Administrative Package Cover Page

This file contains the following documents:

1. Summary of application (in plain language)
2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
3. Application Materials

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

Plain Language Summary

East Cedar Creek Fresh Water Supply District (CN 600629935) operates East Cedar Creek Fresh Water District South Plant (RN 101612349), an activated sludge process plant operated in the extended aeration mode.

The facility is located at approximately 15,700 feet south of the intersection of State Highway 198 and State Highway 334, in Payne Springs, Henderson County, Texas 75147.

This application is to renew the authorization to dispose of treated domestic wastewater effluent at a daily average not to exceed 0.196 MGD via surface irrigation of 134 acres of non-public access agricultural land.

This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain Biochemical Oxygen Demand (BOD), pH, Chlorine, Ammonia Nitrogen, Total Kjeldahl Nitrogen (TKN), Sulfate, Phosphorus, E.coli, and Dissolved Solids.

Domestic wastewater is treated by activated sludge process in the extended aeration mode using treatment units to include an aeration basin, clarifier, two aerobic digesters and chlorine contact chambers.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT RENEWAL

PERMIT NO. WQ0013874001

APPLICATION. East Cedar Creek Fresh Water Supply District, P.O. Box 309, Mabank, Texas 75147, has applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Land Application Permit (TLAP) No. WQ0013874001 to authorize the disposal of treated wastewater at a volume not to exceed a daily average flow of 196,000 gallons per day via surface irrigation of 134 acres of non-public access agricultural land. The domestic wastewater treatment facility and disposal area are located approximately 15,700 feet south of the intersection of State Highway 198 and State Highway 334, near the city of Payne Springs, in Henderson County, Texas 75124. TCEQ received this application on June 3, 2025. The permit application will be available for viewing and copying at East Cedar Creek Fresh Water Supply District Office, lobby, 115 Hammer Road, Gun Barrel City, in Henderson County, Texas prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage: https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tlap-applications. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.
https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.101388,32.29&level=18

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ will hold a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a

response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing.** A contested case hearing is a legal proceeding similar to a civil trial in state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period.**

TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. All public comments and requests must be submitted either electronically at **https://www14.tceq.texas.gov/epic/eComment/**, or in

writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from East Cedar Creek Fresh Water Supply District at the address stated above or by calling Mr. James Blodgett, General Manager, at 903-887-7103.

Issuance Date: June 20, 2025

6781 Oak Hill Boulevard
Tyler, TX 75703
903.581.8141

ORIGINAL

May 29, 2025

Applications Review and Processing Team
Texas Commission on Environmental Quality
Building F, Room 2101
12100 Park 35 Circle
Austin, Texas 78753

Re: East Cedar Creek FWSD
South Wastewater Treatment Plant
Discharge Permit Renewal Application
TPDES Permit No. WQ0013874001

Dear Team Member,

Enclosed you will find the application for the TPDES discharge permit renewal for the East Cedar Creek FWSD South Wastewater Treatment Plant. I have enclosed one (1) original and three (3) copies of the application, as required. I have sent, under separate cover, a check (No. 002691) in to the Revenues Section of the TCEQ in the amount of $815.00, as required.
I have included a copy of the check referenced above for your convenience.

Please contact me, Sigi West, Regulatory Compliance Specialist at (903) 581-8141, or via email at swest@ksaeng.com if you need any other information on the above referenced permit.

Sincerely,

Siglinda West

KSA
Siglinda M. West
Regulatory Compliance Specialist

6781 Oak Hill Boulevard
Tyler, TX 75703
903.581.8141

May 29, 2025

Texas Commission for Environmental Quality
Financial Administration Division
Cashier's Office (MC 214)
12100 Park 35 Circle
Austin, Texas 78753

Re: East Cedar Creek FWSD
South Wastewater Treatment Plant
Discharge Permit Renewal Application
TPDES Permit No. WQ0013874001

Dear Team Member,

Enclosed you will find a check, No.3347 in the amount of $815.00 for the application for permit renewal for the East Cedar Creek FWSD South Wastewater Treatment Plant. I have sent, under separate cover, one (1) original and three (3) copies of the application, as required, to the TCEQ Water Quality Permitting Applications Team. I have also included in that package, a copy of this check.

Please contact me, Sigi West, Regulatory Compliance Specialist at (903) 581-8141 if you need any other information on the above referenced permit.

Sincerely,

Siglinda West

KSA

Siglinda M. West
Regulatory Compliance Specialist

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST

Complete and submit this checklist with the application.

APPLICANT NAME: East Cedar Creek Fresh Water Supply District

PERMIT NUMBER (If new, leave blank): WQ00WQ0013874001

Indicate if each of the following items is included in your application.

	Y	N		Y	N
Administrative Report 1.0	☒	☐	Original USGS Map	☒	☐
Administrative Report 1.1	☐	☐	Affected Landowners Map	☐	☒
SPIF	☒	☐	Landowner Disk or Labels	☐	☒
Core Data Form	☒	☐	Buffer Zone Map	☐	☐
Summary of Application (PLS)	☒	☐	Flow Diagram	☒	☐
Public Involvement Plan Form	☒	☐	Site Drawing	☒	☐
Technical Report 1.0	☒	☐	Original Photographs	☐	☒
Technical Report 1.1	☐	☒	Design Calculations	☐	☒
Worksheet 2.0	☒	☐	Solids Management Plan	☐	☒
Worksheet 2.1	☐	☐	Water Balance	☐	☒
Worksheet 3.0	☐	☐			
Worksheet 3.1	☐	☐			
Worksheet 3.2	☐	☐			
Worksheet 3.3	☐	☐			
Worksheet 4.0	☐	☒			
Worksheet 5.0	☐	☒			
Worksheet 6.0	☐	☒			
Worksheet 7.0	☐	☒			

For TCEQ Use Only

Segment Number _____County _____
Expiration Date _____Region_____
Permit Number _____

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

For any questions about this form, please contact the Applications Review and Processing Team at 512-239-4671.

Section 1. Application Fees (Instructions Page 26)

Indicate the amount submitted for the application fee (check only one).

Flow	New/Major Amendment	Renewal
<0.05 MGD	$350.00 ☐	$315.00 ☐
≥0.05 but <0.10 MGD	$550.00 ☐	$515.00 ☐
≥0.10 but <0.25 MGD	$850.00 ☐	$815.00 ☒
≥0.25 but <0.50 MGD	$1,250.00 ☐	$1,215.00 ☐
≥0.50 but <1.0 MGD	$1,650.00 ☐	$1,615.00 ☐
≥1.0 MGD	$2,050.00 ☐	$2,015.00 ☐

Minor Amendment (for any flow) $150.00 ☐

Payment Information:

Mailed — Check/Money Order Number: Click to enter text.

Check/Money Order Amount: $815.00

Name Printed on Check: East Cedar Creek Fresh Water Supply District

EPAY — Voucher Number: Click to enter text.

Copy of Payment Voucher enclosed? Yes ☐

Section 2. Type of Application (Instructions Page 26)

a. Check the box next to the appropriate authorization type.

☒ Publicly Owned Domestic Wastewater

☐ Privately-Owned Domestic Wastewater

☐ Conventional Water Treatment

b. Check the box next to the appropriate facility status.

☒ Active ☐ Inactive

c. Check the box next to the appropriate permit type.

- ☐ TPDES Permit
- ☒ TLAP
- ☐ TPDES Permit with TLAP component
- ☐ Subsurface Area Drip Dispersal System (SADDS)

d. Check the box next to the appropriate application type

- ☐ New
- ☐ Major Amendment *with* Renewal
- ☐ Major Amendment *without* Renewal
- ☒ Renewal without changes
- ☐ Minor Amendment *with* Renewal
- ☐ Minor Amendment *without* Renewal
- ☐ Minor Modification of permit

e. For amendments or modifications, describe the proposed changes: Click to enter text.

f. For existing permits:

Permit Number: WQ00 13874001

EPA I.D. (TPDES only): TX N/A

Expiration Date: 12/01/2025

Section 3. Facility Owner (Applicant) and Co-Applicant Information (Instructions Page 26)

A. The owner of the facility must apply for the permit.

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

East Cedar Creek Fresh Water Supply District

(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/

CN: 600629935

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Prefix: Mr. Last Name, First Name: James Blodgett

Title: General Manager Credential: Click to enter text.

B. Co-applicant information. Complete this section only if another person or entity is required to apply as a co-permittee.

What is the Legal Name of the co-applicant applying for this permit?

N/A

(The legal name must be spelled exactly as filed with the TX SOS, with the County, or in the legal documents forming the entity.)

If the co-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/

CN: N/A

What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

Prefix: N/A Last Name, First Name: N/A

Title: N/A Credential: NA

Provide a brief description of the need for a co-permittee: N/A

C. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of Administrative Report 1.0. ATTACHMENT No. 1

Section 4. Application Contact Information (Instructions Page 27)

This is the person(s) TCEQ will contact if additional information is needed about this application. Provide a contact for administrative questions and technical questions.

A. Prefix: Mr. Last Name, First Name: Blodgett, James

Title: General Manager Credential: Click to enter text.

Organization Name: East Cedar Creek Fresh Water Supply District

Mailing Address: P.O. Box 309 City, State, Zip Code: Mabank, TX 75147

Phone No.: 903.887.7103 E-mail Address: genmgr@eastcedarcreek.net

Check one or both: ☒ Administrative Contact ☐ Technical Contact

B. Prefix: Ms. Last Name, First Name: West, Siglinda

Title: Regulatory Compliance Specialist Credential: Click to enter text.

Organization Name: KSA Engineers

Mailing Address: 6781 Oak Hill Blvd. City, State, Zip Code: Tyler, TX 75703

Phone No.: 903.581.8141 E-mail Address: swest@ksaeng.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

Section 5. Permit Contact Information (Instructions Page 27)

Provide the names and contact information for two individuals that can be contacted throughout the permit term.

A. Prefix: Ms. Last Name, First Name: West, Siglinda

Title: Regulatory Compliance Specialist Credential: Click to enter text.

Organization Name: KSA Engineers

Mailing Address: 6781 Oak Hill Blvd. City, State, Zip Code: Tyler, TX 75703

Phone No.: 903.581.8141 E-mail Address: swest@ksaeng.com

B. Prefix: Mr. Last Name, First Name: Blodgett, James

Title: General Manager Credential: Click to enter text.

Organization Name: East Cedar Creek Fresh Water Supply District

Mailing Address: P.O. Box 309 City, State, Zip Code: Mabank, TX 75147

Phone No.: 903.887.7103 E-mail Address: genmgr@eastcedarcreek.net

Section 6. Billing Contact Information (Instructions Page 27)

The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits ***in effect on September 1 of each year.*** The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (using form TCEQ-20029).

Prefix: Mr. Last Name, First Name: Blodgett, James

Title: General Manager Credential: Click to enter text.

Organization Name: East Cedar Creek Fresh Water Supply District

Mailing Address: P.O. Box 309 City, State, Zip Code: Mabank, TX 75147

Phone No.: 903.877.7103 E-mail Address: genmgr@eastcedarcreek.net

Section 7. DMR/MER Contact Information (Instructions Page 27)

Provide the name and complete mailing address of the person delegated to receive and submit Discharge Monitoring Reports (DMR) (EPA 3320-1) or maintain Monthly Effluent Reports (MER).

Prefix: Mr. Last Name, First Name: Blodgett, James

Title: General Manager Credential: Click to enter text.

Organization Name: East Cedar Creek Fresh Water Supply District

Mailing Address: P.O. Box 309 City, State, Zip Code: Mabank, TX 75147

Phone No.: 903.877.7103 E-mail Address: genmgr@eastcedarcreek.net

Section 8. Public Notice Information (Instructions Page 27)

A. Individual Publishing the Notices

Prefix: Ms. Last Name, First Name: West Siglinda

Title: Regulatory Compliance Specialist Credential: Click to enter text.

Organization Name: KSA Engineers

Mailing Address: 6781 Oak Hill Blvd. City, State, Zip Code: Tyler, TX 75703

Phone No.: 903.581.8141 E-mail Address: swest@ksaeng.com

B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

☒ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Mr. Last Name, First Name: Blodgett, James

Title: General Manager Credential: Click to enter text.

Organization Name: East Cedar Creek Fresh Water Supply District

Mailing Address: P.O. Box 309 City, State, Zip Code: Mabank, TX 75147

Phone No.: 903.887.7103 E-mail Address: genmgr@eastcedarcreek.net

D. Public Viewing Information

If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: East Cedar Creek FWSD Office

Location within the building: Lobby

Physical Address of Building: 115 Hammer Road

City: Gun Barrel City County: Henderson

Contact (Last Name, First Name): Mr. James Blodgett

Phone No.: 903.887.7103 Ext.: Click to enter text.

E. Bilingual Notice Requirements

This information **is required** for **new, major amendment, minor amendment or minor modification, and renewal** applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

   ☒ Yes ☐ No

   If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

   ☒ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?

   ☐ Yes ☒ No

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?

   ☐ Yes ☒ No

5. If the answer is **yes** to **question 1, 2, 3, or 4**, public notices in an alternative language are required. Which language is required by the bilingual program? Click to enter text.

F. Summary of Application in Plain Language Template

Complete the F. Summary of Application in Plain Language Template (TCEQ Form 20972), also known as the plain language summary or PLS, and include as an attachment.

Attachment: No.2

G. Public Involvement Plan Form

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a **new permit or major amendment to a permit** and include as an attachment.

Attachment: No. 3

Section 9. Regulated Entity and Permitted Site Information (Instructions Page 29)

A. If the site is currently regulated by TCEQ, provide the Regulated Entity Number (RN) issued to this site. **RN** 101612349

Search the TCEQ's Central Registry at http://www15.tceq.texas.gov/crpub/ to determine if the site is currently regulated by TCEQ.

B. Name of project or site (the name known by the community where located):

South Wastewater Treatment Plant

C. Owner of treatment facility: East Cedar Creek Fresh Water Supply District

Ownership of Facility: ☒ Public ☐ Private ☐ Both ☐ Federal

D. Owner of land where treatment facility is or will be:

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: **East Cedar Creek Fresh Water Supply District**

Mailing Address: P.O. Box 309 City, State, Zip Code: Mabank, TX 75147

Phone No.: 903.887.7103 E-mail Address: genmgr@eastcedarcrek.net

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: NOT APPLICABLE

E. Owner of effluent disposal site:

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: **East Cedar Creek Fresh Water Supply District**

Mailing Address: P.O. Box 309 City, State, Zip Code: Mabank, TX 75147

Phone No.: 903.887.7103 E-mail Address: genmgr@eastcedarcreek.net

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: NOT APPLICABLE

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant)::

Prefix: N/A Last Name, First Name: N/A

Title: N/A Credential: N/A

Organization Name: N/A

Mailing Address: N/A City, State, Zip Code: N/A

Phone No.: N/A E-mail Address: N/A

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☒ Yes ☐ No

If **no, or a new permit application**, please give an accurate description:

Click to enter text.

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☒ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

SURFACE IRRIGATION SITE

City nearest the outfall(s): Gun Barrell City

County in which the outfalls(s) is/are located: Henderson

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☐ Yes ☒ No

If **yes**, indicate by a check mark if:

☐ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: NOT APPLICABLE

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: N/A

Section 11. TLAP Disposal Information (Instructions Page 32)

A. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☒ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the disposal site location:

Click to enter text.

B. City nearest the disposal site: Gun Barrell City

C. County in which the disposal site is located: Henderson

D. For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

Effluent route is from the plant via piping to the irrigation area and sprayed on the site via irrigation sprinklers.

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: East Cedar Creek Reservoir

Section 12. Miscellaneous Information (Instructions Page 32)

A. Is the facility located on or does the treated effluent cross American Indian Land?

☐ Yes ☒ No

B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

NOT APPLICABLE

C. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

☐ Yes ☒ No

If yes, list each person formerly employed by the TCEQ who represented your company and was paid for service regarding the application: NOT APPLICABLE

D. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

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

Account number: NOT APPLICABLE

Amount past due: NOTAPPLICABLE

E. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

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

Enforcement order number: NOT APPLICABLE

Amount past due: NOT APPLICABLE

Section 13. Attachments (Instructions Page 33)

Indicate which attachments are included with the Administrative Report. Check all that apply:

☐ Lease agreement or deed recorded easement, if the land where the treatment facility is located or the effluent disposal site are not owned by the applicant or co-applicant.

☒ Original full-size USGS Topographic Map with the following information:

- Applicant's property boundary
- Treatment facility boundary
- Labeled point of discharge for each discharge point (TPDES only)
- Highlighted discharge route for each discharge point (TPDES only)
- Onsite sewage sludge disposal site (if applicable)
- Effluent disposal site boundaries (TLAP only)
- New and future construction (if applicable)
- 1 mile radius information
- 3 miles downstream information (TPDES only)
- All ponds.

☐ Attachment 1 for Individuals as co-applicants

☒ Other Attachments. Please specify: Click to enter text.

Section 14. Signature Page (Instructions Page 34)

If co-applicants are necessary, each entity must submit an original, separate signature page.

Permit Number: WQ0013874001

Applicant: EAST CEDAR CREEK FRESH WATER SUPPLY DISTRICT

Certification:

I 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.

I further certify that I am authorized under 30 Texas Administrative Code § 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): JAMES BLODGETT

Signatory title: GENERAL MANAGER

Signature: James E Blodgett Jr. Date: 5-15-25

(Use blue ink)

Subscribed and Sworn to before me by the said James E Blodgett Jr.

on this 15th day of May, 20 25.

My commission expires on the 10th day of November, 20 26.

Angela Y. Crowsey

Notary Public

[SEAL]

ANGELA CROWSEY
Notary Public, State of Texas
Comm. Expires 11-10-2026
Notary ID 124386949

Henderson

County, Texas

DOMESTIC WASTEWATER PERMIT APPLICATION ADMINISTRATIVE REPORT 1.0

The following information is required for new and amendment applications. NOT APPLICABLE

Section 1. Affected Landowner Information (Instructions Page 36)

A. Indicate by a check mark that the landowners map or drawing, with scale, includes the following information, as applicable:

- ☐ The applicant's property boundaries
- ☐ The facility site boundaries within the applicant's property boundaries
- ☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone
- ☐ The property boundaries of all landowners surrounding the applicant's property (Note: if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
- ☐ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream
- ☐ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge
- ☐ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides
- ☐ The boundaries of the effluent disposal site (for example, irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property
- ☐ The property boundaries of all landowners surrounding the effluent disposal site
- ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners surrounding the applicant's property boundaries where the sewage sludge land application site is located
- ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (for example, sludge surface disposal site or sludge monofill) is located

B. ☐ Indicate by a check mark that a separate list with the landowners' names and mailing addresses cross-referenced to the landowner's map has been provided.

C. ☐ Indicate by a check mark that the landowners list has also been provided as mailing labels in electronic format (Avery 5160).

D. Provide the source of the landowners' names and mailing addresses: Click to enter text.

E. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?

☐ Yes ☐ No

If **yes**, provide the location and foreseeable impacts and effects this application has on the land(s):

NOT APPLICABLE

Section 2. Original Photographs (Instructions Page 38)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

- ☐ At least one original photograph of the new or expanded treatment unit location
- ☐ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- ☐ At least one photograph of the existing/proposed effluent disposal site
- ☐ A plot plan or map showing the location and direction of each photograph

Section 3. Buffer Zone Map (Instructions Page 38)

A. Buffer zone map. Provide a buffer zone map on 8.5 x 11-inch paper with all of the following information. The applicant's property line and the buffer zone line may be distinguished by using dashes or symbols and appropriate labels.

- The applicant's property boundary;
- The required buffer zone; and
- Each treatment unit; and
- The distance from each treatment unit to the property boundaries.

B. Buffer zone compliance method. Indicate how the buffer zone requirements will be met. Check all that apply.

- ☐ Ownership
- ☐ Restrictive easement
- ☐ Nuisance odor control
- ☐ Variance

C. Unsuitable site characteristics. Does the facility comply with the requirements regarding unsuitable site characteristic found in 30 TAC § 309.13(a) through (d)?

☐ Yes ☐ No

DOMESTIC WASTEWATER PERMIT APPLICATION

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES permit applications only. Complete and attach the Supplemental Permit information Form (SPIF) (TCEQ Form 20971).

Attachment: No. 4

ATTACHMENT 1

INDIVIDUAL INFORMATION

Section 1. Individual Information (Instructions Page 41)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., Miss): N/A

Full legal name (Last Name, First Name, Middle Initial): N/A

Driver's License or State Identification Number: N/A

Date of Birth: N/A

Mailing Address: N/A

City, State, and Zip Code: N/A

Phone Number: N/A Fax Number: N/A

E-mail Address: N/A

CN: N/A

For Commission Use Only:
Customer Number:
Regulated Entity Number:
Permit Number:

DOMESTIC WASTEWATER PERMIT APPLICATION CHECKLIST OF COMMON DEFICIENCIES

Below is a list of common deficiencies found during the administrative review of domestic wastewater permit applications. To ensure the timely processing of this application, please review the items below and indicate by checking Yes that each item is complete and in accordance applicable rules at 30 TAC Chapters 21, 281, and 305. If an item is not required this application, indicate by checking N/A where appropriate. Please do not submit the application until the items below have been addressed.

Core Data Form (TCEQ Form No. 10400) ☒ Yes
(Required for all application types. Must be completed in its entirety and signed. Note: Form may be signed by applicant representative.)

Correct and Current Industrial Wastewater Permit Application Forms ☒ Yes
(TCEQ Form Nos. 10053 and 10054. Version dated 6/25/2018 or later.)

Water Quality Permit Payment Submittal Form (Page 19) ☒ Yes
(Original payment sent to TCEQ Revenue Section. See instructions for mailing address.)

7.5 Minute USGS Quadrangle Topographic Map Attached ☒ Yes
(Full-size map if seeking "New" permit. 8 ½ x 11 acceptable for Renewals and Amendments)

Current/Non-Expired, Executed Lease Agreement or Easement ☒ N/A ☐ Yes

Landowners Map ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Things to Know:

- All the items shown on the map must be labeled.
- The applicant's complete property boundaries must be delineated which includes boundaries of contiguous property owned by the applicant.
- The applicant cannot be its own adjacent landowner. You must identify the landowners immediately adjacent to their property, regardless of how far they are from the actual facility.
- If the applicant's property is adjacent to a road, creek, or stream, the landowners on the opposite side must be identified. Although the properties are not adjacent to applicant's property boundary, they are considered potentially affected landowners. If the adjacent road is a divided highway as identified on the USGS topographic map, the applicant does not have to identify the landowners on the opposite side of the highway.

Landowners Labels and Cross Reference List ☒ N/A ☐ Yes
(See instructions for landowner requirements)

Electronic Application Submittal ☒ Yes
(See application submittal requirements on page 23 of the instructions.)

Original signature per 30 TAC § 305.44 – Blue Ink Preferred ☒ Yes
(If signature page is not signed by an elected official or principle executive officer, a copy of signature authority/delegation letter must be attached)

Summary of Application (in Plain Language) ☒ Yes

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

For any questions about this form, please contact the Domestic Wastewater Permitting Team at 512-239-4671.

The following information is required for all renewal, new, and amendment applications.

Section 1. Permitted or Proposed Flows (Instructions Page 42)

A. Existing/Interim I Phase

Design Flow (MGD): 0.196

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

B. Interim II Phase

Design Flow (MGD): N/A

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

C. Final Phase

Design Flow (MGD): 0.196

2-Hr Peak Flow (MGD): N/A

Estimated construction start date: N/A

Estimated waste disposal start date: N/A

D. Current Operating Phase

Provide the startup date of the facility: EXISTING

Section 2. Treatment Process (Instructions Page 42)

A. Current Operating Phase

Provide a detailed description of the treatment process. **Include the type of treatment plant, mode of operation, and all treatment units.** Start with the plant's head works and

finish with the point of discharge. Include all sludge processing and drying units. **If more than one phase exists or is proposed, a description of *each phase* must be provided.**

Treatment consists of one existing and one proposed treatment train. The existing treatment train consists of an activated sludge process in extended aeration mode. The treatment units include an aeration basin, clarifier, two aerobic digesters, and two chlorine contact chambers. The proposed treatment train includes a new aeration basin, clarifier, sludge digester, and chlorine contact chamber. The effluent flows to a holding pond before being land applied. Sludge is sent to the District's North Wastewater Treatment Plant for processing.

B. Treatment Units

In Table 1.0(1), provide the treatment unit type, the number of units, and dimensions (length, width, depth) **of each treatment unit, accounting for *all* phases of operation.**

Table 1.0(1) - Treatment Units

Treatment Unit Type	Number of Units	Dimensions (L x W x D)
SEE ATTCHMENT No. 8		

C. Process Flow Diagram

Provide flow diagrams for the existing facilities and **each** proposed phase of construction.

Attachment: No. 9

Section 3. Site Information and Drawing (Instructions Page 43)

Provide the TPDES discharge outfall latitude and longitude. Enter N/A if not applicable.

- Latitude: N/A
- Longitude: N/A

Provide the TLAP disposal site latitude and longitude. Enter N/A if not applicable.

- Latitude: 32, 17, 25
- Longitude: 96, 06, 06

Provide a site drawing for the facility that shows the following:

- The boundaries of the treatment facility;
- The boundaries of the area served by the treatment facility;
- If land disposal of effluent, the boundaries of the disposal site and all storage/holding ponds; and
- If sludge disposal is authorized in the permit, the boundaries of the land application or disposal site.

Attachment: No. 10
Provide the name **and** a description of the area served by the treatment facility.

East Cedar Creek FWSD Certificated Service Area..
Service Area Attachment No. 11

Collection System Information **for wastewater TPDES permits only**: Provide information for each **uniquely owned** collection system, existing and new, served by this facility, including satellite collection systems. **Please see the instructions for a detailed explanation and examples.**

Collection System Information

Collection System Name	Owner Name	Owner Type	Population Served
NOT APPLICABLE		Choose an item.	
NOT APPLICABLE		Choose an item.	
NOT APPLICABLE		Choose an item.	
NOT APPLICABLE		Choose an item.	

Section 4. Unbuilt Phases (Instructions Page 44)

Is the application for a renewal of a permit that contains an unbuilt phase or phases?

☐ Yes ☒ No

If yes, does the existing permit contain a phase that has not been constructed **within five years** of being authorized by the TCEQ?

☐ Yes ☐ No

If yes, provide a detailed discussion regarding the continued need for the unbuilt phase. **Failure to provide sufficient justification may result in the Executive Director recommending denial of the unbuilt phase or phases.**

NOT APPLICABLE

Section 5. Closure Plans (Instructions Page 44)

Have any treatment units been taken out of service permanently, or will any units be taken out of service in the next five years?

☐ Yes ☒ No

If yes, was a closure plan submitted to the TCEQ?

☐ Yes ☐ No

If yes, provide a brief description of the closure and the date of plan approval.

NOT APPLICBALE

Section 6. Permit Specific Requirements (Instructions Page 44)

For applicants with an existing permit, check the Other Requirements or Special Provisions of the permit.

A. Summary transmittal

Have plans and specifications been approved for the existing facilities and each proposed phase?

☒ Yes ☐ No

If yes, provide the date(s) of approval for each phase: Click to enter text.

Provide information, including dates, on any actions taken to meet a *requirement or provision* pertaining to the submission of a summary transmittal letter. **Provide a copy of an approval letter from the TCEQ, if applicable.**

NOT APPLICABLE

B. Buffer zones

Have the buffer zone requirements been met?

