TCEQ PERMIT NO. WQ0015668001

APPLICATION BY CITY OF FORT WORTH FOR NEW TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. WQ0015668001	§ § § § § §	BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the City of Fort Worth application for a new permit, proposed Texas Pollutant Disposal Elimination System (TPDES) Permit No. WQ0015668001 and the ED's preliminary decision. As required by 30 Texas Administrative Code (TAC) Section (§) 55.156, before a permit is issued, the ED prepares a response to all timely, relevant and material, or significant comments. The Office of the Chief Clerk received timely comment letters from those individuals named in the Attachments.

This Response addresses all such timely public comments received, whether or not withdrawn. If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.state.tx.us.

BACKGROUND

Description of Facility

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit to authorize the discharge of treated domestic wastewater at an annual average flow not to exceed 10 million gallons per day (MGD) in the Interim phase and an annual average flow not to exceed 15 MGD in the Final phase. The proposed wastewater treatment facility will serve the west side of the City of Fort Worth.

The treated effluent will be discharged to Mary's Creek, thence to Clear Fork Trinity River Below Benbrook Lake in Segment No. 0829 of the Trinity River Basin. The unclassified receiving water use is high aquatic life use for Mary's Creek. The designated uses for Segment No. 0829 are primary contact recreation, public water supply, and high aquatic life use. In accordance with 30 Texas Administrative Code § 307.5 and the TCEQ implementation procedures (June 2010) for the Texas Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

The Mary's Creek Wastewater Treatment Facility will be a membrane bioreactor plant utilizing an activated sludge process operated in the extended aeration mode. Treatment units in the Interim phase will include three coarse screens, two grit chambers, an equalization basin, a peak flow storage basin, three rotary drum fine screens, four anaerobic zones, four anoxic zones, four aerobic zones, eight membrane basins, four aerated storage tanks, two sludge thickeners, two sludge holding tanks, three sludge dewatering presses, and an Ultraviolet light (UV) disinfection system. Treatment units in the Final phase will include four coarse screens, three grit chambers, an equalization basin, a peak flow storage basin, four rotary drum fine screens, six anaerobic zones, six anoxic zones, six aerobic zones, twelves membrane basins, six aerated storage tanks, three sludge thickeners, two sludge holding tanks, four sludge dewatering presses, and an UV disinfection system. The facility has not been constructed.

The facility will be located at 11091 Chapin Road, in the City of Fort Worth, Tarrant County, Texas 76108.

The effluent limitations in the Interim and Final phases of the draft permit, based on a 30-day average, are 5 mg/l five-day carbonaceous biochemical oxygen demand ($CBOD_5$), 5 mg/l total suspended solids (TSS), 2.0 mg/l ammonia-nitrogen (NH_3-N), 0.2 mg/l total Phosphorus 126 CFU or MPN of *E. coli* per 100 ml, and 4.0 mg/l minimum dissolved oxygen (DO). The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Procedural Background

The permit application was received on March 23, 2018, and declared administratively complete on May 11, 2018. The Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in Fort Worth County, Texas in English on January June 9, 2018, in the *Star-Telegram*, and in Spanish on June 15, 2018, in *Star-Telegram*. The Applicant published combined notice NORI and the Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD) in Fort Bend County, Texas in English on August 3, 2020, in the *Star-Telegram* and in Spanish on April 4, 2020, in *La Estrella*. A Public Meeting was held on October 5, 2020. The comment period for this application closed on October 5, 2020. This application was filed on or after June 1, 2018; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill (HB) 801, 76th Legislature (1999), and Senate Bill (SB) 709, 84th Legislature (2015), both implemented by the Commission in its rules in 30 TAC Chapter 39, 50, and 55. The Texas Legislature enacted Senate Bill 709, effective September 1, 2015, amending the requirements for comments and contested case hearings. This application is subject to those changes in the law.

Access to Rules, Laws, and Records

All administrative rules:

- Secretary of State Website: www.sos.state.tx.us
- TCEQ rules: Title 30 of the Texas Administrative Code: www.sos.state.tx.us/tac/ (select TAC Viewer on the right, then Title 30 Environmental Quality)
- Texas statutes: http://www.statutes.legis.state.tx.us/

- TCEQ website: http://www.tceq.texas.gov/ (for downloadable rules in WordPerfect or Adobe PDF formats, select "Rules," then "Current TCEQ Rules," then "Download TCEQ Rules")
- Federal rules: Title 40 of the Code of Federal Regulations (C.F.R.): http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl
- Federal environmental laws: http://www.epa.gov/lawsregs/
- Environmental or Citizen Complaints may be filed online at: https://www.tceq.texas.gov/assets/public/compliance/monops/complaints/complaints.html. or by sending an email to the following address: cmplaint@TCEQ.state.tx.us.

Commission records for this facility are available for viewing and copying at the TCEQ's main office in Austin, 12100 Park 35 Circle, Building F, 1st Floor (Office of Chief Clerk, for the current application until final action is taken). The application for this facility has been available for viewing and copying at Fort Worth City Hall, Water Department, 200 Texas Street, Fort Worth, Texas. The draft permit, statement of basis/technical summary and ED's preliminary decision has been available for viewing and copying at the same location since publication of the NAPD.

In light of directives to protect public health, to obtain documents located in the Office of the Chief Clerk, please leave a voice mail at (512) 239-3300 and someone will return your call the same day. Some documents located in the Office of the Chief Clerk may be located on the Commissioners' Integrated Database at: <https://www14.tceq.texas.gov/epic/eCID/>.

COMMENTS AND RESPONSES

Comment 1:

The individuals listed in attachment A expressed concerns regarding the impact the permit will have on recreational activities on the river such as swimming, tubing, kayaking, and paddle boarding.

Response 1:

The draft permit contains limitations to protect receiving waters from degradation and to protect existing uses. The bacteria limits in the draft permit, a daily average limit of 126 CFU or MPN of E. coli per 100 mL and a single grab sample limit of 399 CFU or MPN of E. coli per 100 mL, are equivalent to designated criteria to protect primary contact recreation within the Clear Fork of the Trinity River Below Benbrook Lake in Segment 0829 of the Trinity River Basin as detailed in Appendix A (Site-specific Uses and Criteria for Classified Segments) of the Texas Surface Water Quality Standards (TSWQS) in 30 TAC Chapter 307. These bacteria limits should also be protective of contact recreation use within Mary's Creek. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

TCEQ is aware of the 303(d) listing of bacteria for the Clear Fork Trinity River Below Lake Benbrook (Segment 0829), and the Standards Implementation Team noted the then 305(b) concern for bacteria in the draft 2016 Integrated Report. As noted in

the Standards Implementation Team's review, the draft permit has end-of-pipe limits equal to the segment criteria; therefore, this discharge should not contribute to 303(d) impairment of Segment 0829 for bacteria. This is consistent with TCEQ's antidegradation implementation procedures for discharges to water bodies impaired for bacteria.

Comment 2:

The individuals in attachment B expressed concerns regarding the environmental impact the permit will have on fishing in the river.

Response 2:

The TCEQ protects water quality and uses of receiving waters primarily through the implementation of the TSWQS, located in 30 TAC Chapter 307, which designates criteria for the protection of aquatic life and human health and the environment. The Executive Director's staff developed the effluent limitations in the draft permit to maintain and protect the existing instream uses. The Executive Director determined that these uses should be protected if the facility is operated and maintained as required by the proposed permit and regulations. The TSWQS include numeric and narrative water quality criteria used to protect the designated and assigned uses of receiving waters. As part of the permit application process, the TCEQ must determine the uses of the receiving waters and set effluent limits that are protective of those uses. For example, based on the designated or assigned aquatic life use subcategory, receiving waters are assigned a numeric dissolved oxygen criterion that must be met to support the aquatic life use. The TCEQ's Water Quality Assessment Team then performs a dissolved oxygen modeling analysis to ensure that the permit's effluent limits and other requirements will support the dissolved oxygen criterion and, therefore, protect the aquatic life use. For new permit applications and major amendment applications , an antidegradation review is also performed.

