Trinity River Authority of Texas
P.O. Box 60
Arlington, Texas 76004

No. 209477
Check Date: 6/25/25

TCEQ Tx Commission Environment, PO Box 13088, Austin TX 78711-3089 **(2060)**

Invoice Number	Description	Date	Gross Amount	Discount Amount	Net Amount Paid
08-3404D-1		06/17/25	$9,194.50	$0.00	$9,194.50
Detach at Perforation Before Depositing Check		**TOTALS:**	$9,194.50	$0.00	$9,194.50

Wells Fargo Bank, N.A.
16414 North San Pedro, Suite 1000
San Antonio, TX 78232
37-65/1119

Check Date	Number
06/25/2025	209477

PAY *VOID VOID VOID VOID VOID VOID VOID VOID*

PAY TO THE ORDER OF **TCEQ Tx Commission Environment**
PO Box 13088
Austin TX 78711-3089
(2060)

$ 9,194.50

Void After 90 Days

NON-NEGOTIABLE

Trinity River Authority of Texas
P.O. Box 60
Arlington, Texas 76004

TCEQ Tx Commission Environment
PO Box 13088
Austin TX 78711-3089

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TCEQ WATER RIGHTS PERMITTING APPLICATION

ADMINISTRATIVE INFORMATION CHECKLIST

Complete and submit this checklist for each application. See Instructions Page 5.

APPLICANT(S): Trinity River Authority of Texas

Indicate whether the following items are included in your application by writing either Y (for yes) or N (for no) next to each item (all items are <u>not</u> required for every application).

Y/N		Y/N	
Y	**Administrative Information Report**	Y	**Worksheet 3.0**
N	Additional Co-Applicant Information	N	Additional W.S. 3.0 for each Point
N	Additional Co-Applicant Signature Pages	N	Recorded Deeds for Diversion Points
Y	Written Evidence of Signature Authority	N	Consent for Diversion Access
N	**Technical Information Report**	Y	**Worksheet 4.0**
Y	USGS Map (or equivalent)	Y	TPDES Permit(s)
Y	Map Showing Project Details	Y	WWTP Discharge Data
N	Original Photographs	N	Groundwater Well Permit
N	Water Availability Analysis	N	Signed Water Supply Contract
Y	**Worksheet 1.0**	Y	**Worksheet 4.1**
N	Recorded Deeds for Irrigated Land	Y	**Worksheet 5.0**
N	Consent for Irrigated Land	N	Addendum to Worksheet 5.0
Y	**Worksheet 1.1**	Y	**Worksheet 6.0**
N	Addendum to Worksheet 1.1	Y	Water Conservation Plan(s)
N	**Worksheet 1.2**	Y	Drought Contingency Plan(s)
Y	**Worksheet 2.0**	Y	Documentation of Adoption
N	Additional W.S. 2.0 for Each Reservoir	Y	**Worksheet 7.0**
N	Dam Safety Documents	Y	Accounting Plan
N	Notice(s) to Governing Bodies	Y	**Worksheet 8.0**
N	Recorded Deeds for Inundated Land	Y	Fees
N	Consent for Inundated Land	Y	Public Involvement Plan

ADMINISTRATIVE INFORMATION REPORT

The following information **is required** for **all** new applications and amendments.

****Applicants are REQUIRED to schedule a pre-application meeting with TCEQ Staff to discuss Applicant's needs prior to submitting an application. Call the Water Rights Permitting Team to schedule a meeting at* **(512) 239-4600.**

1. TYPE OF APPLICATION (Instructions, Page. 6)

Indicate, by marking X, next to the following authorizations you are seeking.

_____New Appropriation of State Water

X_____Amendment to a Water Right *

_____Bed and Banks

If you are seeking an amendment to an existing water rights authorization, you must be the owner of record of the authorization. If the name of the Applicant in Section 2 does not match the name of the current owner(s) of record for the permit or certificate or if any of the co-owners is not included as an applicant in this amendment request, your application could be returned. If you or a co-applicant are a new owner, but ownership is not reflected in the records of the TCEQ, submit a change of ownership request (Form TCEQ-10204) prior to submitting the application for an amendment. See Instructions page. 6. Please note that an amendment application may be returned, and the Applicant may resubmit once the change of ownership is complete.

Please summarize the authorizations or amendments you are seeking in the space below or attach a narrative description entitled "Summary of Request."

The Trinity River Authority of Texas (TRA) is the owner of Certificate of Adjudication 08-3404, as amended in A, B, C, and D, which includes 17,000 af /yr of natural yield and 4,368 af/y of reuse water from TRA's Mountain Creek Regional Wastewater System. On January 25, 2023, the TCEQ approved a Major Amendment to TPDES Permit No. WQ0010348001 which increased the discharge volume from TRA's Mountain Creek Regional Wastewater Treatment Plant (MCRWS) from 3MGD to a final effluent limit of 12 MGD (13,450 af/y).

TRA is requesting an increase in the reuse portion of the above-mentioned water right from 4,368 to 13,450 af/y, to be used for the same purpose and within the same service area as the existing authorization.

2. APPLICANT INFORMATION (Instructions, Page. 6)

a. Applicant

Indicate the number of Applicants/Co-Applicants 1
(Include a copy of this section for each Co-Applicant, if any)

What is the Full Legal Name of the individual or entity (applicant) applying for this permit?

Trinity River Authority of Texas

(If the Applicant is an entity, the legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal documents forming the entity.)

If the applicant is currently a customer with the TCEQ, what is the Customer Number (CN)? You may search for your CN on the TCEQ website at http://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

CN : CN601265945 (leave blank if you do not yet have a CN).

What is the name and title of the person or persons signing the application? Unless an application is signed by an individual applicant, the person or persons must submit written evidence that they meet the signatory requirements in *30 TAC § 295.14*.

First/Last Name: J. Kevin Ward

Title: General Manager

Have you provided written evidence meeting the signatory requirements in 30 TAC § 295.14, as an attachment to this application? **Y/N** Y

What is the applicant's mailing address as recognized by the US Postal Service (USPS)? You may verify the address on the USPS website at https://tools.usps.com/go/ZipLookupAction!input.action.

Name: Trinity River Authority of Texas

Mailing Address: 5300 S. Collins St.

City: Arlington State: TX ZIP Code: 76018

Indicate an X next to the type of Applicant:

____Individual	____Sole Proprietorship-D.B.A.
____Partnership	____Corporation
____Trust	____Estate
____Federal Government	____State Government
____County Government	____City Government
____Other Government	X Other River Authority

For Corporations or Limited Partnerships, provide:
State Franchise Tax ID Number: na SOS Charter (filing) Number: na

3. APPLICATION CONTACT INFORMATION (Instructions, Page. 9)

If the TCEQ needs additional information during the review of the application, who should be contacted? Applicant may submit their own contact information if Applicant wishes to be the point of contact.

First and Last Name: Webster Mangham

Title: Manager, Environmental and Water Resources Planning

Organization Name: Trinity River Authority of Texas

Mailing Address: 5300 S. Collins St.

City: Arlington State: TX ZIP Code: 76018

Phone Number: 817-467-4343

Fax Number: na

E-mail Address: [redacted]

4. WATER RIGHT CONSOLIDATED CONTACT INFORMATION (Instructions, Page. 9)

This section applies only if there are multiple Owners of the same authorization. Unless otherwise requested, Co-Owners will each receive future correspondence from the Commission regarding this water right (after a permit has been issued), such as notices and water use reports. Multiple copies will be sent to the same address if Co-Owners share the same address. Complete this section if there will be multiple owners and **all** owners agree to let one owner receive correspondence from the Commission. Leave this section blank if you would like all future notices to be sent to the address of each of the applicants listed in section 2 above.

I/We authorize all future notices be received on my/our behalf at the following:

First and Last Name: na

Title: _____

Organization Name: _____

Mailing Address: _____

City: _____ State: _____ ZIP Code: _____

Phone Number: _____

Fax Number: _____

E-mail Address: _____

5. MISCELLANEOUS INFORMATION (Instructions, Page. 9)

a. The application will not be processed unless all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol by all applicants/co-applicants. If you need assistance determining whether you owe delinquent penalties or fees, please call the Water Rights Permitting Team at (512) 239-4600, prior to submitting your application.

1. Does Applicant or Co-Applicant owe any fees to the TCEQ? **Yes / No** No

   If **yes**, provide the following information:

   Account number: _____ Amount past due: _____

2. Does Applicant or Co-Applicant owe any penalties to the TCEQ? **Yes / No** No

   If **yes**, please provide the following information:

   Enforcement order number: _____ Amount past due: _____

b. If the Applicant is a taxable entity (corporation or limited partnership), the Applicant must be in good standing with the Comptroller or the right of the entity to transact business in the State may be forfeited. See Texas Tax Code, Subchapter F. Applicant's may check their status with the Comptroller at https://mycpa.cpa.state.tx.us/coa/
Is the Applicant or Co-Applicant in good standing with the Comptroller? **Yes / No** Yes

c. The commission will not grant an application for a water right unless the applicant has submitted all Texas Water Development Board (TWDB) surveys of groundwater and surface water use – if required. See TWC §16.012(m) and 30 TAC § 297.41(a)(5). Applicants should check survey status on the TWDB website prior to filing:
https://www3.twdb.texas.gov/apps/reports/WU_REP/SurveyStatus_PriorThreeYears
Applicant has submitted all required TWDB surveys of groundwater and surface water?
Yes / No Yes

6. SIGNATURE PAGE (Instructions, Page. 11)

Applicant:

I, J. Kevin Ward, General Manager
(Typed or printed name) (Title)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Article IV Sections 1 and 3 (f) Authorizes the General Manager to coordinate the Authority's project development functions. Please see Attachment AIC_6_TRA_Bylaws

I further certify that I am authorized under Title 30 Texas Administrative Code §295.14 to sign and submit this document and I have submitted written evidence of my signature authority.

Signature: J. Kevin Ward Date: 6-16-2025
(Use blue ink)

Subscribed and Sworn to before me by the said

on this 16th day of June, 20 25.

My commission expires on the 28th day of July, 20 27.

Laura L. Caughey
Notary Public

LAURA L CAUGHEY
NOTARY PUBLIC
STATE OF TEXAS
MY COMM. EXP. 07/28/27
NOTARY ID 12868845-5

[SEAL]

Tarrant
County, Texas

If the Application includes Co-Applicants, each Applicant and Co-Applicant must submit an original, separate signature page

TECHNICAL INFORMATION REPORT
WATER RIGHTS PERMITTING

This Report is required for applications for new or amended water rights. Based on the Applicant's responses below, Applicants are directed to submit additional Worksheets (provided herein). A completed Administrative Information Report is also required for each application.

Applicants are REQUIRED to schedule a pre-application meeting with TCEQ Permitting Staff to discuss Applicant's needs and to confirm information necessary for an application prior to submitting such application. Please contact the Water Availability Division at (512) 239-4600 or WRPT@tceq.texas.gov to schedule a meeting.

Date of pre-application meeting: 3/14/2025

1. New or Additional Appropriations of State Water. Texas Water Code (TWC) § 11.121 (Instructions, Page. 12)

State Water is: *The water of the ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, and of every bay or arm of the Gulf of Mexico, and the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed in the state. TWC § 11.021.*

a. Applicant requests a new appropriation (diversion or impoundment) of State Water? **Y / N** N

b. Applicant requests an amendment to an existing water right requesting an increase in the appropriation of State Water or an increase of the overall or maximum combined diversion rate? **Y / N** N (If yes, indicate the Certificate or Permit number: NA)

If Applicant answered yes to (a) or (b) above, does Applicant also wish to be considered for a term permit pursuant to TWC § 11.1381? **Y / N** N

c. Applicant requests to extend an existing Term authorization or to make the right permanent? **Y / N** N (If yes, indicate the Term Certificate or Permit number: NA)

If Applicant answered yes to (a), (b) or (c), the following worksheets and documents are required:

- **Worksheet 1.0 – Quantity, Purpose, and Place of Use Information Worksheet**
- **Worksheet 2.0 - Impoundment/Dam Information Worksheet** (submit one worksheet for each impoundment or reservoir requested in the application)
- **Worksheet 3.0 - Diversion Point Information Worksheet** (submit one worksheet for each diversion point and/or one worksheet for the upstream limit and one worksheet for the downstream limit of each diversion reach requested in the application)
- **Worksheet 5.0 – Environmental Information Worksheet**
- **Worksheet 6.0 – Water Conservation Information Worksheet**
- **Worksheet 7.0 – Accounting Plan Information Worksheet**
- **Worksheet 8.0 – Calculation of Fees**
- **Fees calculated on Worksheet 8.0** – see instructions **Page. 34.**
- **Maps** – See instructions **Page. 15.**
- **Photographs** - See instructions **Page. 30.**

Additionally, if Applicant wishes to submit an alternate source of water for the project/authorization, see Section 3, Page 3 for Bed and Banks Authorizations (Alternate sources may include groundwater, imported water, contract water or other sources).

Additional Documents and Worksheets may be required (see within).

2. Amendments to Water Rights. TWC § 11.122 (Instructions, Page. 12)

This section should be completed if Applicant owns an existing water right and Applicant requests to amend the water right. ***If Applicant is not currently the Owner of Record in the TCEQ Records, Applicant must submit a Change of Ownership Application (TCEQ-10204) prior to submitting the amendment Application or provide consent from the current owner to make the requested amendment. If the application does not contain consent from the current owner to make the requested amendment, TCEQ will not begin processing the amendment application until the Change of Ownership has been completed and will consider the Received Date for the application to be the date the Change of Ownership is completed.*** **See instructions page. 6.**

Water Right (Certificate or Permit) number you are requesting to amend: 08-3404

Applicant requests to sever and combine existing water rights from one or more Permits or Certificates into another Permit or Certificate? **Y / N** N (if yes, complete chart below):

List of water rights to sever	Combine into this ONE water right
na	na

a. Applicant requests an amendment to an existing water right to increase the amount of the appropriation of State Water (diversion and/or impoundment)? **Y / N** N

If yes, application is a new appropriation for the increased amount, complete ***Section 1 of this Report (PAGE. 1) regarding New or Additional Appropriations of State Water****.*

b. Applicant requests to amend existing Term authorization to extend the term or make the water right permanent (remove conditions restricting water right to a term of years)? **Y / N** N

If yes, application is a new appropriation for the entire amount, complete ***Section 1 of this Report (PAGE. 1) regarding New or Additional Appropriations of State Water****.*

c. Applicant requests an amendment to change the purpose or place of use or to add an additional purpose or place of use to an existing Permit or Certificate? **Y / N** N
If yes, submit:

- **Worksheet 1.0 – Quantity, Purpose, and Place of Use Information Worksheet**
- **Worksheet 1.2 - Notice: "Marshall Criteria"**

d. Applicant requests to change: diversion point(s); or reach(es); or diversion rate? **Y / N** N
If yes, submit:

- **Worksheet 3.0 - Diversion Point Information Worksheet** (submit one worksheet for each diversion point or one worksheet for the upstream limit and one worksheet for the downstream limit of each diversion reach)
- **Worksheet 5.0 – Environmental Information** (Required for <u>any</u> new diversion points that are not already authorized in a water right)

e. Applicant requests amendment to add or modify an impoundment, reservoir, or dam? **Y / N** N

If yes, submit: **Worksheet 2.0 - Impoundment/Dam Information Worksheet** (submit one worksheet for each impoundment or reservoir)

f. Other - Applicant requests to change any provision of an authorization not mentioned above? **Y / N** Y *If yes, call the Water Availability Division at (512) 239-4600 to discuss.*

Additionally, all amendments require:

- **Worksheet 8.0 – Calculation of Fees; and Fees calculated – see instructions Page. 34**
- **Maps – See instructions Page. 15.**
- **Additional Documents and Worksheets may be required (see within).**

3. Bed and Banks. TWC § 11.042 (Instructions, Page 13)

a. Pursuant to contract, Applicant requests authorization to convey, stored or conserved water to the place of use or diversion point of purchaser(s) using the bed and banks of a watercourse? TWC § 11.042(a). **Y/N** N

If yes, submit a signed copy of the Water Supply Contract pursuant to 30 TAC §§ 295.101 and 297.101. Further, if the underlying Permit or Authorization upon which the Contract is based does not authorize Purchaser's requested Quantity, Purpose or Place of Use, or Purchaser's diversion point(s), then either:

1. *Purchaser must submit the worksheets required under Section 1 above with the Contract Water identified as an alternate source; or*
2. *Seller must amend its underlying water right under Section 2.*

b. Applicant requests to convey water imported into the state from a source located wholly outside the state using the bed and banks of a watercourse? TWC § 11.042(a-1). **Y / N** N

If yes, submit worksheets 1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0, Maps and fees from the list below.

c. Applicant requests to convey Applicant's own return flows derived from privately owned groundwater using the bed and banks of a watercourse? TWC § 11.042(b). **Y / N** N

If yes, submit worksheets 1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0, Maps, and fees from the list below.

d. Applicant requests to convey Applicant's own return flows derived from surface water using the bed and banks of a watercourse? TWC § 11.042(c). **Y / N** Y

If yes, submit worksheets 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, Maps, and fees from the list below.

Please note, if Applicant requests the reuse of return flows belonging to others, the Applicant will need to submit the worksheets and documents under Section 1 above, as the application will be treated as a new appropriation subject to termination upon direct or indirect reuse by the return flow discharger/owner.

e. Applicant requests to convey water from any other source, other than (a)-(d) above, using the bed and banks of a watercourse? TWC § 11.042(c). **Y / N** N

If yes, submit worksheets 1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0, Maps, and fees from the list below.

Worksheets and information:

- **Worksheet 1.0 – Quantity, Purpose, and Place of Use Information Worksheet**
- **Worksheet 2.0 - Impoundment/Dam Information Worksheet** (submit one worksheet for each impoundment or reservoir owned by the applicant through which water will be conveyed or diverted)
- **Worksheet 3.0 - Diversion Point Information Worksheet** (submit one worksheet for the downstream limit of each diversion reach for the proposed conveyances)

- **Worksheet 4.0 – Discharge Information Worksheet** (for each discharge point)
- **Worksheet 5.0 – Environmental Information Worksheet**
- **Worksheet 6.0 – Water Conservation Information Worksheet**
- **Worksheet 7.0 – Accounting Plan Information Worksheet**
- **Worksheet 8.0 – Calculation of Fees; and Fees calculated – see instructions Page. 34**
- **Maps** – See instructions **Page. 15.**
- **Additional Documents and Worksheets may be required (see within).**

4. General Information, Response Required for all Water Right Applications (Instructions, Page 15)

a. Provide information describing how this application addresses a water supply need in a manner that is consistent with the state water plan or the applicable approved regional water plan for any area in which the proposed appropriation is located or, in the alternative, describe conditions that warrant a waiver of this requirement (*not required for applications to use groundwater-based return flows*). Include citations or page numbers for the State and Regional Water Plans, if applicable. Provide the information in the space below or submit a supplemental sheet entitled "Addendum Regarding the State and Regional Water Plans":

TRA is located within the Region C Planing Group. This application is consistent with the 2021 Region C Water Plan and the 2022 State Water Plan. Both plans broadly discuss the importance of indirect reuse as strategies to address water supply shortages. Specifically, the 2021 Region C Water Plan Volume 1 specifically discusses utilizing reuse supplies from Mountain Creek Regional Wastewater Treatment Plant to address shortages and needs for the Midlothian Water User Group area on pages 36-41 and on Row 1907 on the 2022 State Water Plan List of Water Management Strategies Excel file.

Citations:
Region C Water Planning Group. 2021 Region C Water Plan, pp. 36–41. Texas Water Development Board, 2021. https://www.regioncwater.org

https://www.twdb.texas.gov/waterplanning/swp/2022/docs/2022SWP_RecommendedWMS.xlsx

b. Did the Applicant perform its own Water Availability Analysis? **Y / N** N

If the Applicant performed its own Water Availability Analysis, provide electronic copies of any modeling files and reports.

c. Does the application include required Maps? (**Instructions Page. 15**) **Y / N** Y

WORKSHEET 1.0
Quantity, Purpose and Place of Use

1. New Authorizations (Instructions, Page. 16)

Submit the following information regarding quantity, purpose and place of use for requests for new or additional appropriations of State Water or Bed and Banks authorizations:

Quantity (acre-feet) (*Include losses for Bed and Banks*)	**State Water Source (River Basin) or Alternate Source** *each *alternate source* (*and new appropriation based on return flows of others*) *also requires completion of Worksheet 4.0*	**Purpose(s) of Use**	**Place(s) of Use** **requests to move state water out of basin also require completion of Worksheet 1.1 Interbasin Transfer*
9,082	Mountain Creek Regional Wastewater Treatment Plant	Municipal, Domestic, Industrial, and Agricultural (Irrigation)	TRA's service area in Dallas, Tarrant and Ellis Counties
	TRA is requesting an increase in the reuse portion of the above-mentioned water right from 4,368 to 13,450 af/y, to be used for the same purpose and within the same service area as the existing authorization.		

9,082 Total amount of water (in acre-feet) to be used annually (*include losses for Bed and Banks applications*)

If the Purpose of Use is Agricultural/Irrigation for any amount of water, provide:

a. Location Information Regarding the Lands to be Irrigated

i) Applicant proposes to irrigate a total of na acres in any one year. This acreage is all of or part of a larger tract(s) which is described in a supplement attached to this application and contains a total of na acres in na County, TX.

ii) Location of land to be irrigated: In the na Original Survey No. na, Abstract No. 76018.

A copy of the deed(s) or other acceptable instrument describing the overall tract(s) with the recording information from the county records must be submitted. Applicant's name must match deeds.

If the Applicant is not currently the sole owner of the lands to be irrigated, Applicant must submit documentation evidencing consent or other documentation supporting Applicant's right to use the land described.

Water Rights for Irrigation may be appurtenant to the land irrigated and convey with the land unless reserved in the conveyance. 30 TAC § 297.81.

2. Amendments - Purpose or Place of Use (Instructions, Page. 12)

a. Complete this section for each requested amendment changing, adding, or removing Purpose(s) or Place(s) of Use, complete the following:

Quantity (acre-feet)	Existing Purpose(s) of Use	Proposed Purpose(s) of Use*	Existing Place(s) of Use	Proposed Place(s) of Use**
NA	Additional Reuse water will be used for the same purpose and within the same service area as the existing authorization.			

**If the request is to add additional purpose(s) of use, include the existing and new purposes of use under "Proposed Purpose(s) of Use."*

***If the request is to add additional place(s) of use, include the existing and new places of use under "Proposed Place(s) of Use."*

Changes to the purpose of use in the Rio Grande Basin may require conversion. 30 TAC § 303.43.

b. For any request which adds Agricultural purpose of use or changes the place of use for Agricultural rights, provide the following location information regarding the lands to be irrigated:

i. Applicant proposes to irrigate a total of na acres in any one year. This acreage is all of or part of a larger tract(s) which is described in a supplement attached to this application and contains a total of na acres in River Authority County, TX.

ii. Location of land to be irrigated: In the na Original Survey No. na, Abstract No. na.

A copy of the deed(s) describing the overall tract(s) with the recording information from the county records must be submitted. Applicant's name must match deeds. If the Applicant is not currently the sole owner of the lands to be irrigated, Applicant must submit documentation evidencing consent or other legal right for Applicant to use the land described.

Water Rights for Irrigation may be appurtenant to the land irrigated and convey with the land unless reserved in the conveyance. 30 TAC § 297.81.

c. Submit Worksheet 1.1, Interbasin Transfers, for any request to change the place of use which moves State Water to another river basin.

d. See Worksheet 1.2, Marshall Criteria, and submit if required.

e. See Worksheet 6.0, Water Conservation/Drought Contingency, and submit if required.

WORKSHEET 1.1
INTERBASIN TRANSFERS, TWC § 11.085

Submit this worksheet for an application for a new or amended water right which requests to transfer State Water from its river basin of origin to use in a different river basin. A river basin is defined and designated by the Texas Water Development Board by rule pursuant to TWC § 16.051.

Applicant requests to transfer State Water to another river basin within the State? **Y / N** N

1. Interbasin Transfer Request (Instructions, Page. 20)

a. Provide the Basin of Origin. NA

b. Provide the quantity of water to be transferred (acre-feet). NA

c. Provide the Basin(s) and count(y/ies) where use will occur in the space below:

NA

2. Exemptions (Instructions, Page. 20), TWC § 11.085(v)

Certain interbasin transfers are exempt from further requirements. Answer the following:

a. The proposed transfer, which in combination with any existing transfers, totals less than 3,000 acre-feet of water per annum from the same water right. **Y/N** NA

b. The proposed transfer is from a basin to an adjoining coastal basin? **Y/N** NA

c. The proposed transfer from the part of the geographic area of a county or municipality, or the part of the retail service area of a retail public utility as defined by Section 13.002, that is within the basin of origin for use in that part of the geographic area of the county or municipality, or that contiguous part of the retail service area of the utility, not within the basin of origin? **Y/N** NA

d. The proposed transfer is for water that is imported from a source located wholly outside the boundaries of Texas, except water that is imported from a source located in the United Mexican States? **Y/N** NA

3. Interbasin Transfer Requirements (Instructions, Page. 20)

For each Interbasin Transfer request that is not exempt under any of the exemptions listed above Section 2, provide the following information in a supplemental attachment titled "Addendum to Worksheet 1.1, Interbasin Transfer":

a. the contract price of the water to be transferred (if applicable) (also include a copy of the contract or adopted rate for contract water);

b. a statement of each general category of proposed use of the water to be transferred and a detailed description of the proposed uses and users under each category;

c. the cost of diverting, conveying, distributing, and supplying the water to, and treating the water for, the proposed users (example - expert plans and/or reports documents may be provided to show the cost);

d. describe the need for the water in the basin of origin and in the proposed receiving basin based on the period for which the water supply is requested, but not to exceed 50 years (the need can be identified in the most recently approved regional water plans. The state and regional water plans are available for download at this website: (http://www.twdb.texas.gov/waterplanning/swp/index.asp);

e. address the factors identified in the applicable most recently approved regional water plans which address the following:

(i) the availability of feasible and practicable alternative supplies in the receiving basin to the water proposed for transfer;
(ii) the amount and purposes of use in the receiving basin for which water is needed;

(iii) proposed methods and efforts by the receiving basin to avoid waste and implement water conservation and drought contingency measures;

(iv) proposed methods and efforts by the receiving basin to put the water proposed for transfer to beneficial use;

(v) the projected economic impact that is reasonably expected to occur in each basin as a result of the transfer; and

(vi) the projected impacts of the proposed transfer that are reasonably expected to occur on existing water rights, instream uses, water quality, aquatic and riparian habitat, and bays and estuaries that must be assessed under Sections 11.147, 11.150, and 11.152 in each basin *(if applicable*). If the water sought to be transferred is currently authorized to be used under an existing permit, certified filing, or certificate of adjudication, such impacts shall only be considered in relation to that portion of the permit, certified filing, or certificate of adjudication proposed for transfer and shall be based on historical uses of the permit, certified filing, or certificate of adjudication for which amendment is sought;

f. proposed mitigation or compensation, if any, to the basin of origin by the applicant; and

g. the continued need to use the water for the purposes authorized under the existing Permit, Certified Filing, or Certificate of Adjudication, if an amendment to an existing water right is sought.

NA

WORKSHEET 1.2
NOTICE. "THE MARSHALL CRITERIA"

This worksheet assists the Commission in determining notice required for certain **amendments** that do not already have a specific notice requirement in a rule for that type of amendment, and *that do not change the amount of water to be taken or the diversion rate*. The worksheet provides information that Applicant **is required** to submit for amendments such as certain amendments to special conditions or changes to off-channel storage. These criteria address whether the proposed amendment will impact other water right holders or the on- stream environment beyond and irrespective of the fact that the water right can be used to its full authorized amount.

*This worksheet is **not required for Applications in the Rio Grande Basin** requesting changes in the purpose of use, rate of diversion, point of diversion, and place of use for water rights held in and transferred within and between the mainstems of the Lower Rio Grande, Middle Rio Grande, and Amistad Reservoir. See 30 TAC § 303.42.*

*This worksheet is **not required for amendments which are only changing or adding diversion points, or request only a bed and banks authorization or an IBT authorization**. However, Applicants may wish to submit the Marshall Criteria to ensure that the administrative record includes information supporting each of these criteria*

1. The "Marshall Criteria" (Instructions, Page. 21)

Submit responses on a supplemental attachment titled "Marshall Criteria" in a manner that conforms to the paragraphs (a) – (g) below:

a. Administrative Requirements and Fees. Confirm whether application meets the administrative requirements for an amendment to a water use permit pursuant to TWC Chapter 11 and Title 30 Texas Administrative Code (TAC) Chapters 281, 295, and 297. An amendment application should include, but is not limited to, a sworn application, maps, completed conservation plan, fees, etc.

b. Beneficial Use. Discuss how proposed amendment is a beneficial use of the water as defined in TWC § 11.002 and listed in TWC § 11.023. Identify the specific proposed use of the water (e.g., road construction, hydrostatic testing, etc.) for which the amendment is requested.

c. Public Welfare. Explain how proposed amendment is not detrimental to the public welfare. Consider any public welfare matters that might be relevant to a decision on the application. Examples could include concerns related to the well-being of humans and the environment.

d. Groundwater Effects. Discuss effects of proposed amendment on groundwater or groundwater recharge.

e. State Water Plan. Describe how proposed amendment addresses a water supply need in a manner that is consistent with the state water plan or the applicable approved regional water plan for any area in which the proposed appropriation is located or, in the alternative, describe conditions that warrant a waiver of this requirement. The state and regional water plans are available for download at: http://www.twdb.texas.gov/waterplanning/swp/index.asp.

f. Waste Avoidance. Provide evidence that reasonable diligence will be used to avoid waste and achieve water conservation as defined in TWC § 11.002. Examples of evidence could include, but are not limited to, a water conservation plan or, if required, a drought contingency plan, meeting the requirements of 30 TAC Chapter 288.

g. Impacts on Water Rights or On-stream Environment. Explain how the proposed amendment will not impact other water right holders or the on-stream environment beyond and irrespectiveof the fact that the water right can be used to its full authorized amount.