☒ Yes ☐ No

Provide information below, including dates, on any actions taken to meet the conditions of the buffer zone. If available, provide any new documentation relevant to maintaining the buffer zones.

NOT APPLICABLE

C. Other actions required by the current permit

Does the *Other Requirements* or *Special Provisions* section in the existing permit require submission of any other information or other required actions? Examples include Notification of Completion, progress reports, soil monitoring data, etc.

☐ Yes ☒ No

If yes, provide information below on the status of any actions taken to meet the conditions of an *Other Requirement* or *Special Provision.*

NONE OF THE SPECIAL PROVISIONS APPLY AT THIS TIME

D. Grit and grease treatment

1. Acceptance of grit and grease waste

Does the facility have a grit and/or grease processing facility onsite that treats and decants or accepts transported loads of grit and grease waste that are discharged directly to the wastewater treatment plant prior to any treatment?

☐ Yes ☒ No

If No, stop here and continue with Subsection E. Stormwater Management.

2. Grit and grease processing

Describe below how the grit and grease waste is treated at the facility. In your description, include how and where the grit and grease is introduced to the treatment works and how it is separated or processed. Provide a flow diagram showing how grit and grease is processed at the facility.

NOT APPLICABLE

3. Grit disposal

Does the facility have a Municipal Solid Waste (MSW) registration or permit for grit disposal?

☐ Yes ☒ No

If No, contact the TCEQ Municipal Solid Waste team at 512-239-2335. Note: A registration or permit is required for grit disposal. Grit shall not be combined with treatment plant sludge. See the instruction booklet for additional information on grit disposal requirements and restrictions.

Describe the method of grit disposal.

NOT APPLICABLE

4. *Grease and decanted liquid disposal*

Note: A registration or permit is required for grease disposal. Grease shall not be combined with treatment plant sludge. For more information, contact the TCEQ Municipal Solid Waste team at 512-239-2335.

Describe how the decant and grease are treated and disposed of after grit separation.

NOT APPLICABLE

E. Stormwater management

1. *Applicability*

Does the facility have a design flow of 1.0 MGD or greater in any phase?

☐ Yes ☒ No

Does the facility have an approved pretreatment program, under 40 CFR Part 403?

☐ Yes ☒ No

If no to both of the above, then skip to Subsection F, Other Wastes Received.

2. *MSGP coverage*

Is the stormwater runoff from the WWTP and dedicated lands for sewage disposal currently permitted under the TPDES Multi-Sector General Permit (MSGP), TXR050000?

☐ Yes ☒ No

If yes, please provide MSGP Authorization Number and skip to Subsection F, Other Wastes Received:

TXR05 NOT APPLICABLE or TXRNE NOT APPLICABLE

If no, do you intend to seek coverage under TXR050000?

☐ Yes ☒ No

3. *Conditional exclusion*

Alternatively, do you intend to apply for a conditional exclusion from permitting based TXR050000 (Multi Sector General Permit) Part II B.2 or TXR050000 (Multi Sector General Permit) Part V, Sector T 3(b)?

☐ Yes ☒ No

If yes, please explain below then proceed to Subsection F, Other Wastes Received:

NOT APPLICABLE

4. ***Existing coverage in individual permit***

Is your stormwater discharge currently permitted through this individual TPDES or TLAP permit?

☐ Yes ☒ No

If yes, provide a description of stormwater runoff management practices at the site that are authorized in the wastewater permit then skip to Subsection F, Other Wastes Received.

NOT APPLICABLE

5. ***Zero stormwater discharge***

Do you intend to have no discharge of stormwater via use of evaporation or other means?

☐ Yes ☒ No

If yes, explain below then skip to Subsection F. Other Wastes Received.

NOT APPLICABLE

Note: If there is a potential to discharge any stormwater to surface water in the state as the result of any storm event, then permit coverage is required under the MSGP or an individual discharge permit. This requirement applies to all areas of facilities with treatment plants or systems that treat, store, recycle, or reclaim domestic sewage, wastewater or sewage sludge (including dedicated lands for sewage sludge disposal located within the onsite property boundaries) that meet the applicability criteria of above. You have the option of obtaining coverage under the MSGP for direct discharges, (recommended), or obtaining coverage under this individual permit.

6. ***Request for coverage in individual permit***

Are you requesting coverage of stormwater discharges associated with your treatment plant under this individual permit?

☐ Yes ☒ No

If yes, provide a description of stormwater runoff management practices at the site for which you are requesting authorization in this individual wastewater permit and describe whether you intend to comingle this discharge with your treated effluent or discharge it via a separate dedicated stormwater outfall. Please also indicate if you

intend to divert stormwater to the treatment plant headworks and indirectly discharge it to water in the state.

NOT APPLICABLE

Note: Direct stormwater discharges to waters in the state authorized through this individual permit will require the development and implementation of a stormwater pollution prevention plan (SWPPP) and will be subject to additional monitoring and reporting requirements. Indirect discharges of stormwater via headworks recycling will require compliance with all individual permit requirements including 2-hour peak flow limitations. All stormwater discharge authorization requests will require additional information during the technical review of your application.

F. Discharges to the Lake Houston Watershed

Does the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If yes, attach a Sewage Sludge Solids Management Plan. See Example 5 in the instructions.
NOT APPLICABLE

G. Other wastes received including sludge from other WWTPs and septic waste

1. *Acceptance of sludge from other WWTPs*

Does or will the facility accept sludge from other treatment plants at the facility site?

☐ Yes ☒ No

If yes, attach sewage sludge solids management plan. See Example 5 of instructions.

In addition, provide the date the plant started or is anticipated to start accepting sludge, an estimate of monthly sludge acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the sludge, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

NOT APPLICABLE

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

2. *Acceptance of septic waste*

Is the facility accepting or will it accept septic waste?

☐ Yes ☒ No

If yes, does the facility have a Type V processing unit?

☐ Yes ☒ No

If yes, does the unit have a Municipal Solid Waste permit?

☐ Yes ☒ No

If yes to any of the above, provide the date the plant started or is anticipated to start accepting septic waste, an estimate of monthly septic waste acceptance (gallons or millions of gallons), an estimate of the BOD_5 concentration of the septic waste, and the design BOD_5 concentration of the influent from the collection system. Also note if this information has or has not changed since the last permit action.

NOT APPLICABLE

Note: Permits that accept sludge from other wastewater treatment plants may be required to have influent flow and organic loading monitoring.

3. ***Acceptance of other wastes (not including septic, grease, grit, or RCRA, CERCLA or as discharged by IUs listed in Worksheet 6)***

Is or will the facility accept wastes that are not domestic in nature excluding the categories listed above?

☐ Yes ☒ No

If yes, provide the date that the plant started accepting the waste, an estimate how much waste is accepted on a monthly basis (gallons or millions of gallons), a description of the entities generating the waste, and any distinguishing chemical or other physical characteristic of the waste. Also note if this information has or has not changed since the last permit action.

NOT APPLICABLE

Section 7. Pollutant Analysis of Treated Effluent (Instructions Page 49)

Is the facility in operation?

☒ Yes ☐ No

If no, this section is not applicable. Proceed to Section 8.

If yes, provide effluent analysis data for the listed pollutants. ***Wastewater treatment facilities*** complete Table 1.0(2). ***Water treatment facilities*** discharging filter backwash water, complete Table 1.0(3). Provide copies of the laboratory results sheets. **These tables are not applicable for a minor amendment without renewal.** See the instructions for guidance.

Note: The sample date must be within 1 year of application submission.

Table1.0(2) – Pollutant Analysis for Wastewater Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
$CBOD_5$, mg/l	4.5				4/8/25 13:30 Sample 2 - Effluent
Total Suspended Solids, mg/l	--------				
Ammonia Nitrogen, mg/l	1.83				4/8/25 13:30 Sample 2 - Effluent
Nitrate Nitrogen, mg/l	3.31				4/8/25 13:30 Sample 2 - Effluent
Total Kjeldahl Nitrogen, mg/l	4.0				4/8/25 13:30 Sample 2 - Effluent
Sulfate, mg/l	39.2				4/8/25 13:30 Sample 2 - Effluent
Chloride, mg/l	36.5				4/8/25 13:30 Sample 2 - Effluent
Total Phosphorus, mg/l	0.24				4/8/25 13:30 Sample 2 - Effluent
pH, standard units	7.27				4/8/25 13:30 Sample 2 - Effluent
Dissolved Oxygen*, mg/l	-------				
Chlorine Residual, mg/l					
E.coli (CFU/100ml) freshwater	33				4/8/25 13:30 Sample 2 - Effluent
Entercocci (CFU/100ml) saltwater	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	210				4/8/25 13:30 Sample 2 - Effluent
Electrical Conductivity, µmohs/cm, †	366				4/8/25 13:30 Sample 2 - Effluent
Oil & Grease, mg/l	--------				
Alkalinity ($CaCO_3$)*, mg/l	N/A	N/A	N/A	N/A	N/A

*TPDES permits only
†TLAP permits only

Table1.0(3) – Pollutant Analysis for Water Treatment Facilities

Pollutant	Average Conc.	Max Conc.	No. of Samples	Sample Type	Sample Date/Time
Total Suspended Solids, mg/l	N/A	N/A	N/A	N/A	N/A
Total Dissolved Solids, mg/l	N/A	N/A	N/A	N/A	N/A
pH, standard units	N/A	N/A	N/A	N/A	N/A
Fluoride, mg/l	N/A	N/A	N/A	N/A	N/A
Aluminum, mg/l	N/A	N/A	N/A	N/A	N/A
Alkalinity ($CaCO_3$), mg/l	N/A	N/A	N/A	N/A	N/A

Section 8. Facility Operator (Instructions Page 49)

Facility Operator Name: James Blodgett, Jr.

Facility Operator's License Classification and Level: WW-B

Facility Operator's License Number: WW0035286

Section 9. Sludge and Biosolids Management and Disposal (Instructions Page 50)

A. WWTP's Sewage Sludge or Biosolids Management Facility Type

Check all that apply. See instructions for guidance

- ☐ Design flow>= 1 MGD
- ☐ Serves >= 10,000 people
- ☐ Class I Sludge Management Facility (per 40 CFR § 503.9)
- ☒ Biosolids generator
- ☐ Biosolids end user - land application (onsite)
- ☐ Biosolids end user - surface disposal (onsite)
- ☐ Biosolids end user - incinerator (onsite)

B. WWTP's Sewage Sludge or Biosolids Treatment Process

Check all that apply. See instructions for guidance.

- ☒ Aerobic Digestion
- ☐ Air Drying (or sludge drying beds)
- ☐ Lower Temperature Composting
- ☐ Lime Stabilization
- ☐ Higher Temperature Composting
- ☐ Heat Drying
- ☐ Thermophilic Aerobic Digestion
- ☐ Beta Ray Irradiation
- ☐ Gamma Ray Irradiation
- ☐ Pasteurization
- ☐ Preliminary Operation (e.g. grinding, de-gritting, blending)
- ☐ Thickening (e.g. gravity thickening, centrifugation, filter press, vacuum filter)
- ☐ Sludge Lagoon
- ☐ Temporary Storage (< 2 years)
- ☐ Long Term Storage (>= 2 years)
- ☐ Methane or Biogas Recovery
- ☒ Other Treatment Process: Biological treatment and spray irrigation of effluent

C. Sewage Sludge or Biosolids Management

Provide information on the *intended* sewage sludge or biosolids management practice. Do not enter every management practice that you want authorized in the permit, as the

permit will authorize all sewage sludge or biosolids management practices listed in the instructions. Rather indicate the management practice the facility plans to use.

Biosolids Management

Management Practice	Handler or Preparer Type	Bulk or Bag Container	Amount (dry metric tons)	Pathogen Reduction Options	Vector Attraction Reduction Option
Other	Off-site Third-Party Handler or Preparer	Not Applicable		Class B: Density of Fecal Coliform	N/A: Trasporrted to another facility for further processing
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.
Choose an item.	Choose an item.	Choose an item.		Choose an item.	Choose an item.

If "Other" is selected for Management Practice, please explain (e.g. monofill or transport to another WWTP): Click to enter text.

D. Disposal site

Disposal site name: East Cedar Creek FWSD North WWTP

TCEQ permit or registration number: WQ0011858001

County where disposal site is located: Henderson

E. Transportation method

Method of transportation (truck, train, pipe, other): Truck

Name of the hauler: East Cedar Creek FWSD/ Terra Renewal

Hauler registration number: Terra- 23777/ ECCFWSD 22061

Sludge is transported as a:

Liquid ☒ semi-liquid ☐ semi-solid ☐ solid ☐

Section 10. Permit Authorization for Sewage Sludge Disposal (Instructions Page 52)

A. Beneficial use authorization

Does the existing permit include authorization for land application of biosolids for beneficial use?

☐ Yes ☒ No

If yes, are you requesting to continue this authorization to land apply biosolids for beneficial use?

☐ Yes ☐ No

If yes, is the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451)** attached to this permit application (see the instructions for details)?

☐ Yes ☐ No

B. Sludge processing authorization

Does the existing permit include authorization for any of the following sludge processing, storage or disposal options?

Sludge Composting	☐ Yes	☒ No
Marketing and Distribution of Biosolids	☐ Yes	☒ No
Sludge Surface Disposal or Sludge Monofill	☐ Yes	☒ No
Temporary storage in sludge lagoons	☐ Yes	☒ No

If yes to any of the above sludge options and the applicant is requesting to continue this authorization, is the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056)** attached to this permit application?

☐ Yes ☒ No

Section 11. Sewage Sludge Lagoons (Instructions Page 53)

Does this facility include sewage sludge lagoons?

☐ Yes ☒ No

If yes, complete the remainder of this section. If no, proceed to Section 12.

A. Location information

The following maps are required to be submitted as part of the application. For each map, provide the Attachment Number.

- Original General Highway (County) Map:

  Attachment: N/A
- USDA Natural Resources Conservation Service Soil Map:

  Attachment: N/A
- Federal Emergency Management Map:

  Attachment: N/A
- Site map:

  Attachment: N/A

Discuss in a description if any of the following exist within the lagoon area. Check all that apply.

☐ Overlap a designated 100-year frequency flood plain

☐ Soils with flooding classification

☐ Overlap an unstable area

☐ Wetlands

☐ Located less than 60 meters from a fault

☐ None of the above

Attachment: Click to enter text.

If a portion of the lagoon(s) is located within the 100-year frequency flood plain, provide the protective measures to be utilized including type and size of protective structures:

NOT APPLICABLE

B. Temporary storage information

Provide the results for the pollutant screening of sludge lagoons. These results are in addition to pollutant results in *Section 7 of Technical Report 1.0.*

Nitrate Nitrogen, mg/kg: N/A

Total Kjeldahl Nitrogen, mg/kg: N/A

Total Nitrogen (=nitrate nitrogen + TKN), mg/kg: N/A

Phosphorus, mg/kg: N/A

Potassium, mg/kg: N/A

pH, standard units: N/A

Ammonia Nitrogen mg/kg: N/A

Arsenic: N/A

Cadmium: N/A

Chromium: N/A

Copper: N/A

Lead: N/A

Mercury: N/A

Molybdenum: N/A

Nickel: N/A

Selenium: N/A

Zinc: N/A

Total PCBs: N/A

Provide the following information:

Volume and frequency of sludge to the lagoon(s): N/A

Total dry tons stored in the lagoons(s) per 365-day period: N/A

Total dry tons stored in the lagoons(s) over the life of the unit: N/A

C. Liner information

Does the active/proposed sludge lagoon(s) have a liner with a maximum hydraulic conductivity of $1x10^{-7}$ cm/sec?

☐ Yes ☐ No

If yes, describe the liner below. Please note that a liner is required.

NOT APPLICABLE

D. Site development plan

Provide a detailed description of the methods used to deposit sludge in the lagoon(s):

NOT APPLICABLE

Attach the following documents to the application.

- Plan view and cross-section of the sludge lagoon(s)

  Attachment: N/A
- Copy of the closure plan

  Attachment: N/A
- Copy of deed recordation for the site

  Attachment: N/A
- Size of the sludge lagoon(s) in surface acres and capacity in cubic feet and gallons

  Attachment: N/A
- Description of the method of controlling infiltration of groundwater and surface water from entering the site

  Attachment: N/A
- Procedures to prevent the occurrence of nuisance conditions

  Attachment: N/A

E. Groundwater monitoring

Is groundwater monitoring currently conducted at this site, or are any wells available for groundwater monitoring, or are groundwater monitoring data otherwise available for the sludge lagoon(s)?

☐ Yes ☒ No

If groundwater monitoring data are available, provide a copy. Provide a profile of soil types encountered down to the groundwater table and the depth to the shallowest groundwater as a separate attachment.

Attachment: NOT APPLICABLE

Section 12. Authorizations/Compliance/Enforcement (Instructions Page 54)

A. Additional authorizations

Does the permittee have additional authorizations for this facility, such as reuse authorization, sludge permit, etc?

☐ Yes ☒ No

If yes, provide the TCEQ authorization number and description of the authorization:

NOT APPLICABLE

B. Permittee enforcement status

Is the permittee currently under enforcement for this facility?

☐ Yes ☒ No

Is the permittee required to meet an implementation schedule for compliance or enforcement?

☐ Yes ☒ No

If yes to either question, provide a brief summary of the enforcement, the implementation schedule, and the current status:

NOT APPLICABLE

Section 13. RCRA/CERCLA Wastes (Instructions Page 55)

A. RCRA hazardous wastes

Has the facility received in the past three years, does it currently receive, or will it receive RCRA hazardous waste?

☐ Yes ☒ No

B. Remediation activity wastewater

Has the facility received in the past three years, does it currently receive, or will it receive CERCLA wastewater, RCRA remediation/corrective action wastewater or other remediation activity wastewater?

☐ Yes ☒ No

C. Details about wastes received

If yes to either Subsection A or B above, provide detailed information concerning these wastes with the application.

Attachment: NOT APPLICABLE

Section 14. Laboratory Accreditation (Instructions Page 55)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
  - periodically inspected by the TCEQ; or
  - located in another state and is accredited or inspected by that state; or
  - performing work for another company with a unit located in the same site; or
  - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review 30 TAC Chapter 25 for specific requirements.

The following certification statement shall be signed and submitted with every application. See the Signature Page section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

I certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.*

Printed Name: JAMES BLOGETT

Title: GENERAL MANAGER

Signature: James E Blogett

Date: 6-15-25

DOMESTIC WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.1

The following information is required for new and amendment major applications.

Section 1. Justification for Permit (Instructions Page 56)

A. Justification of permit need

Provide a detailed discussion regarding the need for any phase(s) not currently permitted. Failure to provide sufficient justification may result in the Executive Director recommending denial of the proposed phase(s) or permit.

NOT APPLICABLE

B. Regionalization of facilities

For additional guidance, please review TCEQ's Regionalization Policy for Wastewater Treatment[1].

Provide the following information concerning the potential for regionalization of domestic wastewater treatment facilities:

1. Municipally incorporated areas

If the applicant is a city, then Item 1 is not applicable. Proceed to Item 2 Utility CCN areas.

Is any portion of the proposed service area located in an incorporated city?

☐ Yes ☐ No ☒ Not Applicable

If yes, within the city limits of: Click to enter text.

If yes, attach correspondence from the city.

Attachment: NOT APPLICABLE

If consent to provide service is available from the city, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the city versus the cost of the proposed facility or expansion attached.

Attachment: NOT APPLICABLE

2. Utility CCN areas

Is any portion of the proposed service area located inside another utility's CCN area?

☐ Yes ☒ No

[1] https://www.tceq.texas.gov/permitting/wastewater/tceq-regionalization-for-wastewater

If yes, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the CCN facilities versus the cost of the proposed facility or expansion.

Attachment: NOT APPLICABLE

3. ***Nearby WWTPs or collection systems***

Are there any domestic permitted wastewater treatment facilities or collection systems located within a three-mile radius of the proposed facility?

☐ Yes ☐ No

If yes, attach a list of these facilities and collection systems that includes each permittee's name and permit number, and an area map showing the location of these facilities and collection systems.

Attachment: NOT APPLICABLE

If yes, attach proof of mailing a request for service to each facility and collection system, the letters requesting service, and correspondence from each facility and collection system.

Attachment: NOT APPLICABLE

If the facility or collection system agrees to provide service, attach a justification for the proposed facility and a cost analysis of expenditures that includes the cost of connecting to the facility or collection system versus the cost of the proposed facility or expansion.

Attachment: NOT APPLICABLE

Section 2. Proposed Organic Loading (Instructions Page 58)

Is this facility in operation?

☒ Yes ☐ No

If no, proceed to Item B, Proposed Organic Loading.

If yes, provide organic loading information in Item A, Current Organic Loading

A. Current organic loading

Facility Design Flow (flow being requested in application): NOT APPLICABLE

Average Influent Organic Strength or BOD_5 Concentration in mg/l: NOT APPLICABLE

Average Influent Loading (lbs/day = total average flow X average BOD_5 conc. X 8.34): NOT APPLICABLE

Provide the source of the average organic strength or BOD_5 concentration.

NOT APPLICABLE

B. Proposed organic loading

This table must be completed if this application is for a facility that is not in operation or if this application is to request an increased flow that will impact organic loading.

Table 1.1(1) – Design Organic Loading

Source	Total Average Flow (MGD)	Influent BOD5 Concentration (mg/l)
Municipality	NOT APPLICABLE	NOT APPLICABLE
Subdivision	NOT APPLICABLE	NOT APPLICABLE
Trailer park - transient	NOT APPLICABLE	NOT APPLICABLE
Mobile home park	NOT APPLICABLE	NOT APPLICABLE
School with cafeteria and showers	NOT APPLICABLE	NOT APPLICABLE
School with cafeteria, no showers	NOT APPLICABLE	NOT APPLICABLE
Recreational park, overnight use	NOT APPLICABLE	NOT APPLICABLE
Recreational park, day use	NOT APPLICABLE	NOT APPLICABLE
Office building or factory	NOT APPLICABLE	NOT APPLICABLE
Motel	NOT APPLICABLE	NOT APPLICABLE
Restaurant	NOT APPLICABLE	NOT APPLICABLE
Hospital	NOT APPLICABLE	NOT APPLICABLE
Nursing home	NOT APPLICABLE	NOT APPLICABLE
Other	NOT APPLICABLE	NOT APPLICABLE
TOTAL FLOW from all sources	NOT APPLICABLE	NOT APPLICABLE
AVERAGE BOD_5 from all sources	NOT APPLICABLE	NOT APPLICABLE

Section 3. Proposed Effluent Quality and Disinfection (Instructions Page 58)

A. Existing/Interim I Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: NOT APPLICABLE

Total Suspended Solids, mg/l: N/A

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: N/A

B. Interim II Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: N/A

Total Suspended Solids, mg/l: N/A

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: N/A

C. Final Phase Design Effluent Quality

Biochemical Oxygen Demand (5-day), mg/l: N/A

Total Suspended Solids, mg/l: N/A

Ammonia Nitrogen, mg/l: N/A

Total Phosphorus, mg/l: N/A

Dissolved Oxygen, mg/l: N/A

Other: N/A

D. Disinfection Method

Identify the proposed method of disinfection.

☐ Chlorine: N/ mg/l after N/A minutes detention time at peak flow

Dechlorination process: N/A

☐ Ultraviolet Light: N/A seconds contact time at peak flow

☐ Other: N/A

Section 4. Design Calculations (Instructions Page 58)

Attach design calculations and plant features for each proposed phase. Example 4 of the instructions includes sample design calculations and plant features.

Attachment: NOT APPLICABLE

Section 5. Facility Site (Instructions Page 59)

A. 100-year floodplain

Will the proposed facilities be located above the 100-year frequency flood level?

☐ Yes ☒ No

If no, describe measures used to protect the facility during a flood event. Include a site map showing the location of the treatment plant within the 100-year frequency flood level. If applicable, provide the size and types of protective structures.

NOT APPLICABLE

Provide the source(s) used to determine 100-year frequency flood plain.

NOT APPLICABLE

For a new or expansion of a facility, will a wetland or part of a wetland be filled?

☐ Yes ☒ No

If yes, has the applicant applied for a US Corps of Engineers 404 Dredge and Fill Permit?

☐ Yes ☒ No

If yes, provide the permit number: NOT APPLICABLE

If no, provide the approximate date you anticipate submitting your application to the Corps: NOT APPLICABLE

B. Wind rose

Attach a wind rose: Click to enter text.

Section 6. Permit Authorization for Sewage Sludge Disposal (Instructions Page 59)

A. Beneficial use authorization

Are you requesting to include authorization to land apply sewage sludge for beneficial use on property located adjacent to the wastewater treatment facility under the wastewater permit?

☐ Yes ☒ No

If yes, attach the completed **Application for Permit for Beneficial Land Use of Sewage Sludge (TCEQ Form No. 10451):** NOT APPLICABLE

B. Sludge processing authorization

Identify the sludge processing, storage or disposal options that will be conducted at the wastewater treatment facility:

☐ Sludge Composting

☐ Marketing and Distribution of sludge

☐ Sludge Surface Disposal or Sludge Monofill

If any of the above, sludge options are selected, attach the completed **Domestic Wastewater Permit Application: Sewage Sludge Technical Report (TCEQ Form No. 10056):** NOT APPLICABLE

Section 7. Sewage Sludge Solids Management Plan (Instructions Page 60)

Attach a solids management plan to the application.

Attachment: NOT APPLICABLE

The sewage sludge solids management plan must contain the following information:

- Treatment units and processes dimensions and capacities

- Solids generated at 100, 75, 50, and 25 percent of design flow
- Mixed liquor suspended solids operating range at design and projected actual flow
- Quantity of solids to be removed and a schedule for solids removal
- Identification and ownership of the ultimate sludge disposal site
- For facultative lagoons, design life calculations, monitoring well locations and depths, and the ultimate disposal method for the sludge from the facultative lagoon

An example of a sewage sludge solids management plan has been included as Example 5 of the instructions.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.0: RECEIVING WATERS

The following information is required for all TPDES permit applications.

Section 1. Domestic Drinking Water Supply (Instructions Page 63)

Is there a surface water intake for domestic drinking water supply located within 5 miles downstream from the point or proposed point of discharge?

☐ Yes ☒ No

If **no**, proceed it Section 2. **If yes**, provide the following:

Owner of the drinking water supply: NOT APPLICABLE

Distance and direction to the intake: NOT APPLICABLE

Attach a USGS map that identifies the location of the intake.

Attachment: NOT APPLICABLE

Section 2. Discharge into Tidally Affected Waters (Instructions Page 63)

Does the facility discharge into tidally affected waters?

☐ Yes ☒ No

If **no**, proceed to Section 3. **If yes**, complete the remainder of this section. If no, proceed to Section 3.

A. Receiving water outfall

Width of the receiving water at the outfall, in feet: NOT APPLICABLE

B. Oyster waters

Are there oyster waters in the vicinity of the discharge?

☐ Yes ☒ No

If yes, provide the distance and direction from outfall(s).

NOT APPLICABLE

C. Sea grasses

Are there any sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If yes, provide the distance and direction from the outfall(s).

NOT APPLICABLE

Section 3. Classified Segments (Instructions Page 63)

Is the discharge directly into (or within 300 feet of) a classified segment?