In this case, in Appendix A of the TSWQS, Mary's Creek was assigned a high aquatic life use and the associated 5.0 mg/l DO criterion to protect this aquatic life use. Similarly, Clear Fork Trinity River Below Benbrook Lake, has a designated aquatic life use of high and associated 5.0 mg/l DO criterion to protect this use as described in Appendix A of the TSWQS. Modeling by the Water Quality Assessment Team has shown the effluent limits in the draft permit should be protective of the 5.0 mg/l DO criteria for Mary's Creek and Clear Fork Trinity River Below Benbrook Lake.

According to the Administrative Report in the application, both US Fish and Wildlife as well as Texas Parks and Wildlife received a copy of the application during the administrative review. The TCEQ has not received any comments regarding this application from either of these agencies.

Comment 3:

The individuals in attachments C and D expressed concerns regarding the permit's environmental impact including algal blooms.

Response 3:

TCEQ's nutrient screening approach and the factors considered when evaluating the need for nutrient limits for proposed discharges to streams and rivers are described in the Implementation Procedures. TCEQ's general approach for setting nutrient limits for wastewater discharges is to focus on phosphorus rather than nitrogen, especially for discharges to freshwater systems, to prevent violation of numerical nutrient criteria and/or preclude excessive growth of aquatic vegetation. The justification for this approach is outlined in the General Screening Approach for Nutrient Impacts section of the Implementation Procedures.

The nutrient screening review for this permit application determined that nutrient limits were needed. Based on guidance in the Implementation Procedures, the size of the discharge, and site-specific factors, the Standards Implementation Team recommended the inclusion of a 0.2 mg/L total phosphorus (TP) limit for all discharge flow phases to ensure that no significant degradation of water quality will occur. This TP limit should help to preclude the potential for eutrophication effects, including algae blooms or other excessive growth of aquatic vegetation.

The draft permit was developed in accordance with the TSWQS and the Implementation Procedures and should be protective of water quality and uses of the receiving stream, provided the applicant operates and maintains the facility according to the requirements of the draft permit. An antidegradation review of the receiving waters was performed as part of the application review process. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

The Standard Implementation Team's nutrient screening and subsequent TP limit recommendation primarily focused on Mary's Creek, but also considered the chlorophyll-a listing for the Clear Fork Trinity River Below Lake Benbrook (Segment 0829) in the then draft 2016 Integrated report. Because the TP limit was recommended with the aim of precluding the potential for eutrophication effects in the immediate receiving water, Mary's Creek, a relatively small stream, it is expected that this TP limit will also preclude eutrophication, as result of the discharge, in the Clear Fork Trinity River Below Lake Benbrook, which is a relatively larger river and is located more than seven miles downstream of the proposed point of discharge.

Comment 4:

The individuals in attachment E expressed concerns regarding the impact the permit will have upon human health.

Response 4:

The proposed permit was drafted to ensure the treated effluent meets water quality standards for the protection of surface water quality, groundwater, and human

health according to TCEQ rules and policies. The proposed draft permit includes additional requirements for the wastewater treatment system to ensure the protection of water quality and human health. The proposed draft permit includes requirements for the disposal of domestic sludge generated from the wastewater treatment facility based on TCEQ rules. The Executive Director has determined that the proposed draft permit is protective of the environment, water quality, and human health and that it meets TCEQ rules and requirements. Noncompliance with the permit may result in enforcement action against the permittee.

The bacteria limits in the draft permit, a daily average limit of 126 CFU or MPN of E. coli per 100 mL and a single grab sample limit of 399 CFU or MPN of E. coli per 100 mL, are equivalent to designated criteria to protect primary contact recreation within the Clear Fork of the Trinity River Below Benbrook Lake in Segment 0829 of the Trinity River Basin as detailed in Appendix A (Site-specific Uses and Criteria for Classified Segments) of the TSWQS. These bacteria limits should be protective of contact recreation use within Mary's Creek and Clear Fork Trinity River Below Benbrook Lake from effects of the proposed wastewater discharge. The permittee shall utilize an Ultraviolet Light (UV) system for disinfection purposes. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

Comment 5:

The individuals in attachment F expressed concerns regarding the impact the permit will have upon wildlife, migratory birds, and endangered species, including mussels and whooping cranes.

Response 5:

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES; September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

According to the Administrative Report in the application, both US Fish and Wildlife as well as Texas Parks and Wildlife received a copy of the application during the administrative review. The TCEQ has not received any comments regarding this application from either of these agencies.

The TSWQS in 30 TAC Chapter 307 require that discharges may not degrade the receiving waters and may not result in situations that impair existing, attainable or designated uses, and that surface waters not be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals. The effluent limits in the draft permit are set to maintain and protect the existing instream uses.

Comment 6:

The individuals in attachments G and H expressed concerns regarding the impact the permit's "waste" will have upon the aesthetic qualities and overall conditions of the river, including water quality.

Response 6:

The TSWQS in 30 TAC Chapter 307 require that discharges may not degrade the receiving waters and may not result in situations that impair existing, attainable or designated uses, and that surface waters not be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals. The effluent limits in the draft permit are set to maintain and protect the existing instream uses.

The draft permit was developed in accordance with the TSWQS to be protective of water quality, provided the applicant operates and maintains the proposed facility according to TCEQ rules and the proposed permit's requirements. The methodology outlined in the Procedures to Implement the Texas Surface Water Quality Standards (June 2010) is designed to ensure compliance with the TSWQS in 30 TAC Chapter 307.

Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater that: 1) results in instream aquatic toxicity; 2) causes a violation of an applicable narrative or numerical state water quality standard; 3) results in the endangerment of a drinking water supply; or 4) results in aquatic bioaccumulation that threatens human health. General criteria in the TSWQS (30 TAC § 307.4) describe aesthetic parameters that must be maintained, including the requirement that surface waters must be maintained in an aesthetically attractive condition.

As part of the application process, TCEQ staff must determine the uses of the receiving waters and set effluent limits that are protective of those uses. In order to achieve the goal of maintaining a level of water quality sufficient to protect existing water body uses, the proposed permit contains several water quality specific parameter requirements that limit the potential impact of the discharge on the receiving waters.

Comment 7:

Frank Orlando, Maddison Jones, David Lynn Buchanan, Michael Reznikoff, John Vandie, Anthony Demma, and on behalf of Tarrant Regional Water District James M Oliver, Woody Frossard, and Fred B. Werkenthin requested that the permit be reconsidered.

Response 7:

The Executive Director acknowledges these comments.

Comment 8:

The individuals in attachment I requested that the permittee seek other alternatives rather than the proposed permit.

Response 8:

The Texas Water Code § 26.027, authorizes the TCEQ to issue permits for discharges into water in the state. The ED evaluates applications for wastewater treatment plants based on the information provided in the application. The ED can recommend issuance or denial of an application based on whether the application complies with the Texas Water Code and TCEQ regulations. However, the ED does not have the authority to mandate a different discharge route or location.

Comment 9:

The individuals in attachment J expressed concerns about odor.

Response 9:

According to 30 TAC §309.13(e), the Applicant is required to select one of the following alternatives to abate and control nuisance odor prior to construction of a new wastewater treatment plant unit:

1. Lagoons with zones of anaerobic activity... may not be located closer than 500 feet to the nearest property line. Any other wastewater treatment plant units may not be located closer than 150 feet to the nearest property line. ... The permittee must hold legal title or have other sufficient property interest to a contiguous tract of land necessary to meet the [500 feet or 150 feet] distance requirements;
2. The applicant must submit a nuisance odor prevention request for approval by the executive director. A request for nuisance odor prevention must be in the form of an engineering report, prepared and sealed by a licensed professional engineer in support of the request; or
3. The permittee must submit sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the applicant. Sufficient evidence of legal restriction may, among others, take the form of a suitable restrictive easement, right-of-way, covenant, deed restriction, deed recorded, or a private agreement provided as a certified copy of the original document. The request shall be submitted, prior to construction, either with a permit application and subject to review during the permitting process or submitted for executive director approval after the permitting process is completed.