WORKSHEET 2.0
Impoundment/Dam Information

This worksheet **is required** for any impoundment, reservoir and/or dam. Submit an additional Worksheet 2.0 for each impoundment or reservoir requested in this application.

If there is more than one structure, the numbering/naming of structures should be consistent throughout the application and on any supplemental documents (e.g., maps).

1. Storage Information (Instructions, Page. 21)

a. Official USGS name of reservoir, if applicable: NA

b. Provide amount of water (in acre-feet) impounded by structure at normal maximum operating level: NA.

c. The impoundment is on-channel X or off-channel _____ (mark one)

i. Applicant has verified on-channel or off-channel determination by contacting Surface Water Availability Team at (512) 239-4600? **Y / N** N

ii. If on-channel, will the structure have the ability to pass all State Water inflows that Applicant does not have authorization to impound? **Y / N** Y

d. Is the impoundment structure already constructed? **Y / N** Y

i. For already constructed **on-channel** structures:

1. Date of Construction: Began 12/6/1979 ended May 1986, Deliberate Impoundment began 1/7/1986 - USACE Data

2. Was it constructed to be an exempt structure under TWC § 11.142? **Y / N** N
   a. If Yes, is Applicant requesting to proceed under TWC § 11.143? **Y / N** _____
   b. If No, has the structure been issued a notice of violation by TCEQ? **Y / N** N

3. Is it a U.S. Natural Resources Conservation Service (NRCS) (formerly Soil Conservation Service (SCS)) floodwater-retarding structure? **Y / N** N
   a. If yes, provide the Site No. NA and watershed project name NA;
   b. Authorization to close "ports" in the service spillway requested? **Y / N** NA

ii. For **any** proposed new structures or modifications to structures:

1. Applicant **must** contact TCEQ Dam Safety Section at (512) 239-0326, *prior to submitting an Application.* Applicant has contacted the TCEQ Dam Safety Section regarding the submission requirements of 30 TAC, Ch. 299? **Y / N** NA
   Provide the date and the name of the Staff Person NA

2. As a result of Applicant's consultation with the TCEQ Dam Safety Section, TCEQ has confirmed that:
   a. No additional dam safety documents required with the Application. **Y / N** NA
   b. Plans (with engineer's seal) for the structure required. **Y / N** NA
   c. Engineer's signed and sealed hazard classification required. **Y / N** NA
   d. Engineer's statement that structure complies with 30 TAC, Ch. 299 Rules required. **Y / N** NA

3. Applicants **shall** give notice by certified mail to each member of the governing body of each county and municipality in which the reservoir, or any part of the reservoir to be constructed, will be located. (30 TAC § 295.42). Applicant must submit a copy of all the notices and certified mailing cards with this Application. Notices and cards are included? **Y / N** NA

iii. Additional information required for **on-channel** storage:

1. Surface area (in acres) of on-channel reservoir at normal maximum operating level: 7,470 - USACE Data.

2. Based on the Application information provided, Staff will calculate the drainage area above the on-channel dam or reservoir. If Applicant wishes to also calculate the drainage area they may do so at their option.
Applicant has calculated the drainage area. **Y/N** N
If yes, the drainage area is 232 sq.mi. - USACE Data sq. miles.
(*If assistance is needed, call the Surface Water Availability Team prior to submitting the application, (512) 239-4600).*

2. Structure Location (Instructions, Page. 23)

a. On Watercourse (if on-channel) (USGS name): Mountain Creek

b. Zip Code: 75249

c. In the NA Original Survey No. _____, Abstract No. _____, _____ County, Texas.

* ***A copy of the deed(s) with the recording information from the county records must be submitted describing the tract(s) that include the structure and all lands to be inundated.***

*****If the Applicant is not currently the sole owner of the land on which the structure is or will be built and sole owner of all lands to be inundated, Applicant must submit documentation evidencing consent or other documentation supporting Applicant's right to use the land described.***

d. A point on the centerline of the dam (on-channel) or anywhere within the impoundment (off-channel) is:

Latitude NA °N, Longitude NA °W.

****Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places***

i. Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): NA

ii. Map submitted which clearly identifies the Impoundment, dam (where applicable), andthe lands to be inundated. See instructions Page. 15. **Y / N** NA

WORKSHEET 3.0
DIVERSION POINT (OR DIVERSION REACH) INFORMATION

This worksheet **is required** for each diversion point or diversion reach. Submit one Worksheet 3.0 for **each** diversion point and two Worksheets for **each** diversion reach (one for the upstream limit and one for the downstream limit of each diversion reach).

The numbering of any points or reach limits should be consistent throughout the application and on supplemental documents (e.g., maps).

1. Diversion Information (Instructions, Page. 24)

a. This Worksheet is to add new (select 1 of 3 below):

1. NA Diversion Point No.
2. NA Upstream Limit of Diversion Reach No.
3. NA Downstream Limit of Diversion Reach No.

b. Maximum Rate of Diversion for **this new point** NA cfs (cubic feet per second) or NA gpm (gallons per minute)

c. Does this point share a diversion rate with other points? **Y / N** NA
*If yes, submit Maximum **Combined** Rate of Diversion for all points/reaches* NA cfs or NA gpm

d. For amendments, is Applicant seeking to increase combined diversion rate? **Y / N** N

*** An increase in diversion rate is considered a new appropriation and would require completion of Section 1, New or Additional Appropriation of State Water.*

e. Check (√) the appropriate box to indicate diversion location and indicate whether the diversion location is existing or proposed):

Check one		Write: Existing or Proposed
☐	Directly from stream	
☑	From an on-channel reservoir	Existing: Joe Pool Reservoir
☐	From a stream to an on-channel reservoir	
☐	Other method (explain fully, use additional sheets if necessary)	

f. Based on the Application information provided, Staff will calculate the drainage area above the diversion point (or reach limit). If Applicant wishes to also calculate the drainage area, you may do so at their option.

Applicant has calculated the drainage area. **Y / N** NA

If yes, the drainage area is NA sq. miles.
(*If assistance is needed, call the Surface Water Availability Team at (512) 239-4600, prior to submitting application*)

2. Diversion Location (Instructions, Page 25)

a. On watercourse (USGS name): NA

b. Zip Code: NA

c. Location of point: In the NA Original Survey No. NA, Abstract No. NA, NA County, Texas.

A copy of the deed(s) with the recording information from the county records must be submitted describing tract(s) that include the diversion structure.

For diversion reaches, the Commission cannot grant an Applicant access to property that the Applicant does not own or have consent or a legal right to access, the Applicant will be required to provide deeds, or consent, or other documents supporting a legal right to use the specific points when specific diversion points within the reach are utilized. Other documents may include, but are not limited to a recorded easement, a land lease, a contract, or a citation to the Applicant's right to exercise eminent domain to acquire access.

d. Point is at:
Latitude NA °N, Longitude NA °W.
Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places

e. Indicate the method used to calculate the location (examples: Handheld GPS Device, GIS, Mapping Program): NA

f. Map submitted must clearly identify each diversion point and/or reach. See instructions Page. 15.

g. If the Plan of Diversion is complicated and not readily discernable from looking at the map, attach additional sheets that fully explain the plan of diversion.

See map showing Joe Pool Lake in Attachment WS3.2.F_WS4.1_JPL_Diversion_Map

WORKSHEET 4.0
DISCHARGE INFORMATION

This worksheet required for any requested authorization to discharge water into a State Watercourse for conveyance and later withdrawal or in-place use. Worksheet 4.1 is also required for each Discharge point location requested. **Instructions Page. 26.** ***Applicant is responsible for obtaining any separate water quality authorizations which may be required and for insuring compliance with TWC, Chapter 26 or any other applicable law.***

a. The purpose of use for the water being discharged will be Municipal, Domestic, Industrial, and Agricultural (Irrigation).

b. Provide the amount of water that will be lost to transportation, evaporation, seepage, channel or other associated carriage losses 6.5 (% or amount) and explain the method of calculation: Existing channel loss component in current permit 08-3404D

c. Is the source of the discharged water return flows? **Y / N** Y If yes, provide the following information:

1. The TPDES Permit Number(s). WQ0010348001 (attach a copy of the **current** TPDES permit(s)) **See Attachment WS4.C.1_WS5.3.A_MCRWS_TPDES_Permit_2023_to_2028**
2. Applicant is the owner/holder of each TPDES permit listed above? **Y / N** Y

PLEASE NOTE: If Applicant is not the discharger of the return flows, or the Applicant is not the water right owner of the underlying surface water right, or the Applicant does not have a contract with the discharger, the application should be submitted under Section 1, New or Additional Appropriation of State Water, as a request for a new appropriation of state water. If Applicant is the discharger, the surface water right holder, or the contract holder, then the application should be submitted under Section 3, Bed and Banks.

3. Monthly WWTP discharge data for the past 5 years in electronic format. (Attach and label as "Supplement to Worksheet 4.0"). **See Attachment WS4.C.3_Five_Years_WWTP_Discharge_Data**
4. The percentage of return flows from groundwater 0, surface water 100?
5. If any percentage is surface water, provide the base water right number(s) 08-3404, 08-5035, 08-4976.

d. Is the source of the water being discharged groundwater? **Y / N** N If yes, provide the following information:

1. Source aquifer(s) from which water will be pumped: NA
2. If the well has not been constructed, provide production information for wells in the same aquifer in the area of the application. See http://www.twdb.texas.gov/groundwater/data/gwdbrpt.asp. Additionally, provide well numbers or identifiers NA.
3. Indicate how the groundwater will be conveyed to the stream or reservoir.

   NA
4. A copy of the groundwater well permit if it is located in a Groundwater Conservation District (GCD) or evidence that a groundwater well permit is not required.

di. Is the source of the water being discharged a surface water supply contract? **Y / N** N If yes, provide the signed contract(s).

dii. Identify any other source of the water NA

WORKSHEET 4.1
DISCHARGE POINT INFORMATION

This worksheet is required for **each** discharge point. Submit one Worksheet 4.1 for each discharge point. If there is more than one discharge point, the numbering of the points should be consistent throughout the application and on any supplemental documents (e.g., maps). **Instructions, Page 27.**

For water discharged at this location provide:

a. The amount of water that will be discharged at this point is 9,082 acre-feet per year. The discharged amount should include the amount needed for use and to compensate for any losses.

b. Water will be discharged at this point at a maximum rate of _____ cfs or 33,333 gpm.

c. Name of Watercourse as shown on Official USGS maps: Unnamed Tributary, to Newton Branch, to Soap Creek, to Mountain Creek, to Joe Pool Lake

d. Zip Code 76065

e. Location of point: In the Texas Original Survey No. _____, Abstract No. 939, Ellis County, Texas.

f. Point is at:
Latitude 32.499978 °N, Longitude -97.014820 °W.
Provide Latitude and Longitude coordinates in decimal degrees to at least six decimal places

g. Indicate the method used to calculate the discharge point location (examples: Handheld GPS Device, GIS, Mapping Program): Mapping Program - Google Earth

Map submitted must clearly identify each discharge point. See instructions Page. 15.

See map showing Joe Pool Lake in Attachment
WS3.2.F_WS4.1_JPL_Diversion_Map

WORKSHEET 5.0
ENVIRONMENTAL INFORMATION

1. Impingement and Entrainment

This section is required for any new diversion point that is not already authorized. Indicate the measures the applicant will take to avoid impingement and entrainment of aquatic organisms (ex. Screens on any new diversion structure that is not already authorized in a water right). **Instructions, Page 28.**

NA

2. New Appropriations of Water (Canadian, Red, Sulphur, and Cypress Creek Basins only) and Changes in Diversion Point(s)

This section is required for new appropriations of water in the Canadian, Red, Sulphur, and Cypress Creek Basins and in all basins for requests to change a diversion point. **Instructions, Page 30.**

Description of the Water Body at each Diversion Point or Dam Location. (Provide an Environmental Information Sheet for each location),

a. Identify the appropriate description of the water body.

☐ Stream NA

☐ Reservoir

Average depth of the entire water body, in feet: _____

☐ Other, specify: na

b. Flow characteristics

If a stream, was checked above, provide the following. For new diversion locations, check one of the following that best characterize the area downstream of the diversion (check one). NA

☐ Intermittent – dry for at least one week during most years

☐ Intermittent with Perennial Pools – enduring pools

☐ Perennial – normally flowing

Check the method used to characterize the area downstream of the new diversion location.

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☐ Other, specify: _____

c. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the stream segments affected by the application and the area surrounding those stream segments.

☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional NA

☐ Natural Area: trees and/or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored

☐ Common Setting: not offensive; developed but uncluttered; water may be colored or turbid

☐ Offensive: stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

d. Waterbody Recreational Uses NA

Are there any known recreational uses of the stream segments affected by the application?

☐ Primary contact recreation (swimming or direct contact with water)

☐ Secondary contact recreation (fishing, canoeing, or limited contact with water)

☐ Non-contact recreation

e. Submit the following information in a Supplemental Attachment, labeled Addendum to Worksheet 5.0: NA

1. Photographs of the stream at the diversion point or dam location. Photographs should be in color and show the proposed point or reservoir and upstream and downstream views of the stream, including riparian vegetation along the banks. Include a description of each photograph and reference the photograph to the mapsubmitted with the application indicating the location of the photograph and the direction of the shot.

2. If the application includes a proposed reservoir, also include:

   i. A brief description of the area that will be inundated by the reservoir.

   ii. If a United States Army Corps of Engineers (USACE) 404 permit is required, provide the project number and USACE project manager.

   iii. A description of how any impacts to wetland habitat, if any, will be mitigated if the reservoir is greater than 5,000 acre-feet.

3. Alternate Sources of Water and/or Bed and Banks Applications

This section is required for applications using an alternate source of water and bed and banks applications in any basins. **Instructions, page 31.**

a. For all bed and banks applications:

i. Submit an assessment of the adequacy of the quantity and quality of flows remaining after the proposed diversion to meet instream uses and bay and estuary freshwater inflow requirements. **This application only diverts additional discharges net channel losses and does not affect environmental flows or bay and estuary inflows.**

b. For all alternate source applications:

i. If the alternate source is treated return flows, provide the TPDES permit number WQ0010348001 WQ0010348001

ii. If groundwater is the alternate source, or groundwater or other surface water will be discharged into a watercourse provide:
Reasonably current water chemistry information including but not limited to the following parameters in the table below. Additional parameters may be requested if there is a specific water quality concern associated with the aquifer from which water is withdrawn. If data for onsite wells are unavailable; historical data collected from similar sized wells drawing water from the same aquifer may be provided. However, onsite data may still be required when it becomes available. Provide the well number or well identifier. Complete the information below for each well and provide the Well Number or identifier.

Parameter	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Sulfate, mg/L					
Chloride, mg/L					
Total Dissolved Solids, mg/L					
pH, standard units					
Temperature*, degrees Celsius					

* Temperature must be measured onsite at the time the groundwater sample is collected.

iii. If groundwater will be used, provide the depth of the well NA and the name of the aquifer from which water is withdrawn NA.

WORKSHEET 6.0
Water Conservation/Drought Contingency Plans

This form is intended to assist applicants in determining whether a Water Conservation Plan and/or Drought Contingency Plans is required and to specify the requirements for plans. **Instructions, Page 31.**

The TCEQ has developed guidance and model plans to help applicants prepare plans. Applicants may use the model plan with pertinent information filled in. For assistance submitting a plan call the Resource Protection Team (Water Conservation staff) at 512-239-4600, or e-mail wras@tceq.texas.gov. The model plans can also be downloaded from the TCEQ webpage. ***Please use the most up-to-date plan documents available on the webpage.***

1. Water Conservation Plans

a. The following applications must include a completed Water Conservation Plan (30 TAC § 295.9) for each use specified in 30 TAC, Chapter 288 (municipal, industrial or mining, agriculture – including irrigation, wholesale):

1. Request for a new appropriation or use of State Water.

2. Request to amend water right to increase appropriation of State Water.

3. Request to amend water right to extend a term.

4. Request to amend water right to change a place of use.
   **does not apply to a request to expand irrigation acreage to adjacent tracts.*

5. Request to amend water right to change the purpose of use.
   **applicant need only address new uses.*

6. Request for bed and banks under TWC § 11.042(c), when the source water is State Water.
   **including return flows, contract water, or other State Water.*

b. If Applicant is requesting any authorization in section (1)(a) above, indicate each use for which Applicant is submitting a Water Conservation Plan as an attachment:

1. _____Municipal Use. See 30 TAC § 288.2. **

2. _____Industrial or Mining Use. See 30 TAC § 288.3.

3. _____Agricultural Use, including irrigation. See 30 TAC § 288.4.

4. X____Wholesale Water Suppliers. See 30 TAC § 288.5. **

If Applicant is a water supplier, Applicant must also submit documentation of adoption of the plan. Documentation may include an ordinance, resolution, or tariff, etc. See 30 TAC §§ 288.2(a)(1)(J)(i) and 288.5(1)(H). Applicant has submitted such documentation with each water conservation plan? **Y / **N**Y___

See Attachment WS6.1.B_WS6.2.B_R-1159-4

c. Water conservation plans submitted with an application must also include data and information which: supports applicant's proposed use with consideration of the plan's water conservation goals; evaluates conservation as an alternative to the proposed

appropriation; and evaluates any other feasible alternative to new water development. See 30 TAC § 288.7.
Applicant has included this information in each applicable plan? **Y / N** Y

(1) This amendment supports the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan:
TRA has adopted a Water Conservation Plan that includes specific, quantified five- and ten-year goals. The WCP promotes conservation efforts among contracting parties, encourages efficient water use, and outlines reuse as a key strategy. The requested increase in discharges from the Mountain Creek Regional Wastewater Treatment Plant, from 3 MGD to 12 MGD, will support future reuse demands and aligns with the long-term conservation goals identified in the 2021 Region C Water Plan, which projects regional reuse demands to grow to over 9,000 acre-feet per year by 2030.
(2) This amendment evaluates conservation as an alternative to the proposed appropriation:
The reuse of treated effluent made possible by this amendment is the conservation-based alternative to acquiring new water rights from natural sources. As regional population and wastewater volumes grow, so does the availability of treated effluent. Without the increased permitted discharge, this growing reuse supply cannot be captured or delivered. As such, this amendment enables the continued use of an existing, reliable, and increasing source, while avoiding the need for new appropriations from additional water supplies.
(3) This amendment evaluates other feasible alternatives to new water development:
The applicant has considered and incorporated multiple alternatives to new water development, including wastewater reuse, optimized system operations, and regional supply planning. The Trinity River Authority has consisten[illegible]rsued reuse across its basin as a key water management strategy. The proposed expansion at Mountain Creek Regional Wastewater Tr[illegible]t Plant is a continuation of these efforts and represents a cost-effective, environmentally sustainable alternative to developing new water infrastructure.

2. Drought Contingency Plans

a. A drought contingency plan is also required for the following entities if Applicant is requesting any of the authorizations in section (1) (a) above – indicate each that applies:

1. ☐ Municipal Uses by public water suppliers. See 30 TAC § 288.20.
2. ☐ Irrigation Use/ Irrigation water suppliers. See 30 TAC § 288.21.
3. ☑ Wholesale Water Suppliers. See 30 TAC § 288.22.

b. If Applicant must submit a plan under section 2(a) above, Applicant has also submitted documentation of adoption of drought contingency plan (*ordinance, resolution, or tariff, etc. See 30 TAC § 288.30*) **Y / N**

See Attachment WS6.1.B_2024_TRA_NR_WaterConservationDroughtContingencyPlan

See Attachment WS6.1.B_WS6.2.B_R-1159-4

WORKSHEET 7.0
ACCOUNTING PLAN INFORMATION WORKSHEET

The following information provides guidance on when an Accounting Plan may be required for certain applications and if so, what information should be provided. An accounting plan can either be very simple such as keeping records of gage flows, discharges, and diversions; or, more complex depending on the requests in the application. Contact the Surface Water Availability Team at 512-239-4600 for information about accounting plan requirements, if any, for your application. **Instructions, Page 34.**

1. Is Accounting Plan Required

Accounting Plans are generally required:

- For applications that request authorization to divert large amounts of water from a single point where multiple diversion rates, priority dates, and water rights can also divert from that point;
- For applications for new major water supply reservoirs;
- For applications that amend a water right where an accounting plan is already required, if the amendment would require changes to the accounting plan;
- For applications with complex environmental flow requirements;
- For applications with an alternate source of water where the water is conveyed and diverted; and
- For reuse applications.

2. Accounting Plan Requirements

a. A **text file** that includes:

1. an introduction explaining the water rights and what they authorize;
2. an explanation of the fields in the accounting plan spreadsheet including how they are calculated and the source of the data;
3. for accounting plans that include multiple priority dates and authorizations, a section that discusses how water is accounted for by priority date and which water is subject to a priority call by whom; and
4. Should provide a summary of all sources of water.

b. A **spreadsheet** that includes:

1. Basic daily data such as diversions, deliveries, compliance with any instream flow requirements, return flows discharged and diverted and reservoir content;
2. Method for accounting for inflows if needed;
3. Reporting of all water use from all authorizations, both existing and proposed;
4. An accounting for all sources of water;
5. An accounting of water by priority date;
6. For bed and banks applications, the accounting plan must track the discharged water from the point of delivery to the final point of diversion;
7. Accounting for conveyance losses;
8. Evaporation losses if the water will be stored in or transported through a reservoir. Include changes in evaporation losses and a method for measuring reservoir content resulting from the discharge of additional water into the reservoir;
9. An accounting for spills of other water added to the reservoir; and
10. Calculation of the amount of drawdown resulting from diversion by junior rights or diversions of other water discharged into and then stored in the reservoir.

WORKSHEET 8.0
CALCULATION OF FEES

This worksheet is for calculating required application fees. Applications are not Administratively Complete until all required fees are received. **Instructions, Page. 34**

1. NEW APPROPRIATION

	Description	Amount ($)
Filing Fee	Circle fee correlating to the total amount of water* requested for any new appropriation and/or impoundment. Amount should match total on Worksheet 1, Section 1. Enter corresponding fee under **Amount ($).** In Acre-Feet a. Less than 100 $100.00 b. 100 - 5,000 $250.00 c. 5,001 - 10,000 $500.00 d. 10,001 - 250,000 $1,000.00 e. More than 250,000 $2,000.00	
Recording Fee		
Agriculture Use Fee	*Only for those with an Irrigation Use.* Multiply 50¢ x_____Number of acres that will be irrigated with State Water. **	
Use Fee	*Required for all Use Types, **excluding Irrigation Use**.* Multiply $1.00 x 9082 Maximum annual diversion of State Water in acre-feet. **	9,082.00
Recreational Storage Fee	*Only for those with Recreational Storage.* Multiply $1.00 x_____acre-feet of in-place Recreational Use State Water to be stored at normal max operating level.	
Storage Fee	*Only for those with Storage, **excluding Recreational Storage.*** Multiply 50¢ x_____acre-feet of State Water to be stored at normal max operating level.	
Mailed Notice	Cost of mailed notice to all water rights in the basin. Contact Staff to determine the amount (512) 239-4600.	
	TOTAL	$

2. AMENDMENT *OR* SEVER AND COMBINE

	Description	Amount ($)
Filing Fee	Amendment: $100	
	OR Sever and Combine: $100 x___of water rights to combine	
Recording Fee		
Mailed Notice	Additional notice fee to be determined once application is submitted.	
	TOTAL INCLUDED	$

3. BED AND BANKS

	Description	Amount ($)
Filing Fee		$100.00
Recording Fee		$12.50
Mailed Notice	Additional notice fee to be determined once application is submitted.	
	TOTAL INCLUDED	$ 9,194.5*

* Will send a separate check for the notice fee, once calculated by TCEQ.

Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

☐ New Permit or Registration Application

☒ New Activity – modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

☐ Requires public notice,

☐ Considered to have significant public interest, **and**

☒ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

If all the above boxes are not checked, a Public Involvement Plan is not necessary. Stop after Section 2 and submit the form.

☒ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V

Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

☐ Texas Pollutant Discharge Elimination System (TPDES)

- ☐ Texas Land Application Permit (TLAP)
- ☐ State Only Concentrated Animal Feeding Operation (CAFO)
- ☐ Water Treatment Plant Residuals Disposal Permit

☐ Class B Biosolids Land Application Permit

☐ Domestic Septage Land Application Registration

Water Rights New Permit

☐ New Appropriation of Water

☐ New or existing reservoir

Amendment to an Existing Water Right

☐ Add a New Appropriation of Water

☐ Add a New or Existing Reservoir

☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

(City)

(County)

(Census Tract)
Please indicate which of these three is the level used for gathering the following information.

☐ City ☐ County ☐ Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

(b) Per capita income for population near the specified location

(c) Percent of minority population and percent of population by race within the specified location

(d) Percent of Linguistically Isolated Households by language within the specified location

(e) Languages commonly spoken in area by percentage

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

☐ Yes ☐ No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

☐ Yes ☐ No

If Yes, please describe.

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

☐ Yes ☐ No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☒ Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

☐ Yes ☐ No

(e) If a public meeting is held, will a translator be provided if requested?

☐ Yes ☐ No

(f) Hard copies of the application will be available at the following (check all that apply):

☐ TCEQ Regional Office ☐ TCEQ Central Office

☐ Public Place (specify)

Section 7. Voluntary Submittal

For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

☐ Yes ☐ No

What types of notice will be provided?

☐ Publish in alternative language newspaper

☐ Posted on Commissioner's Integrated Database Website

☐ Mailed by TCEQ's Office of the Chief Clerk

☐ Other (specify)

Attachment: AIC_6_TRA_Bylaws

BYLAWS OF THE TRINITY RIVER AUTHORITY OF TEXAS

ARTICLE I. OFFICERS

SECTION 1. The Board of Directors shall elect from its number a President, Vice President, and a Chairman of the Executive Committee who shall constitute the elective Officers of the Authority.

SECTION 2. The Board of Directors shall appoint a Secretary and a Treasurer who shall not be members of the Board, or, at its discretion, the Board may combine these two positions into a single position with the title of Secretary-Treasurer.

SECTION 3. The Board of Directors may appoint a General Manager, who shall not be a member of the Board. All other management employees, none of whom shall be members of the Board, shall be employed by the General Manager in accordance with policies prescribed by the Board.

SECTION 4. Terms of Office:

(a) The President, Vice President, and Chairman of the Executive Committee, and the four other members of the Executive Committee shall each serve for a term of two years beginning on the first day of December of each odd-numbered year and terminating the thirtieth day of November of the next odd-numbered year or thereafter until their respective successor shall have been elected; provided, that, if the term as Director of one of the aforesaid shall expire and if the successor shall have been appointed to the Board and if said successor shall have qualified, the Director's term as an Officer or member of the Executive Committee will expire concurrently with the Director's departure from the Board of Directors.

(b) The General Manager, the Secretary, and the Treasurer shall each serve at the pleasure of the Board of Directors.

SECTION 5. The General Manager, the Secretary, and the Treasurer shall each give a bond in connection with their respective services in such amounts as may be prescribed by the Board. The bonds, if any, given by all other management employees shall be in the amounts prescribed by the General Manager, who shall report to the Board the amounts thereof at the close of each fiscal year.

SECTION 6. The election of the President, Vice President, and Chairman of the Executive Committee, as well as the four other members of the Executive Committee, shall be held at the regular meeting of the Board to be held in October in the odd-numbered years. If for any reason the regular October meeting shall not be held in any such year at the scheduled time the election shall be held at the next meeting following such date whether it be a special or regular meeting. At the regular meeting of the Board held in August in odd-numbered years, or the meeting held closest thereto, the President shall appoint three or more members of the Board to act as a Nominating Committee who shall present to the Board at the October regular meeting or the substitute mentioned above, the nominees for the offices of President, Vice President, Chairman of the Executive Committee, and the four other members of the Executive Committee.

SECTION 7. If for any reason a vacancy should occur in the office of the President, Vice President, or Chairman of the Executive Committee, the President or other presiding Officer of the Board of Directors shall appoint three or more members of the Board to act as a Nominating Committee who shall present a nominee for such vacancy to the Board, and the Board of Directors shall fill such vacancy by election of a successor.

SECTION 8. Duties and Authority of the Elective Officers:

(a) The President shall be the chief officer of the Authority and shall preside at the meetings of the Board and shall carry out such other functions and directions as may be given the President by the Board of Directors.

(b) The Vice President shall assist the President and shall perform such other specific duties as may be directed by the Board of Directors or its Executive Committee. In the event of the inability or failure of the President to preside at meetings of the Board, the Vice President shall perform such duty.

(c) The Chairman of the Executive Committee shall preside at meetings of the Executive Committee and shall assist the President and shall perform such other specific duties as may be directed by the Board of Directors or its Executive Committee. The Chairman of the Executive Committee shall be empowered to implement and execute all decisions of that Committee.

ARTICLE II. GENERAL OFFICE

The General Office and principal place of business of the Authority shall be located in the City of Arlington, Tarrant County, Texas.

ARTICLE III. MEETINGS OF THE BOARD OF DIRECTORS

SECTION 1. Quorum. A quorum for the transaction of all business at any regular or special meeting of the Board shall consist of a simple majority of the then effective membership of the Board.