☐ Yes ☒ No

If yes, this Worksheet is complete.

If no, complete Sections 4 and 5 of this Worksheet.

Section 4. Description of Immediate Receiving Waters (Instructions Page 63)

Name of the immediate receiving waters: NOT APPLICABLE

A. Receiving water type

Identify the appropriate description of the receiving waters.

☐ Stream

☐ Freshwater Swamp or Marsh

☐ Lake or Pond

Surface area, in acres: N/A

Average depth of the entire water body, in feet: N/A

Average depth of water body within a 500-foot radius of discharge point, in feet: N/A

☐ Man-made Channel or Ditch

☐ Open Bay

☐ Tidal Stream, Bayou, or Marsh

☐ Other, specify: N/A

B. Flow characteristics

If a stream, man-made channel or ditch was checked above, provide the following. For existing discharges, check one of the following that best characterizes the area *upstream* of the discharge. For new discharges, characterize the area *downstream* of the discharge (check one).

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

☐ Intermittent with Perennial Pools - enduring pools with sufficient habitat to maintain significant aquatic life uses

☐ Perennial - normally flowing

Check the method used to characterize the area upstream (or downstream for new dischargers).

☐ USGS flow records

☐ Historical observation by adjacent landowners

☐ Personal observation

☐ Other, specify: N/A

C. Downstream perennial confluences

List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point.

NOT APPLICABLE

D. Downstream characteristics

Do the receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.)?

☐ Yes ☐ No

If yes, discuss how.

NOT APPLICABLE

E. Normal dry weather characteristics

Provide general observations of the water body during normal dry weather conditions.

NOT APPLICABLE

Date and time of observation: Click to enter text.

Was the water body influenced by stormwater runoff during observations?

☐ Yes ☐ No

Section 5. General Characteristics of the Waterbody (Instructions Page 65)

A. Upstream influences

Is the immediate receiving water upstream of the discharge or proposed discharge site influenced by any of the following? Check all that apply.

☐ Oil field activities
☐ Upstream discharges
☐ Septic tanks
☐ Urban runoff
☐ Agricultural runoff
☐ Other(s), specify: NOT APPLICABLE

B. Waterbody uses

Observed or evidences of the following uses. Check all that apply.

- ☐ Livestock watering
- ☐ Irrigation withdrawal
- ☐ Fishing
- ☐ Domestic water supply
- ☐ Park activities
- ☐ Contact recreation
- ☐ Non-contact recreation
- ☐ Navigation
- ☐ Industrial water supply
- ☐ Other(s), specify: NOT APPLICABLE

C. Waterbody aesthetics

Check one of the following that best describes the aesthetics of the receiving water and the surrounding area.

- ☐ Wilderness: outstanding natural beauty; usually wooded or unpastured area; water clarity exceptional
- ☐ Natural Area: trees and/or native vegetation; 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

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 2.1: STREAM PHYSICAL CHARACTERISTICS

Required for new applications, major facilities, and applications adding an outfall.

Worksheet 2.1 is not required for discharges to intermittent streams or discharges directly to (or within 300 feet of) a classified segment.

Section 1. General Information (Instructions Page 65)

Date of study: NOT APPLICABLE Time of study: NOT APPLICABLE

Stream name: NOT APPLICABLE

Location: NOT APPLICABLE

Type of stream upstream of existing discharge or downstream of proposed discharge (check one).

☐ Perennial ☐ Intermittent with perennial pools

Section 2. Data Collection (Instructions Page 65)

Number of stream bends that are well defined: N/A

Number of stream bends that are moderately defined: N/A

Number of stream bends that are poorly defined: N/A

Number of riffles: N/A

Evidence of flow fluctuations (check one):

☐ Minor ☐ moderate ☐ severe

Indicate the observed stream uses and if there is evidence of flow fluctuations or channel obstruction/modification.

NOT APPLICABLE

Stream transects

In the table below, provide the following information for each transect downstream of the existing or proposed discharges. Use a separate row for each transect.

Table 2.1(1) - Stream Transect Records

Stream type at transect Select riffle, run, glide, or pool. See Instructions, Definitions section.	Transect location	Water surface width (ft)	Stream depths (ft) at 4 to 10 points along each transect from the channel bed to the water surface. Separate the measurements with commas.
Choose an item.	NOT APPLICABLE		NOT APPLICABLE
Choose an item.	NOT APPLICABLE		NOT APPLICABLE
Choose an item.	NOT APPLICABLE		NOT APPLICABLE
Choose an item.	NOT APPLICABLE		NOT APPLICABLE
Choose an item.	NOT APPLICABLE		NOT APPLICABLE
Choose an item.	NOT APPLICABLE		NOT APPLICABLE
Choose an item.	NOT APPLICABLE		NOT APPLICABLE
Choose an item.	NOT APPLICABLE		NOT APPLICABLE
Choose an item.	NOT APPLICABLE		NOT APPLICABLE
Choose an item.	NOT APPLICABLE		NOT APPLICABLE

Section 3. Summarize Measurements (Instructions Page 65)

Streambed slope of entire reach, from USGS map in feet/feet: N/A

Approximate drainage area above the most downstream transect (from USGS map or county highway map, in square miles): N/A

Length of stream evaluated, in feet: N/A

Number of lateral transects made: N/A

Average stream width, in feet: N/A

Average stream depth, in feet: N/A

Average stream velocity, in feet/second: N/A

Instantaneous stream flow, in cubic feet/second: N/A

Indicate flow measurement method (type of meter, floating chip timed over a fixed distance, etc.): N/A

Size of pools (large, small, moderate, none): N/A

Maximum pool depth, in feet: N/A

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.0: LAND DISPOSAL OF EFFLUENT

The following is required for renewal, new, and amendment permit applications.

Section 1. Type of Disposal System (Instructions Page 67)

Identify the method of land disposal:

- ☐ Surface application
- ☒ Irrigation
- ☐ Drip irrigation system
- ☐ Evaporation
- ☐ Other (describe in detail): NOT APPLICABLE
- ☐ Subsurface application
- ☐ Subsurface soils absorption
- ☐ Subsurface area drip dispersal system
- ☐ Evapotranspiration beds

NOTE: All applicants without authorization or proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0.

For existing authorizations, provide Registration Number: NOT APPLICABLE

Section 2. Land Application Site(s) (Instructions Page 67)

In table 3.0(1), provide the requested information for the land application sites. Include the agricultural or cover crop type (wheat, cotton, alfalfa, bermuda grass, native grasses, etc.), land use (golf course, hayland, pastureland, park, row crop, etc.), irrigation area, amount of effluent applied, and whether or not the public has access to the area. Specify the amount of land area and the amount of effluent that will be allotted to each agricultural or cover crop, if more than one crop will be used.

Table 3.0(1) – Land Application Site Crops

Crop Type & Land Use	Irrigation Area (acres)	Effluent Application (GPD)	Public Access? Y/N
Coastal Bermuda	134	196,000	N
Rye	"	"	"
Matua- Hay (Grazing grasses)			

Section 3. Storage and Evaporation Lagoons/Ponds (Instructions Page 67)

Table 3.0(2) – Storage and Evaporation Ponds

Pond Number	Surface Area (acres)	Storage Volume (acre-feet)	Dimensions	Liner Type
1	8.8	88	626' x 620' x 10'	Clay

Attach a copy of a liner certification that was prepared, signed, and sealed by a Texas licensed professional engineer for each pond.

Attachment: No. 13

Section 4. Flood and Runoff Protection (Instructions Page 67)

Is the land application site within the 100-year frequency flood level?

☐ Yes ☒ No

If yes, describe how the site will be protected from inundation.

SEE ATTACHMENT No. 14

Provide the source used to determine the 100-year frequency flood level:

FEMA MAP

Provide a description of tailwater controls and rainfall run-on controls used for the land application site.

Grade of irrigation field does not allow extraneous rainwater to enter or remain on site. Tailwater is controlled by ensuring that the maximum rate of application during irrigation is not reached. Application rate is not to exceed 1.64 acre-feet per year per acre. SEE ATTACHMENT 14

Section 5. Annual Cropping Plan (Instructions Page 67)

Attach an Annual Cropping Plan which includes a discussion of each of the following items. If not applicable, provide a detailed explanation indicating why. **Attachment**: No. 15

- Soils map with crops
- Cool and warm season plant species
- Crop yield goals
- Crop growing season
- Crop nutrient requirements
- Additional fertilizer requirements
- Minimum/maximum harvest height (for grass crops)
- Supplemental watering requirements
- Crop salt tolerances
- Harvesting method/number of harvests
- Justification for not removing existing vegetation to be irrigated

Section 6. Well and Map Information (Instructions Page 68)

Attach a USGS map with the following information shown and labeled. If not applicable, provide a detailed explanation indicating why. **Attachment**: No. 16

- The boundaries of the land application site(s)
- Waste disposal or treatment facility site(s)
- On-site buildings
- Buffer zones
- Effluent storage and tailwater control facilities
- All water wells within 1-mile radius of the disposal site or property boundaries
- All springs and seeps onsite and within 500 feet of the property boundaries
- All surface waters in the state onsite and within 500 feet of the property boundaries
- All faults and sinkholes onsite and within 500 feet of the property

List and cross reference all water wells located within a half-mile radius of the disposal site or property boundaries shown on the USGS map in the following table. Attach additional pages as necessary to include all of the wells.

Table 3.0(3) – Water Well Data

Well ID	Well Use	Producing? Y/N	Open, cased, capped, or plugged?	Proposed Best Management Practice
3348701	Domestic	Y	Open	
3348402	N.A	N	Unknown	
3348702	N/A	N	Unknown	
3348401	Unused	N	Unknown	
			Choose an item.	

If water quality data or well log information is available please include the information in an attachment listed by Well ID.

Attachment: No. 16

Section 7. Groundwater Quality (Instructions Page 68)

Attach a Groundwater Quality Technical Report which assesses the impact of the wastewater disposal system on groundwater. This report shall include an evaluation of the water wells (including the information in the well table provided in Item 6. above), the wastewater application rate, and pond liners. Indicate by a check mark that this report is provided.

Attachment: Click to enter text.

Are groundwater monitoring wells available onsite? ☐ Yes ☒ No

Do you plan to install ground water monitoring wells or lysimeters around the land application site? ☐ Yes ☒ No

If yes, provide the proposed location of the monitoring wells or lysimeters on a site map.

Attachment: Click to enter text.

Section 8. Soil Map and Soil Analyses (Instructions Page 69)

A. Soil map

Attach a USDA Soil Survey map that shows the area to be used for effluent disposal.

Attachment: No. 17

B. Soil analyses

Attach the laboratory results sheets from the soil analyses. **Note**: for renewal applications, the current annual soil analyses required by the permit are acceptable as long as the test date is less than one year prior to the submission of the application.

Attachment: No. 18

List all USDA designated soil series on the proposed land application site. Attach additional pages as necessary.

Table 3.0(4) – Soil Data

Soil Series	Depth from Surface	Permeability	Available Water Capacity	Curve Number
Axtell Loam	0-9	Very slow 0.6-2.0	High 0.11-0.15	
Crockett Loam	0-9	Very slow 0.6-2.0	High 0.11-0.20	
Derly-Rader Complex	0-28	Slow 2.0-6.0	Medium 0.10-0.24	
Wilson series	0-6	Slow 0.2- 0.6	High 0.7-0.11	

Section 9. Effluent Monitoring Data (Instructions Page 70)

Is the facility in operation?

☒ Yes ☐ No

If no, this section is not applicable and the worksheet is complete.

If yes, provide the effluent monitoring data for the parameters regulated in the existing permit. If a parameter is not regulated in the existing permit, enter N/A.

Table 3.0(5) – Effluent Monitoring Data

Date	30 Day Avg Flow MGD	BOD5 mg/l	TSS mg/l	pH	Chlorine Residual mg/l	Acres irrigated
Jan-2024	0	25.5	N/A	6.9	0	0
Feb-2024	0	6.6	N/A	6.8	0	0
Mar-2024	0	11.4	N/A	7.1	0	0
Apr-2024	271	15.9	N/A	7.2	0.4	130
May-2024	313	10.2	N/A	7.2	0.4	130
Jun-2024	292.4	20.4	N/A	7.2	0.475	130
Jul-2024	285	13.0	N/A	7.0	0.62	130
Aug-2024	320	8.0	N/A	7.1	0.15	130
Sep- 2024	433	4.3	N/A	6.9	0.1	130
Oct-2024	298	5.7	N/A	6.9	0.1	130
Nov-2024	264	7.0	N/A	7.1	0.1	130
Dec- 2024	0	7.5	N/A	7.0	0	0

Provide a discussion of all persistent excursions above the permitted limits and any corrective actions taken.

Grass Type	Nutrient Uptake in Lbs./Acre Year		
.	Nitrogen	Phosphorus	Potassium
Coastal Bermuda	350 to 600	30 to 40	200
Rye	180 to 250	55 to 75	240 to 290

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.1: SURFACE LAND DISPOSAL OF EFFLUENT

The following is required for new and major amendment permit applications. Renewal and minor amendment permit applications may be asked for this worksheet on a case by case basis.

Section 1. Surface Disposal (Instructions Page 71)

Complete the item that applies for the method of disposal being used.

RENEWAL APPLICATION

A. Irrigation

Area under irrigation, in acres: Click to enter text.

Design application frequency:

hours/day Click to enter text. **And** days/week Click to enter text.

Land grade (slope):

average percent (%): Click to enter text.

maximum percent (%): Click to enter text.

Design application rate in acre-feet/acre/year: Click to enter text.

Design total nitrogen loading rate, in lbs N/acre/year: Click to enter text.

Soil conductivity (mmhos/cm): Click to enter text.

Method of application: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, method of application, irrigation efficiency, and nitrogen balance.

Attachment: Click to enter text.

B. Evaporation ponds

Daily average effluent flow into ponds, in gallons per day: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations.

Attachment: Click to enter text.

C. Evapotranspiration beds

Number of beds: Click to enter text.

Area of bed(s), in acres: Click to enter text.

Depth of bed(s), in feet: Click to enter text.

Void ratio of soil in the beds: Click to enter text.

Storage volume within the beds, in acre-feet: Click to enter text.

Attach a separate engineering report with the water balance and storage volume calculations, and a description of the lining.

Attachment: Click to enter text.

D. Overland flow

Area used for application, in acres: Click to enter text.

Slopes for application area, percent (%): Click to enter text.

Design application rate, in gpm/foot of slope width: Click to enter text.

Slope length, in feet: Click to enter text.

Design BOD_5 loading rate, in lbs BOD_5/acre/day: Click to enter text.

Design application frequency:

hours/day: Click to enter text. **And** days/week: Click to enter text.

Attach a separate engineering report with the method of application and design requirements according to *30 TAC Chapter 217*.

Attachment: Click to enter text.

Section 2. Edwards Aquifer (Instructions Page 72)

Is the facility subject to *30 TAC Chapter 213*, Edwards Aquifer Rules?

☐ Yes ☒ No

If **yes**, is the facility located on the Edwards Aquifer Recharge Zone?

☐ Yes ☒ No

If yes, attach a geological report addressing potential recharge features.

Attachment: Click to enter text.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.2: SURFACE LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **does not meet** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

Section 1. Subsurface Application (Instructions Page 73)

Identify the type of system:

- ☐ Conventional Gravity Drainfield, Beds, or Trenches (new systems must be less than 5,000 GPD)
- ☐ Low Pressure Dosing
- ☐ Other, specify: NOT APPLICABLE

Application area, in acres: N/A

Area of drainfield, in square feet: N/A

Application rate, in gal/square foot/day: N/A

Depth to groundwater, in feet: N/A

Area of trench, in square feet: N/A

Dosing duration per area, in hours: N/A

Number of beds: N/A

Dosing amount per area, in inches/day: N/A

Infiltration rate, in inches/hour: N/A

Storage volume, in gallons: N/A

Area of bed(s), in square feet: N/A

Soil Classification: N/A

Attach a separate engineering report with the information required in *30 TAC § 309.20,* excluding the requirements of *§* 309.20 b(3)(A) and (B) design analysis which may be asked for on a case by case basis. Include a description of the schedule of dosing basin rotation.

Attachment: NOT APPLICABLE

Section 2. Edwards Aquifer (Instructions Page 73)

Is the subsurface system over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☒ No

Is the subsurface system over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☒ No

If yes to either question, the subsurface system may be prohibited by *30 TAC §213.8.* Please call the Municipal Permits Team, at 512-239-4671, to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 3.3: SUBSURFACE AREA DRIP DISPERSAL (SADDS) LAND DISPOSAL OF EFFLUENT

The following **is required** for **new and major amendment** subsurface area drip dispersal system permit applications. Renewal and minor amendments applicants may be asked for the worksheet on a case by case basis.

NOTE: All applicants proposing new/amended subsurface disposal MUST complete and submit Worksheet 7.0. This worksheet applies to any subsurface disposal system that **meets** the definition of a subsurface area drip dispersal system as defined in *30 TAC Chapter 222, Subsurface Area Drip Dispersal System.*

Section 1. Administrative Information (Instructions Page 74)

A. Provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the treatment facility:

B. NOT APPLICABLE Is the owner of the land where the treatment facility is located the same as the owner of the treatment facility?

☐ Yes ☐ No

If **no**, provide the legal name of all corporations or other business entities managed, owned, or otherwise closely related to the owner of the land where the treatment facility is located.

NOT APPLICABLE

C. Owner of the subsurface area drip dispersal system: NOT APPLICABLE

D. Is the owner of the subsurface area drip dispersal system the same as the owner of the wastewater treatment facility or the site where the wastewater treatment facility is located?

☐ Yes ☐ No

If **no**, identify the names of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in Item 1.C.

NOT APPLICABLE

E. Owner of the land where the subsurface area drip dispersal system is located: NOT APPLICABLE

F. Is the owner of the land where the subsurface area drip dispersal system is located the same as owner of the wastewater treatment facility, the site where the wastewater treatment facility is located, or the owner of the subsurface area drip dispersal system?

☐ Yes ☐ No

If **no**, identify the name of all corporations or other business entities managed, owned, or otherwise closely related to the entity identified in item 1.E.

NOT APPLICABLE

Section 2. Subsurface Area Drip Dispersal System (Instructions Page 74)

A. Type of system

☐ Subsurface Drip Irrigation

☐ Surface Drip Irrigation

☐ Other, specify: NOT APPLICABLE

B. Irrigation operations

Application area, in acres: N/A

Infiltration Rate, in inches/hour: N/A

Average slope of the application area, percent (%): N/A

Maximum slope of the application area, percent (%): N/A

Storage volume, in gallons: N/A

Major soil series: N/A

Depth to groundwater, in feet: N/A

C. Application rate

Is the facility located **west** of the boundary shown in *30 TAC § 222.83* **and** also using a vegetative cover of non-native grasses over seeded with cool season grasses during the winter months (October-March)?

☐ Yes ☐ No

If yes, then the facility may propose a hydraulic application rate not to exceed 0.1 gal/square foot/day.

Is the facility located **east** of the boundary shown in *30 TAC § 222.83* **or** in any part of the state when the vegetative cover is any crop other than non-native grasses?

☐ Yes ☐ No

If **yes**, the facility must use the formula in *30 TAC §222.83* to calculate the maximum hydraulic application rate.

Do you plan to submit an alternative method to calculate the hydraulic application rate for approval by the executive director?

☐ Yes ☐ No

Hydraulic application rate, in gal/square foot/day: N/A

Nitrogen application rate, in lbs/gal/day: N/A

D. Dosing information

Number of doses per day: N/A

Dosing duration per area, in hours: N/A

Rest period between doses, in hours: N/A

Dosing amount per area, in inches/day: N/A

Number of zones: N/A

Does the proposed subsurface drip irrigation system use tree vegetative cover as a crop?

☐ Yes ☐ No

If **yes**, provide a vegetation survey by a certified arborist. Please call the Water Quality Assessment Team at (512) 239-4671 to schedule a pre-application meeting.

Attachment: NOT APPLICABLE

Section 3. Required Plans (Instructions Page 74)

A. Recharge feature plan

Attach a Recharge Feature Plan with all information required in *30 TAC §222.79.*

Attachment: NOT APPLICABLE

B. Soil evaluation

Attach a Soil Evaluation with all information required in *30 TAC §222.73.*

Attachment: NOT APPLICABLE

C. Site preparation plan

Attach a Site Preparation Plan with all information required in *30 TAC §222.75.*

Attachment: NOT APPLICABLE

D. Soil sampling/testing

Attach soil sampling and testing that includes all information required in *30 TAC §222.157.*

Attachment: NOT APPLICABLE

Section 4. Floodway Designation (Instructions Page 75)

A. Site location

Is the existing/proposed land application site within a designated floodway?

☐ Yes ☐ No

B. Flood map

Attach either the FEMA flood map or alternate information used to determine the floodway.

Attachment: NOT APPLICABLE

Section 5. Surface Waters in the State (Instructions Page 75)

A. Buffer Map

Attach a map showing appropriate buffers on surface waters in the state, water wells, and springs/seeps.

Attachment: NOT APPLICABLE

B. Buffer variance request

Do you plan to request a buffer variance from water wells or waters in the state?

☐ Yes ☐ No

If yes, then attach the additional information required in *30 TAC § 222.81(c).*

Attachment: NOT APPLICABLE

Section 6. Edwards Aquifer (Instructions Page 75)

A. Is the SADDS located over the Edwards Aquifer Recharge Zone as mapped by TCEQ?

☐ Yes ☒ No

B. Is the SADDS located over the Edwards Aquifer Transition Zone as mapped by TCEQ?

☐ Yes ☒ No

If yes to either question, then the SADDS may be prohibited by *30 TAC §213.8.* Please call the Municipal Permits Team at 512-239-4671 to schedule a pre-application meeting.

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 4.0: POLLUTANT ANALYSIS REQUIREMENTS

The following **is required** for facilities with a permitted or proposed flow of **1.0 MGD or greater**, facilities with an approved **pretreatment** program, or facilities classified as a **major** facility. See instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Toxic Pollutants (Instructions Page 76)

For pollutants identified in Table 4.0(1), indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: NOT APPLICABLE

Table 4.0(1) – Toxics Analysis

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrylonitrile	N/A	N/A	N/A	50
Aldrin	N/A	N/A	N/A	0.01
Aluminum	N/A	N/A	N/A	2.5
Anthracene	N/A	N/A	N/A	10
Antimony	N/A	N/A	N/A	5
Arsenic	N/A	N/A	N/A	0.5
Barium	N/A	N/A	N/A	3
Benzene	N/A	N/A	N/A	10
Benzidine	N/A	N/A	N/A	50
Benzo(a)anthracene	N/A	N/A	N/A	5
Benzo(a)pyrene	N/A	N/A	N/A	5
Bis(2-chloroethyl)ether	N/A	N/A	N/A	10
Bis(2-ethylhexyl)phthalate	N/A	N/A	N/A	10
Bromodichloromethane	N/A	N/A	N/A	10
Bromoform	N/A	N/A	N/A	10
Cadmium	N/A	N/A	N/A	1
Carbon Tetrachloride	N/A	N/A	N/A	2
Carbaryl	N/A	N/A	N/A	5
Chlordane*	N/A	N/A	N/A	0.2
Chlorobenzene	N/A	N/A	N/A	10
Chlorodibromomethane	N/A	N/A	N/A	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Chloroform	N/A	N/A	N/A	10
Chlorpyrifos	N/A	N/A	N/A	0.05
Chromium (Total)	N/A	N/A	N/A	3
Chromium (Tri) **(*1)**	N/A	N/A	N/A	N/A
Chromium (Hex)	N/A	N/A	N/A	3
Copper	N/A	N/A	N/A	2
Chrysene	N/A	N/A	N/A	5
p-Chloro-m-Cresol	N/A	N/A	N/A	10
4,6-Dinitro-o-Cresol	N/A	N/A	N/A	50
p-Cresol	N/A	N/A	N/A	10
Cyanide **(*2)**	N/A	N/A	N/A	10
4,4'- DDD	N/A	N/A	N/A	0.1
4,4'- DDE	N/A	N/A	N/A	0.1
4,4'- DDT	N/A	N/A	N/A	0.02
2,4-D	N/A	N/A	N/A	0.7
Demeton (O and S)	N/A	N/A	N/A	0.20
Diazinon	N/A	N/A	N/A	0.5/0.1
1,2-Dibromoethane	N/A	N/A	N/A	10
m-Dichlorobenzene	N/A	N/A	N/A	10
o-Dichlorobenzene	N/A	N/A	N/A	10
p-Dichlorobenzene	N/A	N/A	N/A	10
3,3'-Dichlorobenzidine	N/A	N/A	N/A	5
1,2-Dichloroethane	N/A	N/A	N/A	10
1,1-Dichloroethylene	N/A	N/A	N/A	10
Dichloromethane	N/A	N/A	N/A	20
1,2-Dichloropropane	N/A	N/A	N/A	10
1,3-Dichloropropene	N/A	N/A	N/A	10
Dicofol	N/A	N/A	N/A	1
Dieldrin	N/A	N/A	N/A	0.02
2,4-Dimethylphenol	N/A	N/A	N/A	10
Di-n-Butyl Phthalate	N/A	N/A	N/A	10
Diuron	N/A	N/A	N/A	0.09
Endosulfan I (alpha)	N/A	N/A	N/A	0.01

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Endosulfan II (beta)	N/A	N/A	N/A	0.02
Endosulfan Sulfate	N/A	N/A	N/A	0.1
Endrin	N/A	N/A	N/A	0.02
Epichlorohydrin	N/A	N/A	N/A	---
Ethylbenzene	N/A	N/A	N/A	10
Ethylene Glycol	N/A	N/A	N/A	---
Fluoride	N/A	N/A	N/A	500
Guthion	N/A	N/A	N/A	0.1
Heptachlor	N/A	N/A	N/A	0.01
Heptachlor Epoxide	N/A	N/A	N/A	0.01
Hexachlorobenzene	N/A	N/A	N/A	5
Hexachlorobutadiene	N/A	N/A	N/A	10
Hexachlorocyclohexane (alpha)	N/A	N/A	N/A	0.05
Hexachlorocyclohexane (beta)	N/A	N/A	N/A	0.05
gamma-Hexachlorocyclohexane (Lindane)	N/A	N/A	N/A	0.05
Hexachlorocyclopentadiene	N/A	N/A	N/A	10
Hexachloroethane	N/A	N/A	N/A	20
Hexachlorophene	N/A	N/A	N/A	10
4,4'-Isopropylidenediphenol	N/A	N/A	N/A	1
Lead	N/A	N/A	N/A	0.5
Malathion	N/A	N/A	N/A	0.1
Mercury	N/A	N/A	N/A	0.005
Methoxychlor	N/A	N/A	N/A	2
Methyl Ethyl Ketone	N/A	N/A	N/A	50
Methyl tert-butyl ether	N/A	N/A	N/A	---
Mirex	N/A	N/A	N/A	0.02
Nickel	N/A	N/A	N/A	2
Nitrate-Nitrogen	N/A	N/A	N/A	100
Nitrobenzene	N/A	N/A	N/A	10
N-Nitrosodiethylamine	N/A	N/A	N/A	20
N-Nitroso-di-n-Butylamine	N/A	N/A	N/A	20
Nonylphenol	N/A	N/A	N/A	333

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Parathion (ethyl)	N/A	N/A	N/A	0.1
Pentachlorobenzene	N/A	N/A	N/A	20
Pentachlorophenol	N/A	N/A	N/A	5
Phenanthrene	N/A	N/A	N/A	10
Polychlorinated Biphenyls (PCB's) **(*3)**	N/A	N/A	N/A	0.2
Pyridine	N/A	N/A	N/A	20
Selenium	N/A	N/A	N/A	5
Silver	N/A	N/A	N/A	0.5
1,2,4,5-Tetrachlorobenzene	N/A	N/A	N/A	20
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	10
Tetrachloroethylene	N/A	N/A	N/A	10
Thallium	N/A	N/A	N/A	0.5
Toluene	N/A	N/A	N/A	10
Toxaphene	N/A	N/A	N/A	0.3
2,4,5-TP (Silvex)	N/A	N/A	N/A	0.3
Tributyltin (see instructions for explanation)	N/A	N/A	N/A	0.01
1,1,1-Trichloroethane	N/A	N/A	N/A	10
1,1,2-Trichloroethane	N/A	N/A	N/A	10
Trichloroethylene	N/A	N/A	N/A	10
2,4,5-Trichlorophenol	N/A	N/A	N/A	50
TTHM (Total Trihalomethanes)	N/A	N/A	N/A	10
Vinyl Chloride	N/A	N/A	N/A	10
Zinc	N/A	N/A	N/A	5

(*1) Determined by subtracting hexavalent Cr from total Cr.