As a measure to abate and control nuisance odors, the proposed permit includes a requirement that the Applicant shall comply with the requirements of 30 TAC § 309.13(a) through (d). In addition, by ownership of the required buffer zone area, the permittee shall comply with the requirements of 30 TAC § 309.13(e). In addition, the permittee shall provide nuisance odor prevention for the liquid and solid streams in accordance with 30 TAC § 309.13(e)(2). Prior to construction of the Interim phase, the permittee shall submit a nuisance odor prevention request for approval by the Executive Director in care of the TCEQ Wastewater Permitting Section (MC 148). The request for nuisance odor prevention shall be in the form of an engineering report, prepared and sealed by a licensed professional engineer, in support of the request according to the requirements of 30 TAC § 309.13(e)(2). Aerobic biological processes use oxygen from the air to reduce the organic content of the wastewater through

biological action. Oxygen turns sulfide compounds (the most common odor-causing compounds) into odorless sulfates. Wastewater without dissolved oxygen (DO) can also produce offensive odors. The draft permit requires that the effluent contain a minimum of 6.0 mg/l of DO.

The one-mile radius on the topographic map in the application is required by the TCEQ rules. An Applicant for a wastewater discharge permit is required to submit a topographic map with the application depicting "the approximate boundaries of the tract of land owned or to be used by the applicant and shall extend at least one mile beyond the tract boundaries sufficient to show" the ownership of tracts of land adjacent to the facility and within a reasonable distance from the proposed point or points of discharge; each well, spring, and surface water; the general character of the areas adjacent to the facility; and the location of any waste disposal activities conducted on the tract not included in the application. Buffer zone maps are depicted on 8.5" x 11" sheets with the title Map - Administrative Report 1.1, Attachment D: Buffer Zone Map.

Comment 10:

Teresa D Patterson on behalf of the Trinity Coalition and Cole Summers expressed concerns about nitrification.

Response 10:

Nitrification is the conversion of ammonia-nitrogen into nitrate. Ammonia-nitrogen is a component of wastewater discharges whose direct impact on instream dissolved oxygen levels is assessed by use of a numerical model. The draft permit includes effluent limits for these oxygen-demanding substances that were modeled in order to evaluate their potential impacts on dissolved oxygen levels in water bodies along the discharge route. In addition to ammonia-nitrogen, these dissolved oxygen-related effluent limits also include 5-day carbonaceous biochemical oxygen demand (CBOD5) and a minimum concentration limit for the amount of dissolved oxygen present in the discharge itself.

Comment 11:

Woody Frossard on behalf of Tarrant Regional Water District, Martha V. Leonard and Cole Summers, Kristi Kerr Leonard, Teresa D Patterson on behalf of the Trinity Coalition, and Debi Wheelan expressed concerns about the levels of dissolved oxygen in the river as well as the adequacy of the modeling performed for this application.

Response 11:

A dissolved oxygen modeling analysis using an uncalibrated QUAL-TX model was developed by the applicant's representatives, with input and modifications by TCEQ modeling staff, for the evaluation of potential dissolved oxygen impacts to Mary's Creek. QUAL-TX is the standard modeling tool used by TCEQ for the assessment of potential direct dissolved oxygen impacts by a wastewater discharge in a water body of this type. It has a long record of accepted use for this purpose, has established modeling procedures applicable to its use in such analyses, and is approved by EPA for the evaluation of dissolved oxygen-related effluent limits for TPDES permits. The

model incorporated considerable amounts of site-specific information, primarily in regard to the hydraulic character of the creek and the presence of numerous low-water dams and pooled sections along the creek.

TCEQ staff worked with the applicant's representatives to make revisions to this model that would ensure it complied with TCEQ modeling protocols and other applicable modeling guidelines for the assessment of TPDES permit effluent limits.

QUAL-TX model results indicate that levels of dissolved oxygen in Mary's Creek are predicted to be maintained at levels that will meet the dissolved oxygen criterion associated with Mary's Creek's high aquatic life use (5.0 mg/L). The model extends 8.2 miles (13.19 kilometers) downstream of the proposed discharge point to the confluence of Mary's Creek with the Clear Fork Trinity River. The QUAL-TX modeling analysis does not extend into the Clear Fork Trinity River. The Clear Fork Trinity River has the same aquatic life use and dissolved oxygen criterion as Mary's Creek.

There are no other significant known wastewater discharges or other point sources of oxygen-demanding substances that enter the Clear Fork Trinity River Below Benbrook Lake, and the concentrations of these constituents that have direct impacts on instream dissolved oxygen levels originating from the proposed discharge will have decreased substantially by the time the discharge would reach the Clear Fork Trinity River. There are no known characteristics of the Clear Fork Trinity River that suggest dissolved oxygen criteria would not be met in the Clear Fork Trinity River as a result of this proposed discharge if that same dissolved oxygen criterion is predicted to be met in Mary's Creek. Extending the QUAL-TX dissolved oxygen modeling analysis into the Clear Fork Trinity River does not appear to be warranted by any currently available evidence. The effluent limits for dissolved oxygen and dissolved oxygen-related constituents are expected to be protective of the Clear Fork Trinity River, just as they are protective of Mary's Creek.

Other types of uncalibrated dissolved oxygen models may not be consistent with established and approved TCEQ modeling protocols and are not expected to provide a more accurate or more valid model result.

Comment 12:

Isaac H Manning, JD Granger, Debi Wheelan, George Grester, Jim Parker, Desiree Brienne, Lyn Abercrombie, Jeffrey Casteen, Robert Joel Sutton, and Donna Morgan expressed concerns about how a dry summer would impact the ecology of the river.

Response 12:

TPDES permits authorize discharges into many different types of water bodies throughout the state. For those discharges that require dissolved oxygen modeling, such as the discharge requested by City of Fort Worth, every attempt is made to develop a modeling approach appropriate for the type of waterbody that will receive the proposed discharge.

Different types of water bodies are evaluated differently, depending on their specific characteristics. Modeling analyses are developed to address the different hydrologic characteristics and flow conditions of small, intermittent, low-to-no-flow creeks; large perennial rivers; shallow creeks; deep creeks; fast-moving, steeply-sloped

creeks; slow, meandering bayous; intermittent creeks with persistent perennial pools; and various other types of water bodies.

Streamflow conditions and the hydrologic character of a stream, river, or other water body can have a significant impact on the capability of that water body to assimilate the oxygen-demanding components of a wastewater discharge. To ensure that dissolved oxygen modeling predictions are conservative, modeling analyses are developed to be appropriate for the water body under consideration and are also evaluated under hot and dry, low-flow conditions, when the impacts of a wastewater discharge on instream dissolved oxygen levels are expected to be at their greatest. Likewise, nutrient screening, recommendations for whole effluent toxicity (WET) testing, and other technical reviews are evaluated under the presumption of summertime, low-flow conditions.

Comment 13:

The individuals in attachment K expressed concerns about the economic impact the permit will have on businesses that utilize the river.

Response 13:

The water quality permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ does not have the authority to address concerns about the impact of the facility on the economy, businesses, tourism, or resale of homes as part of the wastewater permitting process. The scope of the TCEQ's regulatory jurisdiction does not affect or limit the ability of a landowner to seek relief from a court in response to activities that interfere with the landowner's use and enjoyment of his or her property.

The draft permit was drafted in accordance with the TSWQS and the Implementation Procedures and should be protective of water quality and uses of the receiving stream, provided the applicant operates and maintains the facility according to the requirements of the draft permit. An antidegradation review of the receiving waters was performed as part of the application review process. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

Additionally, the permit does not limit the ability of an individual to seek relief from a court in response to any potential trespass, nuisance, or other causes of action in response to activities that may result in injury to human health or property or that may interfere with a landowners use and enjoyment of their property.

Comment 14:

Joshua Arreguin, Faith Dignan, Riley Henderson, and Sarah Brodbeck expressed concerns about the potential costly remedies if the permit disrupts the river.