SECTION 2. Regular Meetings. Regular meetings of the Board of Directors shall be held on the fourth Wednesday of the months of February, April, June, August, and October and during the first week of December of each year on a day selected by the President.

SECTION 3. Special Meetings. Special meetings may be called by the President or by a majority of the Executive Committee or by five members of the Board of Directors.

SECTION 4. Notice of Meetings. Notice of a regular or special meeting shall be sent by the Secretary by mail not less than ten days prior to the day on which the meeting is to be convened and shall state the time and place where the meeting is to be held as determined by the President. Nothing herein shall preclude a special meeting from being held on an emergency basis without the ten days' notice.

SECTION 5. Agenda. Prior to each regular or special meeting, the General Manager shall cause an agenda to be delivered to each Director. The agenda shall include material explaining

matters recommended to the Board for consideration and copies of involved contracts, ordinances, resolutions, and legal instruments.

ARTICLE IV. GENERAL MANAGER

SECTION 1. The General Manager is vested with full authority to discharge the responsibilities of the office under the direction of the President and subject to the policies established by the Board of Directors.

SECTION 2. The Secretary, the Treasurer and all other management employees shall be responsible to the General Manager who in turn shall be totally responsible to the Board of Directors for the conduct of the business of the Authority.

SECTION 3. The General Manager shall be particularly concerned with the following:

(a) The recommendation of policy to the Board of Directors;

(b) The execution of policies approved by the Board of Directors and of directives of the President;

(c) The recommendation to the Board of Directors of professional consultants to be employed by the Authority;

(d) The preparation of a recommended annual budget to govern all operations of the Authority for each oncoming fiscal year, the submission of same for review to the Directors prior to the first day of August each year, the submission of same for approval to the Board of Directors at its regularly scheduled meeting in October each year, and the execution of the policies and programs contained in the annual budget as finally approved by the Board of Directors;

(e) The disseminating of public information concerning the Authority's activities; and

(f) The coordination of the Authority's project development functions so that projects included in the Master Plan for the Trinity River and tributaries, as amended, will be implemented in a timely manner.

SECTION 4. With the written concurrence of the Authority's President, the General Manager shall designate an employee of the Authority who would serve on a temporary basis as Acting General Manager in the event of the General Manager's absence, inability to act or death.

ARTICLE V. COMMITTEES

SECTION 1. Executive Committee. There shall be an Executive Committee, chaired by the Chairman of the Executive Committee, composed of the Chairman of the Executive Committee, the President, the Vice President and four other members of the Board, nominated and elected by the members of the Board at the same time the elective Officers of the Authority are elected. The President shall act as Vice Chairman of the Executive Committee and shall preside at the meetings in the event of the inability or failure of the Chairman of the Executive Committee to do so. In the event of the inability or failure of both the Chairman of the Executive Committee and the President of the Authority, the Vice President of the Authority shall so act. Members of the Executive Committee may be removed therefrom for due cause at any time by the Board. Vacancies on the Committee shall be filled from the Board by the President subject to ratification by the Board of Directors at the next regular or special meeting for which notice for such action has been given. The Committee shall make its own rules of procedure, keep a record of its proceedings and submit a report of its actions at each meeting of the Board of Directors for its approval. In accordance with provisions of SECTION 3(b) of the act of the Texas Legislature creating the Authority, the Executive Committee will perform the functions of the Board between meetings, except as its powers may be restricted from time to time by the Board of Directors. Without limiting that general delegation, the Board may direct, on an advance basis, the Executive Committee to take certain specified actions, including approving the Annual Financial Report and the actions specified in ARTICLE VI, SECTION 2, of the Bylaws, as revised.

SECTION 2. Functional Committees.

(a) There shall be four functional committees of the Board of Directors:

1. The Administration and Audit Committee, which shall be concerned with the Authority's internal business, management activities, policymaking and salary administration;

2. The Legal and Public Policy Committee, which shall be concerned with the Authority's legal activities, particularly the manner in which legal matters are handled, review of standard Authority legal forms, compliance activities, oversight of litigation and administrative proceedings, rulemaking activities by agencies, legislative activities and the Authority's land rights activities;

3. The Resources Development Committee, which shall be concerned with the Authority's provision of financing services to others, master planning responsibilities, environmental matters and studies, water sales policymaking and approval, raw water sales rates, sales of process byproducts, participation in joint planning, cooperative efforts with basin partners, planning for new operating projects and new lines of business and federal project activities; and

4. The Utility Services Committee, which shall be concerned with the operation and maintenance of the Authority's existing revenue-oriented projects and the expansion or enlargement of the Authority's existing projects.

(b) The purpose of the functional committees is to make recommendations to the Board of Directors on policy matters.

(c) Each functional committee shall have a minimum of five members. The Chairman of each functional committee shall be appointed by the President from among those members of the Executive Committee other than the President, Vice President and Chairman of the Executive Committee. The other members of the functional committees shall be appointed by the President.

(d) Membership on functional committees shall be for a term of two years beginning on the first day of December in odd-numbered years and ending on the thirtieth day of November in the following odd-numbered year.

SECTION 3. Right-of-Way Committees.

(a) Right-of-way committees shall be created by the Board of Directors from time to time as needed.

(b) Subject to confirmation by the Board of Directors, the President shall appoint members of the Board of Directors to serve on each right-of-way committee and shall designate the Chairman of each right-of-way committee.

(c) Right-of-way committees shall carry out their duties in accordance with policies approved by the Board of Directors.

SECTION 4. Special Committees. Special committees may be constituted to serve for the time and purpose specified in the authorizing resolution or motion which shall also specify the number of members therefor. Subject to confirmation by the Board of Directors, the President shall appoint members of the Board of Directors to serve on special committees.

SECTION 5. Quorum. Any Officer of the Board may serve as a voting member of a functional, right-of-way or special committee of the Board of Directors, where necessary to constitute a quorum for said committee.

ARTICLE VI. DEPOSITORIES AND DISBURSEMENT OF FUNDS

SECTION 1. From time to time the Board of Directors shall designate in the manner prescribed by law one or more banks within the Authority to serve as a depository for the funds of the Authority.

SECTION 2. The Board of Directors shall, by resolution, make provision for the depositing and withdrawal of funds, the making of loans, and for other banking matters and procedures; provided, however, that the Executive Committee may perform these functions between meetings, except that it shall make no loan for a term of more than 90 days or for a principal amount of more than $200,000.

SECTION 3. No Officer, Director or employee of the Authority shall be authorized to pledge the credit or create any debt against the Authority for any purpose unless the same shall have been either authorized by the Executive Committee within the limits prescribed in ARTICLE VI, SECTION 2 of these Bylaws, as revised, or previously authorized by the Board of Directors.

ARTICLE VII. FEES AND EXPENSES OF DIRECTORS.

SECTION 1. Fees. The members of the Board of Directors shall be entitled to the fees of office authorized by general law for each day the Director actually spends performing the duties of a Director and when participating in meetings of the Board and its Committees and/or as a representative of the Authority in any event when requested by the President or General Manager. Fees of office paid to members of the Board of Directors may not exceed a total of $7,200 per year.

SECTION 2. Expenses.

(a) The members of the Board of Directors shall each be entitled to receive reimbursement for actual expenses reasonably and necessarily incurred in attending to authorized Authority business, including attendance at Board and Committee meetings, as follows:

1. For the use of the Director's automobile, each Director shall be reimbursed on the basis of the amount allowed by the Internal Revenue Service for business mileage expense under the automatic mileage deduction method; and

2. For all other expenses, each Director shall be reimbursed on the basis of actual costs reasonably incurred, provided, however, only expenses for travel, meals and lodging shall be reimbursable.

(b) Statements for reimbursement for expenses shall be submitted by the Secretary to the President on forms provided for review and approval. Upon approval by the President, the reimbursement for expenses shall be made by the General Manager; provided, however, that approval of statements submitted by the President shall be approved by the Chairman of the Executive Committee prior to payment. Claims for reimbursement shall be submitted promptly for processing.

SECTION 4. Payment. In order to receive fees of office and to receive reimbursement for expenses, each Director must comply with Texas Water Code Section 49.060, or any subsequent revision thereof. In addition thereto, in order to receive reimbursement for expenses, each Director shall file with the Secretary or Treasurer of the Authority a verified statement showing the amount due, the number of days actually spent in the service of the Authority, and a general description of the duties performed for each day of service before a check shall be issued therefor. Upon receipt of the statement, a voucher shall be prepared and a check issued for payment.

ARTICLE VIII. LEGAL EXPENSES.

Any person made a party to or involved in any litigation (including any civil, criminal or administrative action, suit or proceeding) by reason of the fact that he or she is or was a Director or Officer of the Trinity River Authority of Texas or by reason of the Director's alleged negligence or misconduct in the performance of their duties as such Director or Officer shall be indemnified by the Trinity River Authority of Texas (to the extent funds are lawfully available and upon the conditions set forth below) against any liability together with the reasonable expenses, including attorney's fees, actually and necessarily incurred by the Director in connection with any action therein, except in relation to matters as to which it shall be adjudged in such litigation that such

Director or Officer is liable for gross negligence or willful misconduct in the performance of the Director's duties. (A conviction or judgment entered in connection with a compromise or settlement of such litigation shall not by itself be deemed to constitute an adjudication of liability for such negligence or misconduct.)

As used herein the term "expenses" shall include fines or penalties imposed and amounts paid in compromise or settlement of any such litigation only if (a) independent legal counsel designated by a majority of the members of the Board of Directors other than those who have incurred expenses in connection with such litigation for which indemnification has been or is to be sought shall have advised the Board of Directors of the Trinity River Authority of Texas that in the opinion of such counsel, such Director or Officer is not liable to the Trinity River Authority of Texas for gross negligence or willful misconduct in the performance of the Director's duties in respect to the subject of such litigation, and (b) a majority of such members of the Board of Directors shall have made a determination that such compromise or settlement was or will be in the interest of the Trinity River Authority of Texas.

Any amount payable by way of indemnity under this Bylaw may be determined and paid pursuant to an order of or allowance by a court under the applicable provisions of the Laws of the State of Texas in effect at the time; and pursuant to a resolution of a majority of the members of the Board of Directors of the Trinity River Authority of Texas other than those who have incurred expenses in connection with such litigation for which indemnification has been or is to be sought. In the event that all of the members of the Board of Directors are made parties to such litigation, then a majority of the effective membership of the Board of Directors of the Trinity River Authority of Texas is authorized to pass a resolution to provide for legal expenses for the entire Board.

The right of indemnification provided by this Bylaw shall not be deemed exclusive of any right to which any Director or Officer may be entitled as a matter of law and shall extend and apply to the estates of deceased Directors or Officers.

As used herein the term "Officers" shall be determined by the Board of Directors from time to time.

ARTICLE IX.

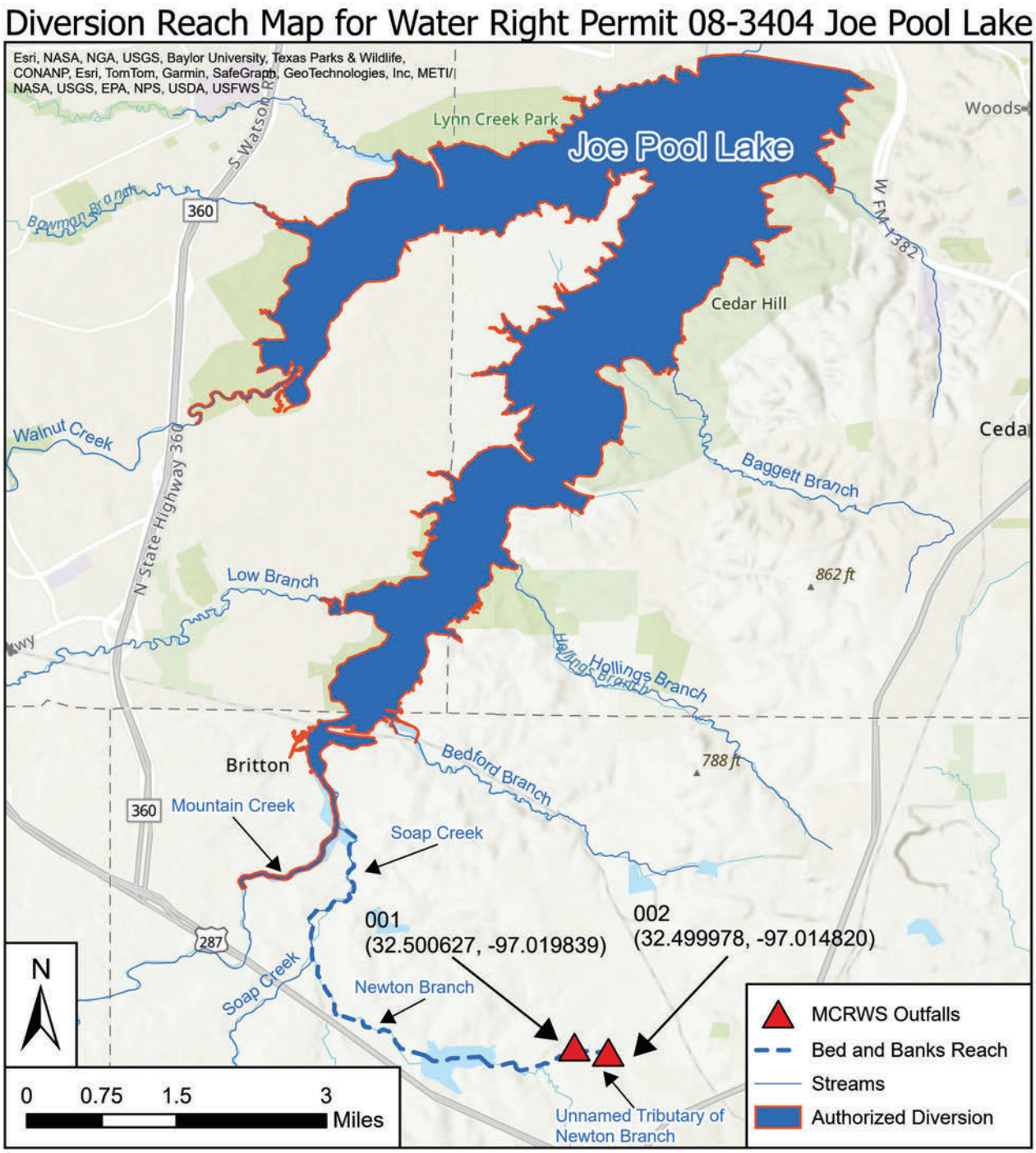
Reserved for future use.

ARTICLE X. AMENDMENTS

These Bylaws may be amended by the affirmative vote of a majority of the effective membership of the Board at any regular meeting or at any special meeting, provided that any proposed amendments to be considered at a special meeting shall be submitted to the Directors in, or in connection with, the notice of the call of the special meeting.

Updated April 22, 2015

Attachment: WS3.2.F_WS4.1_JPL_Diversion_Map



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 25, 2023

Quintin Winters, Manager
Trinity River Authority of Texas
P.O. Box 240
Arlington, Texas 76004

RE: Trinity River Authority of Texas
Permit No. WQ0010348001

This letter is your notice that the Texas Commission on Environmental Quality (TCEQ) executive director (ED) has acted on the above-named application. According to 30 Texas Administrative Code (TAC) Section 50.135 the ED's action became effective on the date the ED signed the permit or other action. A copy of the final action is enclosed and cites the effective date.

For certain matters, a **motion to overturn**, which is a request that the commission review the executive director's action on an application, may be filed with the chief clerk. Whether a motion to overturn is procedurally available for a specific matter is determined by Title 30 of the Texas Administrative Code Chapter 50. According to 30 TAC Section 50.139, an action by the ED is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

If a motion to overturn is filed, the motion must be received by the chief clerk within 23 days after the date of this letter. An original and 7 copies of a motion must be filed with the chief clerk in person or by mail. The Chief Clerk's mailing address is Office of the Chief Clerk (MC 105), TCEQ, P.O. Box 13087, Austin, Texas 78711-3087. On the same day the motion is transmitted to the chief clerk, please provide copies to the Environmental Law Deputy Director (MC 173), and the Public Interest Counsel (MC 103), both at the same TCEQ address listed above. If a motion is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the ED's action. The procedure and timelines for seeking judicial review of a commission or ED action are governed by Texas Water Code Section 5.351.

Individual members of the public may seek further information by calling the TCEQ Public Education Program, toll free, at 1-800-687-4040.

Sincerely,

Laurie Gharis

Laurie Gharis
Chief Clerk

LG/cb

cc: Garrett T. Arthur, TCEQ Public Interest Counsel (MC 103)

COMISIÓN DE CALIDAD AMBIENTAL DE TEXAS

Protegiendo a Texas al Reducir y Prevenir la Contaminación

Enero 25, 2023

Quintin Winters, Manager
Trinity River Authority of Texas
P.O. Box 240
Arlington, Texas 76004

RE: Trinity River Authority of Texas
Permiso No. WQ0010348001

Esta carta es su aviso de que el director ejecutivo (ED, por sus siglas en inglés) de la Comisión de Calidad Ambiental de Texas (TCEQ, por sus siglas en inglés) ha actuado sobre la solicitud mencionada anteriormente. De acuerdo con 30 Código Administrativo de Texas (TAC, por sus siglas en inglés) Sección 50.135, la acción del ED entró en vigencia en la fecha en que el ED firmó el permiso u otra acción. Se adjunta una copia de la acción final y se cita la fecha de vigencia.
Para ciertos asuntos, una **moción para revocar**, que es una solicitud para que la comisión revise la acción del director ejecutivo sobre una solicitud, puede presentarse ante el secretario oficial. Si una moción para revocar está disponible desde el punto de vista procesal para un asunto específico está determinado por el Título 30 del Capítulo 50 del Código Administrativo de Texas. De acuerdo con 30 TAC Sección 50.139, una acción del ED no se ve afectada por una moción de revocación presentada bajo esta sección a menos que la comisión lo ordene expresamente.

Si se presenta una moción para revocarla, la moción debe ser recibida por el secretario oficial dentro de los 23 días posteriores a la fecha de esta carta. Se debe presentar una copia original y 7 copias de una moción ante el secretario oficial en persona o por correo. La dirección postal del Secretario Oficial es Office of the Chief Clerk (MC 105), TCEQ, P.O. Box 13087, Austin, Texas 78711-3087. El mismo día en que se transmite la moción al secretario oficial, proporcione copias al Director Adjunto de Derecho Ambiental D (MC 173) y al Asesor de Interés Público (MC 103), ambos en la misma dirección de la TCEQ mencionada anteriormente. Si una moción no es tomada en cuenta por la comisión dentro de los 45 días posteriores a la fecha de esta carta, entonces la moción se considerará anulada.

También puede solicitar una **revisión judicial** de la acción del ED. El procedimiento y los plazos para solicitar la revisión judicial de una comisión o acción del Departamento de Educación se rigen por la Sección 5.351 del Código de Agua de Texas.

Los miembros individuales del público pueden solicitar más información llamando al Programa de Educación Pública de la TCEQ, al número gratuito, al 1-800-687-4040.

Atentamente,

Laurie Gharis

Laurie Gharis
Secretaria Oficial

LG/cb

cc: Garrett T. Arthur, Asesor de Interés Público de la TCEQ (MC 103)

TPDES PERMIT NO.
WQ0010348001
[For TCEQ office use only - EPA I.D. No. TX0025011]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

This major amendment supersedes and replaces TPDES Permit No. WQ0010348001 issued on February 23, 2017.

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

Trinity River Authority of Texas

whose mailing address is

P.O. Box 240
Arlington, Texas 76004

is authorized to treat and discharge wastes from the Mountain Creek Regional Wastewater Treatment Facility, SIC Code 4952

located approximately 1.5 miles north of the intersection of U.S. Highway 67 and U.S. Highway 287, in Ellis County, Texas 76065

via Outfalls 001 and 002 to two unnamed tributaries, thence to newton Branch, thence to Soil Conservation Services Reservoir 10, thence to Newton Branch, thence to Soap Creek, thence to Mountain Creek, thence to Joe Pool Lake in Segment No. 0838 of the Trinity River Basin

only according to effluent limitations, monitoring requirements, and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, **five years from the date of issuance**.

ISSUED DATE: January 23, 2023

For the Commission

INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 4.50 million gallons per day (MGD) facility for Outfall 002, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.90* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,590 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March–September	7 (53)	12	22	32	One/week	Composite
October–February	10 (75)	15	25	35	One/week	Composite
Total Suspended Solids	15 (113)	25	40	60	One/week	Composite
Ammonia Nitrogen						
March–September	2 (15)	5	10	15	One/week	Composite
October–February	4 (30)	7	12	15	One/week	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Two/month	Grab

*See Other Requirement No. 6, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored daily by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored twice per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l (March-September) and 4.0 mg/l (October-February) and shall be monitored once per week by grab sample.

INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of completion of expansion to the 4.5 million gallons per day (MGD) facility for Outfall 002 and lasting through the completion of expansion to the 6.0 MGD facility for Outfall 002, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.90* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,590 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March–September	7 (53)	12	22	32	One/week	Composite
October–February	10 (75)	15	25	35	One/week	Composite
Total Suspended Solids	15 (113)	25	40	60	One/week	Composite
Ammonia Nitrogen						
March–September	2 (15)	5	10	15	One/week	Composite
October–February	4 (30)	7	12	15	One/week	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Two/month	Grab

*See Other Requirement No. 6, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored daily by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored twice per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per week by grab sample.

INTERIM III EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of completion of expansion to the 6.0 million gallons per day (MGD) facility for Outfall 002 and lasting through the completion of expansion to the 9.0 MGD facility for Outfall 002, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.90* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 1,590 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March–September	7 (53)	12	22	32	One/week	Composite
October–February	10 (75)	15	25	35	One/week	Composite
Total Suspended Solids	15 (113)	25	40	60	One/week	Composite
Ammonia Nitrogen						
March–September	2 (15)	5	10	15	One/week	Composite
October–February	3 (23)	6	10	15	One/week	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Two/month	Grab

*See Other Requirement No. 6, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored daily by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored twice per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per week by grab sample.

INTERIM IV EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of completion of expansion to the 9.0 million gallons per day (MGD) facility for Outfall 002 and lasting through the completion of expansion to the 12.0 MGD facility for Outfall 002, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.90* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 2,500 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March–September	7 (53)	12	22	32	One/week	Composite
October–February	10 (75)	15	25	35	One/week	Composite
Total Suspended Solids	15 (113)	25	40	60	One/week	Composite
Ammonia Nitrogen	2 (15)	5	10	15	One/week	Composite
Total Phosphorus	0.5 (3.8)	1	2	3	One/week	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Two/month	Grab

*See Other Requirement No. 6, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored daily by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored twice per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored once per week by grab sample.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of completion of expansion to the 12.0 million gallons per day (MGD) facility for Outfall 002 and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.90* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 2,500 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March–September	5 (38)	12	22	32	One/week	Composite
October–February	7 (53)	15	25	35	One/week	Composite
Total Suspended Solids	12 (90)	25	40	60	One/week	Composite
Ammonia Nitrogen	2 (15)	5	10	15	One/week	Composite
Total Phosphorus	0.5 (3.8)	1	2	3	One/week	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Two/month	Grab

*See Other Requirement No. 6, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. The effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes (based on peak flow), and shall be monitored daily by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored twice per month by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 5.0 mg/l and shall be monitored once per week by grab sample.

INTERIM I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 002

1. During the period beginning upon the date of issuance and lasting through the completion of expansion to the 4.5 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 3.0* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 6,250 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March-September	7 (175)	12	22	32	Two/week	Composite
October–February	10 (250)	15	25	35	Two/week	Composite
Total Suspended Solids	15 (375)	25	40	60	Two/week	Composite
Ammonia Nitrogen						
March–September	2 (50)	5	10	15	Two/week	Composite
October–February	4 (100)	7	12	15	Two/week	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Daily	Grab

*See Other Requirement No. 6, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. 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.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l (March–September) and 4.0 mg/l (October–February) and shall be monitored twice per week by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

INTERIM II EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 002

1. During the period beginning upon the date of completion of expansion to the 4.5 million gallons per day (MGD) facility and lasting through the completion of expansion to the 6.0 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 4.5* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 6,250 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March–September	7 (263)	15	25	35	Two/week	Composite
October–February	10 (375)	15	25	35	Two/week	Composite
Total Suspended Solids	15 (563)	25	40	60	Two/week	Composite
Ammonia Nitrogen						
March–September	2 (75)	5	10	15	Two/week	Composite
October–February	4 (150)	7	12	15	Two/week	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Daily	Grab

*See Other Requirement No. 7, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. 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.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per week by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored twice per week by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

INTERIM III EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 002

1. During the period beginning upon the date of completion of expansion to the 6.0 million gallons per day (MGD) facility and lasting through the completion of expansion to the 9.0 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 6.0* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 8,333 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March–September	7 (350)	15	25	35	Five/week	Composite
October–February	10 (500)	15	25	35	Five/week	Composite
Total Suspended Solids	15 (751)	25	40	60	Five/week	Composite
Ammonia Nitrogen						
March–September	2 (100)	5	10	15	Five/week	Composite
October–February	3 (150)	6	10	15	Five/week	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Daily	Grab

*See Other Requirement No. 6, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. 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.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored five times per week by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored five times per week by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

INTERIM IV EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 002

1. During the period beginning upon the date of completion of expansion to the 9.0 million gallons per day (MGD) facility and lasting through the completion of expansion to the 12.0 MGD facility, the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 9.0* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 25,000 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March–September	7 (525)	15	25	35	Five/week	Composite
October–February	10 (751)	15	25	35	Five/week	Composite
Total Suspended Solids	15 (1,126)	25	40	60	Five/week	Composite
Ammonia Nitrogen	2 (150)	5	10	15	Five/week	Composite
Total Phosphorus	0.5 (38)	1	2	3	Five/week	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Daily	Grab

*See Other Requirement No. 6, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. 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.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored five times per week by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 6.0 mg/l and shall be monitored five times per week by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 002

1. During the period beginning upon the date of completion of expansion to the 12.0 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

   The annual average flow of effluent shall not exceed 12.0* MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 33,333 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg	7-day Avg	Daily Max	Single Grab	Report Daily Avg. & Daily Max.	
	mg/l (lbs/day)	mg/l	mg/l	mg/l	Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)						
March–September	5 (500)	15	25	35	One/day	Composite
October–February	7 (701)	15	25	35	One/day	Composite
Total Suspended Solids	12 (1,201)	25	40	60	One/day	Composite
Ammonia Nitrogen	2 (200)	5	10	15	One/day	Composite
Total Phosphorus	0.5 (50)	1	2	3	One/day	Composite
E. coli, CFU or MPN** per 100 ml	126	N/A	399	N/A	Daily	Grab

*See Other Requirement No. 6, Page 34.

**CFU or MPN - colony-forming units or most probable number

2. 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.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per day by grab sample.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.
6. The effluent shall contain a minimum dissolved oxygen of 5.0 mg/l and shall be monitored once per day by grab sample.
7. The annual average flow and maximum 2-hour peak flow shall be reported monthly.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

    a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.

    b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

    c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.

    d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

    e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.

    f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

    a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.

        i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.

c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).

g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term “sewage sludge” is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.

6. The term “biosolids” is defined as sewage sludge that has been tested or processed to meet Class A, Class AB, or Class B pathogen standards in 30 TAC Chapter 312 for beneficial use.

7. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

   Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, effluent monitoring data shall be submitted each month, to the Compliance Monitoring Team of the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

   As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

   a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

   b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

   a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge or biosolids use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.

c. Records of monitoring activities shall include the following:

i. date, time and place of sample or measurement;

ii. identity of individual who collected the sample or made the measurement.

iii. date and time of analysis;

iv. identity of the individual and laboratory who performed the analysis;

v. the technique or method of analysis; and

vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224).

7. Noncompliance Notification

   a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

   b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

      i. Unauthorized discharges as defined in Permit Condition 2(g).

      ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.

      iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

   c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

   d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Compliance Monitoring Team of the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

   All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

   i. One hundred micrograms per liter (100 µg/L);

   ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

   iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

   iv. The level established by the TCEQ.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

   i. Five hundred micrograms per liter (500 µg/L);

   ii. One milligram per liter (1 mg/L) for antimony;

   iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or

   iv. The level established by the TCEQ.

10. Signatories to Reports

    All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

11. All POTWs must provide adequate notice to the Executive Director of the following:

    a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;

    b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and

    c. For the purpose of this paragraph, adequate notice shall include information on:

       i. The quality and quantity of effluent introduced into the POTW; and

       ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

   a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

   b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

      i. Violation of any terms or conditions of this permit;

      ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

      iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

   c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

   a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

   b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

   c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

   d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.

   e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.

i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.

b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

   a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:

      i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or

      ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or

      iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

   c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.

   d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

   e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

   f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or

prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

   a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

   b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

   This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

   Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

   A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

   The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

    The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy

    a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:

       i. the permittee;

       ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or

iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

b. This notification must indicate:

i. the name of the permittee and the permit number(s);

ii. the bankruptcy court in which the petition for bankruptcy was filed; and

iii. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge or biosolids use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.

4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).

7. Documentation

   For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

   a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

      If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

   b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.

10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.

11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:

    a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

    b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

    c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

    d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

    e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well,

container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:

i. Volume of waste and date(s) generated from treatment process;
ii. Volume of waste disposed of on-site or shipped off-site;
iii. Date(s) of disposal;
iv. Identity of hauler or transporter;
v. Location of disposal site; and
vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

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SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge. **The disposal of sludge or biosolids by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of Class A or Class AB Biosolids. This provision does not authorize the permittee to land apply biosolids on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.