(*2) Cyanide, amenable to chlorination or weak-acid dissociable.

(*3) The sum of seven PCB congeners 1242, 1254, 1221, 1232, 1248, 1260, and 1016.

Section 2. Priority Pollutants

For pollutants identified in Tables 4.0(2)A-E, indicate type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: Click to enter text.

Table 4.0(2)A – Metals, Cyanide, and Phenols

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Antimony	N/A	N/A	N/A	5
Arsenic	N/A	N/A	N/A	0.5
Beryllium	N/A	N/A	N/A	0.5
Cadmium	N/A	N/A	N/A	1
Chromium (Total)	N/A	N/A	N/A	3
Chromium (Hex)	N/A	N/A	N/A	3
Chromium (Tri) **(*1)**	N/A	N/A	N/A	N/A
Copper	N/A	N/A	N/A	2
Lead	N/A	N/A	N/A	0.5
Mercury	N/A	N/A	N/A	0.005
Nickel	N/A	N/A	N/A	2
Selenium	N/A	N/A	N/A	5
Silver	N/A	N/A	N/A	0.5
Thallium	N/A	N/A	N/A	0.5
Zinc	N/A	N/A	N/A	5
Cyanide **(*2)**	N/A	N/A	N/A	10
Phenols, Total	N/A	N/A	N/A	10

(*1) Determined by subtracting hexavalent Cr from total Cr.

(*2) Cyanide, amenable to chlorination or weak-acid dissociable

Table 4.0(2)B – Volatile Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acrolein	N/A	N/A	N/A	50
Acrylonitrile	N/A	N/A	N/A	50
Benzene	N/A	N/A	N/A	10
Bromoform	N/A	N/A	N/A	10
Carbon Tetrachloride	N/A	N/A	N/A	2
Chlorobenzene	N/A	N/A	N/A	10
Chlorodibromomethane	N/A	N/A	N/A	10
Chloroethane	N/A	N/A	N/A	50
2-Chloroethylvinyl Ether	N/A	N/A	N/A	10
Chloroform	N/A	N/A	N/A	10
Dichlorobromomethane [Bromodichloromethane]	N/A	N/A	N/A	10
1,1-Dichloroethane	N/A	N/A	N/A	10
1,2-Dichloroethane	N/A	N/A	N/A	10
1,1-Dichloroethylene	N/A	N/A	N/A	10
1,2-Dichloropropane	N/A	N/A	N/A	10
1,3-Dichloropropylene [1,3-Dichloropropene]	N/A	N/A	N/A	10
1,2-Trans-Dichloroethylene	N/A	N/A	N/A	10
Ethylbenzene	N/A	N/A	N/A	10
Methyl Bromide	N/A	N/A	N/A	50
Methyl Chloride	N/A	N/A	N/A	50
Methylene Chloride	N/A	N/A	N/A	20
1,1,2,2-Tetrachloroethane	N/A	N/A	N/A	10
Tetrachloroethylene	N/A	N/A	N/A	10
Toluene	N/A	N/A	N/A	10
1,1,1-Trichloroethane	N/A	N/A	N/A	10
1,1,2-Trichloroethane	N/A	N/A	N/A	10
Trichloroethylene	N/A	N/A	N/A	10
Vinyl Chloride	N/A	N/A	N/A	10

Table 4.0(2)C – Acid Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
2-Chlorophenol	N/A	N/A	N/A	10
2,4-Dichlorophenol	N/A	N/A	N/A	10
2,4-Dimethylphenol	N/A	N/A	N/A	10
4,6-Dinitro-o-Cresol	N/A	N/A	N/A	50
2,4-Dinitrophenol	N/A	N/A	N/A	50
2-Nitrophenol	N/A	N/A	N/A	20
4-Nitrophenol	N/A	N/A	N/A	50
P-Chloro-m-Cresol	N/A	N/A	N/A	10
Pentalchlorophenol	N/A	N/A	N/A	5
Phenol	N/A	N/A	N/A	10
2,4,6-Trichlorophenol	N/A	N/A	N/A	10

Table 4.0(2)D – Base/Neutral Compounds

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Acenaphthene	N/A	N/A	N/A	10
Acenaphthylene	N/A	N/A	N/A	10
Anthracene	N/A	N/A	N/A	10
Benzidine	N/A	N/A	N/A	50
Benzo(a)Anthracene	N/A	N/A	N/A	5
Benzo(a)Pyrene	N/A	N/A	N/A	5
3,4-Benzofluoranthene	N/A	N/A	N/A	10
Benzo(ghi)Perylene	N/A	N/A	N/A	20
Benzo(k)Fluoranthene	N/A	N/A	N/A	5
Bis(2-Chloroethoxy)Methane	N/A	N/A	N/A	10
Bis(2-Chloroethyl)Ether	N/A	N/A	N/A	10
Bis(2-Chloroisopropyl)Ether	N/A	N/A	N/A	10
Bis(2-Ethylhexyl)Phthalate	N/A	N/A	N/A	10
4-Bromophenyl Phenyl Ether	N/A	N/A	N/A	10
Butyl benzyl Phthalate	N/A	N/A	N/A	10
2-Chloronaphthalene	N/A	N/A	N/A	10
4-Chlorophenyl phenyl ether	N/A	N/A	N/A	10
Chrysene	N/A	N/A	N/A	5
Dibenzo(a,h)Anthracene	N/A	N/A	N/A	5
1,2-(o)Dichlorobenzene	N/A	N/A	N/A	10
1,3-(m)Dichlorobenzene	N/A	N/A	N/A	10
1,4-(p)Dichlorobenzene	N/A	N/A	N/A	10
3,3-Dichlorobenzidine	N/A	N/A	N/A	5
Diethyl Phthalate	N/A	N/A	N/A	10
Dimethyl Phthalate	N/A	N/A	N/A	10
Di-n-Butyl Phthalate	N/A	N/A	N/A	10
2,4-Dinitrotoluene	N/A	N/A	N/A	10
2,6-Dinitrotoluene	N/A	N/A	N/A	10
Di-n-Octyl Phthalate	N/A	N/A	N/A	10
1,2-Diphenylhydrazine (as Azo-benzene)	N/A	N/A	N/A	20
Fluoranthene	N/A	N/A	N/A	10

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Fluorene	N/A	N/A	N/A	10
Hexachlorobenzene	N/A	N/A	N/A	5
Hexachlorobutadiene	N/A	N/A	N/A	10
Hexachlorocyclo-pentadiene	N/A	N/A	N/A	10
Hexachloroethane	N/A	N/A	N/A	20
Indeno(1,2,3-cd)pyrene	N/A	N/A	N/A	5
Isophorone	N/A	N/A	N/A	10
Naphthalene	N/A	N/A	N/A	10
Nitrobenzene	N/A	N/A	N/A	10
N-Nitrosodimethylamine	N/A	N/A	N/A	50
N-Nitrosodi-n-Propylamine	N/A	N/A	N/A	20
N-Nitrosodiphenylamine	N/A	N/A	N/A	20
Phenanthrene	N/A	N/A	N/A	10
Pyrene	N/A	N/A	N/A	10
1,2,4-Trichlorobenzene	N/A	N/A	N/A	10

Table 4.0(2)E - Pesticides

Pollutant	AVG Effluent Conc. (µg/l)	MAX Effluent Conc. (µg/l)	Number of Samples	MAL (µg/l)
Aldrin	N/A	N/A	N/A	0.01
alpha-BHC (Hexachlorocyclohexane)	N/A	N/A	N/A	0.05
beta-BHC (Hexachlorocyclohexane)	N/A	N/A	N/A	0.05
gamma-BHC (Hexachlorocyclohexane)	N/A	N/A	N/A	0.05
delta-BHC (Hexachlorocyclohexane)	N/A	N/A	N/A	0.05
Chlordane	N/A	N/A	N/A	0.2
4,4-DDT	N/A	N/A	N/A	0.02
4,4-DDE	N/A	N/A	N/A	0.1
4,4,-DDD	N/A	N/A	N/A	0.1
Dieldrin	N/A	N/A	N/A	0.02
Endosulfan I (alpha)	N/A	N/A	N/A	0.01
Endosulfan II (beta)	N/A	N/A	N/A	0.02
Endosulfan Sulfate	N/A	N/A	N/A	0.1
Endrin	N/A	N/A	N/A	0.02
Endrin Aldehyde	N/A	N/A	N/A	0.1
Heptachlor	N/A	N/A	N/A	0.01
Heptachlor Epoxide	N/A	N/A	N/A	0.01
PCB-1242	N/A	N/A	N/A	0.2
PCB-1254	N/A	N/A	N/A	0.2
PCB-1221	N/A	N/A	N/A	0.2
PCB-1232	N/A	N/A	N/A	0.2
PCB-1248	N/A	N/A	N/A	0.2
PCB-1260	N/A	N/A	N/A	0.2
PCB-1016	N/A	N/A	N/A	0.2
Toxaphene	N/A	N/A	N/A	0.3

* For PCBS, if all are non-detects, enter the highest non-detect preceded by a "<".

Section 3. Dioxin/Furan Compounds

A. Indicate which of the following compounds from may be present in the influent from a contributing industrial user or significant industrial user. Check all that apply.

☐ 2,4,5-trichlorophenoxy acetic acid

Common Name 2,4,5-T, CASRN 93-76-5

☐ 2-(2,4,5-trichlorophenoxy) propanoic acid

Common Name Silvex or 2,4,5-TP, CASRN 93-72-1

☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate

Common Name Erbon, CASRN 136-25-4

☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate

Common Name Ronnel, CASRN 299-84-3

☐ 2,4,5-trichlorophenol

Common Name TCP, CASRN 95-95-4

☐ hexachlorophene

Common Name HCP, CASRN 70-30-4

For each compound identified, provide a brief description of the conditions of its/their presence at the facility.

NOT APPLICABLE

B. Do you know or have any reason to believe that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) or any congeners of TCDD may be present in your effluent?

☐ Yes ☒ No

If **yes**, provide a brief description of the conditions for its presence.

NOT APPLICABLE

C. If any of the compounds in Subsection A **or** B are present, complete Table 4.0(2)F.

For pollutants identified in Table 4.0(2)F, indicate the type of sample.

Grab ☐ Composite ☐

Date and time sample(s) collected: Click to enter text.

Table 4.0(2)F – Dioxin/Furan Compounds

Compound	Toxic Equivalency Factors	Wastewater Concentration (ppq)	Wastewater Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Equivalents (ppt)	MAL (ppq)
2,3,7,8 TCDD	1	N/A	N/A	N/A	N/A	10
1,2,3,7,8 PeCDD	0.5	N/A	N/A	N/A	N/A	50
2,3,7,8 HxCDDs	0.1	N/A	N/A	N/A	N/A	50
1,2,3,4,6,7,8 HpCDD	0.01	N/A	N/A	N/A	N/A	50
2,3,7,8 TCDF	0.1	N/A	N/A	N/A	N/A	10
1,2,3,7,8 PeCDF	0.05	N/A	N/A	N/A	N/A	50
2,3,4,7,8 PeCDF	0.5	N/A	N/A	N/A	N/A	50
2,3,7,8 HxCDFs	0.1	N/A	N/A	N/A	N/A	50
2,3,4,7,8 HpCDFs	0.01	N/A	N/A	N/A	N/A	50
OCDD	0.0003	N/A	N/A	N/A	N/A	100
OCDF	0.0003	N/A	N/A	N/A	N/A	100
PCB 77	0.0001	N/A	N/A	N/A	N/A	0.5
PCB 81	0.0003	N/A	N/A	N/A	N/A	0.5
PCB 126	0.1	N/A	N/A	N/A	N/A	0.5
PCB 169	0.03	N/A	N/A	N/A	N/A	0.5
Total		N/A	N/A	N/A	N/A	

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 5.0: TOXICITY TESTING REQUIREMENTS

The following **is required** for facilities with a current operating design flow of **1.0 MGD or greater**, with an EPA-approved **pretreatment** program (or those required to have one under 40 CFR Part 403), or are required to perform Whole Effluent Toxicity testing. See Page 86 of the instructions for further details.

This worksheet is not required minor amendments without renewal.

Section 1. Required Tests

Indicate the number of 7-day chronic or 48-hour acute Whole Effluent Toxicity (WET) tests performed in the four and one-half years prior to submission of the application.

7-day Chronic: NOT APPLICABLE

48-hour Acute: NOT APPLICABLE

Section 2. Toxicity Reduction Evaluations (TREs)

Has this facility completed a TRE in the past four and a half years? Or is the facility currently performing a TRE?

☐ Yes ☒ No

If yes, describe the progress to date, if applicable, in identifying and confirming the toxicant.

NOT APPLICABLE

Section 3. Summary of WET Tests

If the required biomonitoring test information has not been previously submitted via both the Discharge Monitoring Reports (DMRs) and the Table 1 (as found in the permit), provide a summary of the testing results for all valid and invalid tests performed over the past four and one-half years. Make additional copies of this table as needed.

Table 5.0(1) Summary of WET Tests

Test Date	Test Species	NOEC Survival	NOEC Sub-lethal
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

DOMESTIC WASTEWATER PERMIT APPLICATION WORKSHEET 6.0: INDUSTRIAL WASTE CONTRIBUTION

The following **is required** for **all publicly owned treatment works**.

Section 1. All POTWs (Instructions Page 87)

A. Industrial users (IUs)

Provide the number of each of the following types of industrial users (IUs) that discharge to your POTW and the daily flows from each user. See the Instructions for definitions of Categorical IUs, Significant IUs - non-categorical, and Other IUs.

If there are no users, enter 0 (zero).

Categorical IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Significant IUs - non-categorical:

Number of IUs: 0

Average Daily Flows, in MGD: 0

Other IUs:

Number of IUs: 0

Average Daily Flows, in MGD: 0

B. Treatment plant interference

In the past three years, has your POTW experienced treatment plant interference (see instructions)?

☐ Yes ☒ No

If yes, identify the dates, duration, description of interference, and probable cause(s) and possible source(s) of each interference event. Include the names of the IUs that may have caused the interference.

NOT APPLICABLE

C. Treatment plant pass through

In the past three years, has your POTW experienced pass through (see instructions)?

☐ Yes ☒ No

If yes, identify the dates, duration, a description of the pollutants passing through the treatment plant, and probable cause(s) and possible source(s) of each pass through event. Include the names of the IUs that may have caused pass through.

NOT APPLICABLE

D. Pretreatment program

Does your POTW have an approved pretreatment program?

☐ Yes ☒ No

If yes, complete Section 2 only of this Worksheet.

Is your POTW required to develop an approved pretreatment program?

☐ Yes ☒ No

If yes, complete Section 2.c. and 2.d. only, and skip Section 3.

If no to either question above, skip Section 2 and complete Section 3 for each significant industrial user and categorical industrial user.

Section 2. POTWs with Approved Programs or Those Required to Develop a Program (Instructions Page 87)

A. Substantial modifications

Have there been any **substantial modifications** to the approved pretreatment program that have not been submitted to the TCEQ for approval according to *40 CFR §403.18*?

☐ Yes ☒ No

If yes, identify the modifications that have not been submitted to TCEQ, including the purpose of the modification.

NOT APPLICABLE

B. Non-substantial modifications

Have there been any **non-substantial modifications** to the approved pretreatment program that have not been submitted to TCEQ for review and acceptance?

☐ Yes ☒ No

If yes, identify all non-substantial modifications that have not been submitted to TCEQ, including the purpose of the modification.

NOT APPLICABLE

C. Effluent parameters above the MAL

In Table 6.0(1), list all parameters measured above the MAL in the POTW's effluent monitoring during the last three years. Submit an attachment if necessary.

Table 6.0(1) – Parameters Above the MAL

Pollutant	Concentration	MAL	Units	Date
NOT APPLICABLE				

D. Industrial user interruptions

Has any SIU, CIU, or other IU caused or contributed to any problems (excluding interferences or pass throughs) at your POTW in the past three years?

☐ Yes ☒ No

If yes, identify the industry, describe each episode, including dates, duration, description of the problems, and probable pollutants.

NOT APPLICABLE

Section 3. Significant Industrial User (SIU) Information and Categorical Industrial User (CIU) (Instructions Page 88)

A. General information

Company Name: NOT APPLICABLE

SIC Code: N/A

Contact name: N/A

Address: N/A

City, State, and Zip Code: N/A

Telephone number: N/A

Email address: N/A

B. Process information

Describe the industrial processes or other activities that affect or contribute to the SIU(s) or CIU(s) discharge (i.e., process and non-process wastewater).

NOT APPLICABLE

C. Product and service information

Provide a description of the principal product(s) or services performed.

NOT APPLICABLE

D. Flow rate information

See the Instructions for definitions of "process" and "non-process wastewater."

Process Wastewater:

Discharge, in gallons/day: NOT APPLICABLE

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

Non-Process Wastewater:

Discharge, in gallons/day: Click to enter text.

Discharge Type: ☐ Continuous ☐ Batch ☐ Intermittent

E. Pretreatment standards

Is the SIU or CIU subject to technically based local limits as defined in the instructions?

☐ Yes ☒ No

Is the SIU or CIU subject to categorical pretreatment standards found in *40 CFR Parts 405-471*?

☐ Yes ☒ No

If subject to categorical pretreatment standards, indicate the applicable category and subcategory for each categorical process.

Category: Subcategories: NOT APPLICABLE

Click or tap here to enter text. N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

Category: N/A

Subcategories: N/A

F. Industrial user interruptions

Has the SIU or CIU caused or contributed to any problems (e.g., interferences, pass through, odors, corrosion, blockages) at your POTW in the past three years?

☐ Yes ☒ No

If yes, identify the SIU, describe each episode, including dates, duration, description of problems, and probable pollutants.

NOT APPLICABLE

WORKSHEET 7.0

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CLASS V INJECTION WELL INVENTORY/AUTHORIZATION FORM

Submit the completed form to:

TCEQ
IUC Permits Team
Radioactive Materials Division
MC-233
PO Box 13087
Austin, Texas 78711-3087
512-239-6466

For TCEQ Use Only
Reg. No._____
Date Received_____
Date Authorized_____

Section 1. General Information (Instructions Page 90)

1. TCEQ Program Area

Program Area (PST, VCP, IHW, etc.): NOT APPLICABLE

Program ID: N/A

Contact Name: N/A

Phone Number: N/A

2. Agent/Consultant Contact Information

Contact Name: N/A

Address: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

3. Owner/Operator Contact Information

☐ Owner ☐ Operator

Owner/Operator Name: N/A

Contact Name: N/A

Address: N/A

City, State, and Zip Code: NA/

Phone Number: N/A

4. Facility Contact Information

Facility Name: N/A

Address: N/A

City, State, and Zip Code: N/A

Location description (if no address is available): N/A

Facility Contact Person: N/A

Phone Number: N/A

5. **Latitude and Longitude, in degrees-minutes-seconds**

Latitude: N/A

Longitude: N/A

Method of determination (GPS, TOPO, etc.): N/A

Attach topographic quadrangle map as attachment A.

6. **Well Information**

Type of Well Construction, select one:

- ☐ Vertical Injection
- ☐ Subsurface Fluid Distribution System
- ☐ Infiltration Gallery
- ☐ Temporary Injection Points
- ☐ Other, Specify: N/A

Number of Injection Wells: N/A

7. **Purpose**

Detailed Description regarding purpose of Injection System:

NOT APPLICABLE

Attach a Site Map as Attachment B (Attach the Approved Remediation Plan, if appropriate.)

8. **Water Well Driller/Installer**

Water Well Driller/Installer Name: N/A

City, State, and Zip Code: N/A

Phone Number: N/A

License Number: N/A

Section 2. Proposed Down Hole Design

Attach a diagram signed and sealed by a licensed engineer as Attachment C.

Table 7.0(1) – Down Hole Design Table

Name of String	Size	Setting Depth	Sacks Cement/Grout – Slurry Volume – Top of Cement	Hole Size	Weight (lbs/ft) PVC/Steel
Casing			NOT APPLICABLE		
Tubing					
Screen					

Section 3. Proposed Trench System, Subsurface Fluid Distribution System, or Infiltration Gallery

Attach a diagram signed and sealed by a licensed engineer as Attachment D.

System(s) Dimensions: N/A

System(s) Construction: N/A

Section 4. Site Hydrogeological and Injection Zone Data

1. Name of Contaminated Aquifer: N/A
2. Receiving Formation Name of Injection Zone: N/A
3. Well/Trench Total Depth: N/A
4. Surface Elevation: N/A
5. Depth to Ground Water: N/A
6. Injection Zone Depth: N/A
7. Injection Zone vertically isolated geologically? ☐ Yes ☐ No

   Impervious Strata between Injection Zone and nearest Underground Source of Drinking Water:

   Name: N/A

   Thickness: N/A
8. Provide a list of contaminants and the levels (ppm) in contaminated aquifer

   Attach as Attachment E.
9. Horizontal and Vertical extent of contamination and injection plume

   Attach as Attachment F.
10. Formation (Injection Zone) Water Chemistry (Background levels) TDS, etc.

    Attach as Attachment G.
11. Injection Fluid Chemistry in PPM at point of injection

    Attach as Attachment H.
12. Lowest Known Depth of Ground Water with < 10,000 PPM TDS: N/A
13. Maximum injection Rate/Volume/Pressure: N/A
14. Water wells within 1/4 mile radius (attach map as Attachment I): N/A
15. Injection wells within 1/4 mile radius (attach map as Attachment J): N/A
16. Monitor wells within 1/4 mile radius (attach drillers logs and map as Attachment K): N/A
17. Sampling frequency: N/A
18. Known hazardous components in injection fluid: N/A

Section 5. Site History

1. Type of Facility: N/A
2. Contamination Dates: N/A
3. Original Contamination (VOCs, TPH, BTEX, etc.) and Concentrations (attach as Attachment L): N/A
4. Previous Remediation (attach results of any previous remediation as attachment M): N/A

NOTE: Authorization Form should be completed in detail and authorization given by the TCEQ before construction, operation, and/or conversion can begin. Attach additional pages as necessary.

Class V Injection Well Designations

5A07 Heat Pump/AC return (IW used for groundwater to heat and/or cool buildings)
5A19 Industrial Cooling Water Return Flow (IW used to cool industrial process equipment)
5B22 Salt Water Intrusion Barrier (IW used to inject fluids to prevent the intrusion of salt water into an aquifer)
5D02 Storm Water Drainage (IW designed for the disposal of rain water)
5D04 Industrial Stormwater Drainage Wells (IW designed for the disposal of rain water associated with industrial facilities)
5F01 Agricultural Drainage (IW that receive agricultural runoff)
5R21 Aquifer Recharge (IW used to inject fluids to recharge an aquifer)
5S23 Subsidence Control Wells (IW used to control land subsidence caused by ground water withdrawal)
5W09 Untreated Sewage
5W10 Large Capacity Cesspools (Cesspools that are designed for 5,000 gpd or greater)
5W11 Large Capacity Septic systems (Septic systems designed for 5,000 gpd or greater)
5W12 WTTP disposal
5W20 Industrial Process Waste Disposal Wells
5W31 Septic System (Well Disposal method)
5W32 Septic System Drainfield Disposal
5X13 Mine Backfill (IW used to control subsidence, dispose of mining byproducts, and/or fill sections of a mine)
5X25 Experimental Wells (Pilot Test) (IW used to test new technologies or tracer dye studies)
5X26 Aquifer Remediation (IW used to clean up, treat, or prevent contamination of a USDW)
5X27 Other Wells
5X28 Motor Vehicle Waste Disposal Wells (IW used to dispose of waste from a motor vehicle site - These are currently banned)
5X29 Abandoned Drinking Water Wells (waste disposal)

ATTACHMENT No. 1

CORE DATA FORM

Page 4, Section 3.c.

Administrative Report

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided.)*

☐ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☒ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN 600629935		**RN 101612349**

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy) 5/30/2025

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* *If new Customer, enter previous Customer below:*

East Cedar Creek Fresh Water Spply District

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
	17751571893	75-1571893	097552533

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☒ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☒ **Yes** ☐ **No**

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:	P.O. Box 309						
	City	Mabank	**State**	TX	**ZIP**	75147	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	offmgr@eastcedarcreek.net

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(903) 887-7103		(903) 887-4299

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

East Cedar Creek Fresh Water Spply District South Wastewater Treatment Plant

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City		**State**		**ZIP**		**ZIP + 4**	
24. County	Henderson							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	Approximately 2,800 feet east of the intersection of County Road 2529 and State Highway 198, in Henderson County, TX 75124				
26. Nearest City			**State**		**Nearest ZIP Code**
Payne Springs			TX		75124

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	32.2902777778		**28. Longitude (W) In Decimal:**	96.1016666667	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
32	17	25	96	6	6

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4952		221320	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Treatment of domestic sewage

34. Mailing Address:	**P.O. Box 309**							
	City	**Mabank**	**State**	**TX**	**ZIP**	**75147**	**ZIP + 4**	
35. E-Mail Address:	**offmgr@eastcedarcreek.net**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(903) 887-7103		**(903) 887-4299**

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☒ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
	2799100			
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☒ PWS
				1070019
☒ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
22061				
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☒ Water Rights	☐ Other:
	WQ0013874001		WSC 303	

SECTION IV: Preparer Information

40. Name:	Siglinda West		**41. Title:**	Regulatory Compliance Specialist
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**	
(903) 581-8141	1314	(888) 224-9418	swest@ksaeng.com	

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	East Cedar Creek Fresh Water Supply District	**Job Title:**	General Manager	
Name *(In Print):*	James Blodgett		**Phone:**	(903) 887- **7103**
Signature:	James E Blodgett		**Date:**	5-15-25

ATTACHMENT No. 2

PLAIN LANGUAGE SUMMARY

Page 7, Section 8.F.

Administrative Report

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

Plain Language Summary

East Cedar Creek Fresh Water Supply District (CN 600629935) operates East Cedar Creek Fresh Water District South Plant (RN 101612349), an activated sludge process plant operated in the extended aeration mode.

The facility is located at approximately 15,700 feet south of the intersection of State Highway 198 and State Highway 334, in Payne Springs, Henderson County, Texas 75147.