Response 14:

The water quality permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ does not have the authority to deny a permit on the basis of costly remediation. However, the permit does not limit the ability of an individual to seek relief from a court in response to any potential trespass, nuisance, or other causes of action in response to activities that may result in injury to human health or property or that may interfere with the normal use and enjoyment of property.

Comment 15:

Judy Williams and Sandra De Nijs expressed concerns about flooding and erosion.

Response 15:

The TCEQ does not have jurisdiction to regulate flooding in the context of a wastewater discharge permit. The permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes and coastal waters. However, to the extent that an issue related to flooding also involves water quality, the Applicant is required to comply with all the numeric and narrative effluent limitations and other conditions in the proposed permit at all times, including during flooding conditions. Likewise, the proposed permit includes effluent limits and other requirements that the Applicant must meet even during rainfall events and periods of flooding. According to the application, the proposed facility is located above the 100-year flood plain. For additional protection, the proposed permit includes Other Requirement No. 5, which requires the Applicant to provide protection for the facility from a 100-year flood.

For any additional flooding concerns, the Commenters may wish to contact the Floodplain Administrator for this area. The TCEQ Resource Protection Team can provide assistance in identifying and contacting the local floodplain administrator, by calling (512)239-4691. Additionally, the Federal Emergency Management Agency (FEMA) has programs that are designed to mitigate damage caused by flooding.

Comment 16:

Woody Frossard, on behalf of Tarrant Regional Water District, and Martha V. Leonard expressed their concerns about notice and whether sufficient notice was provided to the public and all affected landowners.

Response 16:

The TCEQ's notice rules require Applicants to provide public notices for new or major amendments to wastewater discharge permits by publishing the NORI in a "newspaper of largest circulation in the county in which the facility is located or proposed to be located ... if the facility is located or proposed to be located in a municipality, the applicant [must] publish notice in any newspaper of general

circulation in the municipality."[1] After the Office of the Chief Clerk has mailed the preliminary decision and the NAPD to the Applicant, the Applicant is required to publish the NAPD "at least once in a newspaper regularly published or circulated within each county where the proposed facility or discharge is located and in each county affected by the discharge." Additionally, the TCEQ's notice rules for a new permit require mailed notice of the NORI and NAPD to landowners whose properties are adjacent to the facility or along the discharge route within one mile from the point of discharge.

In accordance with TCEQ's notice rules, two public notices were published for the submitted application. The Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in Fort Worth County, Texas in English on January June 9, 2018, in the *Star-Telegram*, and in Spanish on June 15, 2018, in *Star-Telegram.* The Applicant published combined notice NORI and the Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD) in Fort Bend County, Texas in English on August 3, 2020 in the *Star-Telegram* and in Spanish on April 4, 2020, in *La Estrella.* The Public Meeting was held on October 5, 2020.

Comment 17:

Woody Frossard and Fred B. Werkenthin on behalf of Tarrant Regional Water District expressed concerns about Cyanobacteria.

Response 17:

Nutrients are one of many factors that may affect the biomass and toxicity of cyanobacteria (aka blue-green algae). Other factors that may contribute to blooms of cyanobacteria include temperature, light intensity, and water residence time. TCEQ's nutrient screening approach and the factors considered when evaluating the need for nutrient limits for proposed discharges to streams and rivers are described in the Implementation Procedures. TCEQ's general approach for setting nutrient limits for wastewater discharges is to focus on phosphorus rather than nitrogen, especially for discharges to freshwater systems, to prevent violation of numerical nutrient criteria and/or preclude excessive growth of aquatic vegetation. The justification for this approach is outlined in the General Screening Approach for Nutrient Impacts section of the Implementation Procedures.

The nutrient screening review for this permit application determined that nutrient limits were needed. Based on guidance in the Implementation Procedures, the size of the discharge, and site-specific factors, the Standards Implementation Team recommended the inclusion of a 0.2 mg/L total phosphorus (TP) limit for all discharge flow phases to ensure that no significant degradation of water quality will occur. This TP limit should help to preclude the potential for eutrophication effects, including algae blooms or other excessive growth of aquatic vegetation.

The draft permit was developed in accordance with the TSWQS and the Implementation Procedures and should be protective of water quality and uses of the receiving stream, provided the applicant operates and maintains the facility according to the requirements of the draft permit. An antidegradation review of the receiving waters was performed as part of the application review process. A Tier 1

[1] 30 TAC § 39.405(f)(1)

antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

The Standard Implementation Team's nutrient screening and subsequent TP limit recommendation primarily focused on Mary's Creek, but also considered the chlorophyll-a listing for the Clear Fork Trinity River Below Lake Benbrook (Segment 0829) in the then draft 2016 Integrated report. Because the TP limit was recommended with the aim of precluding the potential for eutrophication effects in the immediate receiving water, Mary's Creek, a relatively small stream, it is expected that this TP limit will also preclude eutrophication, as result of the discharge, in the Clear Fork Trinity River Below Lake Benbrook which is a relatively larger river and is located a more than seven miles downstream of the proposed point of discharge.

According to the Administrative Report in the application, both US Fish and Wildlife as well as Texas Parks and Wildlife received a copy of the application during the administrative review. The TCEQ has not received any comments regarding this application from either of these agencies.

Comment 18:

The individuals in attachment L stated their concerns about impacts downstream from the outfall such as the Clear Fork.

Response 18:

The TCEQ protects water quality and uses of receiving waters primarily through the implementation of the TSWQS, as described in the Implementation Procedures. The TSWQS include numeric and narrative water quality criteria used to protect the designated and assigned uses of receiving waters. As part of the permit application process, the TCEQ must determine the uses of the receiving waters and set effluent limits that are protective of those uses. For example, based on the designated or assigned aquatic life use subcategory, receiving waters are assigned a numeric dissolved oxygen criterion that must be met to support the aquatic life use. The TCEQ's Water Quality Assessment Team then performs a dissolved oxygen modeling analysis to ensure that the permit's effluent limits and other requirements will support the dissolved oxygen criterion and, therefore, protect the aquatic life use. For new permit application and renewal applications with major amendments, an Antidegradation review is also performed.

In this case, Mary's Creek was assigned a high aquatic life use and the associated 5.0 mg/l DO criterion to protect this aquatic life use by the Standards Implementation Team. Similarly, Clear Fork Trinity River Below Benbrook Lake, has a designated aquatic life use of high and associated 5.0 mg/l DO criterion to protect this use as described in Appendix A of the TSWQS. Modeling by the Water Quality Assessment Team has shown the effluent limits in the draft permit should be

protective of the 5.0 mg/l DO criteria for Mary's Creek and Clear Fork Trinity River Below Benbrook Lake.

The draft permit was drafted in accordance with the TSWQS and the Implementation Procedures and should be protective of water quality and uses of the receiving stream, provided the applicant operates and maintains the facility according to the requirements of the draft permit. An antidegradation review of the receiving waters was performed as part of the application review process. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

The Standard Implementation Team's nutrient screening and subsequent TP limit recommendation primarily focused on Mary's Creek, but also considered the chlorophyll-a listing for the Clear Fork Trinity River Below Lake Benbrook (Segment 0829) in the then draft 2016 Integrated report. Because the TP limit was recommended with the aim of precluding the potential for eutrophication effects in the immediate receiving water, Mary's Creek, a relatively small stream, it is expected that this TP limit will also preclude eutrophication, as result of the discharge, in the Clear Fork Trinity River Below Lake Benbrook which is a relatively larger river and is located a more than seven miles downstream of the proposed point of discharge.

Comment 19:

Mary Margaret Richter and Ashley Flowers expressed concerns about how the permit will affect livestock.

Response 19:

The Executive Director has determined that the draft permit would be protective of the environment, including livestock and other terrestrial wildlife. The TSWQS in 30 TAC Chapter 307 require that discharges may not degrade the receiving waters and may not result in situations that impair existing, attainable or designated uses, and that surface waters not be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals. The effluent limits in the draft permit are set to maintain and protect the existing instream uses.

