Task Force recommendation for consideration by Blanco City Council

Dear Ms. Kuenstler,

As Director of Watershed Services for The Meadows Center for Water and the Environment, I have served as the official facilitator of the Blanco Water Reclamation Task Force (Task Force) commissioned by the City of Blanco in September 2020. The purpose of this memo is to formally present a key recommendation of the Task Force for City Council consideration and possible action.

### **Task Force Recommendation**

In consideration of the facts and analysis undertaken by the Task Force over a 12-month investigation, a unanimous vote of all members resulted in the following recommendation:

**The City of Blanco should pursue a phased and/or hybrid permitting approach through the Texas Commission on Environmental Quality to obtain a Texas Land Application Permit (TLAP) that would ensure no direct discharge of municipal effluent within a time period not to exceed 18 months or until the City gets TLAP infrastructure in place, whichever occurs first.**

*It is anticipated positive action by Council on this Task Force recommendation would save the City of Blanco \$1,090,000 when compared to pursuing a discharge permit.*

### **Task Force Background**

The Task Force was established in September 2020 and has been facilitated by The Meadows Center for Water and the Environment at Texas State University under a joint Memorandum of Understanding with the City of Blanco. The Task Force includes appointed representatives from both the City of Blanco and Protect Our Blanco. The Task Force has engaged its members with 12 official meetings including interviews with key staff for the Texas Water Development Board and the Texas Commission on Environmental Quality. The Task Force has utilized outside funding to

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*This letter is an electronic communication from Texas State University.*

secure two engineering reports led by Aqua Strategies and KIT. The Task Force has worked with the City of Blanco to support potential funding opportunities for achieving the short and long-term water quality goals of the City including a Project Information Form (PIF) on record with the Texas Water Development Board. The PIF will be used to secure federal infrastructure funds or other state-run financing programs to enhance water and wastewater infrastructure for the City. The recommendation and discussion below are the result of the long hours and dedicated work of our Task Force members and City staff. It should be noted that the designated City Engineer, Mr. Tom Turk, was consulted throughout the Task Force investigatory process, providing valuable feedback and information.

## **Discussion and Considerations**

On July 13, 2021, the Blanco City Council considered a report by Aqua Strategies and KIT commissioned by the Meadows Center for Water and the Environment, “Blanco TPDES Refinement Study”. Based on the findings of this report and discussion from the City Engineer, City Council members voted unanimously to support Task Force recommendations to double existing wastewater treatment plant effluent storage capacity and seek additional lease agreements for reuse and disposal of treated effluent. A Task Force recommendation to pursue a Texas Land Application Permit (TLAP) was not accepted at the July 13, 2021 Council meeting prompting additional work by the Task Force and a subsequent engineering and cost analysis study to compare the costs of two wastewater permitting options for the City of Blanco.

Upon guidance from the Task Force, Aqua Strategies and KIT have submitted the attached report “Assessment of Costs for Two Wastewater Disposal Strategies for the City of Blanco - REVISED”. The Task Force recommendation presented in this memo is based on the findings from this report and discussions over the previous year with City staff, state agencies, civil engineers and local stakeholders. One key finding of the attached report serves as the driver for the Task Force recommendation presented in this memo: the addition of a 9.2 million gallon, lined storage pond would provide sufficient capacity for a 0.225 MGD TLAP when combined with 100 acres of agricultural irrigation.

Recognizing that the financing and infrastructure to secure a 0.225 MGD TLAP are not currently in place, the Task Force has recommended a phased or hybrid approach to secure both the environmental and economic advantages of a TLAP for the City of Blanco. The phased approach would require revisions to the current permit application, including a new time-limited phase and updates to effluent limits and monitoring requirements. The primary benefits of this approach to the City of Blanco are two-fold.

First, a phased or hybrid permit application would allow the City to operate the existing wastewater treatment plant utilizing existing infrastructure while allowing time for funding and construction of additional effluent storage. The only minor infrastructure enhancement would include a diverter box at the outfall bypassing Pond #2 to ensure Type 1 effluent is available for reuse irrigation. The time limited phase of the permit also provides a grace period for discharge while formal lease agreements and distribution infrastructure are added to the system to satisfy the requirements of the TLAP.