This application is to renew the authorization to dispose of treated domestic wastewater effluent at a daily average not to exceed 0.196 MGD via surface irrigation of 134 acres of non-public access agricultural land.

This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain Biochemical Oxygen Demand (BOD), pH, Chlorine, Ammonia Nitrogen, Total Kjeldahl Nitrogen (TKN), Sulfate, Phosphorus, E.coli, and Dissolved Solids.

Domestic wastewater is treated by activated sludge process in the extended aeration mode using treatment units to include an aeration basin, clarifier, two aerobic digesters and chlorine contact chambers.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí **/AGUAS PLUVIALES**

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

El Distrito de Suministro de Agua Dulce de East Cedar Creek (CN 600629935) opera la Planta Sur del Distrito de Agua Dulce de East Cedar Creek (RN 101612349), una planta de procesamiento de lodos activados que opera en el modo de aireación extendida.

La instalación está ubicada aproximadamente a 15,700 pies al sur de la intersección de la Carretera Estatal 198 y la Carretera Estatal 334, en Payne Springs, Condado de Henderson, Texas 75147.

Esta solicitud es para renovar la autorización para eliminar el efluente de aguas residuales domésticas tratadas a un promedio diario que no exceda los 0.196 MGD a través del riego superficial de 134 acres de tierras agrícolas de acceso no público.

Este permiso no autorizará la descarga de contaminantes en el agua del estado. Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno (DBO), pH, cloro, nitrógeno amoniacal, nitrógeno Kjeldahl total (TKN), sulfato, fósforo, E.coli, y sólidos disueltos.

Las aguas residuales domésticas se tratan mediante un proceso de lodos activados en el modo de aireación extendida utilizando unidades de tratamiento que incluyen una cuenca de aireación, un clarificador, dos digestores aeróbicos y cámaras de contacto con el cloro

ATTACHMENT No. 2
PLAIN LANGUAGE SUMMARY
Page 7, Section 8.F
Administrative Report

East Cedar Creek Fresh Water Supply District (CN 600629935) operates East Cedar Creek Fresh Water District South Plant (RN 101612349), an activated sludge process plant operated in the extended aeration mode. The facility is located at approximately 15,700 feet south of the intersection of State Highway 198 and State Highway 334, in Payne Springs, Henderson County, Texas 75147. This application is to renew the authorization to dispose of treated domestic wastewater effluent at a daily average not to exceed 0.196 MGD via surface irrigation of 134 acres of non-public access agricultural land. This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain Biochemical Oxygen Demand (BOD), pH, Chlorine, Ammonia Nitrogen, Total Kjeldahl Nitrogen (TKN), Sulfate, Phosphorus, E.coli, and Dissolved Solids.

Domestic wastewater is treated by activated sludge process in the extended aeration mode using treatment units to include an aeration basin, clarifier, two aerobic digesters and chlorine contact chambers.

Spanish Plain Language Summary

El Distrito de Suministro de Agua Dulce de East Cedar Creek (CN 600629935) opera la Planta Sur del Distrito de Agua Dulce de East Cedar Creek (RN 101612349), una planta de procesamiento de lodos activados que opera en el modo de aireación extendida.

La instalación está ubicada aproximadamente a 15,700 pies al sur de la intersección de la Carretera Estatal 198 y la Carretera Estatal 334, en Payne Springs, Condado de Henderson, Texas 75147.

Esta solicitud es para renovar la autorización para eliminar el efluente de aguas residuales domésticas tratadas a un promedio diario que no exceda los 0.196 MGD a través del riego superficial de 134 acres de tierras agrícolas de acceso no público.

Este permiso no autorizará la descarga de contaminantes en el agua del estado.

Se espera que las descargas de la instalación contengan demanda bioquímica de oxígeno (DBO), pH, cloro, nitrógeno amoniacal, nitrógeno Kjeldahl total (TKN), sulfato, fósforo, E.coli, y sólidos disueltos.

Las aguas residuales domésticas se tratan mediante un proceso de lodos activados en el modo de aireación extendida utilizando unidades de tratamiento que incluyen una cuenca de aireación, un clarificador, dos digestores aeróbicos y cámaras de contacto con el cloro.

ATTACHMENT No. 3

PROJECT INFORMATION FORM

Page 7, Section 8.G.

Administrative Report

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.

Renewal w/ no changes of the existing wastewater discharge permit for the East Cedar Creek South W

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.

Renewal of wastewater discharge permit for existing South Wastewater Treatment Plant.

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)

Henderson

(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?

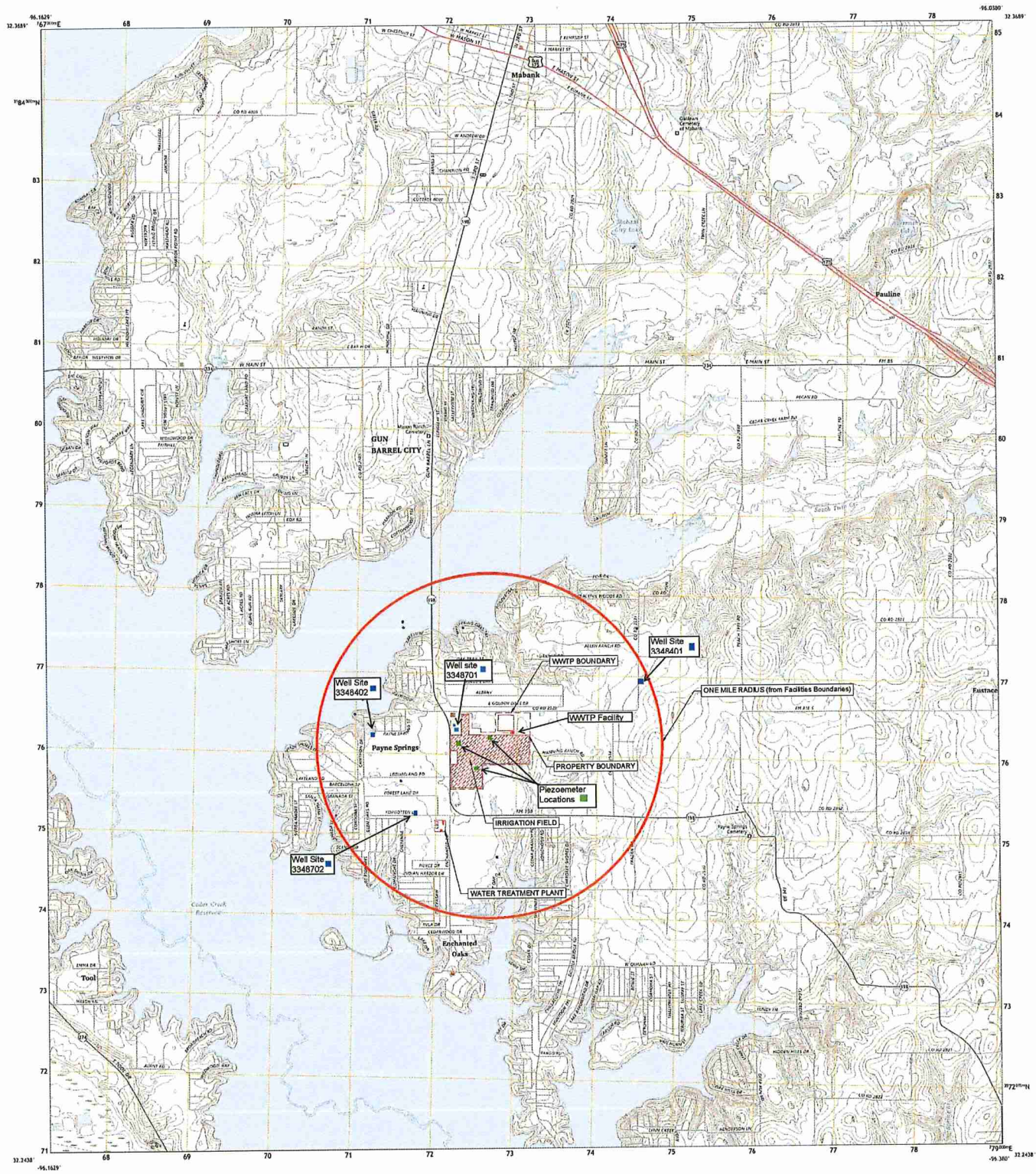
☐ Publish in alternative language newspaper
☐ Posted on Commissioner's Integrated Database Website
☐ Mailed by TCEQ's Office of the Chief Clerk
☐ Other (specify)

ATTACHMENT No. 4

USGS TOPO MAP

Page 10, Section 13

Administrative Report



SEAL
Texas Firm Registration No. F-1386
SHEET NO.
ATTACHMENT 4

KSA
a Pape-Dawson company
6781 Oak Hill Blvd. Tyler, Texas 75703
T.903-581.8141 F.888.224.9418
www.ksaeng.com

DRAWN BY:	
DESIGNED BY:	
LATEST REVISION	
Swest	
KSA JOB NO.:	
103767	

East Cedar Creek South Wastewater Treatment Plant Permit Renewal

WQ0013874.001

PROJECT NAME:

ATTACHMENT NO. 4
USGS TOPO MAP
Page 10, Section 13
Administrative Report

SHEET NAME:

MARK	REVISION	DATE

ATTACHMENT No. 5

SUPPLEMENTARY PROJECT INFORMATION FORM

(SPIF)

Page 2, Item 5

SPIF Report

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: _____Renewal _____Major Amendment ____Minor Amendment _____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

_____ Texas Parks and Wildlife Department _____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: East Cedar Creek Fresh Water Supply District

   Permit No. WQ00 13874001 EPA ID No. TX NOT APPLICABLE

   Address of the project (or a location description that includes street/highway, city/vicinity, and county):

   Approximately 15,700 feet south of the intersection of State Highway 198 and State Highway 334 in Henderson County Texas 75147

Provide the name, address, phone and fax number of an individual that can be contacted to answer specific questions about the property.

Prefix (Mr., Ms., Miss): Ms.

First and Last Name: Siglinda West

Credential (P.E, P.G., Ph.D., etc.):

Title: Regulatory Compliance Specialist

Mailing Address: 6781 Oak Hill Blvd.

City, State, Zip Code: Tyler, Texas 75703

Phone No.: 903.581.8141 Ext.: 1314 Fax No.: 888.224.9418

E-mail Address: swest@ksaeng.com

2. List the county in which the facility is located: Henderson
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

NOT APPLICABLE

4. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in 30 TAC Chapter 307). If known, please identify the classified segment number.

Effluent flows through an irrigation pipe to the irrigation field and discharged onto the site via sprinklers. The site is located in the drainage area of Cedar Creek Reservoir in Segment No. 0818 of the Trinity River Basin.

5. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report).

Provide original photographs of any structures 50 years or older on the property.

Does your project involve any of the following? Check all that apply.

- ☐ Proposed access roads, utility lines, construction easements
- ☐ Visual effects that could damage or detract from a historic property's integrity
- ☐ Vibration effects during construction or as a result of project design
- ☐ Additional phases of development that are planned for the future
- ☐ Sealing caves, fractures, sinkholes, other karst features
- ☐ Disturbance of vegetation or wetlands

1. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features):

No construction impacts

2. Describe existing disturbances, vegetation, and land use:

No existing disturbances

THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

NOT APPLICABLE

4. Provide a brief history of the property, and name of the architect/builder, if known.

NOT APPLICABLE

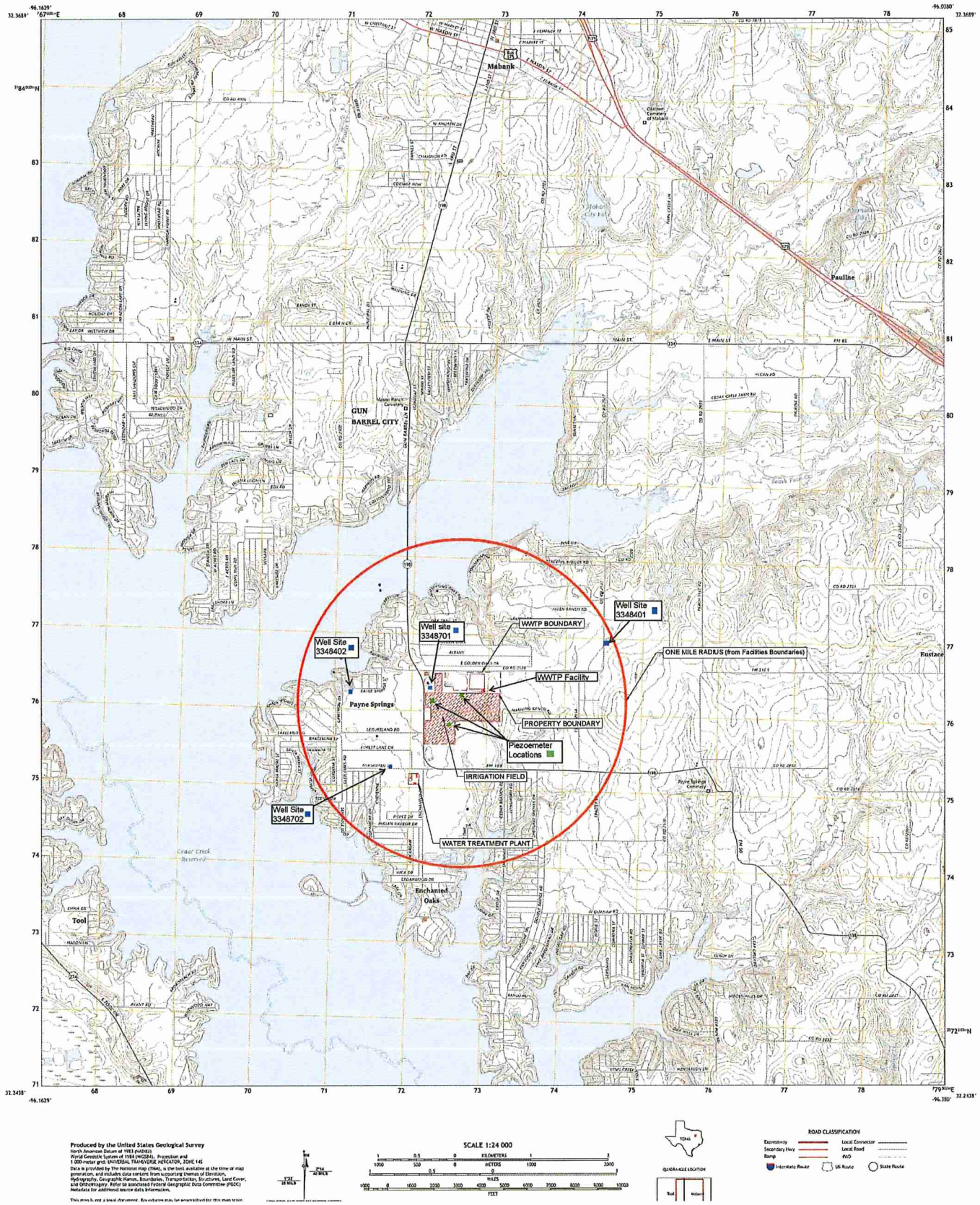
ATTACHMENT No. 6

USGS SPIF MAP

(SPIF)

Page 2, Item 5

SPIF Report



SEAL:
TBPE Firm Registration No. F-1356

ATTACHMENT 6

SHEET NO.

KSA
a Pape-Dawson company
6781 Oak Hill Blvd. Tyler, Texas 75703
T.903-581.8141 F.888.224.9418
www.ksaeng.com

DRAWN BY:	
DESIGNED BY:	
LATEST REVISION	Swest
KSA JOB NO.:	103767

PROJECT NAME:

East Cedar Creek South Wastewater Treatment Plant
Permit Renewal

WQ0013874.001

SHEET NAME:

ATTACHMENT NO. 6
USGS TOPO MAP
Page 2, Item 5
SPIF Report

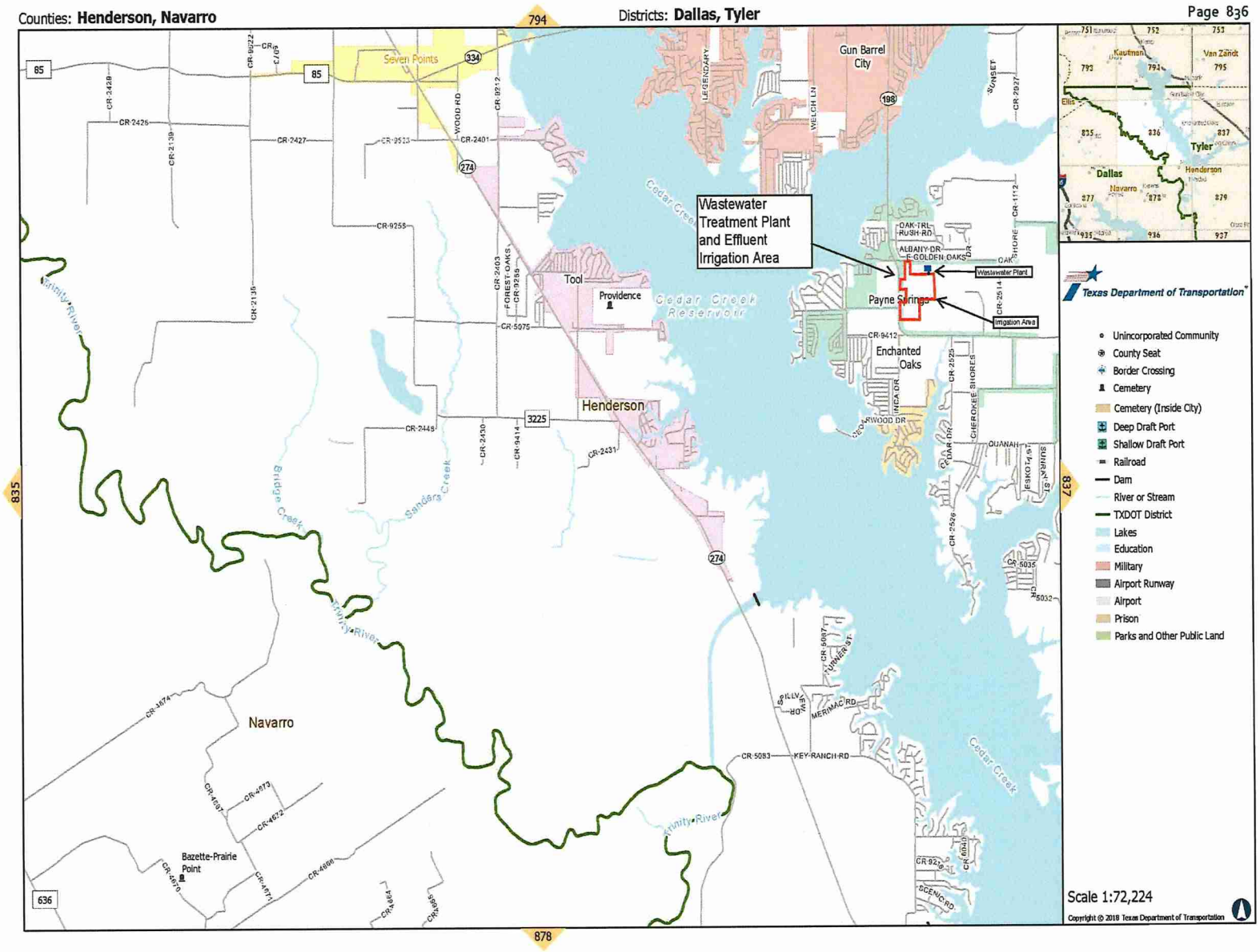
MARK	REVISION	DATE

ATTACHMENT No. 7

LOCATION MAP

Page 2, Item 5

SPIF Report



ATTACHMENT No. 7

ATTACHMENT No. 7
LOCATION MAP
Page 2, Item 5
SPIF Report

EAST CEDAR CREEK FWSD
WWTP PERMIT RENEWAL
WQ0013874.001

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TBPE Firm Registration No. F-1356

ATTACHMENT No. 8

TREATMENT UNITS

Page 2, Section 2.B.

Technical Report

East Cedar Creek Fresh Water Supply District
Wastewater Treatment Plant

ATTACHMENT No. 8

Treatment Units
Page 2, Section 2.B
Technical Report

Phase	Treatment Unit Type	Number of Units	Dimensions
Existing	Bar Screen	1	3' x 5'
	Aeration Basin	1	122' x 13' x 15' SWD
	Clarifier	1	36' DIA. X 11.5' SWD
	Aerobic Digester	2	15' x 13' x 15' SWD
	Chlorine Contact Chamber	2	8' x 13' x 13' SWD
Final	Bar Screen	1	3' x 5'
	Aeration Basin	1	122' x 13' x 15' SWD
	Clarifier	1	36' DIA. X 11.5' SWD
	Aerobic Digester	2	15' x 13' x 15' SWD
	Chlorine Contact Chamber	2	8' x 13' x 13' SWD
	Bar Screen	1	3' x 8'
	Aeration Basin	1	38' x 16' x 15' SWD
	Clarifier	1	24' DIA. X 11.5' SWD
	Chlorine Contact Chamber	1	15' x 9' x 8' SWD
	Aerobic Digester	1	28' x 15' x 15' SWD

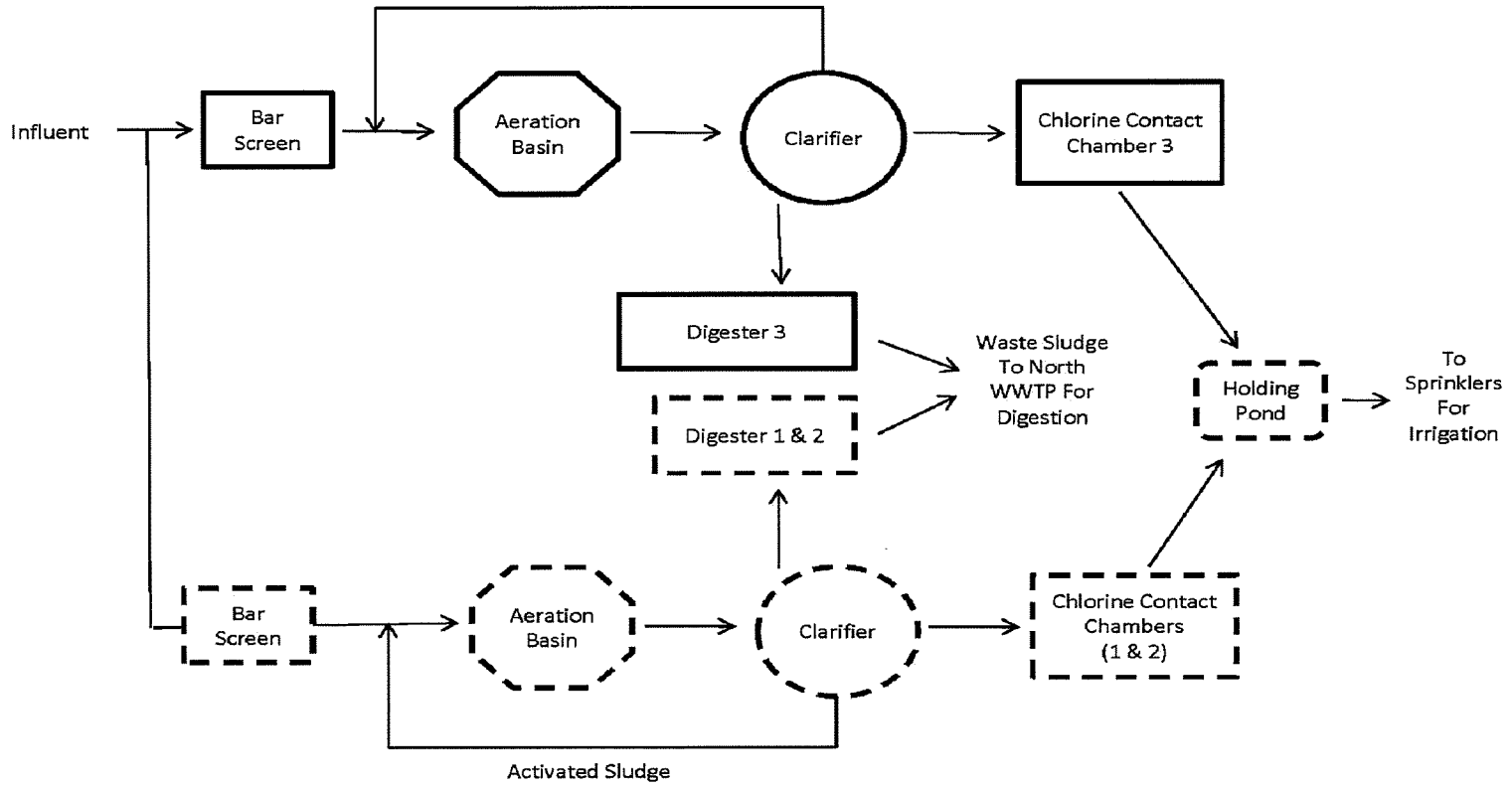
ATTACHMENT No. 9

FLOW DIAGRAM

Page 2, Section 2.C.