Comment 20:

Kelly Shea Clem, Johnnye Panther Michael, Thomas William Ames, Mary Margaret Richter, and Landon Geary expressed concerns about the impact the permit will have on their property values.

Response 20:

The TCEQ does not have jurisdiction under the Texas Water Code or its regulations to address or consider property values or the marketability of adjacent

property when determining whether to approve or deny a permit application. It is beyond the agencies rules and authority to determine and regulate changes in property value due to the presence of a permitted facility. The scope of the TCEQ's regulatory jurisdiction does not affect or limit the ability of a landowner to seek relief from a court in response to activities that interfere with the landowner's use and enjoyment of his or her property.

Comment 21:

The individuals in attachment M expressed concerns about the ability for the public to access the river in the event there are unsafe conditions on the river.

Response 21:

The Executive Director has determined that the proposed draft permit is protective of the environment, water quality, and human health and that it meets TCEQ rules and requirements. The criteria in the proposed draft permit meets water quality standards for the protection of surface water quality, groundwater, and human health according to TCEQ rules and policies. The proposed draft permit includes additional requirements for the wastewater treatment system to ensure the protection of water quality and human health. The proposed draft permit includes requirements for the disposal of domestic sludge generated from the wastewater treatment facility based on TCEQ rules. Noncompliance with the permit may result in enforcement action against the permittee.

The draft permit was drafted in accordance with the TSWQS and the Implementation Procedures and should be protective of water quality and uses of the receiving stream, provided the applicant operates and maintains the facility according to the requirements of the draft permit. An antidegradation review of the receiving waters was performed as part of the application review process. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. Therefore, the discharge from this facility should not have a negative impact on recreational activities. The preliminary determination can be reexamined and may be modified if new information is received.

Comment 22:

Isaac H. Manning stated his concerns about the permit complying with technical standards.

Response 22:

The Applicant "is required to build a wastewater collection system or treatment facility according to the plans and specifications approved by the executive director." The Applicant is required to ensure the plans and specifications for the facility meet all design requirements in the proposed permit. According to the TCEQ rules, the plans and specifications for this facility "must be based on a design that will produce

effluent that will at least meet the requirements and effluent limits in the" proposed permit.

Comment 23:

Ashley Flowers expressed her concern about how the permit would affect groundwater.

Response 23:

The Water Quality Division has determined that the draft permit is in accordance with the TSWQS, which ensures that the effluent discharge is protective of aquatic life, human health, and the environment. The review process for surface water quality is conducted by the Standards Implementation Team and Water Quality Assessment Team surface water modelers. The Water Quality Division has determined that if the surface water quality is protected, then the groundwater quality in the vicinity will not be impacted by the discharge. Therefore, the permit limits given in the draft permit intended to maintain the existing uses of the surface waters and preclude degradation will also protect groundwater.

The Texas Legislature has determined that "the goal of groundwater policy in this state that the existing quality of groundwater not be degraded. This goal of non-degradation does not mean zero-contaminant discharge." Chapter 26 of the Texas Water Code further states, "discharges of pollutants, disposal of wastes, or other activities subject to regulation by state agencies be conducted in a manner that will maintain present uses and not impair potential uses of groundwater or pose a public health hazard."

Further, 30 TAC § 309.13(c) states that a wastewater treatment plant unit may not be located closer than 500 feet from a public water well nor 250 feet from a private water well. The Ground Water Rule does not address private wells because they are not under the jurisdiction of the Safe Drinking Water Act and are therefore not subject to TCEQ regulation. TCEQ recommends that well owners periodically test their water for microbial and chemical contaminants and properly maintain their well.

Comment 24:

Mary Helen Franko expressed her concern about the capacity and growth of the facility over time.

Response 24:

The Applicant's permit authorizes the discharge of treated domestic wastewater at an annual average flow not to exceed 10 million gallons per day (MGD) in the Interim phase and an annual average flow not to exceed 15 MGD in the Final phase. Should the applicant wish to expand the total allowable discharge, they would be required to either seek a variance or an amendment to the existing permit.

Comment 25:

Woody Frossard raised concerns regarding water quality of Mary's Creek and the Clear Forks of the Trinity River. He also raised concerns about the water quality results of the QUALTX Model developed by the city, utilized by TCEQ for its analysis, which identified that ammonia and carbonaceous BOD5 would be discharged from the proposed wastewater treatment plant, and modeling demonstrates a likelihood of future impairment.

Response 25:

The ED's staff developed the effluent limitations in the draft permit to maintain and protect the existing in-stream uses. In accordance with 30 Texas Administrative Code § 307.5 and the TCEQ implementation procedures (June 2010) for the TSWQS, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

DO modeling analyses are performed in order to evaluate whether the effluent limits in a discharge permit are predicted to be adequate to ensure that DO concentrations in the water bodies along a discharge route will be maintained above the criteria established by the Standards Implementation Team for those water bodies. DO concentrations in a water body are critical for protection of aquatic life. In order to evaluate the potential DO impact of the proposed discharge under the most conservative conditions, the ED's staff incorporates what are known as critical conditions into DO modeling analyses.

The DO modeling analyses were performed under critical conditions, which are representative of hot and dry summertime conditions with critical low-flow when DO levels would typically be at their lowest, or when discharge conditions are typically the most restrictive for DO.

Segment No. 0829 is currently listed on the State's inventory of impaired and threatened waters, the 2014 Clean Water Act (CWA) Section 303(d) list. The listing is for dioxin and Polychlorinated Biphenyls (PCBs) in edible tissue throughout the entire segment (AU0829_01, AU0829_02 and AU0829_03). This is a public domestic wastewater treatment facility. According to the city, this facility will not receive industrial wastewater contributions, therefore the effluent from this facility should not contribute to the dioxin and PCBs in edible tissue impairment of this segment. Should this change, the City is required to notify the Commission and if necessary, TCEQ will use this information and take appropriate action.

Comment 26:

Denis McElroy, Kenneth Barr, and Travis Clegg on behalf of The Greater Fort Worth Builders Association, expressed their support of the permit.

Response 26:

The Executive Director acknowledges these comments.

Comment 27:

Woody Frossard on behalf of Tarrant Regional Water District, David R. Hooper, Debi Wheelan, B. C. Adams, and Robert Joel Sutton expressed concerns about the effects the permit will potentially have on water supplies.

Response 27:

The draft permit was drafted in accordance with the TSWQS and the Implementation Procedures and should be protective of water quality and uses of the receiving stream, provided the applicant operates and maintains the facility according to the requirements of the draft permit. An antidegradation review of the receiving waters was performed as part of the application review process. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses, including water supplies, will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

Comment 28:

Martha V. Leonard raised concerns about the impact the permit will have on the dams on her property. She is concerned that the dam created reservoirs will no longer be fit for recreation or wildlife use. She is also concerned about the inability of the waste to assimilate as it approaches the dam as well as the accumulation of effluent on her property in the event of an accidental discharge.

Response 28:

The multiple lower water dams and associated impoundments on Mary's Creek were considered during the Standards Implementation Team's review of the permit application. The multiple impoundments on Mary's Creek were one of several site-specific factors that contributed to the decision to recommend total phosphorus (TP) limits for the proposed discharge.

The nutrient screening review for this permit application determined that nutrient limits were needed. Based on guidance in the Implementation Procedures, the size of the discharge, the presence of multiple downstream impoundments on Mary's Creek, and other site-specific factors, the Standards Implementation Team recommended the inclusion of a 0.2 mg/L total phosphorus (TP) limit for all discharge flow phases to ensure that no significant degradation of water quality will occur. This TP limit should help to preclude the potential for eutrophication effects, including algae blooms or other excessive growth of aquatic vegetation.

Maintaining dissolved oxygen levels in Mary's Creek above the criteria established for this water body is essential for the protection of aquatic life in the creek. The dissolved oxygen modeling analysis developed by the applicant's representatives in coordination with ED modeling staff incorporates nine low-water dams in Mary's Creek downstream of the proposed discharge as components of the model. These dams influence the hydraulic character of sections of Mary's Creek above the dams, as well as representing potential sources of reaeration in sections immediately below the dams. The effluent limits for dissolved oxygen-related constituents in the draft permit are based on these model results. The draft permit also includes a special study requirement to collect data at each dam location (upstream and downstream) for the purpose of refining dam aeration potential in the dissolved oxygen model.