Second, initiating a time-limited phase for a Texas Pollutant Discharge Elimination System (TPDES) permit that would authorize a discharge to the Blanco River while the City works to fulfill its goal of no discharge through a TLAP significantly reduces overall costs and minimizes the risk of an expensive contest case hearing process. Potential litigants will have to acknowledge

that the City has participated in a multi-pronged stakeholder engagement effort to identify best-fit solutions for wastewater disposal and is bound to a permit that will achieve no-discharge standards within an exceptionally reasonable timeframe.

**Further consideration “Assessment of Costs for Two Wastewater Disposal Strategies for the City of Blanco - REVISED”**

With the City Council’s intention to double existing storage capacity and goal to avoid discharge into the Blanco River, a phased transition to TLAP is the most environmentally protective and economically sound pathway for the City of Blanco. The attached Aqua Strategies and KIT report considers two scenarios. Scenario 1 includes the construction of a 9.2 million gallon pond, a combination of City-owned land and long-term irrigation leases and additional permitting costs associated with the likely conditions of a 0.225 MGD TLAP permit. Scenario 2 includes construction of the same 9.2 million gallon pond and assumes costs associated with a 0.225 MGD TPDES permit that would allow discharge to the Blanco River in situations where the City exceeds its capacity for storage and use of reclaimed water.

What really differentiates the two scenarios presented by Aqua Strategies and KIT is the administrative and regulatory approach that ensures no discharge under Scenario 1 while Scenario 2 details a more uncertain and costly pathway that gives service to Blanco’s commitment to increase storage and reduce impacts to the Blanco River but likely results in the City’s need to exercise its option to discharge. Scenario 2 presumes significant additional costs to maintain environmental standards, construct a discharge pipeline across an adjacent property and to cover projected legal fees associated with an almost certain contested case hearing. While operations and maintenance (O&M) requirements differ between TLAP and TPDES, it is assumed that the difference in annual O&M cost of either approach would be negligible. Table 1 presents the projected costs associated with each scenario, with TLAP estimated to save the City of Blanco \$1,090,000.

**Table 1 – City of Blanco cost comparison for two scenarios. From “Assessment of Costs for Two Wastewater Disposal Strategies for the City of Blanco - REVISED”**

<b>Expense</b>	<b>Scenario 1 TLAP permit</b>	<b>Scenario 2 TPDES permit</b>
<b>New Pond</b>	\$1,232,420	\$1,232,420
<b>Permitting*</b>	\$60,000	\$0
<b>Pipeline</b>	\$0	\$200,000
<b>Nutrient reduction</b>	\$0	\$200,000
<b>Land acquisition</b>	TDB	\$0
<b>Litigation**</b>	\$0	\$750,000
<b>Total</b>	<b>\$1,292,420</b>	<b>\$2,382,420</b>
* Note: Net costs, above those of Scenario 2.		
** Assumed cost, which might be much higher.		

Note: Removing the “new pond” cost from Scenario 2 – TPDES permit, was not considered by Aqua Strategies and KIT based on the City Council’s unanimous vote to accept a Task Force recommendation to double existing storage capacity. While removing this cost would be significant in the short-term, it is likely to increase other costs, notably those associated litigation and future expansion.

### **Third Party Monitoring**

To support the City's commitment to maintaining a high standard of operations, to facilitate a One Water future for the City of Blanco and to inform and educate the public, The Meadows Center for Water and the Environment at Texas State University is prepared to support additional, third-party water quality monitoring for City of Blanco wastewater treatment plant operations through a new agreement or revision to the existing MOU with the City of Blanco.

### **Next Steps**

Should the Blanco City Council vote to affirm this recommendation of the Task Force, the City should immediately direct its engineer, to engage in communication with Texas Commission on Environmental Quality permitting staff to finalize details of a revised permit application. The Task Force is happy to facilitate, engage and provide ongoing support throughout the permit revision and application process.

Please feel free to contact me for additional information at 512.213.7389 or at [nickdornak@txtate.edu](mailto:nickdornak@txtate.edu).

Sincerely,

*Nick Dornak*

Nick Dornak  
Director of Watershed Services,  
The Meadows Center for Water and the Environment