Technical Report

ATTACHMENT No. 9
FLOW DIAGRAM



DOMESTIC TECHNICAL REPORT
Page 2, Section 2.C

KSA
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East Cedar Creek FWSD
South WWTP Permit Renewal
WQ0013874001

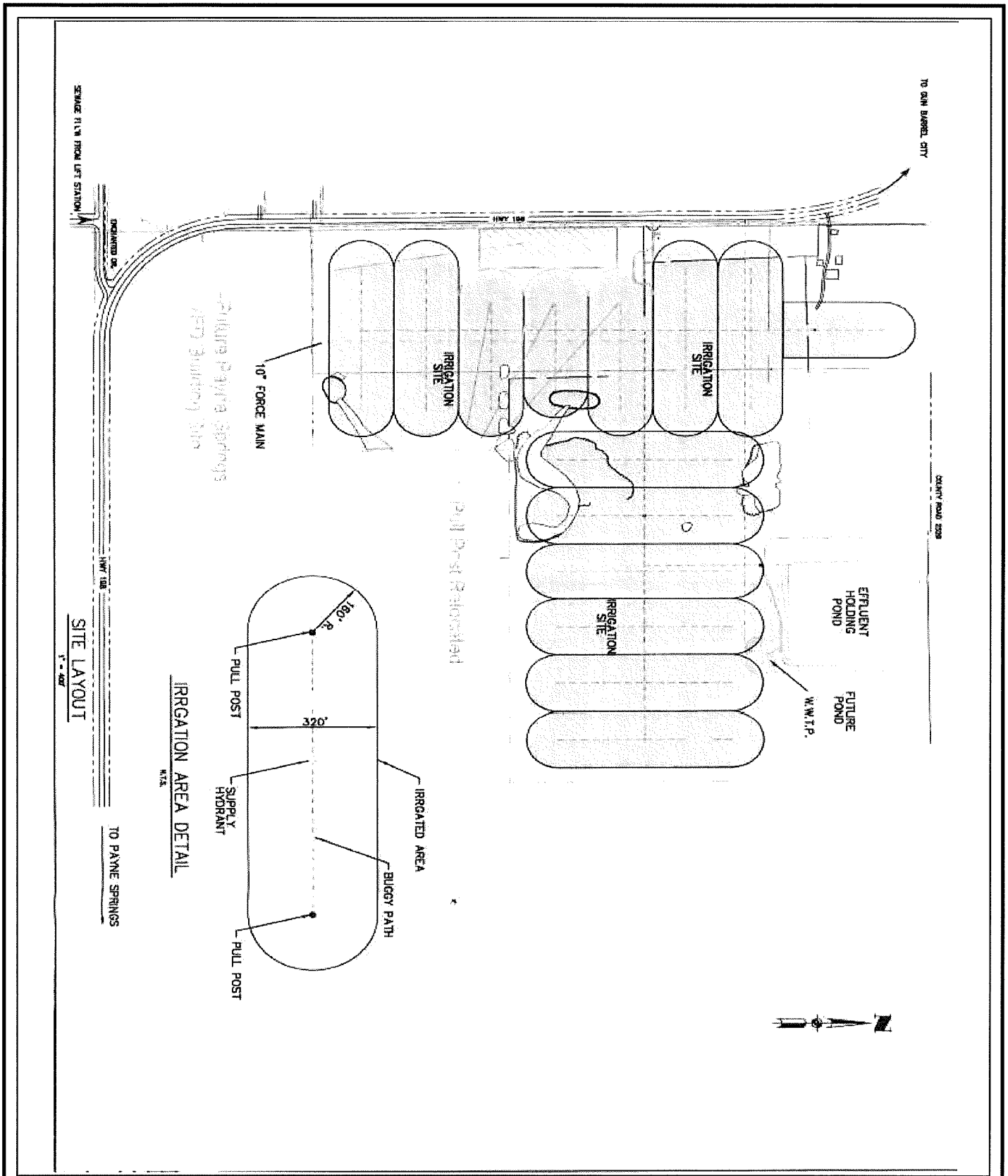
ATTACHMENT 9
FLOW DIAGRAM
Page 2, Section 32.C
Technical Report

ATTACHMENT No. 10

SITE MAP

Page 2, Section 3

Technical Report



KSA
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www.ksaeng.com
TBPE Firm Registration No. F-1356

EAST CEDAR CREEK FWSD
WWTP PERMIT RENEWAL

WQ0013874.001

ATTACHMENT No. 10
SITE MAP
Page 2, Section 3
Technical Report

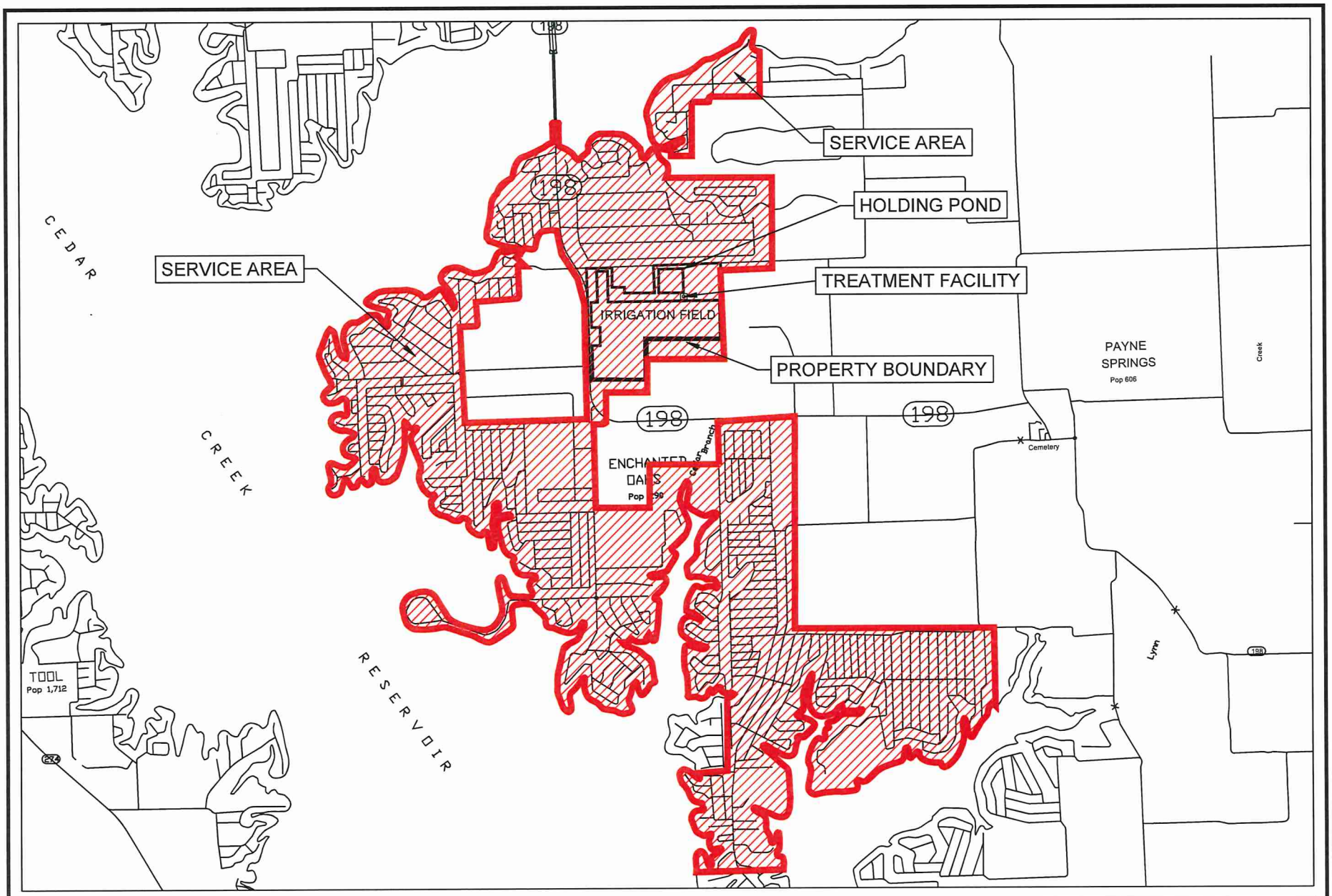
ATTACHMENT No. 10

ATTACHMENT No. 11

SERVICE AREA MAP

Page 3, Section 3

Technical Report



KSA
a Pape-Dawson company

ATTACHMENT No. 11
East Cedar Creek FWSD
South WWTP Plant
Permit No. WQ0013874001

SERVICE AREA
Page 2, Section 3
Technical Report

ATTACHMENT No. 12

EFFLUENT RESULTS

Page 10, Section 7

Technical Report

REPORT

REPORT DATE	04/23/2025
RECEIVE DATE	04/08/2025
RECEIVE TIME	1550
WORK ORDER	N5D1424

REPORT TO
East Cedar Creek WW Christopher Cotton PO Box 309 Mabank, TX 75147

REPORT FROM
Eastex Environmental Laboratory PO Box 631375 Nacogdoches, TX 75963 936-569-8879

PROJECT
ECC South Permit Renewal

Enclosed are the results of analyses for samples received by the laboratory on 04/08/25 15:50, with Lab ID Number N5D1424. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul D. Hughes, Laboratory Director

LABORATORY ANALYTICAL REPORT

Project: ECC South Permit Renewal

Sample Site: ECC South Plant 1
Sample Type: Grab
Sample Matrix: Water

Sample Number
N5D1424-01

Collector: Jay Watson
Sampled: 04/08/25 1330
Received: 04/08/25 1550

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
TKN	15.8	1.0	mg/L	A	B5D5790	04/15/25 0943	TDS	EPA 351.2	20, Cs
CBOD 5	11.0	2.0	mg/L	A	N510566	04/09/25 0800	KP	SM 5210 B	
Chloride	46	5	mg/L	A	N510571	04/10/25 1441	KP	SM 4500 Cl C	
Conductivity	499	10	µmhos/cm @25C	A	N510569	04/11/25 0830	CJA	SM 2510 B	
E coli IDEXX	2420	1	mpn/100ml	A	N510633	04/08/25 1630	RJD	Colilert 18	ZZ
NH3N	14.6	0.1	mg/L	A	N510545	04/10/25 1230	CJA	SM 4500 NH3 - D	
Nitrate - N	2.83	1	mg/L	N	N510531	04/09/25 1045	KP	SM 4500 NO3 D	
pH Lab	7.02		std unit	A	N510516	04/09/25 0900	CJA	SM 4500 H + B	3, 6
pH Temp	19.1		std unit		N510516	04/09/25 0900	CJA	SM 4500 H + B	
Sulfate	49.7	5.00	mg/L	A	N510625	04/11/25 1059	EM	ASTM D516-16	
TDS	274	10.0	mg/L	A	N510535	04/09/25 1335	RJS	SM 2540 C	
Total Phosphorus as P	0.84	0.05	mg/L	A	N510720	04/16/25 0950	KP	SM 4500 P B.5 E	20

Sample Site: ECC South Plant 2
Sample Type: Grab
Sample Matrix: Water

Sample Number
N5D1424-02

Collector: Jay Watson
Sampled: 04/08/25 1330
Received: 04/08/25 1550

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
TKN	4.0	1.0	mg/L	A	B5D5790	04/15/25 0943	TDS	EPA 351.2	20, Cs
CBOD 5	4.5	2.0	mg/L	A	N510566	04/09/25 0800	KP	SM 5210 B	
Chloride	36.5	5	mg/L	A	N510571	04/10/25 1441	KP	SM 4500 Cl C	
Conductivity	366	10	µmhos/cm @25C	A	N510569	04/11/25 0830	CJA	SM 2510 B	
E coli IDEXX	33	1	mpn/100ml	A	N510633	04/08/25 1630	RJD	Colilert 18	
NH3N	1.83	0.1	mg/L	A	N510545	04/10/25 1230	CJA	SM 4500 NH3 - D	
Nitrate - N	3.31	1	mg/L	N	N510531	04/09/25 1045	KP	SM 4500 NO3 D	
pH Lab	7.27		std unit	A	N510516	04/09/25 0900	CJA	SM 4500 H + B	3, 6
pH Temp	19.1		std unit		N510516	04/09/25 0900	CJA	SM 4500 H + B	
Sulfate	39.2	5.00	mg/L	A	N510625	04/11/25 1059	EM	ASTM D516-16	
TDS	210	10.0	mg/L	A	N510535	04/09/25 1335	RJS	SM 2540 C	
Total Phosphorus as P	0.24	0.05	mg/L	A	N510720	04/16/25 0950	KP	SM 4500 P B.5 E	20

SM 4500 H + B - Quality Control

Eastex Environmental Laboratory - Nacogdoches

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch N510516 - No Prep										
LCS (N510516-BS1)										**Prepared & Analyzed: 04/09/25**
pH Lab	7.07		std unit	7.00		101	0-200			
Duplicate (N510516-DUP1)				**Source: N5D1424-01**						**Prepared & Analyzed: 04/09/25**
pH Lab	6.99		std unit		7.02			0.428	20	3, 6
Batch N510531 - No Prep										
Blank (N510531-BLK1)										**Prepared & Analyzed: 04/09/25**
Nitrate - N	ND	1	mg/L							
LCS (N510531-BS1)										**Prepared & Analyzed: 04/09/25**
Nitrate - N	10.3		mg/L	10.0		103	90-110			
MRL Check (N510531-MRL1)										**Prepared & Analyzed: 04/09/25**
Nitrate - N	1.25		mg/L	1.00		125	0-200			
Matrix Spike (N510531-MS1)				**Source: N5D1424-02**						**Prepared & Analyzed: 04/09/25**
Nitrate - N	8.91	1	mg/L	5.00	3.31	112	80-120			
Matrix Spike Dup (N510531-MSD1)				**Source: N5D1424-02**						**Prepared & Analyzed: 04/09/25**
Nitrate - N	8.32	1	mg/L	5.00	3.31	100	80-120	6.85	20	
Batch N510535 - No Prep										
Blank (N510535-BLK1)										**Prepared & Analyzed: 04/09/25**
TDS	ND	10.0	mg/L							

SM 2540 C - Quality Control

Eastex Environmental Laboratory - Nacogdoches

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch N510535 - No Prep										
LCS (N510535-BS1)										**Prepared & Analyzed: 04/09/25**
TDS	48.0		mg/L	50.0		96.0	90-110			
Duplicate (N510535-DUP1)				**Source: N5D1261-01**						**Prepared & Analyzed: 04/09/25**
TDS	186	10.0	mg/L		186			0.00	10	
Batch N510545 - No Prep										
Blank (N510545-BLK1)										**Prepared & Analyzed: 04/10/25**
NH3N	ND	0.1	mg/L							
LCS (N510545-BS1)										**Prepared & Analyzed: 04/10/25**
NH3N	4.78		mg/L	5.00		95.6	90-110			
Matrix Spike (N510545-MS1)				**Source: N5D1265-01**						**Prepared & Analyzed: 04/10/25**
NH3N	5.31	0.1	mg/L	5.00	0.203	102	80-120			
Matrix Spike Dup (N510545-MSD1)				**Source: N5D1265-01**						**Prepared & Analyzed: 04/10/25**
NH3N	5.29	0.1	mg/L	5.00	0.203	102	80-120	0.377	20	
Batch N510566 - No Prep										
Blank (N510566-BLK1)										**Prepared & Analyzed: 04/09/25**
CBOD 5	ND	2.0	mg/L							
LCS (N510566-BS1)										**Prepared & Analyzed: 04/09/25**
CBOD 5	174		mg/L	198		87.9	34.59-115.402			

SM 5210 B - Quality Control

Eastex Environmental Laboratory - Nacogdoches

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch N510566 - No Prep										
Duplicate (N510566-DUP1)				**Source: N5D1259-01**					**Prepared & Analyzed: 04/09/25**	
CBOD 5	2.20	2.0	mg/L		2.10			4.65	30	
Batch N510569 - No Prep										
Blank (N510569-BLK1)									**Prepared & Analyzed: 04/11/25**	
Conductivity	ND	10	µmhos/cm @25C							
LCS (N510569-BS1)									**Prepared & Analyzed: 04/11/25**	
Conductivity	103.1		µmhos/cm @25C	100		103	90-110			
Duplicate (N510569-DUP1)				**Source: N5D1424-02**					**Prepared & Analyzed: 04/11/25**	
Conductivity	367	10	µmhos/cm @25C		366			0.273	20	
Batch N510571 - No Prep										
Blank (N510571-BLK1)									**Prepared & Analyzed: 04/10/25**	
Chloride	ND	5	mg/L							
LCS (N510571-BS1)									**Prepared & Analyzed: 04/10/25**	
Chloride	100		mg/L	100		100	90-110			
MRL Check (N510571-MRL1)									**Prepared & Analyzed: 04/10/25**	
Chloride	5		mg/L	5.00		100	0-200			
Matrix Spike (N510571-MS1)				**Source: N5D1124-01**					**Prepared & Analyzed: 04/10/25**	
Chloride	220	5	mg/L	100	120	100	80-120			

SM 4500 Cl C - Quality Control

Eastex Environmental Laboratory - Nacogdoches

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch N510571 - No Prep										
Matrix Spike Dup (N510571-MSD1)				**Source: N5D1124-01**					**Prepared & Analyzed: 04/10/25**	
Chloride	220	5	mg/L	100	120	100	80-120	0.00	20	
Batch N510625 - No Prep										
Blank (N510625-BLK1)									**Prepared & Analyzed: 04/11/25**	
Sulfate	ND	5.00	mg/L							
LCS (N510625-BS1)									**Prepared & Analyzed: 04/11/25**	
Sulfate	18.7		mg/L	20.0		93.4	80-120			
Matrix Spike (N510625-MS1)				**Source: N5D1312-01**					**Prepared & Analyzed: 04/11/25**	
Sulfate	110	5.00	mg/L	60.0	49.5	101	80-120			
Matrix Spike Dup (N510625-MSD1)				**Source: N5D1312-01**					**Prepared & Analyzed: 04/11/25**	
Sulfate	108	5.00	mg/L	60.0	49.5	97.0	80-120	1.93	20	
Batch N510633 - No Prep Micro										
Blank (N510633-BLK1)									**Prepared & Analyzed: 04/08/25**	
E coli IDEXX	ND	1	mpn/100ml							
Duplicate (N510633-DUP1)				**Source: N5D1295-01**					**Prepared & Analyzed: 04/08/25**	
E coli IDEXX	2	2	mpn/100ml		2			0.00	200	
Batch N510720 - No Prep										
Blank (N510720-BLK1)									**Prepared & Analyzed: 04/16/25**	
Total Phosphorus as P	ND	0.05	mg/L							

SM 4500 P B.5 E - Quality Control

Eastex Environmental Laboratory - Nacogdoches

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch N510720 - No Prep										
LCS (N510720-BS1)										**Prepared & Analyzed: 04/16/25**
Total Phosphorus as P	0.32		mg/L	0.334		96.7	90-110			
Matrix Spike (N510720-MS1)				**Source: N5D1274-01**						**Prepared & Analyzed: 04/16/25**
Total Phosphorus as P	0.78	0.05	mg/L	0.500	0.27	102	80-120			
Matrix Spike Dup (N510720-MSD1)				**Source: N5D1274-01**						**Prepared & Analyzed: 04/16/25**
Total Phosphorus as P	0.76	0.05	mg/L	0.500	0.27	97.6	80-120	2.86	20	

EPA 351.2 - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5D5790 - SM 4500 Norg C										
Blank (B5D5790-BLK1)										**Prepared & Analyzed: 04/15/25**
TKN	ND	1.0	mg/L							
LCS (B5D5790-BS1)										**Prepared & Analyzed: 04/15/25**
TKN	10.2		mg/L	10.0		102	90-110			
Matrix Spike (B5D5790-MS1)				**Source: 5142664-01**						**Prepared & Analyzed: 04/15/25**
TKN	10.3	1.0	mg/L	10.0	1.52	88.0	80-120			
Matrix Spike Dup (B5D5790-MSD1)				**Source: 5142664-01**						**Prepared & Analyzed: 04/15/25**
TKN	10.2	1.0	mg/L	10.0	1.52	87.0	80-120	0.983	20	

Notes and Definitions

ZZ	result is greater than 2420
Cs	Analyses performed at Coldspring Laboratory.
6	Sample not received within required holding time.
3	Sample analysis performed out of holding time.
20	Sample pH not <2.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

**All Metals Analyses performed at Coldspring Laboratory, unless otherwise indicated.*

EASTEX ENVIRONMENTAL LAB, INC.

P.O. Box 1089, Coldspring, TX 77331
P.O. Box 631375, Nacogdoches, TX 75963-1375
(936) 653-3249 * (800) 525-0508
(936) 569-8879 * FAX (936) 569-8951

Report To:

Company:	East Cedar Creek FWSD
Address:	PO Box 309
	Mabank TX 75147
Attn:	James Blodgett
Phone#	(903) 887-7103
Fax#	(903) 887-3672
P.O. #	

Remarks: NSD1424-01-02, NSD1277-01, NSD1278-01, NSD1279-01, NSD1280-01

Sampler's Name (print): Jay Watson

Sampler's Signature: Jay Watson

Project Number:

Project Name: Plant #1 SWWTP Plant #2

Sample ID	Date	Time	C or G	DO	pH	Cl2	Flow	Temp	Matrix	Containers #	size	type	pres	BOD 5	CBOD5	Ammonia Nitrogen	Nitrate Nitrogen	Total Kjeldahl Nitrogen	Salinity	Total Phosphorus	E.Coli	Total Dissolved Solids	Enterococci Count
EFFLUENT Plant 1	4-8-25	1:30pm	G						WW	1	3	P	C	X									
Effluent															X								
Effluent																X							
Effluent																	X						
Effluent																		X					
Effluent																			X				
Effluent																				X			
Effluent																					X		
Effluent																						X	
Effluent																							X
Effluent Plant 2	4-9-25	1330																					
Influent 1	4-8-25	1330												X									
Influent 2	"	"												X									

Relinquished By: Jay Watson	Date 4-8-25	Time 1:30pm	Received By:	Date 4-8-25	Time 1340
Relinquished By:	Date 4-8-25	Time 1550	Received By: Sabina Davis	Date 4/8/25	Time 1550
Relinquished By:	Date	Time	Received By and/or Checked In By:	Date	Time

Received Iced: (YES) / NO

Received Iced: (YES) / NO

Received Iced: YES / NO

LAB USE ONLY Sample Condition Acceptable: (Yes) / No | Temp°C: 4.6 | Therm. ID: 033 | Logged In By: Sabina Davis | Date: 4/9/25 | Time: 0840

Alternate Check In: Date Time

See back for instructions

* Thermometers have a +/- 0.0 factor and recorded temperature is the observed temperature.

ATTACHMENT No. 13

LINER CERTIFICATION LETTER

Page 32, Section 3

Technical Report

ATTACHMMENT No. 13

Page 32, Section 3
Technical Report

POND LINER NARRATIVE:

The storage pond construction documents were prepared, signed and sealed by a Texas licensed professional engineer. The pond liner was designed to be constructed with soils having a liquid limit of not less than 30, a plasticity index of not less than 15, and at least 50% passing the #200 mesh sieve and free of rocks larger than 3" diameter. A copy of the construction documents for the storage pond can be provided upon request.

ATTACHMENT No. 14

RUNOFF PROTECTION/ TAILWATER CONTROLS

Page 32, Section 4

Technical Report

EAST CEDAR CREEK FWSD
South WWTP Permit Renewal
Permit No. WQ00103874001

ATTACHMENT 14
FLOOD AND RUNOFF PROTECTION
(Domestic Worksheet 3.1)
(Page 37, Section 4)

Land Application of Effluent

East Cedar Creek Fresh Water Supply District (FWSD) located on the western end of Henderson County along the eastern shore of Cedar Creek Reservoir between the Lacy Fork and Lynn Creek branches. The irrigation field is approximately 134-acre tract land. The existing wastewater treatment plant and irrigation holding pond are located adjacent to the irrigation field at the north end. After primary and secondary treatment of the sewage is completed, the clarified and chlorinated effluent drains into the holding pond where it is held prior to irrigation. Transfer of the effluent from the holding pond to the irrigation field is accomplished with a small pump station, PVC distribution piping and hose risers that are installed at several locations within the field to maximize coverage with the mobile "traveling gun" sprinkler units.

The irrigation site does not allow for public access. Application of wastewater effluent will be from irrigation "traveling gun" sprinkler units onto the agricultural land. The crops grown on the irrigated land are Coastal Bermuda and winter Rye.

There is no irrigation on the site during rain events or when the site is inundated with water to control runoff and flooding on the site. Irrigation takes place as needed, not daily, to control the flooding, inundation, and runoff. There are piezometers installed in and around the irrigation site.

The disposal of wastewater effluent on this site by irrigation has a rating described as "not limited" for Axtell Loam and "very limited" for the Crockett Loam, Derly-Rader Complex and Wilson series. (See soil map "Disposal of Wastewater by Irrigation").

The main portion of the irrigation site is made up of Derly-Radar(70%) Axtell Loam (15.9%) and shows a rating of "very Limited".

TAILWATER CONTROLS

East Cedar Creek FWSD irrigates 134 acres of agricultural land in Henderson County, adjacent to the wastewater treatment plant that is located along the eastern shore of Cedar Creek Reservoir between the Lacy Fork and Lynn Creek branches. The existing wastewater treatment plant and irrigation holding pond are located adjacent to the irrigation field at the north end. The irrigation field is irrigated several times during the month. Crops being grown on the irrigation site are Coastal Bermuda, winter rye and..

There have been no concerns or issues with tailwater or tailwater controls at this site. This is due to the soils at this irrigation site. The largest portions have moderate permeability, low runoff, are well drained, and up to 80 inches to the restrictive layer. The rating for flooding or ponding is "none".

The field irrigation system is monitored during times wastewater effluent is applied to the site. Irrigation does not occur during a rain event or at times the site is frozen, saturated, or inundated with water.

The area irrigated is 134 acres of non-public access agricultural land. The wastewater treatment plant has a design flow of 0.196 million gallons per day and the application rate for the wastewater effluent is 1.64 acre- feet per year per acre.

ATTACHMENT No. 15

CROPPING PLAN

Page 33, Section 5

Technical Report

ATTACHMENT 15

IRRIGATION FIELD MANAGEMENT PLAN

FOR THE

SOUTH WASTEWATER TREATMENT PLANT

WITHIN

EAST CEDAR CREEK FRESH WATER SUPPLY DISTRICT

HENDERSON COUNTY, TEXAS

April, 2025

TABLE OF CONTENTS

I. INTRODUCTION

A. PURPOSE OF IRRIGATION FIELD MANAGEMENT PLAN

The purpose of this Irrigation Field Management Plan is to specify and describe the actions that the East Cedar Creek Fresh Water Supply District will take to implement practices, techniques and technologies associated with the crop irrigation of wastewater treatment plant effluent utilized as a permitted disposal procedure. This Plan recognizes that the management of water, soil, crop and operational procedures plays an important role in the successful use of wastewater treatment plant effluent for irrigation.

B. IRRIGATION FIELD DESCRIPTION

The East Cedar Creek Fresh Water Supply District is located on the western end of Henderson County along the eastern shore of Cedar Creek Reservoir between the Lacy Fork and Lynn Creek branches. A Vicinity Map displaying the extents of the district boundary is provided for review as Exhibit No. 1 within Appendix "A." A Location Map displaying the size of the irrigation field relative to surrounding roads, subdivisions and other areas of interest is provided for review as Exhibit No. 2 within Appendix "A." The field intended for irrigation disposal of wastewater treatment plant effluent is located on the southeast side of the District and covers approximately 134 acres of available surface area. An Effluent Disposal Facility Layout Map outlining the operational extents of the irrigation field is provided for review as Exhibit No. 3 within Appendix "A."

As shown in the Layout Map, the existing Wastewater Treatment Plant and Irrigation Holding Pond are located adjacent to the north end of the irrigation field. After primary and secondary treatment of the sewage is completed, the clarified and chlorinated effluent drains into the Holding Pond where it is stored prior to irrigation. Transfer of the effluent from the Holding Pond to the irrigation field is accomplished with a small pump station, PVC distribution piping and hose risers that are installed at several locations within the field to maximize coverage with the mobile "traveling gun" sprinkler unit.

II. IRRIGATION PLAN

A. IRRIGATION EQUIPMENT OPERATION

The District utilizes a "traveling gun" sprinkler unit to distribute the effluent flow over the area intended for irrigation of forage crops. The system consists of a wheeled cart with a large sprinkler ("gun"), the main traveler machine with a hose reel, and an irrigation hose. The "gun" sprays a huge stream of water high into the air during irrigation, which is very susceptible to wind and evaporation losses - up to 30% or more in most cases. Literature describing an example of the type of system currently used at the effluent disposal site is provided for review within Appendix "B."

Advantages to use of a "traveling gun" irrigation system include:

- Ease of transport from one part of the field to the other;
- Capability to irrigate odd shaped fields;
- Rate of water application can be adjusted for variability in soil moisture conditions.

Disadvantages to use of a ·'traveling gun., irrigation system include:

- Significant amount of downtime when moving the system between hose riser stations;
- Low energy efficiency since the supply pump must provide continuous and relatively high water pressure at the main discharge unit.

Traveling guns irrigate one section of the field and then are moved to the next section. The actual distance between those sections depends on the diameter of throw of the sprinkler gun, which depends in tum on the sprinkler operating pressure and nozzle size. A typical spacing between sections is 70% of the diameter of throw of the gun.