The draft permit was drafted in accordance with the TSWQS and the Implementation Procedures and should be protective of water quality and uses of the receiving stream, provided the applicant operates and maintains the facility according to the requirements of the draft permit. An antidegradation review of the receiving waters was performed as part of the application review process. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

Comment 29:

The individuals listed in attachment N requested a contested hearing.

Response 29:

The ED acknowledges these requests for a contested case hearing. After the deadline for submitting public comments, the ED will consider all timely comments and prepare a response to all relevant material or significant public comments. The response to comments will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. The mailing will also provide instructions for requesting a contested hearing or reconsideration of the ED's decision. Following the close of all applicable comment and request periods, the ED will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant material water quality concerns submitted during the comment period. If the application does go to hearing, the final decision regarding this application will be made by the TCEQ's Commissioners.

Comment 30:

Brittani Hall and Jacqueline Berkovsky stated they opposed the permit.

Response 30:

The ED acknowledges these comments.

Comment 31:

Clint Tanner McClellen stated that the public should have the opportunity to vote on the permit.

Response 31:

The water quality permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and coastal waters. The TCEQ does not have the authority to choose facility or discharge locations of prospective permits nor can the TCEQ require an applicant to obtain consent of the public to apply for a permit. Chapter 26 of the Texas Water Code does not require an election as part of the permit review process.

When the TCEQ receives applications for TPDES permits, the TCEQ requires applicants to publish notice of both their intent to receive a permit as well notify the public when the Executive Director has made his preliminary decision as to whether the proposed permit complies with all applicable TCEQ rules and regulations. During this period, members of the public are encouraged to submit comments to the TCEQ, raising concerns they might have about the permit so that the Executive Director's staff may address these concerns and determine whether any of the issues raised during this comment period would require changes to the draft permit.

For this permit, the TCEQ received hundreds of comments from several individuals in which numerous issues were raised. This RTC responds to the issues members of the public have raised and as of the publication of this Response, no changes have been made to the draft permit.

Comment 32:

Woody Frossard (director with Tarrant regional water district in Fort Worth) raised concerns regarding the tier one and tier two anti-degradation reviews. Mr. Frossard is concerned the reviews did not take into consideration potential increases in BOD, eutrophication, cyanobacteria, chlorophyll, bacteria, and TDS criteria.

Response 32:

An antidegradation review is performed for new permit applications and renewal applications with major amendments. The antidegradation review includes all applicable technical reviews, screenings, modeling, and effluent limits and other permit conditions. The TCEQ protects water quality and uses of receiving waters primarily through the implementation of the TSWQS, as described in the Implementation Procedures. The TSWQS include numeric and narrative water quality

criteria used to protect the designated and assigned uses of receiving waters. As part of the permit application process, the TCEQ must determine the uses of the receiving waters and set effluent limits that are protective of those uses. For example, based on the designated or assigned aquatic life use subcategory, receiving waters are assigned a numeric dissolved oxygen criterion that must be met to support the aquatic life use. The TCEQ's Water Quality Assessment Team then performs a dissolved oxygen modeling analysis to ensure that the permit's effluent limits and other requirements will support the dissolved oxygen criterion and, therefore, protect the aquatic life use. Additional screenings and technical reviews that may be performed as part of the application review process and antidegradation review, include critical conditions assessment, biomonitoring review, dissolved solids screening, nutrient screening, and TexTox screening for toxics.

In this case, Mary's Creek was assigned a high aquatic life use and the associated 5.0 mg/l DO criterion to protect this aquatic life use by the Standards Implementation Team. Similarly, Clear Fork Trinity River Below Benbrook Lake, has a designated aquatic life use of high and associated 5.0 mg/l DO criterion to protect this use as described in Appendix A of the TSWQS. Modeling by the Water Quality Assessment Team has shown the effluent limits in the draft permit should be protective of the 5.0 mg/l DO criteria for Mary's Creek and Clear Fork Trinity River Below Benbrook Lake.

The nutrient screening review for this permit application determined that nutrient limits were needed. Based on guidance in the Implementation Procedures, the size of the discharge, and site-specific factors, the Standards Implementation Team recommended the inclusion of a 0.2 mg/L total phosphorus (TP) limit for all discharge flow phases to ensure that no significant degradation of water quality will occur. This TP limit should help to preclude the potential for eutrophication effects, including algae blooms or other excessive growth of aquatic vegetation.

The Standards Implementation Team's nutrient screening and subsequent TP limit recommendation primarily focused on Mary's Creek, but also considered the chlorophyll-a listing for the Clear Fork Trinity River Below Lake Benbrook (Segment 0829) in the then draft 2016 Integrated report. Because the TP limit was recommended with the aim of precluding the potential for eutrophication effects in the immediate receiving water, Mary's Creek, a relatively small stream, it is expected that this TP limit will also preclude eutrophication, as result of the discharge, in the Clear Fork Trinity River Below Lake Benbrook which is a relatively larger river and is located a more than seven miles downstream of the proposed point of discharge.

TCEQ is aware of the 303(d) listing of bacteria for the Clear Fork Trinity River Below Lake Benbrook (Segment No. 0829), and the Standards Implementation Team noted the then 305(b) concern for bacteria in the draft 2016 Integrated Report. As noted in the Standards Implementation Team's review, the draft permit has end-of-pipe limits equal to the segment criteria; therefore, this discharge should not contribute to the 303(d) impairment of Segment No. 0829 for bacteria. This practice is consistent with TCEQ's antidegradation implementation procedures for discharges to water bodies impaired for bacteria.

The ED's staff developed the effluent limitations in the draft permit to maintain and protect the existing in-stream uses. In accordance with 30 Texas Administrative Code § 307.5 and the TCEQ Implementation Procedures (June 2010) for the Texas

Surface Water Quality Standards, an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Mary's Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

CHANGES MADE TO THE DRAFT PERMIT IN RESPONSE TO COMMENTS

No changes to the draft permit have been made in response to public comment.

Respectfully submitted,

Texas Commission on Environmental Quality

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Environmental Law Division

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REPRESENTING THE EXECUTIVE DIRECTOR OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Attachment A:

JD Granger, Woody Frossard on behalf of Tarrant Regional Water District, Matthew Black Mancino, Martha V. Leonard, Skyler Stephenson, Matt Oliver, Betty Dillard, Sydney, O'Connell, Jerry Cate, Caroline Stephenson, Blake Billman, Ryan Helm, Meaghan Geary, David. R. Hooper on behalf of Forth Worth Fly Fishers, Hollace Ava Weiner, Fallon Foster, Noah Collins, Karla Cate, Johnnye Michael, Johnnye Michael Panther, Emily Anne Craig, Kevin McConnell, Steve Vasquez, Jacob A. Posey, Alex Walraven, Taylor Ullman, Samantha Ogle, Kaden Taylor, Greyson Brooks Perkins, Kian Amos, Julie Hencke, Tristen Rodriguez, Raul Rodriguez, Dani Cheshire, Lewis Roger Coffey, Anhquan Nguyen, Cory M. Henderson, Sara Hunt, Cole Summers, Lester Jackson, Richard Grayson, Theresa Patterson and Trinity Coalition, William Jared Fuller, Chandler S Davis, Bailey Templin, Charles Reid, Valerie Ann Ramos, Gerrard Joseph Schlegel, Daniel Ivery, Kelly Shea Clem, Thomas William Ames, Megan W McMullen, Autumn N. Crawford, Allison Jo Hocking, Jodi Thomason, Taylor Ellison, Landon Geary, Mikeala Van Horn, John S. Boid, Gregory Mark Mancino, Andy Payne on behalf of The Texas Council of Fly Fishers International, Shanna Cate Granger, Brittany Hall, Travis Cate, Andrew Ryan Sparks, Justice Garcia, Jeremy Raines, Amy Martin, Stephen M Woodcock, Madison Jones, Diane Williamson, Susan Barnard, Sydney Walker, Sean Jacobson, Helen Elliot, Riley Henderson, Daniel Glenn, Devondrick Rashad Williams, David Lynn Buchanan, Blane A Hiett, Christian Linville, Robert Joel Sutton, John Vandine, Aron Smudy, Frederick Sirs Dieterich, Laura Vanhook, Andy Prunty, Therese Progar, Lyn Abercrombie, Jeffrey Casteen, Bronson Segura, Yancy Smith, Nathan Montgomery, Greg Demars, Tracey Thompson, Robert Joel Sutton, Russel Warren Husted and Texas Council Fly Fishers International, Lacey Imbert, and Teresa Patterson on behalf of the Trinity Coalition.