2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.

3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

B. Testing Requirements

1. Sewage sludge or biosolids shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 4) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 4) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

2. Biosolids shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C. of this permit.

TABLE 1

Pollutant	Ceiling Concentration (Milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B biosolids pathogen requirements.

a. For sewage sludge to be classified as Class A biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge must be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information;

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion; or

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of must be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. For sewage sludge to be classified as Class AB biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%; or

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information; or

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

c. Sewage sludge that meets the requirements of Class AB biosolids may be classified a Class A biosolids if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.

d. Three alternatives are available to demonstrate compliance with Class B biosolids criteria.

Alternative 1

i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.

ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;

iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and

v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1 – 3, the following site restrictions must be met if Class B biosolids are land applied:

i. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.

v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.

vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of biosolids.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.

ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

i. Biosolids shall be injected below the surface of the land.

ii. No significant amount of the biosolids shall be present on the land surface within one hour after the biosolids are injected.

iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10-

i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

ii. When biosolids that are incorporated into the soil is Class A or Class AB with respect to pathogens, the biosolids shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- annually
PCBs	- annually

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

Amount of biosolids (*) metric tons per 365-day period	Monitoring Frequency
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(*) *The amount of bulk biosolids applied to the land (dry wt. basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge or biosolids for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE OR BIOSOLIDS FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A, Class AB or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Table 2

Pollutant	Cumulative Pollutant Loading Rate (pounds per acre)*
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

Pollutant	Monthly Average Concentration (milligrams per kilogram)*
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

*Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A, Class AB or Class B biosolids pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk sewage sludge enters a wetland or other waters in the State.

2. Bulk biosolids not meeting Class A requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.

3. Bulk biosolids shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk Class A or AB biosolids sold or given away. The information sheet shall contain the following information:

   a. The name and address of the person who prepared the Class A or AB biosolids that are sold or given away in a bag or other container for application to the land.

   b. A statement that application of the biosolids to the land is prohibited except in accordance with the instruction on the label or information sheet.

   c. The annual whole sludge application rate for the biosolids application rate for the biosolids that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

1. If bulk is applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:

   a. The location, by street address, and specific latitude and longitude, of each land application site.

   b. The approximate time period bulk biosolids will be applied to the site.

   c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.

2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the biosolids disposal practice.

E. Record Keeping Requirements

The documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a biosolids material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a

period of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.

2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).

3. A description of how the vector attraction reduction requirements are met.

4. A description of how the management practices listed above in Section II.C are being met.

5. The following certification statement:

   "I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk biosolids are applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:

   a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.

   b. The location, by street address, and specific latitude and longitude, of each site on which biosolids are applied.

   c. The number of acres in each site on which bulk biosolids are applied.

   d. The date and time biosolids are applied to each site.

   e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.

   f. The total amount of biosolids applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 4) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year the following information. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.

4. The frequency of monitoring listed in Section I.C. that applies to the permittee.

5. Toxicity Characteristic Leaching Procedure (TCLP) results.

6. PCB concentration in sludge or biosolids in mg/kg.

7. Identity of hauler(s) and TCEQ transporter number.

8. Date(s) of transport.

9. Texas Commission on Environmental Quality registration number, if applicable.

10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.

11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.

12. Level of pathogen reduction achieved (Class A, Class AB or Class B).

13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.

14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

15. Vector attraction reduction alternative used as listed in Section I.B.4.

16. Amount of sludge or biosolids transported in dry tons/year.

17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.

18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.

    a. The location, by street address, and specific latitude and longitude.

    b. The number of acres in each site on which bulk biosolids are applied.

    c. The date and time bulk biosolids are applied to each site.

    d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.

    e. The amount of biosolids (i.e., dry tons) applied to each site.

    The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge meets the requirements in 30 TAC § 330 concerning the quality of the sludge or biosolids disposed in a municipal solid waste landfill.

B. If the permittee generates sewage sludge and supplies that sewage sludge or biosolids to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge or biosolids disposal practice.

D. Sewage sludge or biosolids shall be tested annually in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

   Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 4) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

   The report shall contain test results, certification that unauthorized waste management has stopped and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 4) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

E. Sewage sludge or biosolids shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.

F. Record Keeping Requirements

   The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.

2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 4) and Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year the following information. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. Toxicity Characteristic Leaching Procedure (TCLP) results.

3. Annual sludge or biosolids production in dry tons/year.

4. Amount of sludge or biosolids disposed in a municipal solid waste landfill in dry tons/year.

5. Amount of sludge or biosolids transported interstate in dry tons/year.

6. A certification that the sewage sludge or biosolids meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

7. Identity of hauler(s) and transporter registration number.

8. Owner of disposal site(s).

9. Location of disposal site(s).

10. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION IV. REQUIREMENTS APPLYING TO SLUDGE OR BIOSOLIDS TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

These provisions apply to sludge or biosolids that is transported to another wastewater treatment facility or facility that further processes sludge or biosolids. These provisions are intended to allow transport of sludge or biosolids to facilities that have been authorized to accept sludge or biosolids. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge or biosolids, nor do they limit the ability of the receiving facility to request additional testing or documentation.

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.

2. Sludge or biosolids may only be transported using a registered transporter or using an approved pipeline.

B. Record Keeping Requirements

1. For sludge transported by an approved pipeline, the permittee must maintain records of the following:

   a. the amount of sludge or biosolids transported;

   b. the date of transport;

   c. the name and TCEQ permit number of the receiving facility or facilities;

   d. the location of the receiving facility or facilities;

   e. the name and TCEQ permit number of the facility that generated the waste; and

   f. copy of the written agreement between the permittee and the receiving facility to accept sludge or biosolids.

2. For sludge or biosolids transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge or biosolids transported.

3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

C. Reporting Requirements

The permittee shall report the following information annually to the TCEQ Regional Office (MC Region 4) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. the annual sludge or biosolids production;

3. the amount of sludge or biosolids transported;

4. the owner of each receiving facility;

5. the location of each receiving facility; and

6. the date(s) of disposal at each receiving facility.

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OTHER REQUIREMENTS

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and, in particular, 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

   This Category B in the Interim I, Interim II, Interim II, and Interim IV phases and Category A in the Final phase facility must be operated by a chief operator or an operator holding a Class B license or higher in the Interim I, Interim II, Interim II, and Interim IV phases and Class A license in the Final phase. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.

3. There is no mixing zone established for this discharge to an intermittent stream. Acute toxic criteria apply at the point of discharge.

4. The permittee 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).

5. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.

6. The combined annual average flow from Outfall 001 and Outfall 002 shall not exceed 3.0 MGD in the Interim I phase, 4.5 MGD in the Interim II phase, or 6.0 MGD in the Interim III phase, 9.0 MGD in the Interim IV phase, and 12.0 MGD in the Final phase. The combined loading for Carbonaceous Biochemical Oxygen Demand (5-day), Ammonia Nitrogen, and Total Suspended Solids from Outfall 001 and Outfall 002 shall not exceed the loading limits specified for Outfall 002 for the phase that is in operation.

7. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, at Outfall 001, during the Interim I, Interim II, Interim II, Interim IV, and Final phases, two per month may be reduced to one per month, and at Outfall 002, during the Interim I, Interim II, Interim II, Interim IV, and Final phases, daily may be reduced to 5/week. **A violation of any bacteria limit by a facility that has been granted a less**

frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148). The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

8. Prior to construction of the Interim III, Interim IV, and Final phases treatment facilities, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans, specifications, and a final engineering design report which comply with 30 TAC Chapter 217, Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the effluent limitations required on Pages 2 through 2i of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

9. The permittee shall notify the TCEQ Regional Office (MC Region 4) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, in writing at least forty-five (45) days prior to the completion of each additional phase on Notification of Completion Form 20007.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants may not be introduced into the treatment facility:

   a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed-cup flash point of less than 140° Fahrenheit (60° Celsius) using the test methods specified in 40 CFR § 261.21;

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with a pH lower than 5.0 standard units, unless the works are specifically designed to accommodate such discharges;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

   d. Any pollutant, including oxygen-demanding pollutants (e.g., biochemical oxygen demand), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

   e. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104° Fahrenheit (40° Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;

   f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;

   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   h. Any trucked or hauled pollutants except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403 [*rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798*].

3. The permittee shall provide adequate notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of either of the following:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and

   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

   Any notice shall include information on the quality and quantity of effluent to be introduced into the treatment works and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Revised July 2007

BIOMONITORING REQUIREMENTS

CHRONIC BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 002 for whole effluent toxicity (WET) testing.

1. Scope, Frequency, and Methodology

a. The permittee shall test the effluent for toxicity in accordance with the provisions below. Such testing will determine if an appropriately dilute effluent sample adversely affects the survival, reproduction, or growth of the test organisms.

b. The permittee shall conduct the following toxicity tests using the test organisms, procedures and quality assurance requirements specified in this part of this permit and in accordance with "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," fourth edition (EPA-821-R-02-013) or its most recent update:

1) Chronic static renewal survival and reproduction test using the water flea (*Ceriodaphnia dubia*) (Method 1002.0). This test should be terminated when 60% of the surviving adults in the control produce three broods or at the end of eight days, whichever occurs first. This test shall be conducted once per quarter.

2) Chronic static renewal 7-day larval survival and growth test using the fathead minnow (*Pimephales promelas*) (Method 1000.0). A minimum of five replicates with eight organisms per replicate shall be used in the control and in each dilution. This test shall be conducted once per quarter.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

c. The permittee shall use five effluent dilution concentrations and a control in each toxicity test. These effluent dilution concentrations are 30%, 41%, 54%, 72%, and 100% effluent. The critical dilution, defined as 72% effluent, is the effluent concentration representative of the proportion of effluent in the receiving water during critical low flow or critical mixing conditions.

d. This permit may be amended to require a WET limit, a chemical-specific effluent limit, a best management practice, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

e. Testing Frequency Reduction

1) If none of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee may submit this information in writing and, upon approval, reduce the testing frequency to once per six months for the invertebrate test species and once per year for the vertebrate test species.

2) If one or more of the first four consecutive quarterly tests demonstrates significant toxicity, the permittee shall continue quarterly testing for that species until this permit is reissued. If a testing frequency reduction had been previously granted and a subsequent test demonstrates significant toxicity, the permittee shall resume a quarterly testing frequency for that species until this permit is reissued.

2. Required Toxicity Testing Conditions

a. Test Acceptance - The permittee shall repeat any toxicity test, including the control and all effluent dilutions, which fail to meet the following criteria:

1) a control mean survival of 80% or greater;

2) a control mean number of water flea neonates per surviving adult of 15 or greater;

3) a control mean dry weight of surviving fathead minnow larvae of 0.25 mg or greater;

4) a control coefficient of variation percent (CV%) of 40 or less in between replicates for the young of surviving females in the water flea test; and the growth and survival endpoints in the fathead minnow test;

5) a critical dilution CV% of 40 or less for young of surviving females in the water flea test; and the growth and survival endpoints for the fathead minnow test, unless statistically significant toxicity is demonstrated at the critical dilution, in which case the test shall be considered valid;

6) a percent minimum significant difference of 47 or less for water flea reproduction, unless statistically significant sublethal toxicity is demonstrated at the critical dilution, in which case the test shall be considered valid; and

7) a PMSD of 30 or less for fathead minnow growth, unless statistically significant sublethal toxicity is demonstrated at the critical dilution, in which case the test shall be considered valid.

b. Statistical Interpretation

1) For the water flea survival and reproduction test, the statistical analyses used to determine the inhibition concentration of effluent that would cause a 25% reduction (IC25) in survival or mean young per female shall be as described in the methods manual referenced in Part 1.b.

2) For the fathead minnow larval survival and growth tests, the statistical analyses used to determine the IC25 in survival or growth shall be as described in the methods manual referenced in Part 1.b.

3) The permittee is responsible for reviewing test concentration-response relationships to ensure that calculated test-results are interpreted and reported

correctly. The document entitled "Method Guidance and Recommendation for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136)" (EPA 821-B-00-004) provides guidance on determining the validity of test results.

4) Most point estimates are derived from a mathematical model that assumes a continuous dose-response relationship. For any test result that demonstrates a non-continuous (threshold) response, or a non-monotonic dose-response relationship, the IC25 should be determined based on the method guidance manual referenced in Item 3.

5) Pursuant to the responsibility assigned to the permittee in Part 2.b.3), test results that demonstrate a non-monotonic dose-response relationship may be submitted, prior to the due date, for technical review of test validity and acceptability. The method guidance manual referenced in Item 3 will be used as the basis, along with best professional judgement, for making a determination of test validity and acceptability.

c. Dilution Water

1) Dilution water used in the toxicity tests must be the receiving water collected as close as possible to the point of discharge into SCS Reservoir 10 but unaffected by the discharge or a synthetic dilution water that has a pH, hardness, and alkalinity similar to that of the closest downstream perennial water.

2) Where the receiving water proves unsatisfactory as a result of pre-existing instream toxicity (i.e. fails to fulfill the test acceptance criteria of Part 2.a.), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:

a) a synthetic lab water control was performed (in addition to the receiving water control) which fulfilled the test acceptance requirements of Part 2.a;

b) the test indicating receiving water toxicity was carried out to completion (i.e., 7 days); and

c) the permittee submitted all test results indicating receiving water toxicity with the reports and information required in Part 3.

3) The synthetic dilution water shall consist of standard, moderately hard, reconstituted water. Upon approval, the permittee may substitute other appropriate dilution water with chemical and physical characteristics similar to that of the receiving water.

d. Samples and Composites

1) The permittee shall collect a minimum of three composite samples from Outfall 002. The second and third composite samples will be used for the renewal of the dilution concentrations for each toxicity test.

2) The permittee shall collect the composite samples such that the samples are

representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged on an intermittent basis.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the first composite sample. The holding time for any subsequent composite sample shall not exceed 72 hours. Samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 002 ceases discharging during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions, and the sample holding time are waived during that sampling period. However, the permittee must have collected an effluent composite sample volume sufficient to complete the required toxicity tests with renewal of the effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report.

5) The effluent samples shall not be dechlorinated after sample collection.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

a. The permittee shall prepare a full report of the results of all tests conducted in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated whether carried to completion or not.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 1 forms provided with this permit.

1) Annual biomonitoring test results are due on or before January 20th for biomonitoring conducted during the previous 12-month period.

2) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

3) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

4) Monthly biomonitoring test results are due on or before the 20th day of the month following sampling.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the water flea, Parameter T4P3B, enter a “1” if the IC25 for survival is less than the critical dilution; otherwise, enter a “0.”

2) For the water flea, Parameter T6P3B, report the IC25 for survival.

3) For the water flea, Parameter T5P3B, enter a "1" if the IC25 for reproduction is less than the critical dilution; otherwise, enter a "0."

4) For the water flea, Parameter T7P3B, report the IC25 for reproduction.

5) For the fathead minnow, Parameter T4P6C, enter a "1" if the IC25 for survival is less than the critical dilution; otherwise, enter a "0."

6) For the fathead minnow, Parameter T6P6C, report the IC25 for survival.

7) For the fathead minnow, Parameter T5P6C, enter a "1" if the IC25 for growth is less than the critical dilution; otherwise, enter a "0."

8) For the fathead minnow, Parameter T7P6C, report the IC25 for growth.

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "1" if the IC25 for survival is less than the critical dilution; otherwise, enter a "0."

2) For retest number 2, Parameter 22416, enter a "1" if the IC25 for survival is less than the critical dilution; otherwise, enter a "0."

4. Persistent Toxicity

The requirements of this Part apply only when a test demonstrates a significant effect at the critical dilution. Significant lethality and significant effect were defined in Part 2.b. Significant sublethality is defined as a statistically significant difference in growth/reproduction at the critical dilution when compared to the growth/reproduction in the control.

a. The permittee shall conduct a total of 2 additional tests (retests) for any test that demonstrates a significant effect (lethal or sublethal) at the critical dilution. The two retests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two retests in lieu of routine toxicity testing. All reports shall be submitted within 20 days of test completion. Test completion is defined as the last day of the test.

b. If the retests are performed due to a demonstration of significant lethality, and one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5. The provisions of Part 4.a. are suspended upon completion of the two retests and submittal of the TRE action plan and schedule defined in Part 5.

If neither test demonstrates significant lethality and the permittee is testing under the reduced testing frequency provision of Part 1.e., the permittee shall return to a quarterly testing frequency for that species.

c. If the two retests are performed due to a demonstration of significant sublethality, and

one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall again perform two retests as stipulated in Part 4.a.

d. If the two retests are performed due to a demonstration of significant sublethality, and neither test demonstrates significant lethality, the permittee shall continue testing at the quarterly frequency.

e. Regardless of whether retesting for lethal or sublethal effects, or a combination of the two, no more than one retest per month is required for a species.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, or within 45 days of being so instructed due to multiple toxic events, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, or within 90 days of being so instructed due to multiple toxic events, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analyses to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall describe an approach for the reduction or elimination of lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled “Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I” (EPA/600/6-91/005F) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled “Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity” (EPA/600/R-92/080) and “Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity” (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent

toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE action plan should describe the project staff, project manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation which identifies the pollutant(s) and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive months with at least monthly testing. At the end of the 12 months, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates persistent significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 28 months from the last test day of the retest that confirmed significant lethal effects at the critical dilution. The permittee may petition the Executive Director (in writing) for an extension of the 28-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall provide information pertaining to the specific control mechanism selected that will, when implemented, result in the reduction of effluent toxicity to no significant lethality at the critical dilution. The report shall also provide a specific corrective action schedule for implementing the selected control mechanism.

h. Based on the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements, where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

i. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 1 (SHEET 1 OF 4)

BIOMONITORING REPORTING

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION

Dates and Times Composites Collected

Date Time Date Time

No. 1 FROM: _____ TO: _____

No. 2 FROM: _____ TO: _____

No. 3 FROM:_____ TO: _____

Test initiated: _____am/pm _____date

Dilution water used: _____ Receiving water _____ Synthetic Dilution water

NUMBER OF YOUNG PRODUCED PER ADULT AT END OF TEST

REP	Percent effluent					
	0%	30%	41%	54%	72%	100%
A						
B						
C						
D						
E						
F						
G						
H						
I						
J						
Survival Mean						
Total Mean						
CV%*						

*Coefficient of Variation = standard deviation x 100/mean (calculation based on young of the surviving adults)

Designate males (M), and dead females (D), along with number of neonates (x) released prior to death.

TABLE 1 (SHEET 2 OF 4)

CERIODAPHNIA DUBIA SURVIVAL AND REPRODUCTION TEST

PERCENT SURVIVAL

	Percent effluent					
Time of Reading	0%	30%	41%	54%	72%	100%
24h						
48h						
End of Test						

1. Is the IC25 for reproduction less than the critical dilution (72%)? _____ YES _____ NO

2. Is the IC25 for survival less than the critical dilution (72%)? _____ YES _____ NO

3. Enter percent effluent corresponding to each IC25 below:

   IC25 reproduction = _____%

   IC25 survival = _____%

TABLE 1 (SHEET 3 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW LARVAE GROWTH AND SURVIVAL

		Date Time		Date Time
Dates and Times Composites Collected	No. 1	FROM: _____	TO:	_____
	No. 2	FROM: _____	TO:	_____
	No. 3	FROM: _____	TO:	_____

Test initiated: _____am/pm _____date

Dilution water used: _____ Receiving water _____ Synthetic dilution water

FATHEAD MINNOW GROWTH DATA

Effluent Concentration	Average Dry Weight in replicate chambers					Mean Dry Weight	CV%*
	A	B	C	D	E		
0%							
30%							
41%							
54%							
72%							
100%							

* Coefficient of Variation = standard deviation x 100/mean

TABLE 1 (SHEET 4 OF 4)

BIOMONITORING REPORTING

FATHEAD MINNOW GROWTH AND SURVIVAL TEST

FATHEAD MINNOW SURVIVAL DATA

Effluent Concentration	Percent Survival in replicate chambers					Mean percent survival			CV%*
	A	B	C	D	E	24h	48h	7 day	
0%									
30%									
41%									
54%									
72%									
100%									

* Coefficient of Variation = standard deviation x 100/mean

1. Is the IC25 for growth less than the critical dilution (72%)? _____ YES _____ NO

2. Is the IC25 for survival less than the critical dilution (72%)? _____ YES _____ NO

3. Enter percent effluent corresponding to each IC25 below:

   IC25 growth = _____%

   IC25 survival = _____%

24-HOUR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

The provisions of this section apply to Outfall 002 for whole effluent toxicity (WET) testing.

1. Scope, Frequency, and Methodology

a. The permittee shall test the effluent for lethality in accordance with the provisions in this section. Such testing will determine compliance with Texas Surface Water Quality Standard 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the appropriate test organisms in 100% effluent for a 24-hour period.

b. The toxicity tests specified shall be conducted once per six months. The permittee shall conduct the following toxicity tests using the test organisms, procedures, and quality assurance requirements specified in this section of the permit and in accordance with "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms," fifth edition (EPA-821-R-02-012) or its most recent update:

1) Acute 24-hour static toxicity test using the water flea (*Daphnia pulex* or *Ceriodaphnia dubia*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

2) Acute 24-hour static toxicity test using the fathead minnow (*Pimephales promelas*). A minimum of five replicates with eight organisms per replicate shall be used in the control and each dilution.

The permittee must perform and report a valid test for each test species during the prescribed reporting period. An invalid test must be repeated during the same reporting period. An invalid test is defined as any test failing to satisfy the test acceptability criteria, procedures, and quality assurance requirements specified in the test methods and permit.

c. In addition to an appropriate control, a 100% effluent concentration shall be used in the toxicity tests. The control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

d. This permit may be amended to require a WET limit, a best management practice, a chemical-specific limit, or other appropriate actions to address toxicity. The permittee may be required to conduct a toxicity reduction evaluation (TRE) after multiple toxic events.

e. As the dilution series specified in the Chronic Biomonitoring Requirements includes a 100% effluent concentration, the results from those tests may fulfill the requirements of this section; any tests performed in the proper time interval may be substituted. Compliance will be evaluated as specified in Part 1.a. The 50% survival in 100% effluent for a 24-hour period standard applies to all tests utilizing a 100% effluent dilution, regardless of whether the results are submitted to comply with the minimum testing frequency.

2. Required Toxicity Testing Conditions

a. Test Acceptance – The permittee shall repeat any toxicity test, including the control, if the control fails to meet a mean survival equal to or greater than 90%.

b. Dilution Water - In accordance with Part 1.c., the control and dilution water shall consist of standard, synthetic, moderately hard, reconstituted water.

c. Samples and Composites

1) The permittee shall collect one composite sample from Outfall 002.

2) The permittee shall collect the composite samples such that the sample is representative of any periodic episode of chlorination, biocide usage, or other potentially toxic substance being discharged.

3) The permittee shall initiate the toxicity tests within 36 hours after collection of the last portion of the composite sample. The samples shall be maintained at a temperature of 0-6 degrees Centigrade during collection, shipping, and storage.

4) If Outfall 002 ceases discharging during the collection of the effluent composite sample, the requirements for the minimum number of effluent portions are waived. However, the permittee must have collected a composite sample volume sufficient for completion of the required test. The abbreviated sample collection, duration, and methodology must be documented in the full report.

5) The effluent sample shall not be dechlorinated after sample collection.

3. Reporting

All reports, tables, plans, summaries, and related correspondence required in this section shall be submitted to the attention of the Standards Implementation Team (MC 150) of the Water Quality Division.

a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this permit in accordance with the manual referenced in Part 1.b. for every valid and invalid toxicity test initiated.

b. The permittee shall routinely report the results of each biomonitoring test on the Table 2 forms provided with this permit.

1) Semiannual biomonitoring test results are due on or before July 20th and January 20th for biomonitoring conducted during the previous 6-month period.

2) Quarterly biomonitoring test results are due on or before April 20th, July 20th, October 20th, and January 20th for biomonitoring conducted during the previous calendar quarter.

c. Enter the following codes for the appropriate parameters for valid tests only:

1) For the water flea, Parameter TIE3D, enter a “0” if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than

or equal to 50%, enter "1."

2) For the fathead minnow, Parameter TIE6C, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."

d. Enter the following codes for retests only:

1) For retest number 1, Parameter 22415, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."

2) For retest number 2, Parameter 22416, enter a "0" if the mean survival at 24 hours is greater than 50% in the 100% effluent dilution; if the mean survival is less than or equal to 50%, enter "1."

4. Persistent Mortality

The requirements of this part apply when a toxicity test demonstrates significant lethality, which is defined as a mean mortality of 50% or greater of organisms exposed to the 100% effluent concentration for 24 hours.

a. The permittee shall conduct 2 additional tests (retests) for each species that demonstrates significant lethality. The two retests shall be conducted once per week for 2 weeks. Five effluent dilution concentrations in addition to an appropriate control shall be used in the retests. These effluent concentrations are 6%, 13%, 25%, 50% and 100% effluent. The first retest shall be conducted within 15 days of the laboratory determination of significant lethality. All test results shall be submitted within 20 days of test completion of the second retest. Test completion is defined as the 24th hour.

b. If one or both of the two retests specified in Part 4.a. demonstrates significant lethality, the permittee shall initiate the TRE requirements as specified in Part 5.

5. Toxicity Reduction Evaluation

a. Within 45 days of the retest that demonstrates significant lethality, the permittee shall submit a general outline for initiating a TRE. The outline shall include, but not be limited to, a description of project personnel, a schedule for obtaining consultants (if needed), a discussion of influent and effluent data available for review, a sampling and analytical schedule, and a proposed TRE initiation date.

b. Within 90 days of the retest that demonstrates significant lethality, the permittee shall submit a TRE action plan and schedule for conducting a TRE. The plan shall specify the approach and methodology to be used in performing the TRE. A TRE is a step-wise investigation combining toxicity testing with physical and chemical analysis to determine actions necessary to eliminate or reduce effluent toxicity to a level not effecting significant lethality at the critical dilution. The TRE action plan shall lead to the successful elimination of significant lethality for both test species defined in Part 1.b. At a minimum, the TRE action plan shall include the following:

1) Specific Activities - The TRE action plan shall specify the approach the permittee

intends to utilize in conducting the TRE, including toxicity characterizations, identifications, confirmations, source evaluations, treatability studies, and alternative approaches. When conducting characterization analyses, the permittee shall perform multiple characterizations and follow the procedures specified in the document entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA/600/6-91/003) or alternate procedures. The permittee shall perform multiple identifications and follow the methods specified in the documents entitled "Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081). All characterization, identification, and confirmation tests shall be conducted in an orderly and logical progression;

2) Sampling Plan - The TRE action plan should describe sampling locations, methods, holding times, chain of custody, and preservation techniques. The effluent sample volume collected for all tests shall be adequate to perform the toxicity characterization/identification/confirmation procedures, and chemical-specific analyses when the toxicity tests show significant lethality. Where the permittee has identified or suspects a specific pollutant and source of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical-specific analyses for the identified and suspected pollutant and source of effluent toxicity;

3) Quality Assurance Plan - The TRE action plan should address record keeping and data evaluation, calibration and standardization, baseline tests, system blanks, controls, duplicates, spikes, toxicity persistence in the samples, randomization, reference toxicant control charts, and mechanisms to detect artifactual toxicity; and

4) Project Organization - The TRE action plan should describe the project staff, manager, consulting engineering services (where applicable), consulting analytical and toxicological services, etc.

c. Within 30 days of submittal of the TRE action plan and schedule, the permittee shall implement the TRE.

d. The permittee shall submit quarterly TRE activities reports concerning the progress of the TRE. The quarterly TRE activities reports are due on or before April 20th, July 20th, October 20th, and January 20th. The report shall detail information regarding the TRE activities including:

1) results and interpretation of any chemical-specific analyses for the identified and suspected pollutant performed during the quarter;

2) results and interpretation of any characterization, identification, and confirmation tests performed during the quarter;

3) any data and substantiating documentation that identifies the pollutant and source of effluent toxicity;

4) results of any studies/evaluations concerning the treatability of the facility's effluent toxicity;

5) any data that identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to eliminate significant lethality; and

6) any changes to the initial TRE plan and schedule that are believed necessary as a result of the TRE findings.

e. During the TRE, the permittee shall perform, at a minimum, quarterly testing using the more sensitive species. Testing for the less sensitive species shall continue at the frequency specified in Part 1.b.

f. If the effluent ceases to effect significant lethality, i.e., there is a cessation of lethality, the permittee may end the TRE. A cessation of lethality is defined as no significant lethality for a period of 12 consecutive weeks with at least weekly testing. At the end of the 12 weeks, the permittee shall submit a statement of intent to cease the TRE and may then resume the testing frequency specified in Part 1.b.

This provision accommodates situations where operational errors and upsets, spills, or sampling errors triggered the TRE, in contrast to a situation where a single toxicant or group of toxicants cause lethality. This provision does not apply as a result of corrective actions taken by the permittee. Corrective actions are defined as proactive efforts that eliminate or reduce effluent toxicity. These include, but are not limited to, source reduction or elimination, improved housekeeping, changes in chemical usage, and modifications of influent streams and effluent treatment.