The unit is propelled with a cable winch that is powered by a water turbine. During set up, the cable is unrolled and attached to an anchor point. The winch then retracts the cable during irrigation, pulling the machine along and dragging the irrigation supply hose behind. The rate of pull is manually adjusted with a gearing mechanism controlled by speed of the turbine.

The following formula can be used to help the operator determine the amount of water applied during an irrigation pull:

Application Depth (inches)= (1.605 x gpm) / (SSP x TSPD)

In this fo1mula => **gpm** is Rate of Flow in gallons per minute
SSP is Spacing Between Sections in feet
TSPD is Traveler Reel-[n Speed in feet per minute

Most operators will apply at least 1 inch of water depth per pass - or more if the soil properties, slope and groundcover conditions will accept the effluent without runoff occurring during application operations.

B. WATER MANAGEMENT

Most treated wastewater is not very saline, with salinity levels usually ranging between 200 and 500 mg/J. However, there may be instances where the salinity concentration exceeds the 2,000 mg/I level. In any case, appropriate water management practices will have to be followed to prevent salinization of the soil. If salt is not flushed out of the root zone by leaching and removed from the soil by effective drainage, salinity problems can build up rapidly. Thus, leaching and drainage are two important water management practices that will be employed to avoid salinization of soils.

For irrigated agriculture, a certain amount of excess irrigation water is required to percolate through the root zone so as to remove the salts which have accumulated as a result of evapotranspiration from the original irrigation water. This process of displacing the salts from the root zone is called --Leaching." Salinity control by effective leaching of the root zone becomes more important as the irrigation water becomes more saline.

Drainage is defined as the removal of excess water from the soil surface and below so as to permit optimum growth of plants. Removal of excess surface water is termed "surface drainage," while the removal of excess water from beneath the soil surface is te1med ·'sub-surface drainage."

C. SODIUM ABSORPTION RATIO (SAR)

Soils with an excess of sodium ions (saline), compared to calcium and magnesium ions, remain in a dispersed condition and are almost impermeable to rain or irrigation water.

A ·'dispersed" soil is extremely sticky when wet, tends to crust and becomes very hard and cloddy when dry. Water infiltration is usually severely restricted. Dispersion caused by sodium may result in poor physical soil conditions such that water and air cannot move readily through the soil. High levels of sodium may also be toxic to plant cells.

Elevated concentrations of sodium ions create a plant growth hazard that can be measured by a method referred to as the Sodium Absorption Ratio (SAR). SAR is the proportion of sodium ions compared to the concentration of calcium plus magnesium ions in the soil.

When the SAR rises above 15 or so, serious soil problems occur and plants have difficulty absorbing water. This is because the excess sodium will be absorbed by the clay particles within the soil matrix. If the SAR test indicates excess sodium in the soil, the addition of calcium sulfate ("Gypsum") may be necessary to free the sodium from the clay and allow it to be leached from the soil. Testing by a soils laboratory to determine the quantity of gypsum already present in the soil as well as the amount of gypsum, magnesium chloride or phosphogypsum necessary to alleviate the excess sodium problem must be conducted. (Phosphogypsum is a by-product of the reaction between sulfuric acid and phosphate rock in the manufacture of phosphoric acid.)

D. EXISTING SOIL CONDITIONS (BASELINE SOIL ANALYSIS)

In 2007, an analysis of the soils present at the existing irrigation field was conducted by a qualified soils testing laboratory. A copy of the report on the analysis work is provided for review within Appendix "C."

The soils within the root zones were sampled to establish baseline analytical results for comparison to the results derived from future annual sampling events. Specifically, the analysis was conducted to determine the following:

- Types of soil classifications within the irrigation site;
- Composite of each soil type in each root zone;
- Content of Potassium, Total Kjeldahl Nitrogen, Total Phosphorus, Nitrate-Nitrogen, Calcium, Magnesium, Sulfur and Sodium within each soil sample;

- Value of SAR, pH and Specific Conductivity for each soil sample.

As noted in the soils analysis report, the irrigation site contains four different soil types as defined by the USDA Soil Conservation Service (SCS). The first type, Axtell Loam, has a soil profile that consists of surficial deposits of silty sand underlain by deposits of clayey sand and sandy lean clay. The second type. Crockett Loam, is described as very slow permeable and moderately well drained. The third type. Derly-Rader Complex, is a loamy soil that has surficial deposits of silty sand underlain by deposits of clayey sand, sandy lean clay and fat clay. The fourth type, Wilson Series, is described as loamy and very slowly permeable. Plate I in the report reveals that most of the irrigation field is composed of the Derly-Rader Complex soil while Wilson Loam exists in a small "horseshoe" shaped area on the west side of the field and in the areas occupied by the WWTP and the existing and future effluent holding ponds. Axtell Loam and Crockett Loam are located predominately in the southeast and northeast corners of the field, respectively.

Table I - Summary of Analytical Test Results in the report indicates that the SAR values for all four types of soil are relatively low with the highest value of all at 5.6 for the Axtell Loam and Crockett Loam at a depth of 18 to 36 inches below grade. These values indicate that the existing soils in the irrigation field area are not saline in their natural state and that the addition of chemicals for control of sodium content within the soil will not be required at this time.

III. FORAGE CROP MANAGEMENT

A. EFFLUENT APPLICATION SCHEDULE

To obtain maximum yields, irrigation water should be applied to the forage crops before the soil, moisture potential reaches a level at which the evapotranspiration rate is likely to be reduced below its potential. Several methods are available to determine optimum irrigation scheduling. The factors that determine irrigation scheduling are: a) available water retention capacity of the soils; b) depth of the root zone; c) evapotranspiration rate; d) amount of water to be applied per irrigation event; e) irrigation method; f) drainage conditions.

Irrigation at the wastewater treatment plant is done with a traveling gun sprinkler where water is applied in the form of a spray and reaches the soil very much like rain. The rate of sprinkling is adjusted so that it does not create ponding of water on the surface of the soil. Water application efficiency with the sprinkling method ranges typically between 60 and 70%.

The peak consumptive use of water by forage crops will range from 0.25 to 0.30 inches per day. That rate of consumption theoretically would require the application by irrigation of about 1.40 million gallons per day or 1,938 gallons per minute based upon an irrigation period duration of 12 hours per day and an assumed evaporation loss of 20% while spraying over the entire 134 acre irrigation field.

As noted within the existing land application permit for the South WWTP, the effluent application rate is not allowed to exceed 1.64 acre-feet per year per acre irrigated.

B. FORAGE CROP CHARACTERISTICS

The forage crops grown currently in the irrigation field are coastal Bermuda grass and rye grass. The coastal Bermuda is grown in the spring, summer and fall months with rye growth in the winter months. The soil within the field is aerated and fertilized twice each year. No lime is applied to the soil. Both types of grass are harvested as feed for cattle and other livestock during the peak growing months of the year.

Forage crop utilization has several advantages in this situation including the following:

- Evapotranspiration from both types of grass allows for the disposal of large amounts of wastewater from the treatment plant;
- Both types of grass are tolerant of moderate variations in nutrient quality within the effluent flow;
- Rye grass is somewhat resistant to flooding while coastal Bermuda is most tolerant and can sustain several weeks of flooding without injury;
- Each grass type requires relatively little maintenance or technical expertise to grow properly.

The most significant nutrients essential for plant growth are Nitrogen, Phosphorus, Potassium, Calcium, Magnesium and Sulfur. Of these, Nitrogen, Phosphorus and Potassium are delivered to the plants and soil through irrigation of the wastewater treatment plant effluent. The anticipated nutrient uptake rates for coastal Bermuda and rye grasses are listed as follows:

Grass Type	**Nutrient Uptake in Lbs./Acre Year**		
	Nitrogen	Phosphorus	Potassium
Coastal Bermuda	350 to 600	30 to 40	200
Rye	180 to 250	55 to 75	240 to 290

The nutrient content of a plant or grass depends, in part, on the amounts of nutrients available. The minimum amounts required for cellular growth are approximately 2% Nitrogen, 0.2% Phosphorus and 1% Potassium. For forage crops in general, the percent composition of Nitrogen within the cellular structure (dry weight) can range from 1.2% to 2.8% with an average value of 1.8%. However, with the availability of wastewater irrigation, that value can range from 3.0% to 4.5% Nitrogen content.

C. FORAGE CROP HARVESTING CONSIDERATIONS

A factor that affects both percent Nitrogen composition and yield of forage crops is "stage of growth." In general, grasses contain the highest percentage of Nitrogen during the green, fast growth stage. The Nitrogen uptake decreases with plant maturity. For grasses, Nitrogen uptake is very low during early growth (the first 30 to 40 days) and thereafter climbs sharply.

For coastal Bermuda, Nitrogen uptake reaches a peak around the 20^{th} day and then declines. This suggests that harvesting the coastal Bermuda grass crop every 8 to 9 weeks (for a total of 2 to 3 harvests per season) will result in maximum Nitrogen uptake from the irrigation field.

The amounts of Phosphorus in applied wastewater are usually much higher that what the plants require for growth. Fortunately, many soil types have a high sorption capacity for Phosphorus and very little of the excess amount is passed on into the groundwater. Instead, it is held within the soil and serves as a source of nutrient enrichment.

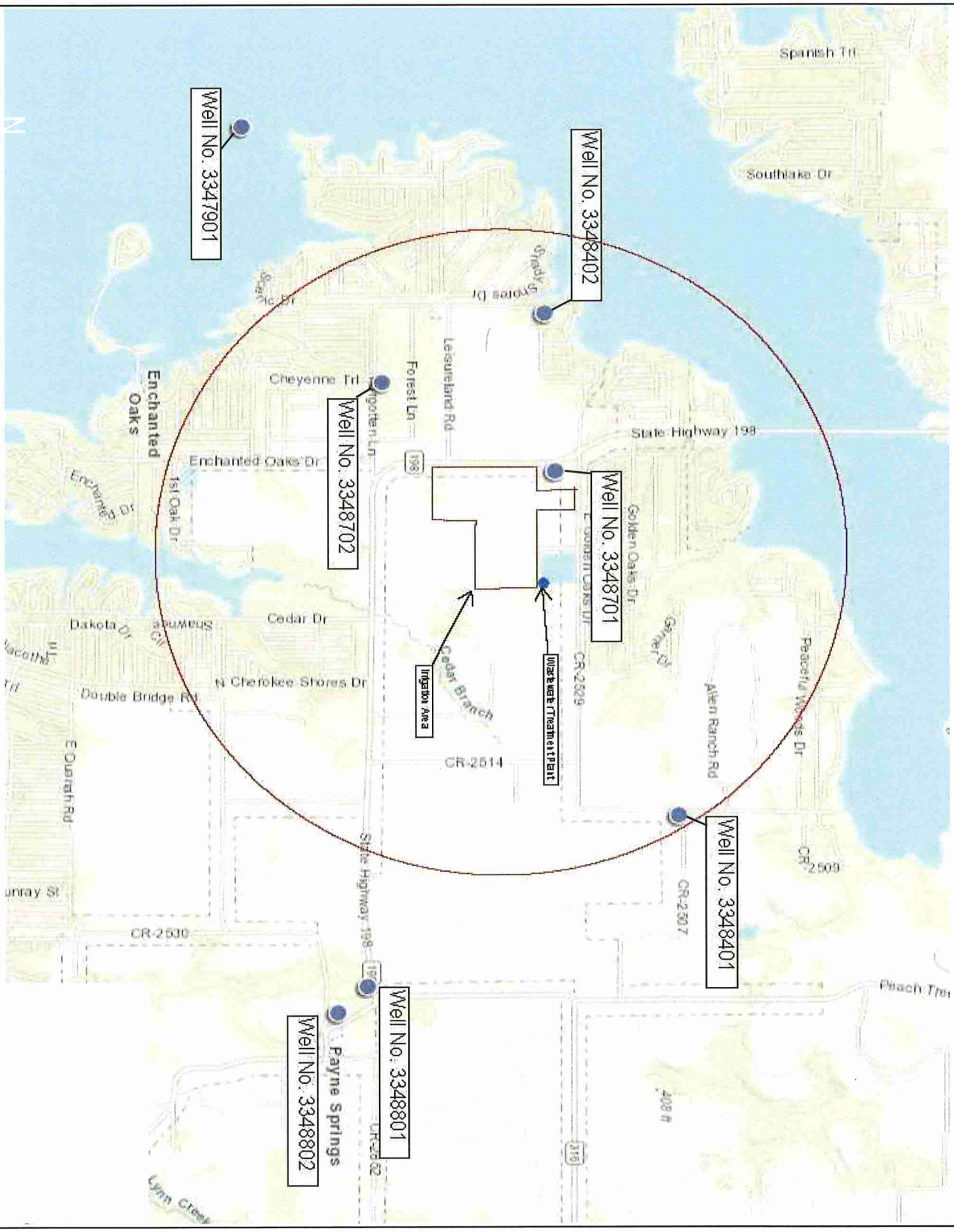
Potassium is utilized in large amounts by many forage crops, but typical wastewaters are relatively deficient in content of that element. In some cases, Potassium from chemical fertilizers may be needed to establish optimum conditions for plant growth.

ATTACHMENT No. 16

WELL MAP & DATA

Page 33, Section 6

Technical Report



KSA
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EAST CEDAR CREEK FWSD
WWTP PERMIT RENEWAL

WQ0013874.001

ATTACHMENT No. 16
WELL MAP
Page 33, Section 6
Technical Report

ATTACHMENT No. 16

ATTACHMENT No. 16
Well Data & Information
Worksheet 3.0
Page 38, Section 6

Well No.	Well Owner	Well Type	Producing	Open, Cased, Capped, Plugged	Best Management Practice
3348402	Not Listed	Not Listed	?	No Data	
3348701	F.L. Meredith	Domestic	N	No Data	Use of piezometers for monitoring, angling irrigation meters away from property.
3348702	Not Listed	Not Listed	?	No Data	
3348401	Harding	Unused	?	No Data	

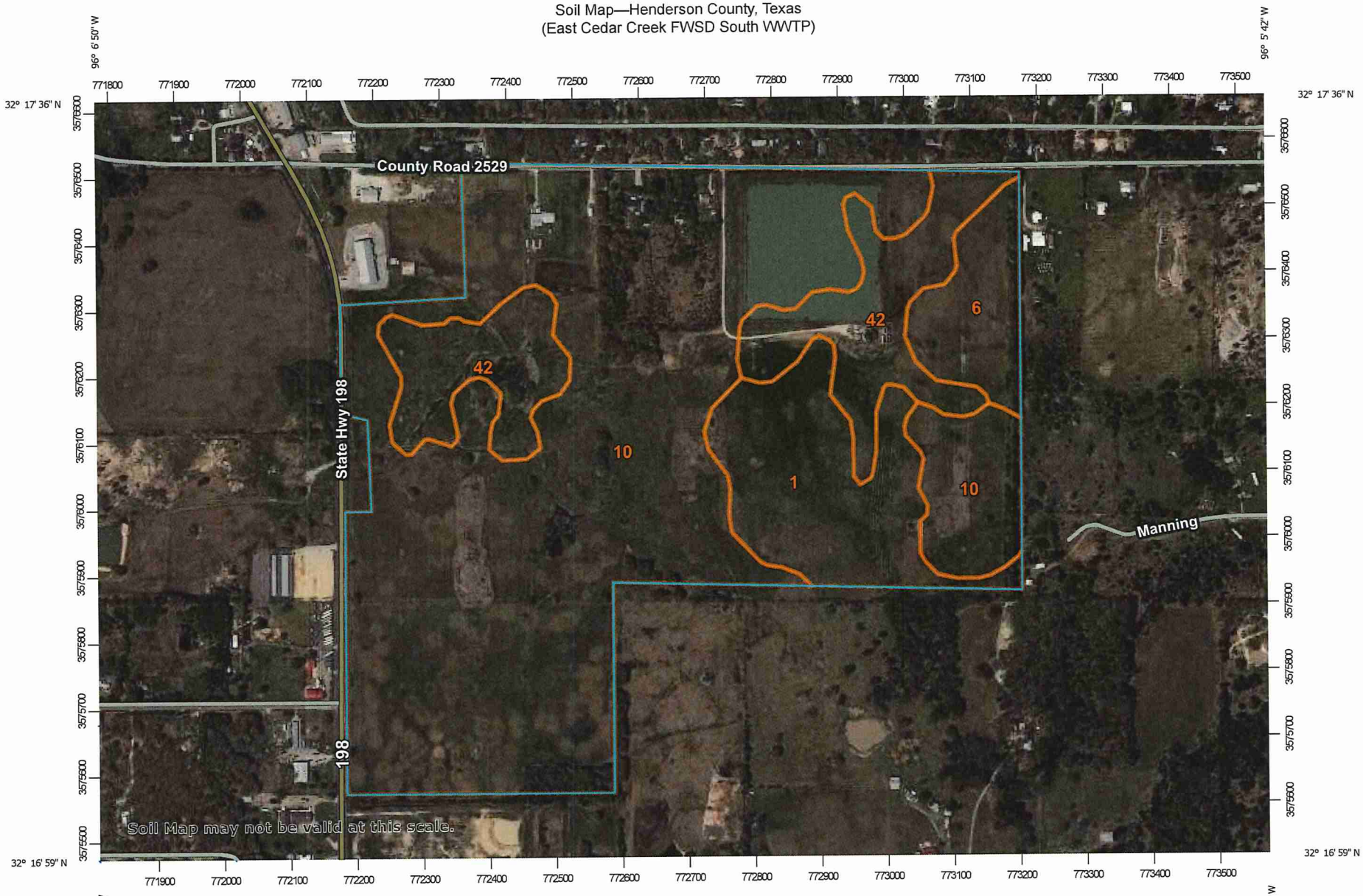
ATTACHMENT No. 17

SOIL MAP

Page 34, Section 8.A.

Technical Report

Soil Map—Henderson County, Texas
(East Cedar Creek FWSD South WWTP)



Map Scale: 1:8,060 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Henderson County, Texas
Survey Area Data: Version 22, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 3, 2022—Apr 7, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Axtell loam, 1 to 5 percent slopes	21.5	11.9%
6	Crockett loam, 1 to 3 percent slopes	9.4	5.2%
10	Derly, occasionally ponded-Rader complex	122.5	67.9%
42	Wilson loam, 0 to 1 percent slopes	26.9	14.9%
Totals for Area of Interest		**180.4**	**100.0%**

Henderson County, Texas

1—Axtell loam, 1 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2shgb
Elevation: 250 to 650 feet
Mean annual precipitation: 42 to 43 inches
Mean annual air temperature: 63 to 65 degrees F
Frost-free period: 240 to 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Axtell and similar soils: 87 percent
Minor components: 13 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Axtell

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear, convex
Parent material: Clayey alluvium of pleistocene age derived from mudstone

Typical profile

A - 0 to 8 inches: loam
Btss - 8 to 34 inches: clay
Btkss - 34 to 53 inches: clay loam
Btky - 53 to 80 inches: sandy clay loam

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Gypsum, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R087AY003TX - Claypan Savannah
Hydric soil rating: No

Minor Components

Silawa

Percent of map unit: 13 percent
Landform: Stream terraces, stream terraces
Landform position (three-dimensional): Riser
Down-slope shape: Linear, convex
Across-slope shape: Convex
Ecological site: R087AY005TX - Sandy Loam
Hydric soil rating: No

Data Source Information

Soil Survey Area: Henderson County, Texas
Survey Area Data: Version 22, Aug 30, 2024

Henderson County, Texas

6—Crockett loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2ssh4
Elevation: 270 to 730 feet
Mean annual precipitation: 38 to 47 inches
Mean annual air temperature: 62 to 65 degrees F
Frost-free period: 230 to 235 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Crockett and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Crockett

Setting

Landform: Ridges
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Loamy residuum weathered from shale of cretaceous age

Typical profile

A - 0 to 8 inches: loam
Btss - 8 to 25 inches: clay
Btkss - 25 to 45 inches: clay
BCk - 45 to 53 inches: clay
Cdk - 53 to 72 inches: clay loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: 43 to 60 inches to densic bedrock
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0

Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Ecological site: R086AY003TX - Northern Claypan Prairie
Hydric soil rating: No

Minor Components

Normangee

Percent of map unit: 10 percent
Landform: Ridges
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R086AY003TX - Northern Claypan Prairie
Hydric soil rating: No

Wilson

Percent of map unit: 5 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R086AY003TX - Northern Claypan Prairie
Hydric soil rating: No

Data Source Information

Soil Survey Area: Henderson County, Texas
Survey Area Data: Version 22, Aug 30, 2024

Henderson County, Texas

10—Derly, occasionally ponded-Rader complex

Map Unit Setting

National map unit symbol: dbj1
Elevation: 150 to 700 feet
Mean annual precipitation: 32 to 46 inches
Mean annual air temperature: 63 to 70 degrees F
Frost-free period: 230 to 275 days
Farmland classification: Not prime farmland

Map Unit Composition

Derly and similar soils: 50 percent
Rader and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Derly

Setting

Landform: Depressions on stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Clayey alluvium of quaternary age derived from mixed sources

Typical profile

H1 - 0 to 11 inches: loam
H2 - 11 to 21 inches: clay loam
H3 - 21 to 43 inches: clay
H4 - 43 to 65 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Calcium carbonate, maximum content: 2 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 6.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: D
Ecological site: R087AY003TX - Claypan Savannah
Hydric soil rating: Yes

Description of Rader

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy alluvium of pleistocene age derived from mixed sources

Typical profile

H1 - 0 to 10 inches: fine sandy loam
H2 - 10 to 28 inches: fine sandy loam
H3 - 28 to 44 inches: sandy clay loam
H4 - 44 to 72 inches: clay
H5 - 72 to 76 inches: clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: R087AY005TX - Sandy Loam
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 15 percent

Henderson County, Texas

42—Wilson loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: dbk5
Elevation: 250 to 700 feet
Mean annual precipitation: 32 to 45 inches
Mean annual air temperature: 64 to 70 degrees F
Frost-free period: 220 to 270 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Wilson and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wilson

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Clayey alluvium of quaternary age derived from mixed sources

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 71 inches: clay
H3 - 71 to 75 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Gypsum, maximum content: 15 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Ecological site: R086AY003TX - Northern Claypan Prairie
Hydric soil rating: No

Data Source Information

Soil Survey Area: Henderson County, Texas
Survey Area Data: Version 22, Aug 30, 2024

Chemical Soil Properties

This table shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable cations plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced saturated hydraulic conductivity and aeration, and a general degradation of soil structure.

Report—Chemical Soil Properties

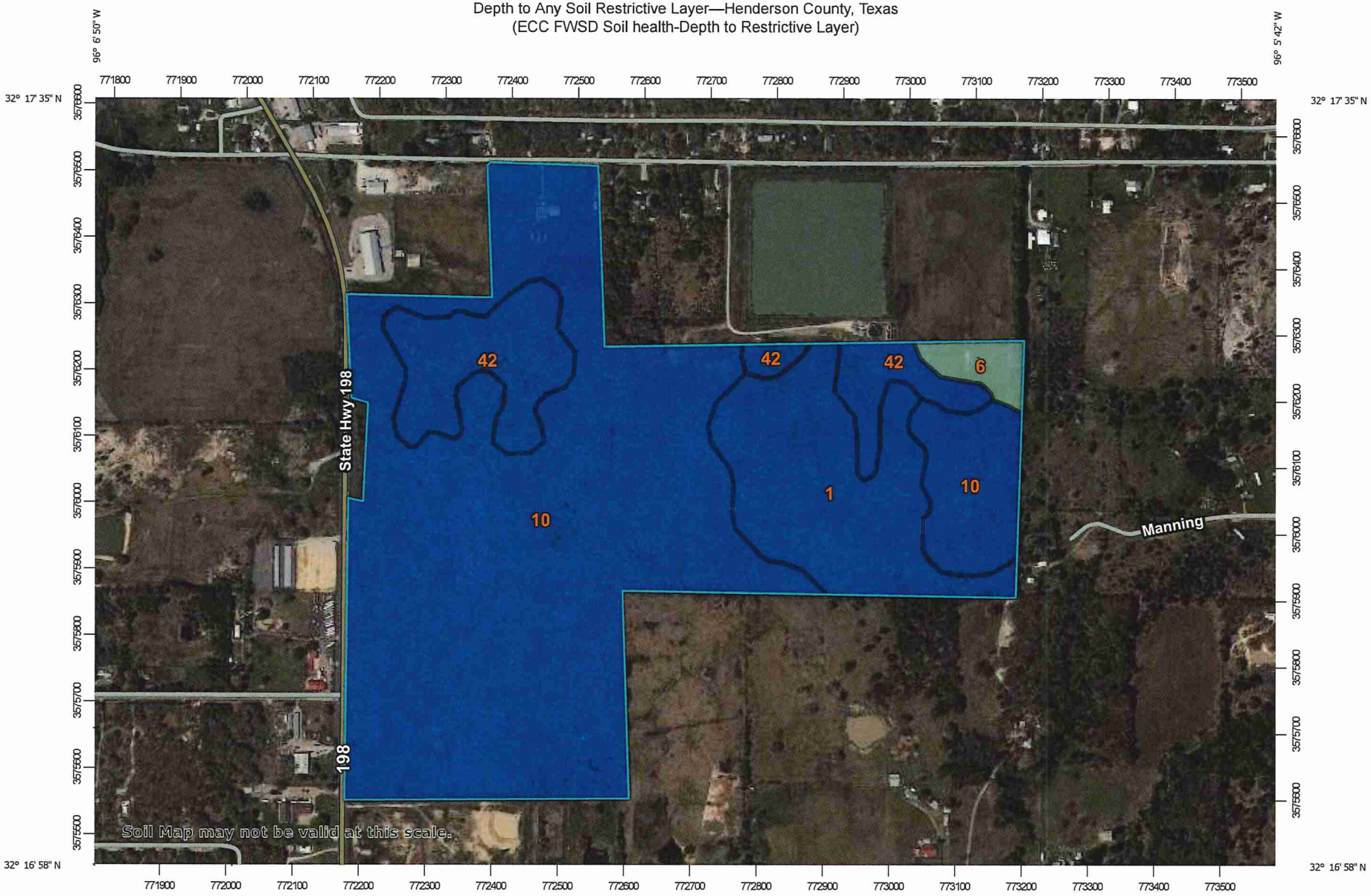
Chemical Soil Properties–Henderson County, Texas								
Map symbol and soil name	**Depth**	**Cation-exchange capacity**	**Effective cation-exchange capacity**	**Soil reaction**	**Calcium carbonate**	**Gypsum**	**Salinity**	**Sodium adsorption ratio**
	In	*meq/100g*	*meq/100g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
1—Axtell loam, 1 to 5 percent slopes								
Axtell	0-8	3.0-7.0	—	5.1-6.5	0	0	0.0-2.0	0
	8-34	—	10-30	4.5-6.5	0	0	0.0-2.0	0-2
	34-53	10-30	—	6.6-8.4	0-15	0-5	0.0-2.0	0-5
	53-80	10-30	—	5.6-8.4	0-10	0-5	0.0-2.0	0-5
6—Crockett loam, 1 to 3 percent slopes								
Crockett	0-8	7.0-18	—	5.6-7.3	0	0	0.0-2.0	0-5
	8-25	27-50	—	5.6-7.8	0-2	0	0.0-2.0	0-5
	25-45	25-50	—	6.1-8.4	0-2	0	0.0-4.0	3-10
	45-53	20-45	—	7.4-8.4	5-30	0-2	0.0-4.0	3-10
	53-72	20-36	—	7.4-8.4	2-10	0-2	0.0-4.0	3-10

Chemical Soil Properties–Henderson County, Texas								
Map symbol and soil name	**Depth**	**Cation-exchange capacity**	**Effective cation-exchange capacity**	**Soil reaction**	**Calcium carbonate**	**Gypsum**	**Salinity**	**Sodium adsorption ratio**
	In	*meq/100g*	*meq/100g*	*pH*	*Pct*	*Pct*	*mmhos/cm*	
10—Derly, occasionally ponded-Rader complex								
Derly	0-11	5.0-15	—	4.5-6.5	0	0	0.0-2.0	0
	11-21	—	15-30	4.5-6.0	0	0	0.0-2.0	0
	21-43	—	15-30	4.5-6.0	0	0	0.0-4.0	0-6
	43-65	15-30	—	5.1-7.3	0-2	0-2	0.0-4.0	0-6
Rader	0-10	2.0-5.0	—	4.5-6.5	0	0	0.0-2.0	0-2
	10-28	2.0-5.0	—	4.5-6.5	0	0	0.0-2.0	0-2
	28-44	—	10-20	4.5-6.0	0	0	0.0-2.0	2-5
	44-72	15-25	—	4.5-6.5	0	0	0.0-2.0	2-10
	72-76	10-25	—	5.1-8.4	0-5	0-2	0.0-4.0	2-10
42—Wilson loam, 0 to 1 percent slopes								
Wilson	0-6	10-20	—	5.6-7.3	0	0	0.0-2.0	0-2
	6-71	20-30	—	5.6-7.8	1-10	0-4	0.0-4.0	2-8
	71-75	20-30	—	6.6-8.4	1-20	2-15	2.0-8.0	4-10

Data Source Information

Soil Survey Area: Henderson County, Texas
Survey Area Data: Version 22, Aug 30, 2024

Depth to Any Soil Restrictive Layer—Henderson County, Texas
(ECC FWSD Soil health-Depth to Restrictive Layer)



Map Scale: 1:8,150 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Lines

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Points

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

Aerial Photography

MAP INFORMATION

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Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Date(s) aerial images were photographed: Apr 3, 2022—Apr 7, 2022

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Depth to Any Soil Restrictive Layer

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
1	Axtell loam, 1 to 5 percent slopes	>200	22.5	15.9%
6	Crockett loam, 1 to 3 percent slopes	135	2.7	1.9%
10	Derly, occasionally ponded-Rader complex	>200	99.3	70.3%
42	Wilson loam, 0 to 1 percent slopes	>200	16.7	11.9%
Totals for Area of Interest			**141.2**	**100.0%**

Description

A "restrictive layer" is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers.