Attachment B:

JD Granger, Emily Anne Craig, Woody Frossard on behalf of Tarrant Regional Water District, Russel Husted and on behalf of Texas Council Fly Fishers International, David R. Hooper and on behalf of Forth Worth Fly Fishers, Richard H Grayson, Teresa Patterson on behalf of the Trinity Coalition, Mary Margaret Richter, Gerrard Joseph Schlegel, Andy Payne on behalf of The Texas Council of Fly Fishers International, Matthew Blake Mancino, Noah Collins, Jacob A. Posey, Alex Walraven, Greyson Brooks Perkins, Julie Hencke, Stephen M Woodcock, Raul Rodriguez, Roger Lewis Coffey, Anhquan Nguyen, Cole Summers, Robert Garmon, Sydney Walker, Riley Henderson, David Lynn Buchanan, Blane A Hiett, Christian Linville, David R Maples, Robert Resendez, Laura Vanhook, Bronson Segura, Yancy Smith, Nathan Montgomery, Leah Miranda Hill, Carl Hopkins, Sarah Brodbeck, Russel Warran Husted and on behalf of Texas Council Fly Fishers International.

Attachment C:

Emily Anne Craig, Woody Frossard on behalf of Tarrant Regional Water District, Martha V. Leonard, David R. Hooper and on behalf of Forth Worth Fly Fishers, William Jared Fuller, Isaac H Manning, Mary Margaret Richter, Allison Jo Hocking, Jodi Thomason, Andy Payne on behalf of The Texas Council of Fly Fishers International Fallon Foster, Kaden Taylor, Greyson Brooks Perkins, Lester Jackson, Amy Martin, Frank Orlando, B C Adams, Dani Chesier, Roger

Lewis Coffey, Cory M. Henderson, Sara Hunt, Cole Summers, George Grester, Joshua Arreguin, Suzanne Barnard, Sean Christian Harla, Sydney Walker, Kathryn Mills, Riley Henderson, James Osborne, Leslie Rue, Clint Tanner McClellen, Jim Parker, David Lynn Buchanan, Christian Linville, Robert Joel Sutton, David R Maples, John Vandine, Joe John Bond, Lauran Vanhook, Elaine Weinbrenner, Andy Prunty, Desiree Brienne, Jeffrey Casteen, Faith Dignan, Stephanie Shelton, Kenneth Guthrie, Yancy Smith, Anthony Demma, Leah Miranda Hill, Carl Hopkins, Christina Ann Hammer, Mariya Zemerova, Tracey Thompson, Donna Morgan, and Sarah Brodbeck.

Attachment D:

JD Granger, Russel Husted and Texas Council Fly Fishers International, David R. Hooper on behalf of Forth Worth Fly Fishers, Teresa D Patterson on behalf of the Trinity Coalition, William Jared Fuller, Mary Margaret Richter, Chandler S. Davis, Bailey Templin, Charles Reid, Valerie Ann Ramos, Gerrard Joseph Schelgel, Daniel Ivery, Kelly Clea Shem, Thomas William Ames, Megan W McMullen, Autumn N. Crawford, William Jared Fuller, Allison Jo Hocking, Jodi Thomason, Taylor Ellison, Mikeala Van Horn, John S. Boid, Gregory Mark Mancino, Andy Payne on behalf of The Texas Council of Fly Fishers International, Russel Husted on behalf of Texas Council Fly Fishers International, Shanna Cate Granger, Skyler Stephenson, Matt Oliver, Betty Dillard, Sydney O'Connell, Jerry Cate, Debi Wheelan, Travis Cate, Caroline Stephenson, Blake Billman, Meaghan Geary, Andrew Ryan Sparks, Karla Cate, Hollace Ava Weiner, Noah Collins, Katherine Taft, Jacob A. Posey, Greyson Brooks Perkins, Justice Garcia, Kian Amos, Tristen Rodriguez, Jeremy Raines, Stephen M Woodcock, George Crester, Diane Williamson, Jim Parker, Shelly Borders, Desiree Brienne, Jeffrey Casteen, Yancy Smith, and Donna Morgan.

Attachment E:

JD Granger, Woody Frossard on behalf of Tarrant Regional Water District, Russel Husted and Texas Council Fly Fishers International, David R. Hooper on behalf of Forth Worth Fly Fishers, William Jared Fuller, Chandler S Davis, Bailey Templin, Charles Reid, Valeria Ann Ramos, Gerrard Joseph Schlegel, Daniel Ivery, Kelly Shea Clem, Thomas William Ames, Megan W McMullen, Autumn N. Crawford, William Jared Fuller, Allison Jo Hocking, Jodi Thomason, Taylor Ellison, Mikeala Van Horn, John S. Boid, Gregory Mark Mancino, Shanna Cate Granger, Skyler Stephenson, Matt Oliver, Betty Dillard, Sydney O'Connell, Jerry Cate, Debi Wheelan, Travis Cate, Caroline Stephenson, Ryan Helm, Meaghan Geary, Andrew Ryan Sparks, Karla Cate, Johnnye Michael, Johnnye Panther Michael, Hollace Ave Weiner, Noah Collins, Kaden Taylor, Kevin McConnell, Katherine Taft, Jacob A. Posey, Greyson Brooks Perkins, Justice Garcia, Kian Amos, Julie Hencke, Tristen Rodriguez, Jeremy Raines, Stephen M Woodcock, Robert Garmon, Suzanne Barnard, Helen Elliot, Riley Henderson, Jim Parker, Shelly Borders, Desiree Brienne, Jeffrey Casteen, Yancy Smith, Joshua Sadler, Ashley Flowers, Donna Morgan, Sarah Brodbeck, and Fred B. Werkenthin on behalf of Tarrant Regional Water District,

Attachment F:

Stephanie Shelton, Cole Summers, Emily Anne Craig, Martha V. Leonard, David R. Hooper on behalf of Forth Worth Fly Fishers, Isaac H Manning, Robert

Garmon, Suzanne Barnard, Helen Elliot, Riley Henderson, Leslie Rue, Robert Joel Sutton, Laura Vanhook, Yancy Smith, Shelly Borders, and Ashley Flowers.

Attachment G:

Emily Anne Craig, Richard H Greyson, Amy Martin, Christian Berger, Raul Rodriguez, Anhquan Nguyen, Cory M. Henderson, Sara Hunt, Maddison Jones, Tarah Kitcher, Diane Williamson, Suzanne Barnard, Sean Jacobson, Helen Elliot, Riley Henderson, Bryan M Cole, James Osborne, Jacqueline Berkovsky, Richard Laffey, Leslie Rue, Rick Messina, David Lynn Buchanan, Michael Reznikoff, Christian Linville, Robert Joel Sutton, Julia Brown Naughton, David R Maples, John Vandine, Robert Resendez, Amanda Jeane Melbourne, Matthew Flett, Aron Smudy, Joe John Bond, Shelly Borders, Dave Siewert, Elaine Weinbrenner, Mason Mcleod, Andy Prunty, Desire Brienne, Therese Progar, Lyn Abercrombie, Jeffrey Casteen, Faith Dignan, Stephanie Shelton, Bronson Segura, Kenneth Guthrie, Yancy Smith, Nathan Montgomery, Josh Corbin, Sergey V Kokhan, Leah Miranda Hill, Carl Hopkins, Greg Demars, Joshua Sadler, Mariya Zemerova, Tracey Thompson, Robert Joel Sutton, Ashley Flowers, George Crester, Donna Morgan, Sarah Brodbeck, Tim Martin, and John S. Boid.