The permittee may only apply this cessation of lethality provision once. If the effluent again demonstrates persistent significant lethality to the same species, the permit will be amended to add a WET limit with a compliance period, if appropriate. However, prior to the effective date of the WET limit, the permittee may apply for a permit amendment removing and replacing the WET limit with an alternate toxicity control measure by identifying and confirming the toxicant and an appropriate control measure.

g. The permittee shall complete the TRE and submit a final report on the TRE activities no later than 18 months from the last test day of the retest that demonstrates significant lethality. The permittee may petition the Executive Director (in writing) for an extension of the 18-month limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its control stalled the toxicity identification evaluation/TRE. The report shall specify the control mechanism that will, when implemented, reduce effluent toxicity as specified in item 5.h. The report will also specify a corrective action schedule for implementing the selected control mechanism.

h. Within 3 years of the last day of the test confirming toxicity, the permittee shall comply with 30 TAC § 307.6(e)(2)(B), which requires greater than 50% survival of the test organism in 100% effluent at the end of 24-hours. The permittee may petition the Executive Director (in writing) for an extension of the 3-year limit. However, to warrant an extension the permittee must have demonstrated due diligence in its pursuit of the toxicity identification evaluation/TRE and must prove that circumstances beyond its

control stalled the toxicity identification evaluation/TRE.

The permittee may be exempted from complying with 30 TAC § 307.6(e)(2)(B) upon proving that toxicity is caused by an excess, imbalance, or deficiency of dissolved salts. This exemption excludes instances where individually toxic components (e.g., metals) form a salt compound. Following the exemption, this permit may be amended to include an ion-adjustment protocol, alternate species testing, or single species testing.

i. Based upon the results of the TRE and proposed corrective actions, this permit may be amended to modify the biomonitoring requirements where necessary, require a compliance schedule for implementation of corrective actions, specify a WET limit, specify a best management practice, and specify a chemical-specific limit.

j. Copies of any and all required TRE plans and reports shall also be submitted to the U.S. EPA Region 6 office, 6WQ-PO.

TABLE 2 (SHEET 1 OF 2)

WATER FLEA SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24-hour LC50 = _____% effluent

TABLE 2 (SHEET 2 OF 2)

FATHEAD MINNOW SURVIVAL

GENERAL INFORMATION

	Time	Date
Composite Sample Collected		
Test Initiated		

PERCENT SURVIVAL

Time	Rep	Percent effluent					
		0%	6%	13%	25%	50%	100%
24h	A						
	B						
	C						
	D						
	E						
	MEAN						

Enter percent effluent corresponding to the LC50 below:

24-hour LC50 = _____% effluent

Attachment: WS4.C.3_Five_Years_WWTP_Discharge_Data

Average of MCRWD Discharge (MG	Date				
Years	Jan	Feb	Mar	Apr	May
2020	2.19	2.72	3.42	2.25	3.07
2021	2.58	2.46	2.36	2.78	4.95
2022	2.25	2.44	2.40	2.57	2.53
2023	2.66	3.80	3.21	2.92	3.07
2024	4.01	3.85	4.37	4.32	5.07

Jun	Jul	Aug	Sep	Oct	Nov	Dec
2.27	2.32	2.12	2.59	2.24	2.25	2.34
2.86	2.51	2.56	2.32	2.47	2.33	2.26
2.52	2.42	3.11	2.84	2.65	3.30	3.09
2.95	3.07	2.85	2.95	3.54	3.04	3.51
4.51	3.24	3.20	3.47	3.31	3.47	3.91

Trinity River Authority of Texas

Bardwell Reservoir, Joe Pool Reservoir and Navarro Mills Reservoir

Water Conservation & Drought Contingency Plan

April 2005
Revised April 2009
Revised April 2014
Revised April 2019
Revised April 2024

Prepared
by
Trinity River Authority of Texas

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1 INTRODUCTION

The Trinity River Authority of Texas (Authority) is a governmental agency of the State of Texas created as a conservation and reclamation district under Article XVI, Section 59 of the Constitution pursuant to Chapter 518, Acts of the 54th Legislature of Texas, Regular Session, 1955, as amended. The Authority is empowered to construct, own and operate wholesale water supply, treatment, and distribution facilities and wholesale sewerage gathering, transmission, treatment, and disposal facilities, to charge for such services, and to make contracts in reference thereto with municipalities and others.

The Authority's defined territory includes all of Dallas, Tarrant, Ellis, Navarro, Chambers Counties, and the principal watershed portions of Anderson, Freestone, Henderson, Houston, Kaufman, Leon, Madison, Polk, San Jacinto, Trinity, Walker, and Liberty Counties. The Authority is governed by a Board of 25 directors who are appointed by the Governor with the advice and consent of the Texas Senate. The first directors were appointed for staggered terms, and directors thereafter have served six-year terms. Three of the directors are appointed from the area-at-large; three directors are from Tarrant County; four are from Dallas County; and one director is from each of the other 15 counties.

This Water Conservation Plan and Drought Contingency Plan pertain to the use of water by the Authority's Contracting Parties of the Bardwell Reservoir, Joe Pool Reservoir and Navarro Mills Reservoir. The plans are intended to meet the requirements of the Texas Commission on Environmental Quality (TCEQ) and the Texas Water Development Board (TWDB).

2 WATER CONSERVATION PLAN

2.1 Introduction

The Authority currently provides wholesale raw water to:

- two Contracting Parties of the Bardwell Reservoir;
- four Contracting Parties of Joe Pool Reservoir; however only two currently utilize their contract entitlements; and
- four Contracting Parties of the Navarro Mills Reservoir; however only one current

utilizes its contract entitlement.

As the contracting parties retail utility systems are separate from the Authority's raw water system, the Authority does not have the ability to implement most of the water conservation measures discussed in this Program. The contracting parties will be able to implement these measures as a part of their respective retail water supply operations. The Authority's role in this program will include the administration and promotion of the Water Conservation Plan, public education and information, and investigations into wastewater reuse.

2.2 PLANNING AREA DESCRIPTION

2.2.1 Bardwell Reservoir

Bardwell Reservoir is located on Waxahachie Creek within the Chambers Creek watershed of the Trinity River Basin. The Reservoir is in Ellis County, Texas, 5 miles south of Ennis and 15 miles southeast of Waxahachie. The Project was designed to control floodwaters and provide water for municipal, industrial and recreational uses.

The Authority currently holds Certificate of Adjudication No. 08-5021 for water stored in Bardwell Reservoir, the physical appurtenances of which are owned by the United States of America and operated by the U.S. Army Corps of Engineers. The Authority entered into contracts with the City of Ennis and the Ellis County Water Control Improvement District Number One (District)[1] for the diversion and use of water stored in Bardwell Reservoir. The Certificate, as amended, authorizes the Authority to impound 54,900 acre-feet and divert from the reservoir for municipal and industrial purposes not to exceed 9,600 acre-feet per year. It also allows for the diversions of up to an additional 3,696 acre-feet per annum for the City of Ennis and 5,128.5 acre-feet per annum for the District based upon wastewater discharges into Bardwell Reservoir.

The natural yield of the reservoir is divided between the two Authority customers with Ennis receiving 55 percent and the District receiving 45 percent. These two contracting parties separately own and operate surface water treatment plants. The Ennis plant is located on the southeast shore of Bardwell Reservoir. The District's treatment plant is located upstream near Lake Waxahachie. The District maintains a raw water pump station at Bardwell Reservoir that pumps water into Lake Waxahachie. For the natural yield portion of Bardwell water, the District

[1] The District is the entity that treats the water for the City of Waxahachie. For all intents and purposes, the District is Waxahachie.

is authorized to 1) pump water from Bardwell to Lake Waxahachie, or 2) overdraft Bardwell's natural yield from Lake Waxahachie. The reuse portion must be pumped from Bardwell to Waxahachie for diversion. The Authority does not own or operate any diversion infrastructure in the reservoir.

- The planning area of the Bardwell Reservoir includes the following:
- The City of Ennis and its customer East Garrett Water Supply Corporation (located north of Ennis); and
- The District's service area.

2.2.2 Joe Pool Reservoir

The Authority is the local sponsor of Joe Pool Reservoir, which is located on Mountain Creek, a tributary of the West Fork of the Trinity River. In 1976, the Authority acquired the right to use the conservation storage space from the Corps of Engineers along with water right No. 08-3404 from the TCEQ to impound 176,900 acre-feet and divert 17,000 acre-feet of water from the reservoir per year. In turn, the Authority contracted with the cities of Cedar Hill, Midlothian, Grand Prairie and Duncanville for the yield of Joe Pool Lake.

The Contracts with the customers specify that each party is entitled to a percentage of the conservation yield as follows:

City of Cedar Hill	43.21%
City of Midlothian	39.19%
City of Grand Prairie	10.56%
City of Duncanville	7.04%

In 1985, the Authority entered into contracts with Cedar Hill, Duncanville and Grand Prairie to create the Lakeview Regional WSP to include a raw water intake structure and raw water pump station at Joe Pool Reservoir. As a result, the Authority issued contract revenue bonds to construct components of an intake structure that would be significantly more expensive to construct after the impoundment of water in the lake. The intake structure and its appurtenances were built. Easements were also secured for a pump station, but that structure has not yet been built. The Authority will continue to plan and negotiate additional contracts with the three cities in order to implement a regional water treatment plant and distribution pipeline to deliver treated water to the three cities.

The City of Midlothian through the Midlothian Water District made the decision to develop a separate raw-water pump station and treatment plant and did not participate in the regional system. Currently, the Midlothian Water District is treating and using water from Joe Pool Reservoir for municipal water needs. Through Midlothian's intake structure, the City of Grand Prairie is using a limited amount of raw water for irrigation purposes.

The planning area of the Joe Pool Reservoir includes the following:

- The City of Midlothian.
- The City of Cedar Hill;
- The City of Duncanville; and
- The City of Grand Prairie.

The cities of Cedar Hill, Duncanville and Grand Prairie currently have long-term water contracts with the City of Dallas, which mitigates immediate needs for those cities to use JPL as a water supply. However, Joe Pool Lake is planned as a future water supply for these parties.

2.2.3 Navarro Mills Reservoir

Navarro Mills Reservoir is located 16 miles southwest of Corsicana, Texas in the west central portion of Navarro County and in the southeastern portion of Hill County. The Reservoir was created by placing a dam on Richland Creek, a tributary to the Trinity River. Contract No. DA-41-443-CIVENG-59-671 between the United States of America and the Authority granted the Authority the right to utilize all of the storage space in the Reservoir below the conservation pool elevation 424.5 feet above mean sea level. Texas Water Commission Permit No. 1948 was issued to the Authority on January 13, 1960 and was amended on November 12, 1982 and December 12, 1996. The permit as amended authorizes the Authority to impound 63,300 acre-feet of water within Navarro Mills Reservoir and to divert 19,400 acre-feet per year from the reservoir. The Authority does not own any existing diversion infrastructure in the Reservoir.

The contract amount of each of the wholesale customers are described below.

Purchaser	Amount (Acre-Feet/Year)
City of Corsicana	17,460
Superock, Inc.	450
Town of Dawson	368
Post Oak Special Utility District	353

2.3 CONSERVATION GOALS

In accordance with TCEQ regulations, this water conservation plan includes the information required to facilitate the Authority's water conservation goals. The Authority's first goal is to provide an adequate supply of suitable raw water that meets the needs of its wholesale customers. This must include appropriate measures such as water supply contracts, appropriate monitoring and metering leak detection throughout the Authority's utilities, and also setting a maximum unaccounted for water goal of 5% for the affected municipal systems, the value of which represents an acceptable level of unaccounted for water. These measures are addressed in more detail in other parts of this Water Conservation Plan.

The Authority's second goal is to encourage its wholesale customers to adopt and implement water conservation plans that will reduce per capita and peak use demands. As the Authority is a wholesale supplier, it has limited control over water use. Therefore, the Authority's water conservation program is predicated on the fact that the implementation of such conservation measures must occur at largely the local level and achievement of significant water conservation savings can only occur if each retail water user sets and implements its own water conservation programs. It is then the Authority's role to encourage and support those initiatives chosen by the wholesale customers in order to promote long term water use efficiency and reduction of wasted water.

TCEQ requires all municipal water right holders set per capita water consumption goals in "gallons per capita per day" (gpcd). This gpcd calculation is defined by TCEQ as the total amount of water diverted/pumped for potable use divided by the total permanent population, then that value is divided by 365 (days in the year).

The first step to identifying the gpcd goals is establishing the baseline per capita water use values for the wholesale customers. The data used to calculate these values was taken from the 2021 Water User Group Entity Detailed GCPD Report from the Texas Water Development Board. The results from those calculations can be seen in the table below but it is important to note that the values shown *include water used from all sources*, not just water supplied by the Authority, and should be considered an approximation of gcpd.

TRA Project	Wholesale Customer	Estimated Population	Total Net Water Use (Gallons)	Total Net Water Use (AF)	GPCD	Project GPCD
Bardwell	Ennis	20,131	901,423,831	2,766	123	149
	(Ellis Count Water Control & Improvement District #1)	40,162	237,563,0656	7,290	162	
Joe Pool*	Cedar Hill	41,592	2,021,858,390	6,204	133	117
	Duncanville	40,295	1,432,122,000	4,395	97	
	Grand Prairie	198,988	8,271,595,267	25,384	114	
	Midlothian	19,626	1,111,158,767	3,410	155	
Navarro Mills	Corsicana	26,845	1,685,043,079	5,171	171	171
	Dawson	830	35,108,700	107	116	
	Post Oak	1,518	102,160,700	313	184	

Source: Regional Water Planning Water User Group (WUG) Utility – Detailed GPCD Report 2021 (http://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates/index.asp)
*Only Midlothian pumps water for potable use.

Lake Bardwell supplies water to two customers: Ennis and the Ellis County Water Control & Improvement District # 1 (will be referred to henceforth as the District). For all intents and purposes, the District is the City of Waxahachie. According to the TWDB report, Ennis and the District reported a total net use of 10,056 AF in 2021. Their combined population was 60,293 according to population estimates from the TWDB. Therefore, the gpcd usage for Bardwell Reservoir municipal customers was 149 gpcd. This is increased from 2016, when the gpcd was 136, along an increase in population of approximately 18,000. While the gpcd was higher than in 2016, it was 173 in 2011, even with smaller population numbers.

For each customer, TCEQ also requires a 5- and 10-year gcpd goal. In 2016, the gcpd use for Lake Bardwell customers was under the TWDB goal of 140, as the ultimate goal set by the TCEQ had already been met. Using the updated water use data that showed a gpcd of 149 in 2016, new 5-year gcpd goals were calculated: 142 for 5-years and 140 for 10-years. This is determined by reducing the current estimated gcpd use rate by 1% every year until it reaches the TWDB goal of 140 gcpd.

The Authority's Joe Pool Lake wholesale customers, Cedar Hill, Duncanville, Grand Prairie and Midlothian had a total net use in 2021 of approximately 39,393 AF, according to the TWDB 2021 GCPD report. Using this data in combination with their population of 300,501 provided a gpcd rate of 117 for 2021. The customers' gcpd in 2016 was 116. While there is an increase of 1 gcpd, it is still lower than the state goal of 140. Accordingly, the 5- and 10-year per capita goal for 2029 and 2034 is still 140 gcpd.

The cities of Corsicana, Dawson and Post Oak are customers of the Authority's Navarro Mills project. Combined, these customers reported a total water use of approximately 5,591 AF in 2021 according to the 2021 TWDB detailed gpcd report. Using the population estimate of 29,193 from the same report, the gpcd for 2021 is 171 gpcd. This is an increase from 2019, when the gpcd reported for this project was 164. There was also an increase of 2,348 in the reported population. The 5- and 10-year gcpd goal for 2029 and 2034 are now 162 gpcd, and 154 gpcd. This was again determined by reducing the reported gpcd rate by 1% per year.

2.4 Metering Water Diverted from the Source of Supply

Water diverted from Bardwell Reservoir is metered by the two Contracting Parties. The City of Ennis measures raw water flow at their water treatment plant and Waxahachie measures raw water diverted at the raw water pump station.

Currently water diverted from Joe Pool Reservoir is metered at the City of Midlothian's raw water pump station and at their existing water treatment plant. Irrigation water (raw) is metered at the point of delivery from Midlothian's existing raw water pipeline to the City of Grand Prairie's golf course.

When the Authority's Lakeview Regional Water Supply Project is developed further for the diversion and treatment of water from Joe Pool, measuring equipment that complies with the TCEQ "Design Criteria" will be installed.

Water diverted from Navarro Mills Reservoir is metered by the three Contracting Parties; the City of Corsicana operates a master meter at its Navarro Mills Water Treatment Plant, the City of Dawson operates one master meter at the intake structure and another at the water treatment plant, and Superock operates a master meter at their pump on Richland Creek.

2.5 Monitoring and Record Management Program

Water diversion reports from the Contracting Parties are submitted to the Authority and maintained in the Authority's files.

Each year the Authority's records, including water sales, deliveries, and losses are audited by an independent auditor. In addition, flow records and reports are routinely audited by the Authority's internal auditor.

2.6 Metering/Leak Detection and Repair Program

The Contracting Parties shall meter all retail water uses and will be encouraged to provide a master meter as well as metering of all utility, city and other public facilities. The Contracting Parties will manage their ongoing leak detection, location and repair programs.

Waterline leaks are detected by utility personnel while reading meters, maintaining their water and wastewater systems, and while performing other routine surveillance programs. Periodic water audits shall be utilized to determine if leaks exist which have gone undetected.

In addition, the Authority will monitor for leaks in any water storage, delivery, and distribution system components used to transport raw water prior to delivery to the wholesale customers. Any reported leaks will be repaired in a timely manner.

2.7 Water Supply Contracts

Every contract for the wholesale sale of water entered into, renewed, or extended by the Authority after the adoption of this water conservation and drought contingency plan will include a requirement that the wholesale customer and any wholesale customers of that wholesale customer develop and implement a water conservation plan meeting the requirements of Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 of the Texas Administrative Code. This requirement will extend to each successive wholesale customer in the resale of water.

All customer plans must be reviewed and approved by the Authority before water sales contracts are signed.

2.8 Reservoir Operations Plan

Bardwell Reservoir, Joe Pool Reservoir and Navarro Mills Reservoir are not in common watersheds with other reservoirs operated by the Authority, and TCEQ requirements for coordinated operation of the reservoirs with others are not applicable.

2.9 Ordinance/Resolution and Implementation

Resolution No. R-1159-4 adopts the Water Conservation Plan for Bardwell Reservoir, Joe Pool Reservoir and Navarro Mills Reservoir by the Authority's Board of Directors. The General Manager, or his/her designee, is authorized and directed to implement the applicable provisions of the Plan. The General Manager, or his/her designee, will act as the administrator of the plan, oversee the execution and implementation of the plan, and will be responsible for keeping adequate records for program verification.

2.10 Coordination with Regional Planning Groups

The water service areas of the three reservoirs are located within Region C and Region G planning groups, and the Authority will provide a copy of the Plan to Region C and Region G.

2.11 Education and Information Program

The Authority recognizes that water conservation significantly benefits individuals and

communities in terms of long-term water availability and reduces costs. The most readily available and lowest cost method of promoting water conservation is to inform the retail water users about ways to save water in homes and businesses, in landscaping and lawn uses, and in recreational use.

2.12 Review and Update of Water Conservation Plan

As required by TCEQ rules, the Authority will review and update this water conservation plan by May 1, 2029 and every five years thereafter. The plan will be updated as appropriate based on new or updated information from contracting parties, and the Authority will be available to present water conservation programs to local schools, civic organizations, and other groups.

3 DROUGHT CONTINGENCY PLAN

3.1 Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and to protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the Authority adopts the following Drought Contingency Plan (the Plan).

3.2 Public Involvement

The Plan was adopted under the open meetings requirement of the TCEQ during the April 24, 2024 Board of Directors meeting.

3.3 Wholesale Water Customer Education

The Authority will periodically provide wholesale customers with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. A copy of the Plan will be provided to each wholesale water customer.

3.4 Coordination with Regional Water Planning Groups

The water service areas of the three reservoirs are located within the Region C and Region G, and the Authority will provide a copy of the Plan to Region C and Region G planning groups.

3.5 Authorization

The General Manager, or his/her designee, is hereby authorized and directed to implement the applicable provisions of the Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The General Manager, or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in the Plan.

3.6 Application

The provisions of the Plan shall apply to all customers utilizing water provided by the Authority from Bardwell Reservoir, Joe Pool Reservoir and Navarro Mills Reservoir. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

3.7 Triggering Criteria for Initiation and Termination of Drought Response Stages

The General Manager, or his/her designee, shall monitor water supply and demand conditions on a periodic basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Customer notification of the initiation or termination of drought response stages will be made by email, mail or telephone. The news media will also be informed by the Authority.

The triggering criterion to be monitored for determining drought response stages is the water surface elevation of the individual reservoirs. The reservoir stages selected are based on the U.S. Army Corps of Engineers' Drought Contingency Plan prepared in 1991.

3.7.1 Stage 1 – MILD Water Shortage Condition

Requirements for Initiation - The Authority will recognize that a mild water shortage condition exists when the water surface elevation of each corresponding reservoir reaches the triggering criteria in the following table:

TRA Project	Triggering Criterion for Stage 1
Bardwell Reservoir	water surface elevation of Bardwell Reservoir declines below 417.0 feet
Joe Pool Reservoir	water surface elevation of Joe Pool Reservoir declines below 516.0 feet
Navarro Mills Reservoir	water surface elevation of Navarro Mills Reservoir declines below 421.5 feet

Requirements for Termination - Stage 1 of the Plan may be rescinded when the conditions listed as triggering events have ceased to exist for a period of 15 consecutive days. The Authority will notify its wholesale customers and the media of the termination of Stage 1 in the same manner as the notification of initiation of Stage 1 of the Plan.

3.7.2 Stage 2 – MODERATE Water Shortage Condition

Requirements for Initiation - The Authority will recognize that a moderate water shortage condition exists when the water surface elevation of each corresponding reservoir reaches the triggering criteria in the following table:

TRA Project	Triggering Criterion for Stage 2
Bardwell Reservoir	water surface elevation of Bardwell Reservoir declines below 414.0 feet
Joe Pool Reservoir	water surface elevation of Joe Pool Reservoir declines below 511.0 feet
Navarro Mills Reservoir	water surface elevation of Navarro Mills Reservoir declines below 419.0 feet

Requirements for Termination - Stage 2 of the Plan may be rescinded when the conditions listed as triggering events have ceased to exist for a period of 15 consecutive days. Upon termination of Stage 2, Stage 1 becomes operative. The Authority will notify its wholesale customers and the media of the termination of Stage 2 in the same manner as the notification of initiation of Stage 1 of the Plan.

3.7.3 Stage 3 – SEVERE Water Shortage Condition

Requirements for Initiation - The Authority will recognize that a severe water shortage condition exists when the water surface elevation of each corresponding reservoir reaches the triggering criteria in the following table:

TRA Project	Triggering Criterion for Stage 3
Bardwell Reservoir	water surface elevation of Bardwell Reservoir declines below 408.0 feet
Joe Pool Reservoir	water surface elevation of Joe Pool Reservoir declines below 501.0 feet
Navarro Mills Reservoir	water surface elevation of Navarro Mills Reservoir declines below 414.5 feet

Requirements for termination - Stage 3 of the Plan may be rescinded when the conditions listed as triggering events have ceased to exist for a period of 15 consecutive days. Upon termination of Stage 3, Stage 2 becomes operative. The Authority will notify its wholesale customers and the media of the termination of Stage 3 in the same manner as the notification of initiation of Stage 1 of the Plan.

3.7.4 Emergency Water Shortage Condition

Requirements for Initiation - The Authority will recognize that an emergency water shortage condition exists when any of the following occur in a particular reservoir:

- Natural or man-made contamination of the water supply source occurs; and
- Any condition exists which prevents or imminently threatens to prevent Authority customers from withdrawing sufficient water from each individual reservoir to meet demands.

When an Emergency Water Shortage is declared, the Authority's General Manager may immediately curtail water made available to affected parties from Authority water supplies in accordance to the provisions of Section 5.7 of this plan. Authority customers will be notified on a not-less-than weekly basis of the water, if any, that is available to them from the affected supply.

Requirements for Termination - The emergency water shortage condition may be rescinded when the General Manager, or his/her designee, deems appropriate. The Authority

will notify its wholesale customers and the media of the termination of emergency shortage condition in the same manner as the notification of initiation of Stage 1 of the Plan.

3.8 Drought Response Stages

The General Manager, or his/her designee, shall monitor water supply and demand conditions and, in accordance with the triggering criteria set forth in Section 5.7, shall determine that mild, moderate, or severe water shortage conditions exist or that an emergency condition exists and shall implement the following actions:

3.8.1 Stage 1 – Mild Water Shortage Conditions

Target: Achieve a voluntary 5 percent reduction in daily water demand for each retail utility utilizing a reservoir which has been recognized in Stage 1 drought.

Best Management Practices for Supply Management:

- The Authority will coordinate with the U.S. Corps of Engineers to ensure that unnecessary releases of water from the Reservoir are minimized, including leakage from project gates;
- The Authority will encourage each wholesale water customer to utilize alternative water sources such as interconnections with another water system, temporary use of a non-municipal water supply, use of reclaimed water, etc.

Water Use Restrictions for Reducing Demand;

- The General Manager, or his/her designee(s), will contact wholesale water customers to discuss water supply and demand conditions and will request that wholesale water customers initiate voluntary measures to reduce water use (e.g. implement Stage 1 of the customer's drought contingency plan); and
- The General Manager, or his/her designee(s), will provide a periodic report to the news media with information regarding current water supply and demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

3.8.2 Stage 2 – Moderate Water Shortage Conditions

Target: Achieve a 10 percent reduction in daily water demand for each retail utility utilizing a reservoir which has been recognized in Stage 2 drought.

Best Management Practices for Supply Management:

- The Authority will coordinate with the U.S. Corps of Engineers to limit or eliminate releases of water from the Reservoir for special events downstream of the Reservoir;
- The Authority will encourage each wholesale water customer to utilize alternative water sources such as interconnections with another water system, temporary use of anon-municipal water supply, use of reclaimed water, etc.

Water Use Restrictions for Reducing Demand:

- The General Manager, or his/her designee(s), will initiate periodic contact with wholesale water customers to discuss water supply or demand conditions and the possibility of pro rata curtailment of water diversions and deliveries.
- The General Manager, or his/her designee(s), will request wholesale water customers to initiate mandatory measures to reduce non-essential water use (e.g. implement Stage 2 of the customer's drought contingency plan);
- The General Manager, or his/her designee(s), will initiate preparations for the implementation of pro rata curtailment of water diversions and deliveries by preparing a monthly water usage allocation baseline for each wholesale customer according to procedures specified in 3.9 of the Plan; and
- The General Manager, or his/her designee(s), will provide a periodic report to the news media with information regarding current water supply and demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

3.8.3 Stage 3 – Severe Water Shortage Conditions

Target: Achieve a 30 percent reduction in daily water demand for each retail utility utilizing a reservoir which has been recognized in Stage 3 drought.

Best Management Practices for Supply Management:

The Authority will coordinate with the U.S. Corps of Engineers to make recommendations to the TCEQ, the Texas Parks and Wildlife Department, and the U.S. Fish and Wildlife Department and others as needed, for reducing or eliminating releases downstream; and
The Authority will encourage each wholesale water customer to utilize alternative water sources such as interconnections with another water system, temporary use of a non-municipal water supply, use of reclaimed water, etc.

Water Use Restrictions for Reducing Demand:

- The General Manager, or his/her designee(s), will contact wholesale water customers to discuss water supply and demand conditions and will request that wholesale water customers initiate additional mandatory measures to reduce non-essential water use (e.g. implement Stage 3 of the customer's drought contingency plan);
- The General Manager, or his/her designee(s), will initiate pro rata curtailment of water diversions and deliveries for each wholesale customer according to the procedures specified in Section 5.7 of the Plan; and
- The General Manager, or his/her designee(s), will provide a periodic report to the news media with information regarding current water supply and demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

3.8.4 Emergency Water Shortage Conditions

Whenever emergency water shortage conditions exist in a reservoir, as defined in Section 5.7 of the Plan, the General Manager, or his/her designee(s) shall:

- Assess the severity of the problem and identify the actions needed and the time required to solve the problem;
- Inform the utility director or other responsible official of each wholesale water customer and suggest actions, as appropriate to alleviate problems (e.g., notification of the public to reduce water use until service is restored);
- If appropriate, notify city, county, or state emergency response officials for

assistance;

- Undertake necessary actions, including repairs or clean-up as needed; and
- Prepare a post-event assessment report on the incident including an evaluation of emergency response procedures and actions.

3.9 Pro Rata Water Allocation

In the event that the triggering criteria specified in Section 5.7 of the Plan for Stage 3 - Severe Water Shortage Conditions have been met, or an Emergency Water Shortage Condition is declared, the General Manager, or his/her designee(s), is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code Section 11.039. A provision will be included in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code Section 11.039.

3.10 Enforcement

Mandatory water use restrictions may be imposed in Stage 3 droughts or under Emergency Water Shortage declarations. Under such conditions, the Authority will have the right to audit, monitor and or directly measure all diversions from the affected source(s). These mandatory water use restrictions will be enforced by warnings and penalties as follows:

- On the first violation, the customer will be given a written warning that they have violated one or more of the mandatory water use restrictions;
- The Authority will require the customer to implement a more comprehensive public education and outreach program in a manner that increases the public's awareness about mandatory water use restrictions and the current drought status; and
- After receiving a second notice of violation, the customer will be required to immediately submit documentation to the Authority of the steps it has taken to ensure compliance with this water conservation and drought contingency plan. In addition, the Authority will require the customer to implement additional public education and outreach program in a manner that increases the public's awareness about mandatory water use restrictions and the current drought status.

- The Authority may petition the Texas Commission on Environmental Quality to initiate formal enforcement action against customers that fail to comply with pro rata allocations consistent with Texas Water Code Section 11.039.

3.11 Variances

The General Manager, or his/her designee, may, in writing, grant a temporary variance to the pro rata water allocation policies provided by the Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the public health, welfare, or safety and if one or more of the following conditions are met:

1) Compliance with the Plan cannot be technically accomplished during the duration of this water supply shortage or other condition for which the Plan is in effect; and
2) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of the Plan shall file a petition for variance with the General Manager, or his/her designee, within 5 days after pro rata allocation has been invoked. All petitions for variances shall be reviewed by the Authority and shall include the following:

1) Name and address of the petitioner(s);
2) Detailed statement with supporting data and information as to how the pro rata allocation of water under the policies and procedures established in the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Plan;
3) Description of the relief requested;
4) Period of time for which the variance is sought;
5) Alternative measures the petitioner is taking or will take to meet the intent of the Plan and the compliance date; and
6) Other pertinent information.

Variances granted by the Authority shall be subject to the following conditions, unless waived or modified by the Authority:

1) Variances granted shall include a timetable for compliance with allocation requirements; and
2) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of the Plan occurring prior to the issuance of the variance.

3.12 Review and Update of Drought Contingency Plan

As required by TCEQ rules, the Authority will review and update this drought contingency plan in May 2029 and every five years thereafter. The plan will be updated as appropriate based on new or updated information.

3.13 Severability

It is hereby declared to be the intention of the Authority that the sections, paragraphs, sentences, clauses, and phrases of the Plan are severable and, if any phrase, clause, sentence, paragraph, or section of the Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of the Plan, since the same would not have been enacted by the Authority without the incorporation into the Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

APPENDIX A

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers (Form 20162)

Bardwell Reservoir Project

Joe Pool Reservoir Project

Navarro Reservoir Project

Texas Commission on Environmental Quality

Water Availability Division
MC-160, P.O. Box 13087 Austin, Texas 78711-3087
Telephone (512) 239-4600, FAX (512) 239-2214

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

This form is provided to assist wholesale public water suppliers in water conservation plan development. If you need assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4600.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website http://www.twdb.texas.gov/conservation/BMPs/index.asp. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name:	Trinity River Authority – Bardwell Reservoir	
Address:	PO Box 60, Arlington TX 76004	
Telephone Number:	(817) 467-4343	Fax: (817) 417-0367
Water Right No.(s):	CA 08-5021	
Regional Water Planning Group:	Region C	
Person responsible for implementing conservation program:	Kevin Ward	Phone: (817) 467-4343
Form Completed By:	Webster Mangham	
Title:	Manager SR, TSBP	
Signature:		Date: 3/15/2024

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. *Population and Service Area Data:*

1. Service area size (in square miles):

   (Please attach a copy of service-area map)

   75.3

2. Current population of service area:

   69,791 (NCTCOG 2023 Pop Ennis 22,691+Waxahachie 47,100)

3. Current population served for:

   a. Water 69,791

   b. Wastewater NA

4. Population served for previous five years:

Year	*Population*
2019	55,562
2020	61,299
2021	62,689
2022	66,141
2023	69,791

5. Projected population for service area in the following decades:

Year	*Population*
2030	68,614
2040	81,027
2050	94,513
2060	108,027
2070	122,917

6. List source or method for the calculation of current and projected population size.

2019 population is obtained from TWDB database (Ennis +Waxahachie).
https://www3.twdb.texas.gov/apps/reports/WU_REP/SumFinal_UtilityWUGSum
2020-2023 population is obtained from NCTCO database (Ennis +Waxahachie). https://data-nctcoggis.opendata.arcgis.com/datasets/a5efd489d8cc4fc58bd1c9ed8cb92152_3/explore
Projected population 2030-2070 is obtained from TWDB database:
https://www3.twdb.texas.gov/apps/reports/Projections/2027_Reports/RWP27_pop_SearchWUG

B. *Customer Data*

List (or attach) the names of all wholesale customers, amount of annual contract, and amount of annual use for each customer for the previous year:

Wholesale Customer	*Contracted Amount (Acre-feet)*	*Previous Year Amount of Water Delivered (acre-feet)*
City of Ennis	5,280	5,657
Waxahachie	4,320	3,687

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet):

Year	*Treated Water*	*Raw Water*
2019	NA	8,407
2020	NA	8,931
2021	NA	8,661
2022	NA	15,106
2023	NA	9,345
Totals	NA	50,451

B. *Water Accounting Data*

1. Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses:

Year	2019	2020	2021	2022	2023
Month					
January	312	1,140	1,363	882	1,195
February	274	383	674	709	599
March	352	162	697	862	343
April	344	327	381	1,346	371
May	345	334	357	1,492	451
June	395	398	407	1,471	518
July	610	421	487	1,675	1,152

August	871	561	813	1,476	1,279
September	1,405	1,040	964	1,429	1,063
October	1,402	1,441	934	1,394	965
November	820	1,330	801	1,267	840
December	1,277	1,394	783	1,103	571
Totals	8,407	8,931	8,661	15,106	9,345

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

Year	*Total Population Served*	*Total Annual Water Diverted for Municipal Use*
2019	55,562	7,601
2020	61,299	8,184
2021	62,689	8,143
2022	66,141	14,422
2023	69,791	8,471

C. Projected Water Demands

If applicable, project and attach water supply demands for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

List all current water supply sources and the amounts authorized (in acre feet) with each.

Water Type	*Source*	*Amount Authorized*
Surface Water	Bardwell Reservoir	9,600 (water right permit)
Groundwater	NA	NA
Other	Ennis and Waxahachie Wastewater Return Flows	8,824.5 (water right permit – reuse)

B. Treatment and Distribution System (if providing treated water)

1. Design daily capacity of system (MGD):

   NA

2. Storage capacity (MGD):

   a. Elevated NA

   b. Ground NA

3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks

   NA

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s) (MGD):

   NA

2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

   NA

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: NA%

2. Monthly volume treated for previous five years (in 1,000 gallons):

Year	*NA*	*NA*	*NA*	*NA*	*NA*
Month					
January	NA	NA	NA	NA	NA
February	NA	NA	NA	NA	NA
March	NA	NA	NA	NA	NA
April	NA	NA	NA	NA	NA
May	NA	NA	NA	NA	NA
June	NA	NA	NA	NA	NA
July	NA	NA	NA	NA	NA

August	NA	NA	NA	NA	NA
September	NA	NA	NA	NA	NA
October	NA	NA	NA	NA	NA
November	NA	NA	NA	NA	NA
December	NA	NA	NA	NA	NA
Totals	NA	NA	NA	NA	NA

Water Conservation Plan

In addition to the description of the wholesaler's service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, Chapter 288.5. Note: If the water conservation plan does not provide information for each requirement an explanation must be included as to why the requirement is not applicable.

A. *Specific, Quantified 5 & 10-Year Targets*

The water conservation plan must include specific, quantified 5-year and 10-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. Note that the goals established by a wholesale water supplier under this subparagraph are not enforceable. These goals must be updated during the 5-year review and submittal.

B. *Measuring and Accounting for Diversions*

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

C. *Record Management Program*

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

D. *Metering/Leak-Detection and Repair Program*

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

E. *Contract Requirements for Successive Customer Conservation*

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

F. *Reservoir Systems Operations Plan*

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

G. *Enforcement Procedure and Official Adoption*

The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

H. Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

The service area of the _____ (name of water supplier) is located within the _____ (name of regional water planning area or areas) and _____ (name of water supplier) has provided a copy of this water conservation plan to the _____ (name of regional water planning group or groups).

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous 5-year and 10-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan no later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

V. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of 30 TAC §288.5(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;

2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans;

3. A program for reuse and/or recycling of wastewater and/or graywater;

4. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VI. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

Water Conservation Plans submitted with a water right application for New or Additional State Water must include data and information which:

1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;

2. evaluates conservation as an alternative to the proposed appropriation; and

3. evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

Additionally, it shall be the burden of proof of the applicant to demonstrate that no feasible alternative to the proposed appropriation exists and that the requested amount of appropriation is necessary and reasonable for the proposed use.

Texas Commission on Environmental Quality

Water Availability Division
MC-160, P.O. Box 13087 Austin, Texas 78711-3087
Telephone (512) 239-4600, FAX (512) 239-2214

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

This form is provided to assist wholesale public water suppliers in water conservation plan development. If you need assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4600.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website http://www.twdb.texas.gov/conservation/BMPs/index.asp. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name:	Trinity River Authority – Joe Pool Reservoir	
Address:	PO Box 60, Arlington TX 76004	
Telephone Number:	(817) 467-4343	Fax: (817) 417-0367
Water Right No.(s):	CA 08-3404	
Regional Water Planning Group:	Region C	
Person responsible for implementing conservation program:	Kevin Ward	Phone: (817) 467-4343
Form Completed By:	Webster Mangham	
Title:	Manager SR, TSBP	
Signature:		Date: 4/18/2024

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. *Population and Service Area Data:*

1. Service area size (in square miles):

   (Please attach a copy of service-area map)

   168.91

2. Current population of service area:

3. Current population served for:

   a. Water

   b. Wastewater NA

4. Population served for previous five years:

Year	*Population*
2019	293,185
2020	321,079
2021	325,338
2022	328,337
2023	335,303

5. Projected population for service area in the following decades:

Year	*Population*
2030	354,537
2040	393,469
2050	438,467
2060	458,787
2070	482,665

6. List source or method for the calculation of current and projected population size.

2019 population is obtained from TWDB database (Cedar Hill+Midlothian+Grand Prairie+Duncanville)
https://www3.twdb.texas.gov/apps/reports/WU_REP/SumFinal_UtilityWUGSum
2020-2023 population is obtained from NCTCO database (Cedar Hill+Midlothian+Grand Prairie+Duncanville).
https://data-nctcoggis.opendata.arcgis.com/datasets/a5efd489d8cc4fc58bd1c9ed8cb92152_3/explore
Projected population 2030-2070 is obtained from TWDB database:
https://www3.twdb.texas.gov/apps/reports/Projections/2027_Reports/RWP27_pop_SearchWUG

B. *Customer Data*

List (or attach) the names of all wholesale customers, amount of annual contract, and amount of annual use for each customer for the previous year:

Wholesale Customer	*Contracted Amount (Acre-feet)*	*Previous Year Amount of Water Delivered (acre-feet)*
Cedar Hill	7,346	0
Midlothian	6,662	6,922
Grand Prairie	1,795	171
Duncanville	1,197	0

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet):

Year	*Treated Water*	*Raw Water*
2019		7,288
2020		7,474
2021		7,560
2022		6,819
2023		7,093
Totals		36,235

B. *Water Accounting Data*

1. Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses:

Year	*2019*	*2020*	*2021*	*2022*	*2023*
Month					
January	438	245	635	598	446
February	389	508	577	630	486
March	456	517	526	674	569
April	438	608	661	560	627
May	492	704	597	764	551
June	692	739	540	559	417
July	816	834	704	666	710

August	908	858	784	603	1,114
September	819	441	720	433	690
October	684	599	587	441	523
November	585	690	628	444	443
December	573	730	602	447	516
Totals	7,288	7,474	7,560	6,819	7,093

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

Year	*Total Population Served*	*Total Annual Water Diverted for Municipal Use*
2019	17,293(TWDB Midlothian)	7,193
2020	35,125(NCTCOG Midlothian)	7,423
2021	36,468	7,555
2022	37,579	6,774
2023	39,385	6,922

C. Projected Water Demands

If applicable, project and attach water supply demands for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

List all current water supply sources and the amounts authorized (in acre feet) with each.

Water Type	*Source*	*Amount Authorized*
Surface Water	Joe Pool Reservoir	17,000 AF (water right)
Groundwater	NA	NA
Other	Return Flows from Mountain Creek Regional Wastewater Treatment Plant	4,368 AF

B. Treatment and Distribution System (if providing treated water)

1. Design daily capacity of system (MGD):

   NA

2. Storage capacity (MGD):

   a. Elevated NA

   b. Ground NA

3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks

   NA

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s) (MGD):

   NA

2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

   NA

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: NA%

2. Monthly volume treated for previous five years (in 1,000 gallons):

Year	NA	NA	NA	NA	NA
Month					
January	NA	NA	NA	NA	NA
February	NA	NA	NA	NA	NA
March	NA	NA	NA	NA	NA
April	NA	NA	NA	NA	NA
May	NA	NA	NA	NA	NA
June	NA	NA	NA	NA	NA
July	NA	NA	NA	NA	NA

August	NA	NA	NA	NA	NA
September	NA	NA	NA	NA	NA
October	NA	NA	NA	NA	NA
November	NA	NA	NA	NA	NA
December	NA	NA	NA	NA	NA
Totals	NA	NA	NA	NA	NA

Water Conservation Plan

In addition to the description of the wholesaler's service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, Chapter 288.5. Note: If the water conservation plan does not provide information for each requirement an explanation must be included as to why the requirement is not applicable.

A. *Specific, Quantified 5 & 10-Year Targets*

The water conservation plan must include specific, quantified 5-year and 10-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. Note that the goals established by a wholesale water supplier under this subparagraph are not enforceable. These goals must be updated during the 5-year review and submittal.

B. *Measuring and Accounting for Diversions*

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

C. *Record Management Program*

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

D. *Metering/Leak-Detection and Repair Program*

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

E. *Contract Requirements for Successive Customer Conservation*

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

F. *Reservoir Systems Operations Plan*

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

G. *Enforcement Procedure and Official Adoption*

The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

H. Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

The service area of the _____ (name of water supplier) is located within the _____ (name of regional water planning area or areas) and _____ (name of water supplier) has provided a copy of this water conservation plan to the _____ (name of regional water planning group or groups).

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous 5-year and 10-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan no later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

V. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of 30 TAC §288.5(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;

2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans;

3. A program for reuse and/or recycling of wastewater and/or graywater;

4. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VI. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

Water Conservation Plans submitted with a water right application for New or Additional State Water must include data and information which:

1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;

2. evaluates conservation as an alternative to the proposed appropriation; and

3. evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

Additionally, it shall be the burden of proof of the applicant to demonstrate that no feasible alternative to the proposed appropriation exists and that the requested amount of appropriation is necessary and reasonable for the proposed use.

Texas Commission on Environmental Quality

Water Availability Division
MC-160, P.O. Box 13087 Austin, Texas 78711-3087
Telephone (512) 239-4600, FAX (512) 239-2214

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

This form is provided to assist wholesale public water suppliers in water conservation plan development. If you need assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4600.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website http://www.twdb.texas.gov/conservation/BMPs/index.asp. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name:	Trinity River Authority – Navarro Mills Reservoir	
Address:	PO Box 60, Arlington TX 76004	
Telephone Number:	(817) 467-4343	Fax: (817) 417-0367
Water Right No.(s):	CA 08-4992	
Regional Water Planning Group:	Region C	
Person responsible for implementing conservation program:	Kevin Ward	Phone: (817) 467-4343
Form Completed By:	Webster Mangham	
Title:	Manager SR, TSBP	
Signature:		Date: 3/15/2024

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data:

1. Service area size (in square miles):

   (Please attach a copy of service-area map)

   317

2. Current population of service area:

   25,885 (*Corsicana only, others cities' data not available*)

3. Current population served for:

   a. Water 25,885

   b. Wastewater NA

4. Population served for previous five years:

Year	*Population*
2019	25,397
2020	25,109
2021	25,103
2022	25,141
2023	25,885

5. Projected population for service area in the following decades:

Year	*Population*
2030	30,108
2040	32,073
2050	33,696
2060	35,077
2070	36,597

6. List source or method for the calculation of current and projected population size.

2019 population is obtained from TWDB database (Corsicana only).
https://www3.twdb.texas.gov/apps/reports/WU_REP/SumFinal_UtilityWUGSum
2020-2023 population is obtained from NCTCO database (Only Corsicana data available). https://data-nctcoggis.opendata.arcgis.com/datasets/a5efd489d8cc4fc58bd1c9ed8cb92152_3/explore
Projected population 2030-2070 is obtained from TWDB database (WUG includes Corsicana, Dawson and Post Oak SUD): https://www3.twdb.texas.gov/apps/reports/Projections/2027_Reports/RWP27_pop_SearchWUG

B. Customer Data

List (or attach) the names of all wholesale customers, amount of annual contract, and amount of annual use for each customer for the previous year:

Wholesale Customer	*Contracted Amount (Acre-feet)*	*Previous Year Amount of Water Delivered (acre-feet)*
City of Corsicana	17,460	7,726
Superock, Inc	450	0
Town of Dawson	368	0
Post Oak Special Utility District	353	0

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet):

Year	*Treated Water*	*Raw Water*
2019	NA	6,390
2020	NA	6,332
2021	NA	6,587
2022	NA	7,747
2023	NA	7,726
Totals	NA	34,783

B. *Water Accounting Data*

1. Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses:

Year	*2019*	*2020*	*2021*	*2022*	*2023*
Month					
January	491	461	539	577	540
February	429	438	601	519	502
March	492	440	461	454	536
April	474	450	496	446	540

May	514	498	473	560	592
June	474	576	515	746	634
July	605	615	528	918	774
August	728	661	610	799	978
September	625	550	677	735	779
October	586	605	633	786	689
November	497	512	535	593	585
December	475	526	519	613	578
Totals	6,390	6,332	6,587	7,747	7,726

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

Year	*Total Population Served*	*Total Annual Water Diverted for Municipal Use*
2019	25,397	6,390
2020	25,109	6,332
2021	25,103	6,587
2022	25,141	7,747
2023	25,885	7,726

C. Projected Water Demands

If applicable, project and attach water supply demands for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

List all current water supply sources and the amounts authorized (in acre feet) with each.

Water Type	*Source*	*Amount Authorized*
Surface Water	Navarro Mills Reservoir	19,400
Groundwater	NA	NA
Other	NA	NA

B. Treatment and Distribution System (if providing treated water)

1. Design daily capacity of system (MGD):

   NA

2. Storage capacity (MGD):

   a. Elevated NA

   b. Ground NA

3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks

   NA

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s) (MGD):

   NA

2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

   NA

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: NA%

2. Monthly volume treated for previous five years (in 1,000 gallons):

Year	*NA*	*NA*	*NA*	*NA*	*NA*
Month					
January	NA	NA	NA	NA	NA
February	NA	NA	NA	NA	NA
March	NA	NA	NA	NA	NA
April	NA	NA	NA	NA	NA

May	NA	NA	NA	NA	NA
June	NA	NA	NA	NA	NA
July	NA	NA	NA	NA	NA
August	NA	NA	NA	NA	NA
September	NA	NA	NA	NA	NA
October	NA	NA	NA	NA	NA
November	NA	NA	NA	NA	NA
December	NA	NA	NA	NA	NA
Totals	NA	NA	NA	NA	NA

Water Conservation Plan

In addition to the description of the wholesaler's service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, Chapter 288.5. Note: If the water conservation plan does not provide information for each requirement an explanation must be included as to why the requirement is not applicable.

A. *Specific, Quantified 5 & 10-Year Targets*

The water conservation plan must include specific, quantified 5-year and 10-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable water loss, and the basis for the development of these goals. Note that the goals established by a wholesale water supplier under this subparagraph are not enforceable. These goals must be updated during the 5-year review and submittal.

B. *Measuring and Accounting for Diversions*

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

C. *Record Management Program*

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

D. *Metering/Leak-Detection and Repair Program*

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

E. *Contract Requirements for Successive Customer Conservation*

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

F. *Reservoir Systems Operations Plan*

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

G. *Enforcement Procedure and Official Adoption*

The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

H. Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

The service area of the _____ (name of water supplier) is located within the _____ (name of regional water planning area or areas) and _____ (name of water supplier) has provided a copy of this water conservation plan to the _____ (name of regional water planning group or groups).

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous 5-year and 10-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan no later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

V. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of 30 TAC §288.5(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;

2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans;

3. A program for reuse and/or recycling of wastewater and/or graywater;

4. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VI. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

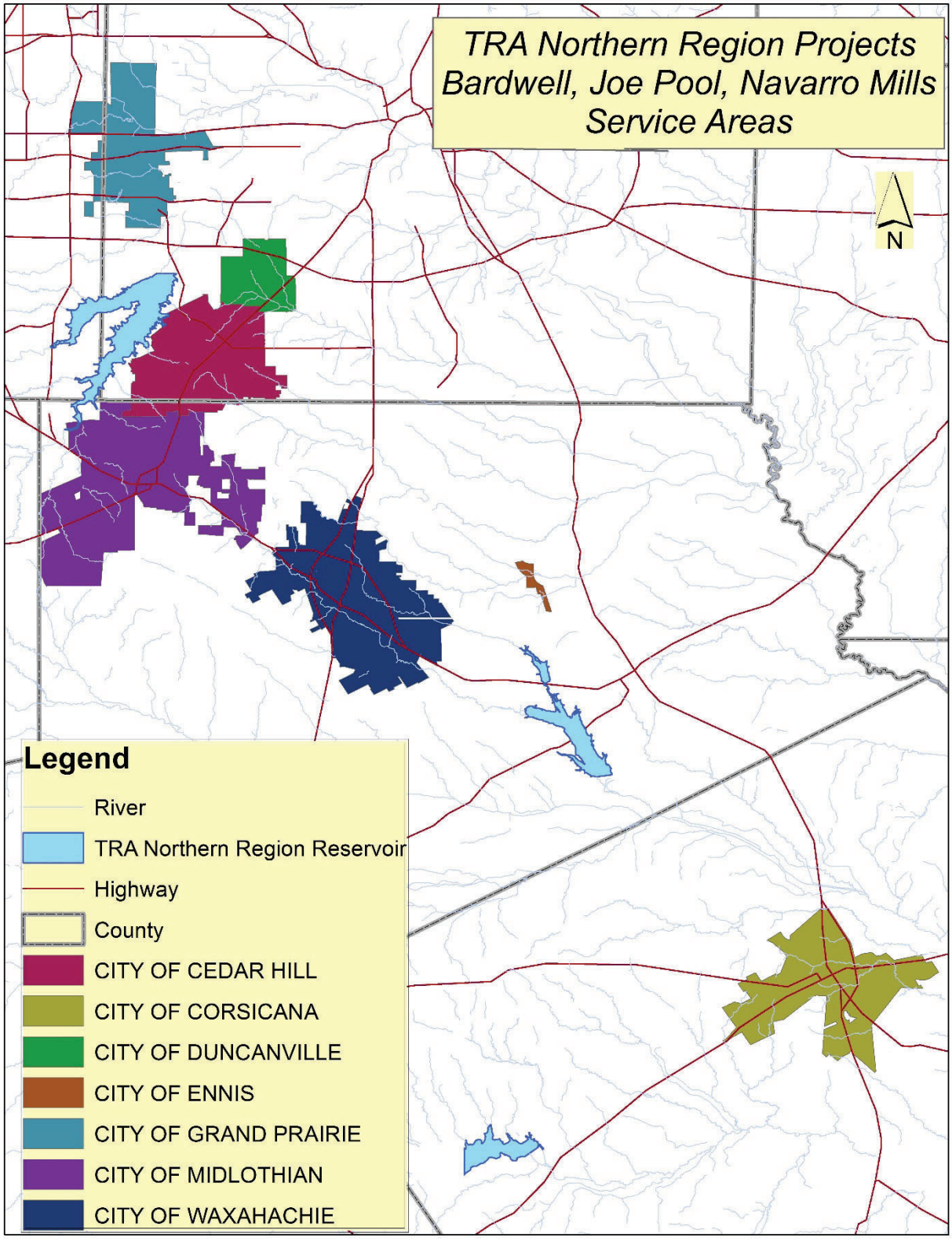
Water Conservation Plans submitted with a water right application for New or Additional State Water must include data and information which:

1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;

2. evaluates conservation as an alternative to the proposed appropriation; and

3. evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

Additionally, it shall be the burden of proof of the applicant to demonstrate that no feasible alternative to the proposed appropriation exists and that the requested amount of appropriation is necessary and reasonable for the proposed use.


TRA Northern Region Projects
Bardwell, Joe Pool, Navarro Mills
Service Areas
N
Legend
River
TRA Northern Region Reservoir
Highway
County
CITY OF CEDAR HILL
CITY OF CORSICANA
CITY OF DUNCANVILLE
CITY OF ENNIS
CITY OF GRAND PRAIRIE
CITY OF MIDLOTHIAN
CITY OF WAXAHACHIE

2021 Regional Water Plan - Population Projections for 2020-2070

WUG Name	County	2020	2030	2040	2050	2060	2070
ENNIS	ELLIS	21,354	25,111	28,828	41,086	66,145	110,073
WAXAHACHIE	ELLIS	37,700	43,084	52,272	64,400	78,500	95,500
CEDAR HILL	DALLAS	53,244	65,133	76,989	83,579	83,579	83,579
CEDAR HILL	ELLIS	694	884	1,103	1,421	1,421	1,421
DUNCANVILLE	DALLAS	43,110	47,307	47,307	47,307	47,307	47,307
GRAND PRAIRIE	DALLAS	166,208	206,781	231,491	231,491	231,491	231,491
GRAND PRAIRIE	ELLIS	55	71	88	114	140	170
GRAND PRAIRIE	TARRANT	51,864	51,864	51,864	51,864	51,864	51,864
MIDLOTHIAN	ELLIS	20,660	30,895	32,500	34,500	36,836	40,689
CORSICANA	NAVARRO	26,739	29,484	32,318	35,546	38,921	42,525
DAWSON	NAVARRO	893	934	975	1,016	1,057	1,100

Source: http://www.twdb.texas.gov/waterplanning/data/projections/2022/popproj.asp

2021 Regional Water Plan – Water Demand Projections for 2020-2070 (in Acre-Feet)

WUG Name	County	2020	2030	2040	2050	2060	2070
ENNIS	ELLIS	4,026	4,625	5,234	7,401	11,887	19,761
WAXAHACHIE	ELLIS	6,872	7,702	9,226	11,299	13,749	16,715
CEDAR HILL	DALLAS	10,660	12,810	14,994	16,201	16,186	16,184
CEDAR HILL	ELLIS	139	174	215	275	275	275
DUNCANVILLE	DALLAS	6,091	6,464	6,322	6,244	6,230	6,229
GRAND PRAIRIE	DALLAS	26,811	32,615	36,061	35,851	35,799	35,792
GRAND PRAIRIE	ELLIS	9	11	14	18	22	26
GRAND PRAIRIE	TARRANT	8,366	8,180	8,079	8,032	8,021	8,019
MIDLOTHIAN	ELLIS	4,811	7,094	7,408	7,839	8,359	9,231
CORSICANA	NAVARRO	6,104	6,582	7,101	7,750	8,472	9,253
DAWSON	NAVARRO	149	151	155	159	165	172

Source: http://www.twdb.texas.gov/waterplanning/data/projections/2022/demandproj.asp

Description of Bardwell Reservoir Project

Bardwell Lake is a U.S. Army Corps of Engineers multi-purpose reservoir located in Ellis County, this project's dependable water supply yield of 9,600 acre-feet was contractually purchased by TRA as the project's local sponsor. TRA subsequently signed contracts for the sale of Bardwell Lake's water to Ennis and the Ellis County Water Control and Improvement District Number One (City of Waxahachie). With the revenue generated, TRA is repaying the federal government over a 50-year period for project development costs attributable to the water supply portion of the reservoir.

Description of Joe Pool Reservoir Project

A contract with the US Army Corps of Engineers for the storage of Joe Pool Lake's water was entered into by TRA as the local sponsor. TRA subsequently entered into contracts with the Cities of Cedar Hill, Duncanville, Grand Prairie, and Midlothian to provide up to 17,000 acre-feet per year of raw water.

Description of Navarro Reservoir Project

As local sponsor for this U.S. Army Corps of Engineers multi-purpose lake, TRA contractually purchased the total dependable water supply yield of 19,400 acre-feet. This water was then sold, at cost, to the cities of Corsicana and Dawson, the Post Oak Water Supply Corporation, and one industry. With the revenue generated by this sale, TRA repaid the federal government over a 50-year period for project costs attributable to water supply.

APPENDIX B

Water Conservation Implementation Report Form and Summary of Updates/Revisions to Water Conservation Plan (Form 20645)

Bardwell Reservoir Project

Joe Pool Reservoir Project

Navarro Reservoir Project

Texas Commission on Environmental Quality

Water Availability Division
MC-160, P.O. Box 13087 Austin, Texas 78711-3087
Telephone (512) 239-4600, FAX (512) 239-2214

WATER CONSERVATION IMPLEMENTATION REPORT FORM AND SUMMARY OF UPDATES/REVISIONS TO WATER CONSERVATION PLAN

(Texas Water Code §11.1271(b) and Title 30 Texas Administrative Code §288.30(1) to (4))

Please note, this form replaces the following forms: TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers)

This Form is applicable to the following entities:

1. **Water Right Holders of 1,000 acre-feet or more for municipal, industrial, and other non-irrigation uses.**
2. **Water Right Holders of 10,000 acre-feet or more for irrigation uses.**

The above noted entities are required by rule to submit updates to their water conservation plan(s) and water conservation implementation report(s) every five years beginning May 1, 2009. See 30 Texas Administrative Code (TAC) §288.30(1) to (4). Entities must also submit any revisions to their water conservation plan within 90 days of adoption when the plans are revised in between the five-year submittal deadlines. This form may be used for the five-year submittal or when revisions are made to the water conservation plans in the interim periods between five-year submittals. Please complete the form as directed below.