Attachment H

JD Granger, Teresa D Patterson on behalf of the Trinity Coalition, William Jared Fuller, Ryan Helm, Fallon Foster, Greyson Brooks Perkins, Julie Hencke, Tristen Rodriguez, Diane Williamson, Clint Tanner McClellan, Therese Progar, Jamaal Jackson, Tracey Thompson, Allison Jo Hocking, Steven Ford, Stacey Pierce, Woody Frossard on behalf of Tarrant Regional Water District, Martha V. Leonard, David R. Hooper on behalf of Forth Worth Fly Fishers, Isaac H Manning, Andy Payne on behalf of The Texas Council of Fly Fishers International Debi Wheelan, Roger Lewis Coffey, Janet Kent, Therese Progar, Jamaal Jackson, James Osborne, and John S Boid.

Attachment I:

JD Granger, Stacey Pierce, David R. Hooper on behalf of Forth Worth Fly Fishers, Richard H Grayson, Teresa Patterson on behalf of the Trinity Coalition, Andy Payne on behalf of The Texas Council of Fly Fishers International, Russel Husted on behalf of Texas Council Fly Fishers International, Debi Wheelan, Frank Orlando, BC Adams, Raul Rodriguez, Diane Williamson, Suzanne Barnard, Sydney Walker, Kathryn Mills, Riley Henderson, Bryan M Cole, Richard Laffey, Daniel Glenn, Rick Messina, Blane A Hiett, Robert Joel Sutton, John Vandine, Aron Smudy, Laura Vanhook, E Lee Letts, Elaine Weinbrenner, Andy Prunty, Jeffrey Casteen, Michelle Kopp, Faith Dignan, Niranjan Gadekar, Robert Joel Sutton, Ashley Flowers, Donna Morgan, Debi Wheelan, Sarah Brodbeck, David A Price on behalf of Texas Rivers Protection Association, David F Reichert, Fred B. Werkenthin on behalf of Tarrant Regional Water District, and Bryan M Cole.

Attachment J

Emily Anne Craig, William Jared Fuller, Kelly Shea Clem, Thomas William Ames, William Jared Fuller, Landon Geary, John S Boid, Ryan Helm, Johnnye Michael, Johnnye Panther Michael, Kevin McConnell, Tristen Rodriguez, Julie Hencke, Allison Jo Hocking, Helen Elliot, Riley Henderson, and Yancy Smith.

Attachment K

JD Granger, Russell Husted and on behalf of Texas Council Fly Fishers International, Teresa D Patterson and on behalf of the Trinity Coalition, Gerrard Joseph Schelgel, Allison Jo Hocking, Landon Geary, Shanna Cate Granger, Betty Dillard, Ryan Helm, Johnnye Michael, Johnnye Panther Michael, Samantha Ogle, Kevin McConnell, Taylor Ullman, Greyson Brooks Perkins, Tristen Rodriguez, Amy Martin, Yancy Smith, Tracey Thompson, Stephen M. Woodcock, John S. Boid, Niranjan Gadekar, and Fred B. Werkenthin on behalf of Tarrant Regional Water District, and Faith Dignan.

Attachment L:

John S. Boid, Sandra De Nijs, Andy Payne on behalf of Texas Council of Fly Fishers International, JD Granger, William Jared Fuller, Mary Margaret Richter, Chandler S Davis, Bailey Templin, Charles Reid, Valerie Ann Ramos, Gerry Schlegel, Gerrard Joseph Schlegel, Daniel Ivery, Kelly Shea Clem, Thomas William Ames, Megan W McMullen, Autumn N. Crawford, Teresa D Patterson on behalf of the Trinity Coalition, Allison Jo Hocking, Jodi Thomason, Taylor Ellison, Landon Geary, Mikeala Van Horn, Gregory Mark Mancino, Russel Husted and Texas Council Fly Fishers International, Shanna Cate Granger, Matthew Blake Mancino, Skyler Stephenson, Matt Oliver, Betty Dillard, Sydney O'Connell, Blake Billman, Taylor Ulmann, Jerry Cate, Debi Wheelan, Travis Cate, Caroline Stephenson, Ryan Helm, Meaghan Geary, David R Hooper on behalf of Forth Worth Fly Fishers, Andrew Ryan Sparks, Karla Cate, Johnnye Michael, Johnny Panther Michael, Emily Anne Craig, Hollace Ava Weiner, Fallon Foster, Noah Collins, Kevin McConnell, Katherine Taft, Jacob A. Posey, Greyson Brooks Perkins, Justice Garcia, Kian Amos, Julie Hencke, Tristen Rodriguez, Jeremy Raines, Stephen M Woodcock, Janet Kent, Diane Williamson, Jaqueline Berkovsky, Julia Brown Naughton, Shelly Borders, Jeffrey Casteen, Russel Warren Husted and on behalf of Texas Council of Fly Fishers International, and David R. Hooper on behalf of Forth Worth Fly Fishers.

Attachment M:

Bailey Templin, Valerie Ann Ramos, Daniel Ivery, Kelly Shea Clem, Thomas William Ames, Jodi Thomason, John S. Boid, Chandler S Davis, Charles Reid, Megan W McMullen, Autumn N. Crawford, William Jared Fuller, Jodi Thomason, Taylor Ellison, Landon Geary, Mikeala Van Horn, Gregory Mark Mancino, Russel Husted and on behalf of Texas Council Fly Fishers International, David R. Hooper on behalf of Forth Worth Fly Fishers, Andrew Ryan Sparks, Gerry Schlegel, Gerrard Joseph Schlegel, Taylor Ellison, Shanna Cate Granger, Matthew Blake Mancino, Skyler Stephenson, Matt Oliver, Betty Dillard, Sydney O'Connell, Jerry Cate, Travis Cate, Caroline Stephenson, Meaghan Geary, Karla Cate, Hollace Ava Weiner, Noah Collins, Katherine Taft, Jacob A. Posey, Justice Garcia, Kian Amos, Tristen Rodriguez, Jeremy Raines, Jim Parker, and Frederick Sirs Dieterich.

Attachment N:

JD Granger, Woody Frossard on behalf of Tarrant Regional Water District, Martha V. Leonard, David R. Hooper and behalf of Forth Worth Fly Fishers, Richard H Grayson, Teresa Patterson and on behalf of the Trinity Coalition, William Jared Fuller, Mary Margaret Richter, Chandler S Davis, Bailey Templin,

Charles Reid, Valerie Ann Ramos, Gerry Schlegel, Gerrard Joseph Schlegel, Daniel Ivery, Kelly Shea Clem, Thomas William Ames, Megan W. McMullen, Autumn N. Crawford, Allison Jo Hocking, Jodi Thomason, Taylor Ellison, Landon Geary, Mikeala Van Horn, John S. Boid, Gregory Mark Mancino, Andy Payne on behalf of The Texas Council of Fly Fishers International, Russel Husted, Shanna Cate Granger, Mathew Blake Mancino, Skyler Stephenson, Matt Oliver, Betty Dillard, Sydney O'Connell, Jerry Cate, Brittani Hall, Travis Cate, Caroline Stephenson, Ryan Helm, Meaghan Geary, Andrew Ryan Sparks, Karla Cate, Johnnye Michael, Johnnye Panther Michael, Emily Anne Craig, Noah Collins, Kevin McConnell, Katherine Taft, Jacob A. Posey, Kian Amos, Julie Hencke, Tristen Rodriguez, Jeremy Raines, Stephen M Woodcock, George Grester, Michelle Kopp, David A Price on behalf of Texas Rivers Protection Association, Tim Martin, Teresa Patterson on behalf of the Trinity Coalition, and Fred B. Werkenthin and James M Oliver on behalf of Tarrant Regional Water District.