1. Water Right Holder Name: Trinity River Authority - Bardwell Reservoir
2. Water Right Permit or Certificate Nos. CA 08-5021

3. Please Indicate by placing an 'X' next to all that Apply to your Entity:

Water Right Holder of 1,000 acre-feet or more for non-irrigation uses

_____Municipal Water Use by Public Water Supplier

X_____Wholesale Public Water Supplier

_____Industrial Use

_____Mining Use

_____Agriculture Non-Irrigation

Water Right Holder of 10,000 acre-feet or more for irrigation uses

_____Individually-Operated Irrigation System

_____Agricultural Water Suppliers Providing Water to More Than One User

Water Conservation Implementation Reports/Annual Reports

4. Water Conservation Annual Reports for the previous five years were submitted to the Texas Water Development Board (TWDB) for each of the uses indicated above as required by 30 TAC §288.30(10)(C)? Yes x____ No_____

TCEQ no longer requires submittal of the information contained in the detailed implementation report previously required in Forms TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers). However, the Entity must be up-to-date on its Annual Report Submittals to the TWDB.

Water Conservation Plans

5. For the five-year submittal (or for revisions between the five-year submittals), attach your updated or revised Water Conservation Plan for each of the uses indicated in Section 3, above. Every updated or revised water conservation plan submitted must contain each of the minimum requirements found in the TCEQ rules and must be duly adopted by the entity submitting the water conservation plan. Please include evidence that each water conservation plan submitted has been adopted.

   - Rules on minimum requirements for Water Conservation Plans can be found in 30 TAC Chapter 288. http://texreg.sos.state.tx.us/public/readtac%24ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=288
   - Forms which include the minimum requirements and other useful information are also available to assist you. Visit the TCEQ webpage for Water Conservation Plans and Reports. https://www.tceq.texas.gov/permitting/water_rights/wr_technical-resources/conserve.html

*Call **512-239-4600** or email to **wcp@tceq.texas.gov** for assistance with the requirements for your water conservation plan(s) and report(s).*

6. For each Water Conservation Plan submitted, list dates and descriptions of the conservation measures implemented, and the actual amount of water saved.

As the Authority is a wholesale supplier, it has limited control over water use. Therefore, the Authority's water conservation program is predicated on the fact that the implementation of such conservation measures must occur at largely the local level and achievement of significant water conservation savings can only occur if each retail water user sets and implements its own water conservation programs. It is then the Authority's role to encourage and support those initiatives chosen by the wholesale customers in order to promote long term water use efficiency and reduction of wasted water.

7. For each Water Conservation Plan submitted, state whether the five and ten-year targets for water savings and water loss were met in your *previous* water conservation plan.

   Yes _____ No _____

   If the targets were not met, please provide an explanation as to why any of the targets were not met, including any progress on that particular target.

As a wholesale supplier, the Authority has limited access to the data, such as the population and water usage. Therefore, it is difficult to evaluate whether the targets for water saving and water loss were met.

8. For each five-year submittal, does each water conservation plan submitted contain *updated* five and ten-year targets for water savings and water loss?
Yes X No

If yes, please identify where in the water conservation plan the updated targets are located (page, section).

Page 8 Section 2.3 "Conservation Goals"

9. In the box below (or in an attachment titled "Summary of Updates or Revisions to Water Conservation Plans), please identify any other revisions/updates made to each water conservation plan that is being updated or revised. Please specify the water conservation plan being updated and the location within the plan of the newly adopted updates or revisions.

1. Calculated GPCD and projected goals for 2029 and 2034 (Section 2.3)
2. Updated Form 20162 (Appendix A)
3. Updated Projected Populations and Water Demands for 2020-2070 (Appendix A)
4. Updated Form 20645 (Appendix B)

10. *Form Completed by (Point of Contact):* Webster Mangham
(If different than name listed above, owner and contact may be different individual(s)/entities)

Contact Person Title/Position: Manager, Senior, Technical Services & Basin Planning
Contact Address: PO Box 60, Arlington TX 76004
Contact Phone Number: 817-493-5127 Contact Email Address: [redacted]

Signature: _____ Date: 4/1/2024

Texas Commission on Environmental Quality

Water Availability Division
MC-160, P.O. Box 13087 Austin, Texas 78711-3087
Telephone (512) 239-4600, FAX (512) 239-2214

WATER CONSERVATION IMPLEMENTATION REPORT FORM AND SUMMARY OF UPDATES/REVISIONS TO WATER CONSERVATION PLAN

(Texas Water Code §11.1271(b) and Title 30 Texas Administrative Code §288.30(1) to (4))

Please note, this form replaces the following forms: TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers)

This Form is applicable to the following entities:

1. **Water Right Holders of 1,000 acre-feet or more for municipal, industrial, and other non-irrigation uses.**
2. **Water Right Holders of 10,000 acre-feet or more for irrigation uses.**

The above noted entities are required by rule to submit updates to their water conservation plan(s) and water conservation implementation report(s) every five years beginning May 1, 2009. See 30 Texas Administrative Code (TAC) §288.30(1) to (4). Entities must also submit any revisions to their water conservation plan within 90 days of adoption when the plans are revised in between the five-year submittal deadlines. This form may be used for the five-year submittal or when revisions are made to the water conservation plans in the interim periods between five-year submittals. Please complete the form as directed below.

1. Water Right Holder Name: Trinity River Authority - Joe Pool Lake
2. Water Right Permit or Certificate Nos. CA 08-3404

3. Please Indicate by placing an 'X' next to all that Apply to your Entity:

Water Right Holder of 1,000 acre-feet or more for non-irrigation uses

_____Municipal Water Use by Public Water Supplier

X_____Wholesale Public Water Supplier

_____Industrial Use

_____Mining Use

_____Agriculture Non-Irrigation

Water Right Holder of 10,000 acre-feet or more for irrigation uses

_____Individually-Operated Irrigation System

_____Agricultural Water Suppliers Providing Water to More Than One User

Water Conservation Implementation Reports/Annual Reports

4. Water Conservation Annual Reports for the previous five years were submitted to the Texas Water Development Board (TWDB) for each of the uses indicated above as required by 30 TAC §288.30(10)(C)? Yes x No_____

TCEQ no longer requires submittal of the information contained in the detailed implementation report previously required in Forms TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers). However, the Entity must be up-to-date on its Annual Report Submittals to the TWDB.

Water Conservation Plans

5. For the five-year submittal (or for revisions between the five-year submittals), attach your updated or revised Water Conservation Plan for each of the uses indicated in Section 3, above. Every updated or revised water conservation plan submitted must contain each of the minimum requirements found in the TCEQ rules and must be duly adopted by the entity submitting the water conservation plan. Please include evidence that each water conservation plan submitted has been adopted.

   - Rules on minimum requirements for Water Conservation Plans can be found in 30 TAC Chapter 288. http://texreg.sos.state.tx.us/public/readtac%24ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=288
   - Forms which include the minimum requirements and other useful information are also available to assist you. Visit the TCEQ webpage for Water Conservation Plans and Reports. https://www.tceq.texas.gov/permitting/water_rights/wr_technical-resources/conserve.html

*Call **512-239-4600** or email to **wcp@tceq.texas.gov** for assistance with the requirements for your water conservation plan(s) and report(s).*

6. For each Water Conservation Plan submitted, list dates and descriptions of the conservation measures implemented, and the actual amount of water saved.

As the Authority is a wholesale supplier, it has limited control over water use. Therefore, the Authority's water conservation program is predicated on the fact that the implementation of such conservation measures must occur at largely the local level and achievement of significant water conservation savings can only occur if each retail water user sets and implements its own water conservation programs. It is then the Authority's role to encourage and support those initiatives chosen by the wholesale customers in order to promote long term water use efficiency and reduction of wasted water.

7. For each Water Conservation Plan submitted, state whether the five and ten-year targets for water savings and water loss were met in your *previous* water conservation plan.

   Yes _____ No _____

   If the targets were not met, please provide an explanation as to why any of the targets were not met, including any progress on that particular target.

As a wholesale supplier, the Authority has limited access to the data, such as the population and water usage. Therefore, it is difficult to evaluate whether the targets for water saving and water loss were met.

8. For each five-year submittal, does each water conservation plan submitted contain *updated* five and ten-year targets for water savings and water loss?
Yes X No

If yes, please identify where in the water conservation plan the updated targets are located (page, section).

Page 8 Section 2.3 "Conservation Goals"

9. In the box below (or in an attachment titled "Summary of Updates or Revisions to Water Conservation Plans), please identify any other revisions/updates made to each water conservation plan that is being updated or revised. Please specify the water conservation plan being updated and the location within the plan of the newly adopted updates or revisions.

1. Calculated GPCD and projected goals for 2029 and 2034 (Section 2.3)
2. Updated Form 20162 (Appendix A)
3. Updated Projected Populations and Water Demands for 2020-2070 (Appendix A)
4. Updated Form 20645 (Appendix B)

10. *Form Completed by (Point of Contact):* Webster Mangham
(If different than name listed above, owner and contact may be different individual(s)/entities)

Contact Person Title/Position: Manager SR, TSBP

Contact Address: PO Box 60, Arlington TX 76004

Contact Phone Number: 817-492-5127 Contact Email Address: [redacted]

Signature: _____ Date: 4/1/2024

Texas Commission on Environmental Quality

Water Availability Division
MC-160, P.O. Box 13087 Austin, Texas 78711-3087
Telephone (512) 239-4600, FAX (512) 239-2214

WATER CONSERVATION IMPLEMENTATION REPORT FORM AND SUMMARY OF UPDATES/REVISIONS TO WATER CONSERVATION PLAN

(Texas Water Code §11.1271(b) and Title 30 Texas Administrative Code §288.30(1) to (4))

Please note, this form replaces the following forms: TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers)

This Form is applicable to the following entities:

1. **Water Right Holders of 1,000 acre-feet or more for municipal, industrial, and other non-irrigation uses.**
2. **Water Right Holders of 10,000 acre-feet or more for irrigation uses.**

The above noted entities are required by rule to submit updates to their water conservation plan(s) and water conservation implementation report(s) every five years beginning May 1, 2009. See 30 Texas Administrative Code (TAC) §288.30(1) to (4). Entities must also submit any revisions to their water conservation plan within 90 days of adoption when the plans are revised in between the five-year submittal deadlines. This form may be used for the five-year submittal or when revisions are made to the water conservation plans in the interim periods between five-year submittals. Please complete the form as directed below.

1. Water Right Holder Name: Trinity River Authority - Navarro Mills Reservoir
2. Water Right Permit or Certificate Nos. CA 08-4992

3. Please Indicate by placing an 'X' next to all that Apply to your Entity:

Water Right Holder of 1,000 acre-feet or more for non-irrigation uses

_____Municipal Water Use by Public Water Supplier

X_____Wholesale Public Water Supplier

_____Industrial Use

_____Mining Use

_____Agriculture Non-Irrigation

Water Right Holder of 10,000 acre-feet or more for irrigation uses

_____Individually-Operated Irrigation System

_____Agricultural Water Suppliers Providing Water to More Than One User

Water Conservation Implementation Reports/Annual Reports

4. Water Conservation Annual Reports for the previous five years were submitted to the Texas Water Development Board (TWDB) for each of the uses indicated above as required by 30 TAC §288.30(10)(C)? Yes x No_____

TCEQ no longer requires submittal of the information contained in the detailed implementation report previously required in Forms TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers). However, the Entity must be up-to-date on its Annual Report Submittals to the TWDB.

Water Conservation Plans

5. For the five-year submittal (or for revisions between the five-year submittals), attach your updated or revised Water Conservation Plan for each of the uses indicated in Section 3, above. Every updated or revised water conservation plan submitted must contain each of the minimum requirements found in the TCEQ rules and must be duly adopted by the entity submitting the water conservation plan. Please include evidence that each water conservation plan submitted has been adopted.

   - Rules on minimum requirements for Water Conservation Plans can be found in 30 TAC Chapter 288. http://texreg.sos.state.tx.us/public/readtac%24ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=288
   - Forms which include the minimum requirements and other useful information are also available to assist you. Visit the TCEQ webpage for Water Conservation Plans and Reports. https://www.tceq.texas.gov/permitting/water_rights/wr_technical-resources/conserve.html

*Call **512-239-4600** or email to **wcp@tceq.texas.gov** for assistance with the requirements for your water conservation plan(s) and report(s).*

6. For each Water Conservation Plan submitted, list dates and descriptions of the conservation measures implemented, and the actual amount of water saved.

As the Authority is a wholesale supplier, it has limited control over water use. Therefore, the Authority's water conservation program is predicated on the fact that the implementation of such conservation measures must occur at largely the local level and achievement of significant water conservation savings can only occur if each retail water user sets and implements its own water conservation programs. It is then the Authority's role to encourage and support those initiatives chosen by the wholesale customers in order to promote long term water use efficiency and reduction of wasted water.

7. For each Water Conservation Plan submitted, state whether the five and ten-year targets for water savings and water loss were met in your *previous* water conservation plan.

   Yes _____ No _____

   If the targets were not met, please provide an explanation as to why any of the targets were not met, including any progress on that particular target.

As a wholesale supplier, the Authority has limited access to the data, such as the population and water usage. Therefore, it is difficult to evaluate whether the targets for water saving and water loss were met.

8. For each five-year submittal, does each water conservation plan submitted contain *updated* five and ten-year targets for water savings and water loss?
Yes X No

If yes, please identify where in the water conservation plan the updated targets are located (page, section).

Page 8 Section 2.3 "Conservation Goals"

9. In the box below (or in an attachment titled "Summary of Updates or Revisions to Water Conservation Plans), please identify any other revisions/updates made to each water conservation plan that is being updated or revised. Please specify the water conservation plan being updated and the location within the plan of the newly adopted updates or revisions.

1. Calculated GPCD and projected goals for 2029 and 2034 (Section 2.3)
2. Updated Form 20162 (Appendix A)
3. Updated Projected Populations and Water Demands for 2020-2070 (Appendix A)
4. Updated Form 20645 (Appendix B)

10. *Form Completed by (Point of Contact):* Webster Mangham
(If different than name listed above, owner and contact may be different individual(s)/entities)

Contact Person Title/Position: Manager, SR, TSBP

Contact Address: PO Box 60

Contact Phone Number: 817-493-5127 Contact Email Address: [redacted]

Signature: _____ Date: 4/1/2024

RESOLUTION NO. R-1159-4

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS FOR NAVARRO MILLS, BARDWELL AND JOE POOL RESERVOIRS AND RESCINDING RESOLUTION NO. R-1159-3

WHEREAS, the Trinity River Authority (Authority) recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the Authority recognizes that due to natural limitations and drought conditions, the Authority cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Texas Water Code and the regulations of the Texas Commission on Environmental Quality (TCEQ) require that the Authority adopt water conservation and drought contingency plans; and

WHEREAS, the Board of Directors of the Authority desires to adopt the revised Water Conservation and Drought Contingency Plans for Navarro Mills, Bardwell, and Joe Pool Reservoirs; and

WHEREAS, on April 27, 2005, the Board of Directors of the Authority adopted Resolution No. R-1159 captioned as follows:

> A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR NAVARRO MILLS RESERVOIR; and

WHEREAS, on April 27, 2005, the Board of Directors of the Authority adopted Resolution No. R-1160 captioned as follows:

> A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR BARDWELL RESERVOIR; and

WHEREAS, on April 27, 2005, the Board of Directors of the Authority adopted Resolution No. R-1161 captioned as follows:

> A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR JOE POOL RESERVOIR; and

WHEREAS, on June 24, 2009, the Board of Directors of the Authority adopted Resolution No. R-1159-1 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR NAVARRO MILLS RESERVOIR AND RESCINDING RESOLUTION NO. R-1159; and

WHEREAS, on June 24, 2009, the Board of Directors of the Authority adopted Resolution No. R-1160-1 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR BARDWELL RESERVOIR AND RESCINDING RESOLUTION NO. R-1160; and

WHEREAS, on June 24, 2009, the Board of Directors of the Authority adopted Resolution No. R-1161-1 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR JOE POOL RESERVOIR AND RESCINDING RESOLUTION NO. R-1161; and

WHEREAS, on April 23, 2014, the Board of Directors of the Authority adopted Resolution No. R-1159-2 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS FOR NAVARRO MILLS, BARDWELL AND JOE POOL RESERVOIRS AND RESCINDING RESOLUTION NOS. R-1159-1, R-1160-1 AND R-1161-1

WHEREAS, on April 24, 2019, the Board of Directors of the Authority adopted Resolution No. R-1159-3 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS FOR NAVARRO MILLS, BARDWELL AND JOE POOL RESERVOIRS AND RESCINDING RESOLUTION NOS. R-1159-2, R-1160-2 AND R-1161-2

WHEREAS, it is in the public interest that Resolution R. 1159-3 be rescinded.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY THAT:

(1) That Resolution No. R-1159-3 adopted by the Board of Directors of the Authority on April 24, 2019, is hereby rescinded;

(2) That the Board of Directors hereby adopts Resolution No. R-1159-4 approving and adopting the revised Water Conservation and Drought Contingency Plan for Navarro Mills, Bardwell, and Joe Pool Reservoirs, in substantially the form presented, and that the Authority commits to implement the requirements and procedures set forth in the adopted Plan;

(3) That the Board of Directors does hereby find and declare that sufficient written notice of the date, hour, place, and subject of the meeting adopting this Resolution was posted at a designated place convenient to the public for the time required by law preceding the meeting, that such place of posting was readily accessible at all times to the general public, and that all of the foregoing was done as required by law at all times during which this Resolution and the subject matter thereof has been discussed, considered and formally acted upon;

(4) That the General Manager or his designee is hereby directed to file a copy of the Plan and this Resolution with TCEQ and the Texas Water Development Board in accordance with Title 30, Chapter 288 of the Texas Administrative Code and with the Region C Water Planning Group; and

(5) That should any paragraph, sentence, clause, phrase, or word of this Resolution be declared unconstitutional or invalid for any reason, the remainder of this Resolution shall not be affected.

ADOPTED this 24th day of April, 2024.

C. DWAYNE SOMERVILLE, President
Board of Directors
Trinity River Authority of Texas

ATTEST:

ALEXIS S. LONG, Assistant Secretary
Board of Directors
Trinity River Authority of Texas

TRINITY RIVER AUTHORITY OF TEXAS

Attachment: WS6.1.B_WS6.2.B_R-1159-4

RESOLUTION NO. R-1159-4

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS FOR NAVARRO MILLS, BARDWELL AND JOE POOL RESERVOIRS AND RESCINDING RESOLUTION NO. R-1159-3

WHEREAS, the Trinity River Authority (Authority) recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the Authority recognizes that due to natural limitations and drought conditions, the Authority cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Texas Water Code and the regulations of the Texas Commission on Environmental Quality (TCEQ) require that the Authority adopt water conservation and drought contingency plans; and

WHEREAS, the Board of Directors of the Authority desires to adopt the revised Water Conservation and Drought Contingency Plans for Navarro Mills, Bardwell, and Joe Pool Reservoirs; and

WHEREAS, on April 27, 2005, the Board of Directors of the Authority adopted Resolution No. R-1159 captioned as follows:

> A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR NAVARRO MILLS RESERVOIR; and

WHEREAS, on April 27, 2005, the Board of Directors of the Authority adopted Resolution No. R-1160 captioned as follows:

> A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR BARDWELL RESERVOIR; and

WHEREAS, on April 27, 2005, the Board of Directors of the Authority adopted Resolution No. R-1161 captioned as follows:

> A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR JOE POOL RESERVOIR; and

WHEREAS, on June 24, 2009, the Board of Directors of the Authority adopted Resolution No. R-1159-1 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR NAVARRO MILLS RESERVOIR AND RESCINDING RESOLUTION NO. R-1159; and

WHEREAS, on June 24, 2009, the Board of Directors of the Authority adopted Resolution No. R-1160-1 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR BARDWELL RESERVOIR AND RESCINDING RESOLUTION NO. R-1160; and

WHEREAS, on June 24, 2009, the Board of Directors of the Authority adopted Resolution No. R-1161-1 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR JOE POOL RESERVOIR AND RESCINDING RESOLUTION NO. R-1161; and

WHEREAS, on April 23, 2014, the Board of Directors of the Authority adopted Resolution No. R-1159-2 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS FOR NAVARRO MILLS, BARDWELL AND JOE POOL RESERVOIRS AND RESCINDING RESOLUTION NOS. R-1159-1, R-1160-1 AND R-1161-1

WHEREAS, on April 24, 2019, the Board of Directors of the Authority adopted Resolution No. R-1159-3 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING WATER CONSERVATION AND DROUGHT CONTINGENCY PLANS FOR NAVARRO MILLS, BARDWELL AND JOE POOL RESERVOIRS AND RESCINDING RESOLUTION NOS. R-1159-2, R-1160-2 AND R-1161-2

WHEREAS, it is in the public interest that Resolution R. 1159-3 be rescinded.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY THAT:

(1) That Resolution No. R-1159-3 adopted by the Board of Directors of the Authority on April 24, 2019, is hereby rescinded;

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(3) That the Board of Directors does hereby find and declare that sufficient written notice of the date, hour, place, and subject of the meeting adopting this Resolution was posted at a designated place convenient to the public for the time required by law preceding the meeting, that such place of posting was readily accessible at all times to the general public, and that all of the foregoing was done as required by law at all times during which this Resolution and the subject matter thereof has been discussed, considered and formally acted upon;

(4) That the General Manager or his designee is hereby directed to file a copy of the Plan and this Resolution with TCEQ and the Texas Water Development Board in accordance with Title 30, Chapter 288 of the Texas Administrative Code and with the Region C Water Planning Group; and

(5) That should any paragraph, sentence, clause, phrase, or word of this Resolution be declared unconstitutional or invalid for any reason, the remainder of this Resolution shall not be affected.

ADOPTED this 24th day of April, 2024.

C. DWAYNE SOMERVILLE, President
Board of Directors
Trinity River Authority of Texas

ATTEST:

ALEXIS S. LONG, Assistant Secretary
Board of Directors
Trinity River Authority of Texas

TRINITY RIVER AUTHORITY OF TEXAS

Trinity River Authority 08-3404 Joe Pool Lake Reuse Accounting Plan

This Accounting Plan is designed to account for the water discharged from Trinity River Authority's (TRA) Mountain Creek Wastewater Treatment Plant (MCRWS) and used under the Reuse component of 08-3404D.

Assumptions and Definitions

1. 365.25 days per year.
2. Current 08-3404 Maximum Daily Diversion Rate: 12 MGD/36.8 AF/D WITHOUT Channel Losses
    a. Channel Losses are 0.065.
3. Channel losses are made up from Excess WWTP discharges, if available, on a daily basis
4. Calculations are on a daily timestep.
5. Discharges mean the quantity of treated wastewater (return flows) discharged from the Mountain Creek Regional Wastewater System.
6. Diversions means the quantity of water pumped out of Joe Pool Lake for water supply
7. Return Flows means water discharged from the Mountain Creek Regional Wastewater System into the watercourses downstream of MCRWS, including Joe Pool Lake.
8. Assumes water may not be stored and is used the day it is available.

Conversion Factors

1 MGD = (1120.89 afy / 365.25 days) = 3.069 AF/D

Abbreviations

AF – Acre-feet

AF/D – Acre-feet per day

Col. – Column

MGD – Million Gallons per Day

FY – TRA Fiscal Year (December 1 – November 30)

TRA – Trinity River Authority of Texas

Av. – Average

TCEQ Accounting

Col. 1. **Date**

Col. 2. **Av. Daily Discharges from MCRWS (MGD)** – Discharges from MCRWS (WIMS VAR ID 580045)

Col. 3. **Av. Daily Discharges from MCRWS (AF)** - MGD to AF/D- Converts Daily MCRWS Discharges into AF/d using (Col. 2 * 1120.89/365.25)

Col. 4. **Permitted Discharges Available for Diversion (AF)** – Reduces Col. 3 to Max. Daily Discharge Rate, if needed. Compares Col. 3 to the Maximum Permitted Daily Diversion Rate of 36.8 AF and reduces it to that amount, if necessary. If no reduction is needed, it uses the value in Col. 3.

Col. 5. **Channel Losses (AF)** – This calculates the amount of instream losses while considering the fact that discharges in excess of the permitted reuse amount can be used to offset the losses. If the difference between Col. 3 and Col. 4 is greater than 2.39 AF (the maximum amount of instream losses), then a value of 0 is recorded for channel losses, since excess discharges (over the daily authorized diversion amount) cover the 6.5% channel loss component. If the difference is below 2.39 AF, the 0.65 % channel losses is applied to Col. 4 (discharges available for diversion). The difference between Col. 3 and Col. 4 (discharges above permitted diversions) is then subtracted to account for any excess discharges between the actual discharges in Col. 3 and the Maximum Available Diversions in Col. 4.

Col. 6. **Available Reuse Flows Net Ch. Losses (AF)** - Subtracts Col. 5 from Col. 4.

Col. 7. **Amount Diverted by Midlothian (AF)** - Midlothian daily diversions from Joe Pool Lake in AF. Includes both natural yield and return flows in varying quantities.

Col. 8. **Amount Diverted from Return Flows (AF)** - If the amount of water diverted on a given day is less than the amount of available return flows from the previous day, all diversions are assumed to be return flows, thus maximizing the water available for reuse under 08-3404D. If the amount of water diverted exceeds available return flows, it is assumed that all available return flows are

used and accordingly, the amount shown is equal to the amount of return flows available the prior day.

Col. 9. **Amount Diverted under Natural Yield (AF)** - Calculates the Natural Yield Component of the diversion, if any. If the difference between Col. 7 and 8 is greater than zero, then Col. 7 is subtracted from Col. 8. Natural Yield Diverted equals Total Diversions (Amount diverted by Midlothian) minus Available Return Flows (Amount Diverted from Return Flows).

Col. 10. **REUSE CUMULATIVE ANNUAL DIVERSIONS (AF)** - Calculates a running Cumulative Annual Diversion quantity of return flows per calendar year.

Col. 11. **REUSE CUMULATIVE ANNUAL REMAINING (AF)** - Calculates the running amount of reuse remaining from the annual permitted maximum of 13,450 AF. Cells are traffic light color-coded: Green >50%, Yellow 10–50%, Red <10%.

Average of MCRWD Discharge (MG	Date											
Years	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2020	2.19	2.72	3.42	2.25	3.07	2.27	2.32	2.12	2.59	2.24	2.25	2.34
2021	2.58	2.46	2.36	2.78	4.95	2.86	2.51	2.56	2.32	2.47	2.33	2.26
2022	2.25	2.44	2.40	2.57	2.53	2.52	2.42	3.11	2.84	2.65	3.30	3.09
2023	2.66	3.80	3.21	2.92	3.07	2.95	3.07	2.85	2.95	3.54	3.04	3.51
2024	4.01	3.85	4.37	4.32	5.07	4.51	3.24	3.20	3.47	3.31	3.47	3.91

1	2	3	4	5	6	7	8	9	10	11
Formula Summary	*Enter Daily Discharges*	*Col 2 * (1120.89/365.25)*	*If Col 3 is > 12 MGD/36.8 AF/D, then use (12*3.069)AF. If not, then use Col 3.*	*IF Col 3 - Col 4 is >2.39 AF enter 0, If below 2.39 AF then calculate the required discharges and subtract the extra available discharges.* (2.39 AF is the delta between the 36.828 Max Daily AF Diversion rate and 39.22 AF, which is the Max Diversion Rate * 1.065 which calculates the maximum diversion that would require a channel loss calculation since excess discharges would cover the channel losses.) This leaves the amount needed to be subtracted from Col 4.	*Col 4 - Col 5*	*Enter Daily Midlothian Diversions*	***If Col 7 is Less than Col 6 on the previous day, then shows Col 7 value. If not, it shows Col 6 from the previous day)***	***If Col 7- Col 8 is > 0, then subtract 7 from 8, if not, show 0***	*Looks at the year in Col 1 and sums Col 8 by Calendar Year*	*Subtracts Col 10 from 13,450 AF/Y Permitted Reuse Remaining*
Description	*Average Daily Discharges from WIMS VARID 580045 (MGD)*	*Converts MCRWS discharges from MGD to AF/D*	*If needed, reduces large discharges to 12 MGD/36.8 AF/D maximum daily diversion rate from 08-3404D*	*Determines if excess discharges cover channel losses. If it does not, it calculates how much channel losses need to be applied. Maximizes any excess discharges.*	*Subtracts Channel Losses from the Dischorges*	*Midlothian Diversions in AF*	***Compares Available Reuse Flows Net Ch. Losses from previous day to Midlothian's Diversions. If actual Diversions is less than previous day's available reuse, then entire Diversions is shown as amount diverted from return flows.***	***Calculates the Natural Yield component of the Diversions.***	*Calculates the Total AF of Reuse Diverted to Date, per Calendar Year*	*Calculates the Diversions + Channel Losses and subtracts that from the 13,450 AF/y allowable reuse. Note: The 6.5 % channel losses are already captured in the formulas, so this uses the full permitted amount.* *Color based on % remaining >50% Green, 10-50% Yellow, <10% Red*
Date	**Av. Daily Discharges from MCRWS (MGD)**	**Av. Daily Discharges from MCRWS (AF)**	**Permitted Discharges Available for Diversion (AF)**	**Channel Losses (AF)**	**Available Reuse Flows Net Ch. Losses (AF)**	**Amount Diverted by Midlothian (AF)**	**Amount Diverted from Previous Day's Return Flows (AF)**	**Amount Diverted under Natural Yield (AF)**	REUSE CUMULATIVE ANNUAL DIVERSIONS (AF)	REUSE CUMULATIVE ANNUAL REMAINING (AF)
1/1/2025	**3.83**	**11.75**	11.75	0.76	10.99	**4.45**			0.00	**13,450**
1/2/2025	3.81	**11.70**	11.70	**0.76**	**10.94**	4.45	4.45	-	4.45	**13,446**
1/3/2025	**4.21**	**12.91**	**12.91**	**0.84**	**12.07**	**4.45**	**4.45**	-	**8.89**	13,441
1/4/2025	**3.33**	**10.21**	**10.21**	**0.66**	**9.55**	**4.44**	**4.44**	-	13.33	13,437
1/5/2025	4.46	13.70	**13.70**	**0.89**	**12.81**	**4.44**	4.44	-	17.78	**13,432**
1/6/2025	**3.45**	10.59	10.59	0.69	9.90	6.81	**6.81**	-	24.59	**13,425**
1/7/2025	4.42	**13.57**	**13.57**	**0.88**	**12.69**	**9.68**	9.68	-	34.27	**13,416**
1/8/2025	3.58	10.98	10.98	**0.71**	10.26	9.71	9.71	-	43.98	**13,406**
1/9/2025	4.03	12.38	12.38	0.80	**11.57**	7.78	7.78	-	51.76	**13,398**
1/10/2025	6.42	19.69	19.69	1.28	18.41	8.57	8.57	-	60.33	13,390
1/11/2025	**6.21**	19.07	19.07	**1.24**	17.83	**4.80**	4.80	-	65.13	**13,385**
1/12/2025	**5.97**	18.31	18.31	1.19	**17.12**	**4.47**	4.47	-	69.60	**13,380**
1/13/2025	**4.34**	13.32	**13.32**	0.87	**12.46**	4.47	4.47	-	74.06	**13,376**
1/14/2025	**4.01**	12.29	**12.29**	**0.80**	11.49	4.47	4.47	-	78.53	**13,371**
1/15/2025	3.69	11.33	11.33	**0.74**	10.59	4.47	**4.47**	-	82.99	**13,367**
1/16/2025	3.33	10.20	10.20	0.66	9.54	**4.47**	**4.47**	-	87.46	13,363
1/17/2025	4.14	**12.69**	12.69	0.82	11.86	4.47	4.47	-	91.92	13,358
1/18/2025	**3.28**	10.07	10.07	0.65	9.42	4.47	4.47	-	96.39	13,354
1/19/2025	**4.24**	13.00	13.00	0.84	**12.15**	4.47	4.47	-	100.86	**13,349**
1/20/2025	**3.83**	**11.75**	11.75	0.76	**10.99**	4.46	4.46	-	105.32	**13,345**
1/21/2025	**4.04**	12.39	12.39	0.81	11.59	4.46	4.46	-	109.78	13,340
1/22/2025	3.56	10.92	10.92	0.71	10.21	**4.46**	4.46	-	114.25	13,336
1/23/2025	3.59	11.00	**11.00**	0.72	10.29	3.86	3.86	-	118.11	**13,332**
1/24/2025	2.88	8.82	8.82	0.57	8.25	3.25	**3.25**	-	121.36	13,329
1/25/2025	**4.41**	13.54	13.54	0.88	12.66	3.25	3.25	-	124.61	**13,325**
1/26/2025	**3.21**	**9.84**	**9.84**	0.64	9.20	3.25	3.25	-	127.86	**13,322**

1/27/2025	3.33	10.22	10.22	0.66	9.55	3.25	3.25	-	131.11	13,319
1/28/2025	3.86	11.85	11.85	0.77	11.08	3.25	3.25	-	134.36	13,316
1/29/2025	3.44	10.57	10.57	0.69	9.88	3.25	3.25	-	137.61	13,312
1/30/2025	7.65	23.48	23.48	1.53	21.95	3.26	3.26	-	140.87	13,309
1/31/2025	7.96	24.42	24.42	1.59	22.83	3.26	3.26	-	144.13	13,306
2/1/2025	6.17	18.93	18.93	1.23	17.70	3.26	3.26	-	147.39	13,303
2/2/2025	6.35	19.48	19.48	1.27	18.21	3.26	3.26	-	150.65	13,299
2/3/2025	7.71	23.65	23.65	1.54	22.11	3.26	3.26	-	153.91	13,296
2/4/2025	5.20	15.95	15.95	1.04	14.91	3.26	3.26	-	157.17	13,293
2/5/2025	5.63	17.27	17.27	1.12	16.15	3.26	3.26	-	160.43	13,290
2/6/2025	4.09	12.56	12.56	0.82	11.74	3.25	3.25	-	163.68	13,286
2/7/2025	3.55	10.88	10.88	0.71	10.17	3.24	3.24	-	166.92	13,283
2/8/2025	4.69	14.40	14.40	0.94	13.47	3.24	3.24	-	170.16	13,280
2/9/2025	3.90	11.95	11.95	0.78	11.18	3.24	3.24	-	173.40	13,277
2/10/2025	4.02	12.33	12.33	0.80	11.53	4.06	4.06	-	177.46	13,273
2/11/2025	4.94	15.17	15.17	0.99	14.19	4.47	4.47	-	181.93	13,268
2/12/2025	5.61	17.22	17.22	1.12	16.10	4.47	4.47	-	186.40	13,264
2/13/2025	6.73	20.65	20.65	1.34	19.31	4.47	4.47	-	190.87	13,259
2/14/2025	5.05	15.51	15.51	1.01	14.50	4.47	4.47	-	195.33	13,255
2/15/2025	4.65	14.27	14.27	0.93	13.35	4.47	4.47	-	199.80	13,250
2/16/2025	4.67	14.33	14.33	0.93	13.39	4.46	4.46	-	204.26	13,246
2/17/2025	4.44	13.64	13.64	0.89	12.75	3.78	3.78	-	208.04	13,242
2/18/2025	4.16	12.75	12.75	0.83	11.93	3.25	3.25	-	211.29	13,239
2/19/2025	4.20	12.88	12.88	0.84	12.04	3.25	3.25	-	214.55	13,235
2/20/2025	3.81	11.70	11.70	0.76	10.94	3.25	3.25	-	217.80	13,232
2/21/2025	3.83	11.74	11.74	0.76	10.98	3.25	3.25	-	221.05	13,229
2/22/2025	4.12	12.64	12.64	0.82	11.82	3.25	3.25	-	224.30	13,225
2/23/2025	4.02	12.34	12.34	0.80	11.53	3.25	3.25	-	227.55	13,222
2/24/2025	4.66	14.29	14.29	0.93	13.37	3.25	3.25	-	230.79	13,218
2/25/2025	3.88	11.92	11.92	0.77	11.14	3.25	3.25	-	234.04	13,215
2/26/2025	3.57	10.96	10.96	0.71	10.25	3.25	3.25	-	237.29	13,212
2/27/2025	3.20	9.81	9.81	0.64	9.18	3.24	3.24	-	240.53	13,208
2/28/2025	3.45	10.60	10.60	0.69	9.91	3.25	3.25	-	243.78	13,205
3/1/2025	4.17	12.81	12.81	0.83	11.97	3.24	3.24	-	247.02	13,201
3/2/2025	4.18	12.83	12.83	0.83	12.00	3.24	3.24	-	250.26	13,198
3/3/2025	4.61	14.15	14.15	0.92	13.23	3.24	3.24	-	253.50	13,194
3/4/2025	6.24	19.14	19.14	1.24	17.90	2.62	2.62	-	256.12	13,191
3/5/2025	6.18	18.97	18.97	1.23	17.74	2.70	2.70	-	258.82	13,191
3/6/2025	5.42	16.62	16.62	1.08	15.54	2.79	2.79	-	261.61	13,188
3/7/2025	4.73	14.52	14.52	0.94	13.57	3.24	3.24	-	264.85	13,185
3/8/2025	4.50	13.80	13.80	0.90	12.90	3.24	3.24	-	268.08	13,182
3/9/2025	4.72	14.49	14.49	0.94	13.55	3.24	3.24	-	271.32	13,179
3/10/2025	4.42	13.56	13.56	0.88	12.68	3.24	3.24	-	274.56	13,175
3/11/2025	4.16	12.77	12.77	0.83	11.94	3.24	3.24	-	277.80	13,172
3/12/2025	4.16	12.78	12.78	0.83	11.95	3.51	3.51	-	281.31	13,169
3/13/2025	4.15	12.73	12.73	0.83	11.90	3.25	3.25	-	284.56	13,165
3/14/2025	3.94	12.10	12.10	0.79	11.31	5.32	5.32	-	289.87	13,160
3/15/2025	4.04	12.39	12.39	0.81	11.58	3.92	3.92	-	293.79	13,156
3/16/2025	4.03	12.38	12.38	0.80	11.57	3.25	3.25	-	297.04	13,153
3/17/2025	4.00	12.28	12.28	0.80	11.48	3.25	3.25	-	300.28	13,150
3/18/2025	3.69	11.32	11.32	0.74	10.59	3.92	3.92	-	304.21	13,146
3/19/2025	3.99	12.24	12.24	0.80	11.45	4.49	4.49	-	308.70	13,141
3/20/2025	3.86	11.85	11.85	0.77	11.08	4.45	4.45	-	313.15	13,137
3/21/2025	3.85	11.81	11.81	0.77	11.05	4.44	4.44	-	317.58	13,132
3/22/2025	3.86	11.85	11.85	0.77	11.08	4.44	4.44	-	322.02	13,128
3/23/2025	4.05	12.43	12.43	0.81	11.62	3.49	3.49	-	325.51	13,124
3/24/2025	3.87	11.88	11.88	0.77	11.10	4.04	4.04	-	329.54	13,120
3/25/2025	3.76	11.54	11.54	0.75	10.79	4.45	4.45	-	334.00	13,116
3/26/2025	3.71	11.39	11.39	0.74	10.65	4.43	4.43	-	338.42	13,112

3/27/2025	3.69	11.32	11.32	0.74	10.59	4.47	4.47	-	342.89	13,107
3/28/2025	3.78	11.60	11.60	0.75	10.85	4.43	4.43	-	347.32	13,103
3/29/2025	3.78	11.60	11.60	0.75	10.85	4.39	4.39	-	351.71	13,098
3/30/2025	4.03	12.37	12.37	0.80	11.56	4.03	4.03	-	355.74	13,094
3/31/2025	3.84	11.78	11.78	0.77	11.02	4.43	4.43	-	360.17	13,090
4/1/2025	3.73	11.45	11.45	0.74	10.70	4.43	4.43	-	364.59	13,085
4/2/2025	3.69	11.32	11.32	0.74	10.59	4.42	4.42	-	369.02	13,081
4/3/2025	3.58	10.99	10.99	0.71	10.27	4.42	4.42	-	373.44	13,077
4/4/2025	3.53	10.83	10.83	0.70	10.13	4.42	4.42	-	377.86	13,072
4/5/2025	5.75	17.65	17.65	1.15	16.50	4.43	4.43	-	382.29	13,068
4/6/2025	5.15	15.80	15.80	1.03	14.78	3.23	3.23	-	385.52	13,064
4/7/2025	4.45	13.66	13.66	0.89	12.77	3.24	3.24	-	388.75	13,061
4/8/2025	4.13	12.67	12.67	0.82	11.85	3.24	3.24	-	391.99	13,058
4/9/2025	3.96	12.15	12.15	0.79	11.36	3.24	3.24	-	395.22	13,055
4/10/2025	2.38	7.30	7.30	0.47	6.83	3.23	3.23	-	398.46	13,052
4/11/2025	5.04	15.47	15.47	1.01	14.46	3.23	3.23	-	401.69	13,048
4/12/2025	3.78	11.60	11.60	0.75	10.85	3.23	3.23	-	404.91	13,045
4/13/2025	3.32	10.19	10.19	0.66	9.53	3.23	3.23	-	408.14	13,042
4/14/2025	3.89	11.94	11.94	0.78	11.16	4.02	4.02	-	412.16	13,038
4/15/2025	4.22	12.95	12.95	0.84	12.11	4.46	4.46	-	416.62	13,033
4/16/2025	3.66	11.23	11.23	0.73	10.50	4.46	4.46	-	421.08	13,029
4/17/2025	3.6	11.05	11.05	0.72	10.33	4.42	4.42	-	425.50	13,024
4/18/2025	3.64	11.17	11.17	0.73	10.44	4.41	4.41	-	429.91	13,020
4/19/2025	3.83	11.75	11.75	0.76	10.99	4.41	4.41	-	434.31	13,016
4/20/2025	4.14	12.70	12.70	0.83	11.88	3.14	3.14	-	437.45	13,013
4/21/2025	3.73	11.45	11.45	0.74	10.70	4.40	4.40	-	441.86	13,008
4/22/2025	3.61	11.08	11.08	0.72	10.36	4.40	4.40	-	446.26	13,004
4/23/2025	4.45	13.66	13.66	0.89	12.77	4.40	4.40	-	450.65	12,999
4/24/2025	5	15.34	15.34	1.00	14.35	3.93	3.93	-	454.59	12,995
4/25/2025	5.88	18.04	18.04	1.17	16.87	3.21	3.21	-	457.80	12,992
4/26/2025	5.05	15.50	15.50	1.01	14.49	4.14	4.14	-	461.94	12,988
4/27/2025	4.79	14.70	14.70	0.96	13.74	6.83	6.83	-	468.77	12,981
4/28/2025	4.44	13.63	13.63	0.89	12.74	5.79	5.79	-	474.56	12,975
4/29/2025	4.17	12.80	12.80	0.83	11.97	4.42	4.42	-	478.98	12,971
4/30/2025	5.61	17.22	17.22	1.12	16.10	2.85	2.85	-	481.82	12,968
5/1/2025		-	-	-	-		-	-	481.82	12,968
5/2/2025		-	-	-	-		-	-	481.82	12,968
5/3/2025		-	-	-	-		-	-	481.82	12,968
5/4/2025		-	-	-	-		-	-	481.82	12,968
5/5/2025		-	-	-	-		-	-	481.82	12,968
5/6/2025		-	-	-	-		-	-	481.82	12,968
5/7/2025		-	-	-	-		-	-	481.82	12,968
5/8/2025		-	-	-	-		-	-	481.82	12,968
5/9/2025		-	-	-	-		-	-	481.82	12,968
5/10/2025		-	-	-	-		-	-	481.82	12,968
5/11/2025		-	-	-	-		-	-	481.82	12,968
5/12/2025		-	-	-	-		-	-	481.82	12,968
5/13/2025		-	-	-	-		-	-	481.82	12,968
5/14/2025		-	-	-	-		-	-	481.82	12,968
5/15/2025		-	-	-	-		-	-	481.82	12,968
5/16/2025		-	-	-	-		-	-	481.82	12,968
5/17/2025		-	-	-	-		-	-	481.82	12,968
5/18/2025		-	-	-	-		-	-	481.82	12,968
5/19/2025		-	-	-	-		-	-	481.82	12,968
5/20/2025		-	-	-	-		-	-	481.82	12,968
5/21/2025		-	-	-	-		-	-	481.82	12,968
5/22/2025		-	-	-	-		-	-	481.82	12,968
5/23/2025		-	-	-	-		-	-	481.82	12,968
5/24/2025		-	-	-	-		-	-	481.82	12,968

5/25/2025		-	-	-	-	-		-	-	481.82	12,968
5/26/2025		-	-	-	-	-		-	-	481.82	12,968
5/27/2025		-	-	-	-	-		-	-	481.82	12,968
5/28/2025		-	-	-	-	-		-	-	481.82	12,968
5/29/2025		-	-	-	-	-		-	-	481.82	12,968
5/30/2025		-	-	-	-	-		-	-	481.82	12,968
5/31/2025		-	-	-	-	-		-	-	481.82	12,968
6/1/2025		-	-	-	-	-		-	-	481.82	12,968
6/2/2025		-	-	-	-	-		-	-	481.82	12,968
6/3/2025		-	-	-	-	-		-	-	481.82	12,968
6/4/2025		-	-	-	-	-		-	-	481.82	12,968
6/5/2025		-	-	-	-	-		-	-	481.82	12,968
6/6/2025		-	-	-	-	-		-	-	481.82	12,968
6/7/2025		-	-	-	-	-		-	-	481.82	12,968
6/8/2025		-	-	-	-	-		-	-	481.82	12,968
6/9/2025		-	-	-	-	-		-	-	481.82	12,968
6/10/2025		-	-	-	-	-		-	-	481.82	12,968
6/11/2025		-	-	-	-	-		-	-	481.82	12,968
6/12/2025		-	-	-	-	-		-	-	481.82	12,968
6/13/2025		-	-	-	-	-		-	-	481.82	12,968
6/14/2025		-	-	-	-	-		-	-	481.82	12,968
6/15/2025		-	-	-	-	-		-	-	481.82	12,968
6/16/2025		-	-	-	-	-		-	-	481.82	12,968
6/17/2025		-	-	-	-	-		-	-	481.82	12,968
6/18/2025		-	-	-	-	-		-	-	481.82	12,968
6/19/2025		-	-	-	-	-		-	-	481.82	12,968
6/20/2025		-	-	-	-	-		-	-	481.82	12,968
6/21/2025		-	-	-	-	-		-	-	481.82	12,968
6/22/2025		-	-	-	-	-		-	-	481.82	12,968
6/23/2025		-	-	-	-	-		-	-	481.82	12,968
6/24/2025		-	-	-	-	-		-	-	481.82	12,968
6/25/2025		-	-	-	-	-		-	-	481.82	12,968
6/26/2025		-	-	-	-	-		-	-	481.82	12,968
6/27/2025		-	-	-	-	-		-	-	481.82	12,968
6/28/2025		-	-	-	-	-		-	-	481.82	12,968
6/29/2025		-	-	-	-	-		-	-	481.82	12,968
6/30/2025		-	-	-	-	-		-	-	481.82	12,968
7/1/2025		-	-	-	-	-		-	-	481.82	12,968
7/2/2025		-	-	-	-	-		-	-	481.82	12,968
7/3/2025		-	-	-	-	-		-	-	481.82	12,968
7/4/2025		-	-	-	-	-		-	-	481.82	12,968
7/5/2025		-	-	-	-	-		-	-	481.82	12,968
7/6/2025		-	-	-	-	-		-	-	481.82	12,968
7/7/2025		-	-	-	-	-		-	-	481.82	12,968
7/8/2025		-	-	-	-	-		-	-	481.82	12,968
7/9/2025		-	-	-	-	-		-	-	481.82	12,968
7/10/2025		-	-	-	-	-		-	-	481.82	12,968
7/11/2025		-	-	-	-	-		-	-	481.82	12,968
7/12/2025		-	-	-	-	-		-	-	481.82	12,968
7/13/2025		-	-	-	-	-		-	-	481.82	12,968
7/14/2025		-	-	-	-	-		-	-	481.82	12,968
7/15/2025		-	-	-	-	-		-	-	481.82	12,968
7/16/2025		-	-	-	-	-		-	-	481.82	12,968
7/17/2025		-	-	-	-	-		-	-	481.82	12,968
7/18/2025		-	-	-	-	-		-	-	481.82	12,968
7/19/2025		-	-	-	-	-		-	-	481.82	12,968
7/20/2025		-	-	-	-	-		-	-	481.82	12,968
7/21/2025		-	-	-	-	-		-	-	481.82	12,968
7/22/2025		-	-	-	-	-		-	-	481.82	12,968

7/23/2025		-	-	-	-		-	-	481.82	12,968
7/24/2025		-	-	-	-		-	-	481.82	12,968
7/25/2025		-	-	-	-		-	-	481.82	12,968
7/26/2025		-	-	-	-		-	-	481.82	12,968
7/27/2025		-	-	-	-		-	-	481.82	12,968
7/28/2025		-	-	-	-		-	-	481.82	12,968
7/29/2025		-	-	-	-		-	-	481.82	12,968
7/30/2025		-	-	-	-		-	-	481.82	12,968
7/31/2025		-	-	-	-		-	-	481.82	12,968
8/1/2025		-	-	-	-		-	-	481.82	12,968
8/2/2025		-	-	-	-		-	-	481.82	12,968
8/3/2025		-	-	-	-		-	-	481.82	12,968
8/4/2025		-	-	-	-		-	-	481.82	12,968
8/5/2025		-	-	-	-		-	-	481.82	12,968
8/6/2025		-	-	-	-		-	-	481.82	12,968
8/7/2025		-	-	-	-		-	-	481.82	12,968
8/8/2025		-	-	-	-		-	-	481.82	12,968
8/9/2025		-	-	-	-		-	-	481.82	12,968
8/10/2025		-	-	-	-		-	-	481.82	12,968
8/11/2025		-	-	-	-		-	-	481.82	12,968
8/12/2025		-	-	-	-		-	-	481.82	12,968
8/13/2025		-	-	-	-		-	-	481.82	12,968
8/14/2025		-	-	-	-		-	-	481.82	12,968
8/15/2025		-	-	-	-		-	-	481.82	12,968
8/16/2025		-	-	-	-		-	-	481.82	12,968
8/17/2025		-	-	-	-		-	-	481.82	12,968
8/18/2025		-	-	-	-		-	-	481.82	12,968
8/19/2025		-	-	-	-		-	-	481.82	12,968
8/20/2025		-	-	-	-		-	-	481.82	12,968
8/21/2025		-	-	-	-		-	-	481.82	12,968
8/22/2025		-	-	-	-		-	-	481.82	12,968
8/23/2025		-	-	-	-		-	-	481.82	12,968
8/24/2025		-	-	-	-		-	-	481.82	12,968
8/25/2025		-	-	-	-		-	-	481.82	12,968
8/26/2025		-	-	-	-		-	-	481.82	12,968
8/27/2025		-	-	-	-		-	-	481.82	12,968
8/28/2025		-	-	-	-		-	-	481.82	12,968
8/29/2025		-	-	-	-		-	-	481.82	12,968
8/30/2025		-	-	-	-		-	-	481.82	12,968
8/31/2025		-	-	-	-		-	-	481.82	12,968
9/1/2025		-	-	-	-		-	-	481.82	12,968
9/2/2025		-	-	-	-		-	-	481.82	12,968
9/3/2025		-	-	-	-		-	-	481.82	12,968
9/4/2025		-	-	-	-		-	-	481.82	12,968
9/5/2025		-	-	-	-		-	-	481.82	12,968
9/6/2025		-	-	-	-		-	-	481.82	12,968
9/7/2025		-	-	-	-		-	-	481.82	12,968
9/8/2025		-	-	-	-		-	-	481.82	12,968
9/9/2025		-	-	-	-		-	-	481.82	12,968
9/10/2025		-	-	-	-		-	-	481.82	12,968
9/11/2025		-	-	-	-		-	-	481.82	12,968
9/12/2025		-	-	-	-		-	-	481.82	12,968
9/13/2025		-	-	-	-		-	-	481.82	12,968
9/14/2025		-	-	-	-		-	-	481.82	12,968
9/15/2025		-	-	-	-		-	-	481.82	12,968
9/16/2025		-	-	-	-		-	-	481.82	12,968
9/17/2025		-	-	-	-		-	-	481.82	12,968
9/18/2025		-	-	-	-		-	-	481.82	12,968
9/19/2025		-	-	-	-		-	-	481.82	12,968

9/20/2025		-	-	-	-	-		-	-	481.82	12,968
9/21/2025		-	-	-	-	-		-	-	481.82	12,968
9/22/2025		-	-	-	-	-		-	-	481.82	12,968
9/23/2025		-	-	-	-	-		-	-	481.82	12,968
9/24/2025		-	-	-	-	-		-	-	481.82	12,968
9/25/2025		-	-	-	-	-		-	-	481.82	12,968
9/26/2025		-	-	-	-	-		-	-	481.82	12,968
9/27/2025		-	-	-	-	-		-	-	481.82	12,968
9/28/2025		-	-	-	-	-		-	-	481.82	12,968
9/29/2025		-	-	-	-	-		-	-	481.82	12,968
9/30/2025		-	-	-	-	-		-	-	481.82	12,968
10/1/2025		-	-	-	-	-		-	-	481.82	12,968
10/2/2025		-	-	-	-	-		-	-	481.82	12,968
10/3/2025		-	-	-	-	-		-	-	481.82	12,968
10/4/2025		-	-	-	-	-		-	-	481.82	12,968
10/5/2025		-	-	-	-	-		-	-	481.82	12,968
10/6/2025		-	-	-	-	-		-	-	481.82	12,968
10/7/2025		-	-	-	-	-		-	-	481.82	12,968
10/8/2025		-	-	-	-	-		-	-	481.82	12,968
10/9/2025		-	-	-	-	-		-	-	481.82	12,968
10/10/2025		-	-	-	-	-		-	-	481.82	12,968
10/11/2025		-	-	-	-	-		-	-	481.82	12,968
10/12/2025		-	-	-	-	-		-	-	481.82	12,968
10/13/2025		-	-	-	-	-		-	-	481.82	12,968
10/14/2025		-	-	-	-	-		-	-	481.82	12,968
10/15/2025		-	-	-	-	-		-	-	481.82	12,968
10/16/2025		-	-	-	-	-		-	-	481.82	12,968
10/17/2025		-	-	-	-	-		-	-	481.82	12,968
10/18/2025		-	-	-	-	-		-	-	481.82	12,968
10/19/2025		-	-	-	-	-		-	-	481.82	12,968
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10/22/2025		-	-	-	-	-		-	-	481.82	12,968
10/23/2025		-	-	-	-	-		-	-	481.82	12,968
10/24/2025		-	-	-	-	-		-	-	481.82	12,968
10/25/2025		-	-	-	-	-		-	-	481.82	12,968
10/26/2025		-	-	-	-	-		-	-	481.82	12,968
10/27/2025		-	-	-	-	-		-	-	481.82	12,968
10/28/2025		-	-	-	-	-		-	-	481.82	12,968
10/29/2025		-	-	-	-	-		-	-	481.82	12,968
10/30/2025		-	-	-	-	-		-	-	481.82	12,968
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11/1/2025		-	-	-	-	-		-	-	481.82	12,968
11/2/2025		-	-	-	-	-		-	-	481.82	12,968
11/3/2025		-	-	-	-	-		-	-	481.82	12,968
11/4/2025		-	-	-	-	-		-	-	481.82	12,968
11/5/2025		-	-	-	-	-		-	-	481.82	12,968
11/6/2025		-	-	-	-	-		-	-	481.82	12,968
11/7/2025		-	-	-	-	-		-	-	481.82	12,968
11/8/2025		-	-	-	-	-		-	-	481.82	12,968
11/9/2025		-	-	-	-	-		-	-	481.82	12,968
11/10/2025		-	-	-	-	-		-	-	481.82	12,968
11/11/2025		-	-	-	-	-		-	-	481.82	12,968
11/12/2025		-	-	-	-	-		-	-	481.82	12,968
11/13/2025		-	-	-	-	-		-	-	481.82	12,968
11/14/2025		-	-	-	-	-		-	-	481.82	12,968
11/15/2025		-	-	-	-	-		-	-	481.82	12,968
11/16/2025		-	-	-	-	-		-	-	481.82	12,968
11/17/2025		-	-	-	-	-		-	-	481.82	12,968

11/18/2025		-	-	-	-		-	-	481.82	12,968
11/19/2025		-	-	-	-		-	-	481.82	12,968
11/20/2025		-	-	-	-		-	-	481.82	12,968
11/21/2025		-	-	-	-		-	-	481.82	12,968
11/22/2025		-	-	-	-		-	-	481.82	12,968
11/23/2025		-	-	-	-		-	-	481.82	12,968
11/24/2025		-	-	-	-		-	-	481.82	12,968
11/25/2025		-	-	-	-		-	-	481.82	12,968
11/26/2025		-	-	-	-		-	-	481.82	12,968
11/27/2025		-	-	-	-		-	-	481.82	12,968
11/28/2025		-	-	-	-		-	-	481.82	12,968
11/29/2025		-	-	-	-		-	-	481.82	12,968
11/30/2025		-	-	-	-		-	-	481.82	12,968
12/1/2025		-	-	-	-		-	-	481.82	12,968
12/2/2025		-	-	-	-		-	-	481.82	12,968
12/3/2025		-	-	-	-		-	-	481.82	12,968
12/4/2025		-	-	-	-		-	-	481.82	12,968
12/5/2025		-	-	-	-		-	-	481.82	12,968
12/6/2025		-	-	-	-		-	-	481.82	12,968
12/7/2025		-	-	-	-		-	-	481.82	12,968
12/8/2025		-	-	-	-		-	-	481.82	12,968
12/9/2025		-	-	-	-		-	-	481.82	12,968
12/10/2025		-	-	-	-		-	-	481.82	12,968
12/11/2025		-	-	-	-		-	-	481.82	12,968
12/12/2025		-	-	-	-		-	-	481.82	12,968
12/13/2025		-	-	-	-		-	-	481.82	12,968
12/14/2025		-	-	-	-		-	-	481.82	12,968
12/15/2025		-	-	-	-		-	-	481.82	12,968
12/16/2025		-	-	-	-		-	-	481.82	12,968
12/17/2025		-	-	-	-		-	-	481.82	12,968
12/18/2025		-	-	-	-		-	-	481.82	12,968
12/19/2025		-	-	-	-		-	-	481.82	12,968
12/20/2025		-	-	-	-		-	-	481.82	12,968
12/21/2025		-	-	-	-		-	-	481.82	12,968
12/22/2025		-	-	-	-		-	-	481.82	12,968
12/23/2025		-	-	-	-		-	-	481.82	12,968
12/24/2025		-	-	-	-		-	-	481.82	12,968
12/25/2025		-	-	-	-		-	-	481.82	12,968
12/26/2025		-	-	-	-		-	-	481.82	12,968
12/27/2025		-	-	-	-		-	-	481.82	12,968
12/28/2025		-	-	-	-		-	-	481.82	12,968
12/29/2025		-	-	-	-		-	-	481.82	12,968
12/30/2025		-	-	-	-		-	-	481.82	12,968
12/31/2025		-	-	-	-		-	-	481.82	12,968