This theme presents the depth to any type of restrictive layer that is described for each map unit. If more than one type of restrictive layer is described for an individual soil type, the depth to the shallowest one is presented. If no restrictive layer is described in a map unit, it is represented by the "greater than 200" depth class.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

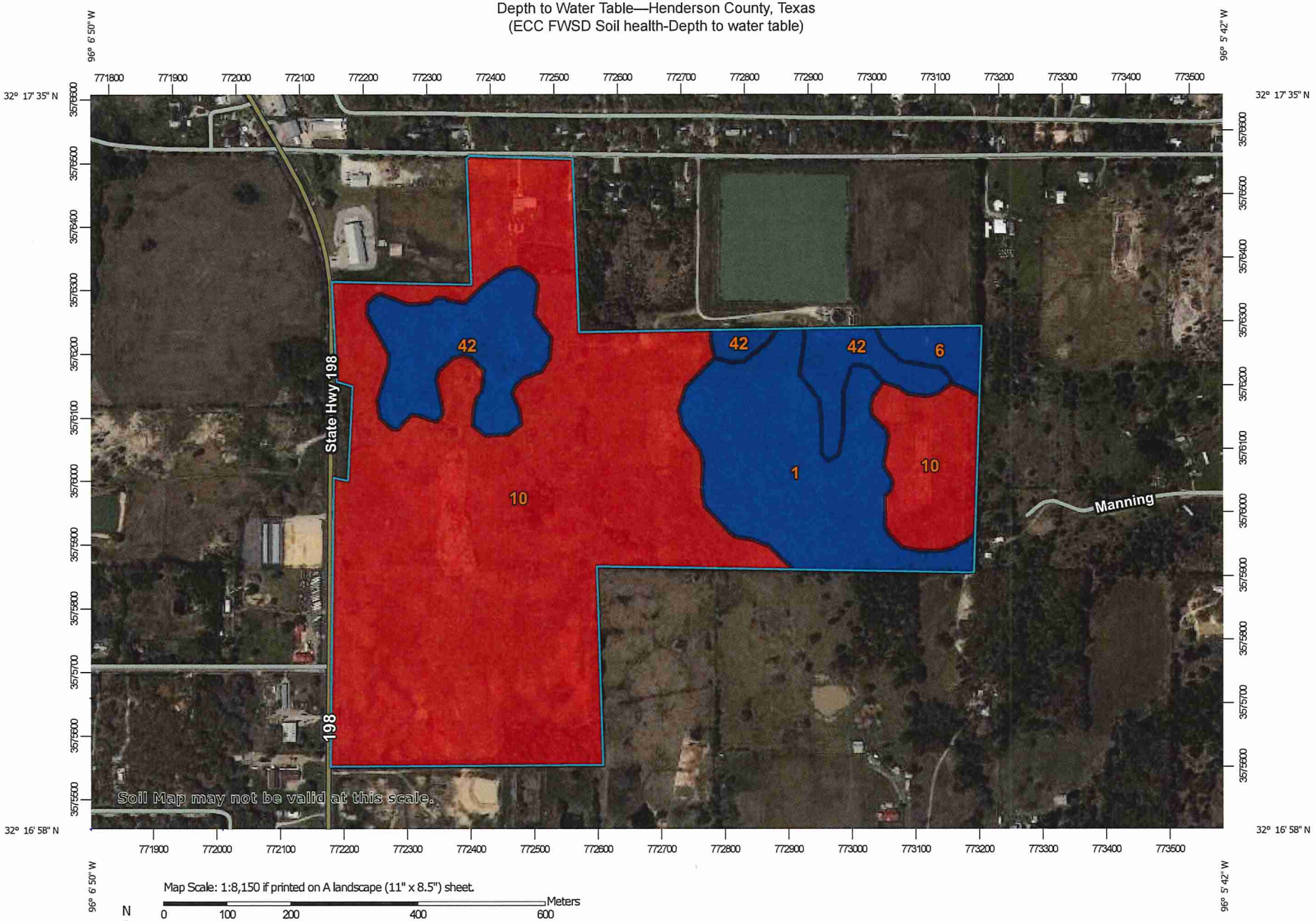
Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Depth to Water Table—Henderson County, Texas
(ECC FWSD Soil health-Depth to water table)



Map Scale: 1:8,150 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Lines
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Points
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

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Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
1	Axtell loam, 1 to 5 percent slopes	>200	22.5	15.9%
6	Crockett loam, 1 to 3 percent slopes	>200	2.7	1.9%
10	Derly, occasionally ponded-Rader complex	0	99.3	70.3%
42	Wilson loam, 0 to 1 percent slopes	>200	16.7	11.9%
Totals for Area of Interest			**141.2**	**100.0%**

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

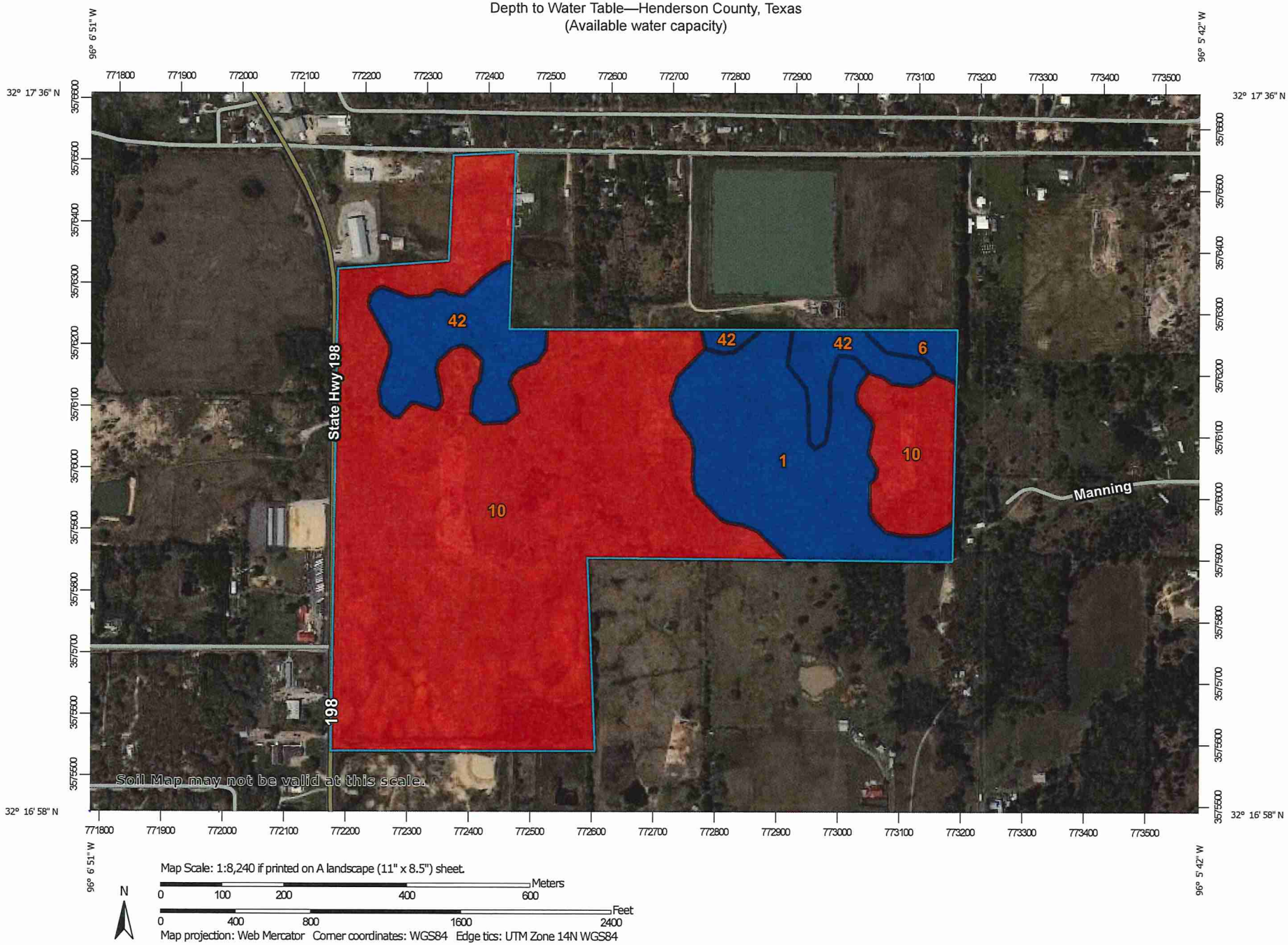
Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Depth to Water Table—Henderson County, Texas
(Available water capacity)



Map Scale: 1:8,240 if printed on A landscape (11" x 8.5") sheet.

N

0 100 200 400 600 Meters

0 400 800 1600 2400 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Lines
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Points
- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Water Features
- Streams and Canals

Transportation
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- Interstate Highways
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- Major Roads
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Background
- Aerial Photography

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Soil Survey Area: Henderson County, Texas
Survey Area Data: Version 22, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 3, 2022—Apr 7, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
1	Axtell loam, 1 to 5 percent slopes	>200	22.8	16.6%
6	Crockett loam, 1 to 3 percent slopes	>200	1.7	1.3%
10	Derly, occasionally ponded-Rader complex	0	98.0	71.2%
42	Wilson loam, 0 to 1 percent slopes	>200	14.9	10.9%
Totals for Area of Interest			**137.5**	**100.0%**

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

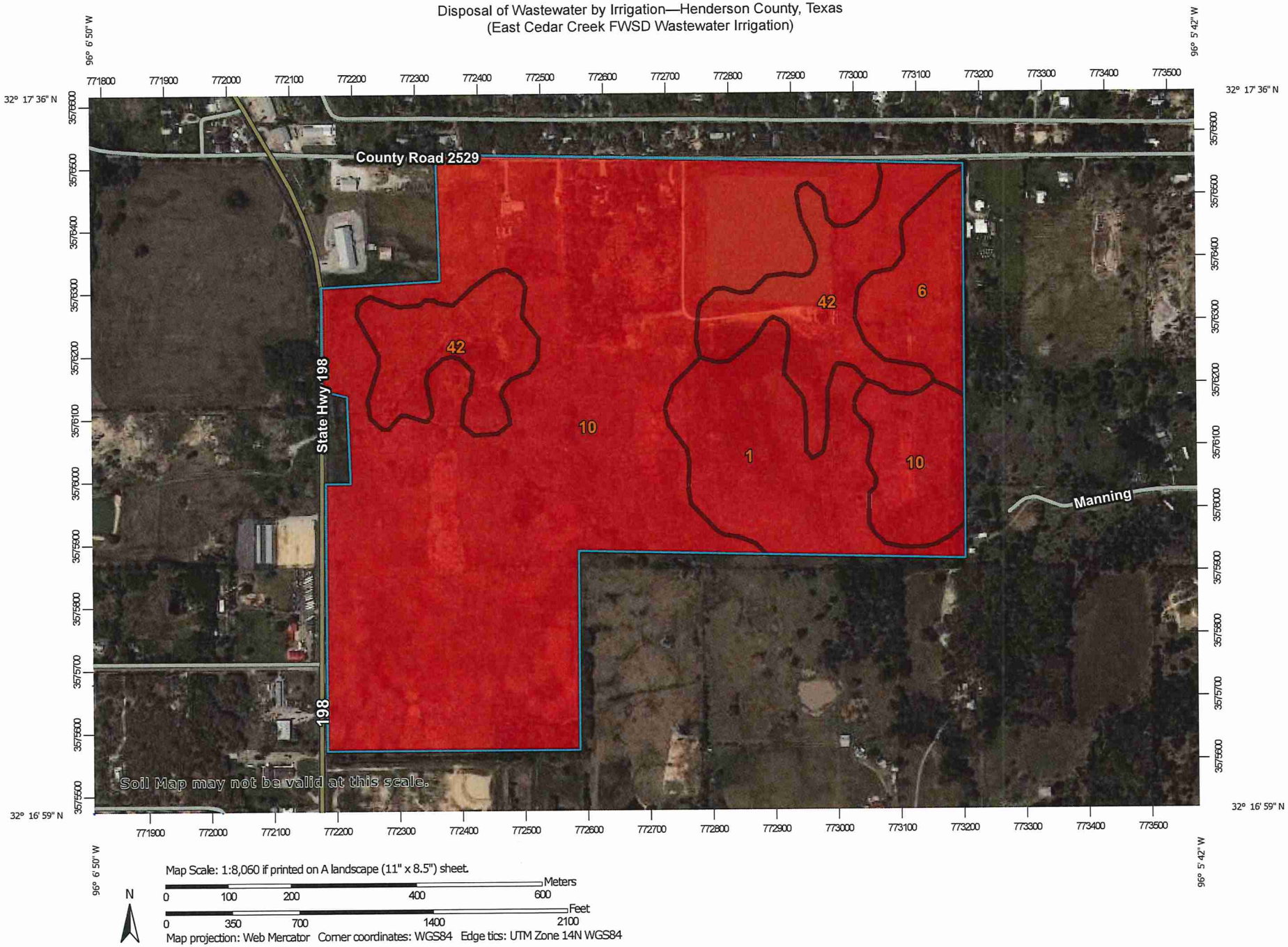
Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Disposal of Wastewater by Irrigation—Henderson County, Texas
(East Cedar Creek FWSD Wastewater Irrigation)



Map Scale: 1:8,060 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Henderson County, Texas
Survey Area Data: Version 22, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 3, 2022—Apr 7, 2022

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Disposal of Wastewater by Irrigation

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
1	Axtell loam, 1 to 5 percent slopes	Very limited	Axtell (87%)	Slow water movement (1.00)	21.5	11.9%
				Too acid (0.42)		
6	Crockett loam, 1 to 3 percent slopes	Very limited	Crockett (85%)	Slow water movement (1.00)	9.4	5.2%
10	Derly, occasionally ponded-Rader complex	Very limited	Derly (50%)	Slow water movement (1.00)	122.5	67.9%
				Ponding (1.00)		
				Depth to saturated zone (1.00)		
				Too acid (0.77)		
			Rader (35%)	Slow water movement (1.00)		
				Too acid (0.77)		
				Depth to saturated zone (0.43)		
42	Wilson loam, 0 to 1 percent slopes	Very limited	Wilson (100%)	Slow water movement (1.00)	26.9	14.9%
				Sodium content (0.08)		
Totals for Area of Interest					**180.4**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Very limited	180.4	100.0%
Totals for Area of Interest	**180.4**	**100.0%**

Description

Wastewater includes municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. The effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings are based on the soil properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, saturated hydraulic conductivity (Ksat), slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a water table, and ponding. The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals. Permanently frozen soils are not suitable for disposal of wastewater by irrigation.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations

between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

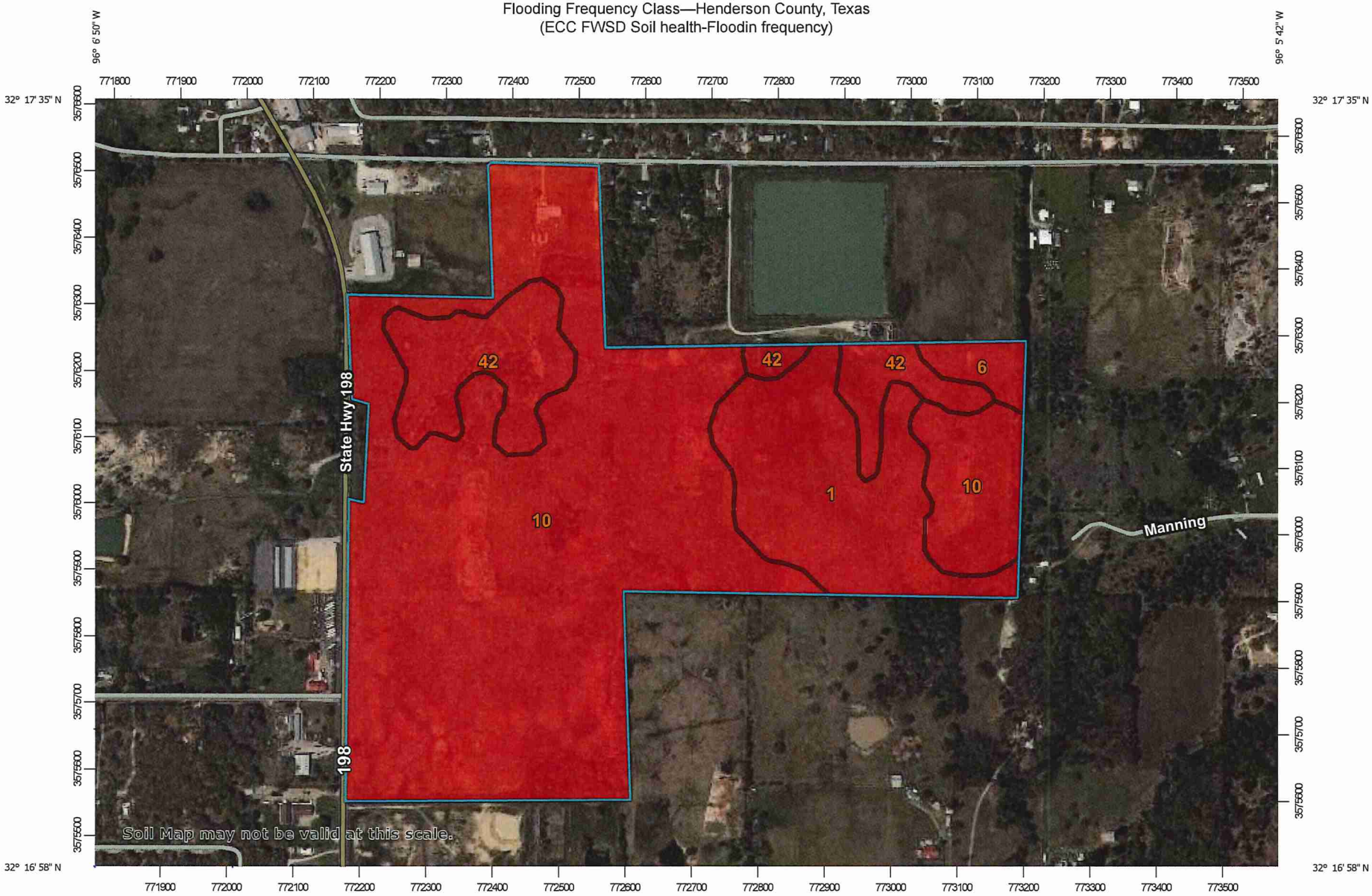
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Flooding Frequency Class—Henderson County, Texas
(ECC FWSD Soil health-Floodin frequency)



Map Scale: 1:8,150 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- None
- Very Rare
- Rare
- Occasional
- Common
- Frequent
- Very Frequent
- Not rated or not available

Soil Rating Lines
- None
- Very Rare
- Rare
- Occasional
- Common
- Frequent
- Very Frequent
- Not rated or not available

Soil Rating Points
- None
- Very Rare
- Rare
- Occasional
- Common
- Frequent
- Very Frequent
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Soil Survey Area: Henderson County, Texas
Survey Area Data: Version 22, Aug 30, 2024

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Date(s) aerial images were photographed: Apr 3, 2022—Apr 7, 2022

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Flooding Frequency Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1	Axtell loam, 1 to 5 percent slopes	None	22.5	15.9%
6	Crockett loam, 1 to 3 percent slopes	None	2.7	1.9%
10	Derly, occasionally ponded-Rader complex	None	99.3	70.3%
42	Wilson loam, 0 to 1 percent slopes	None	16.7	11.9%
Totals for Area of Interest			**141.2**	**100.0%**

Description

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent.

"None" means that flooding is not probable. The chance of flooding is nearly 0 percent in any year. Flooding occurs less than once in 500 years.

"Very rare" means that flooding is very unlikely but possible under extremely unusual weather conditions. The chance of flooding is less than 1 percent in any year.

"Rare" means that flooding is unlikely but possible under unusual weather conditions. The chance of flooding is 1 to 5 percent in any year.

"Occasional" means that flooding occurs infrequently under normal weather conditions. The chance of flooding is 5 to 50 percent in any year.

"Frequent" means that flooding is likely to occur often under normal weather conditions. The chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year.

"Very frequent" means that flooding is likely to occur very often under normal weather conditions. The chance of flooding is more than 50 percent in all months of any year.

Rating Options

Aggregation Method: Dominant Condition

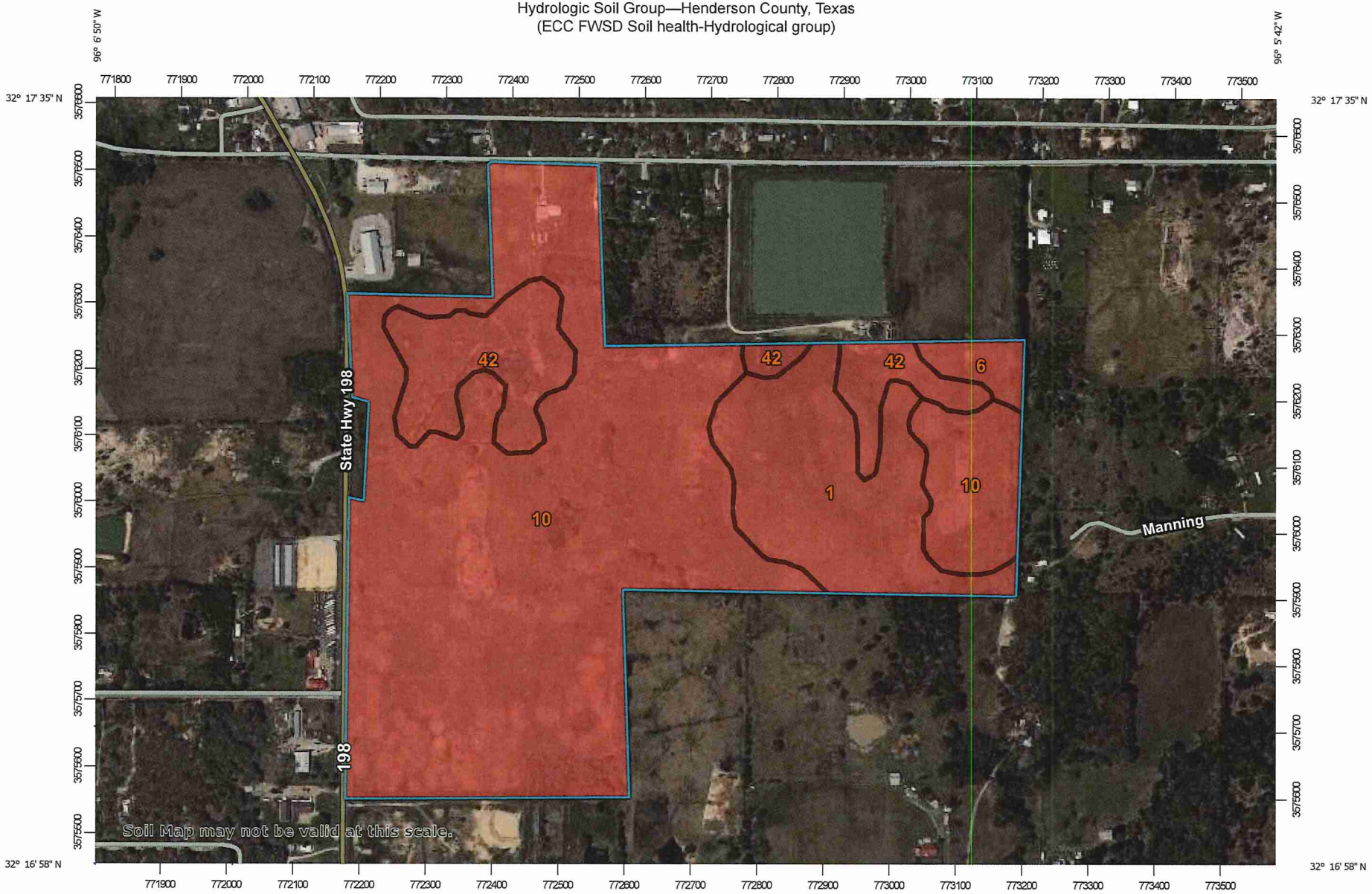
Component Percent Cutoff: None Specified

Tie-break Rule: More Frequent

Beginning Month: January

Ending Month: December

Hydrologic Soil Group—Henderson County, Texas
(ECC FWSD Soil health-Hydrological group)



Map Scale: 1:8,150 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1	Axtell loam, 1 to 5 percent slopes	D	22.5	15.9%
6	Crockett loam, 1 to 3 percent slopes	D	2.7	1.9%
10	Derly, occasionally ponded-Rader complex	D	99.3	70.3%
42	Wilson loam, 0 to 1 percent slopes	D	16.7	11.9%
Totals for Area of Interest			**141.2**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

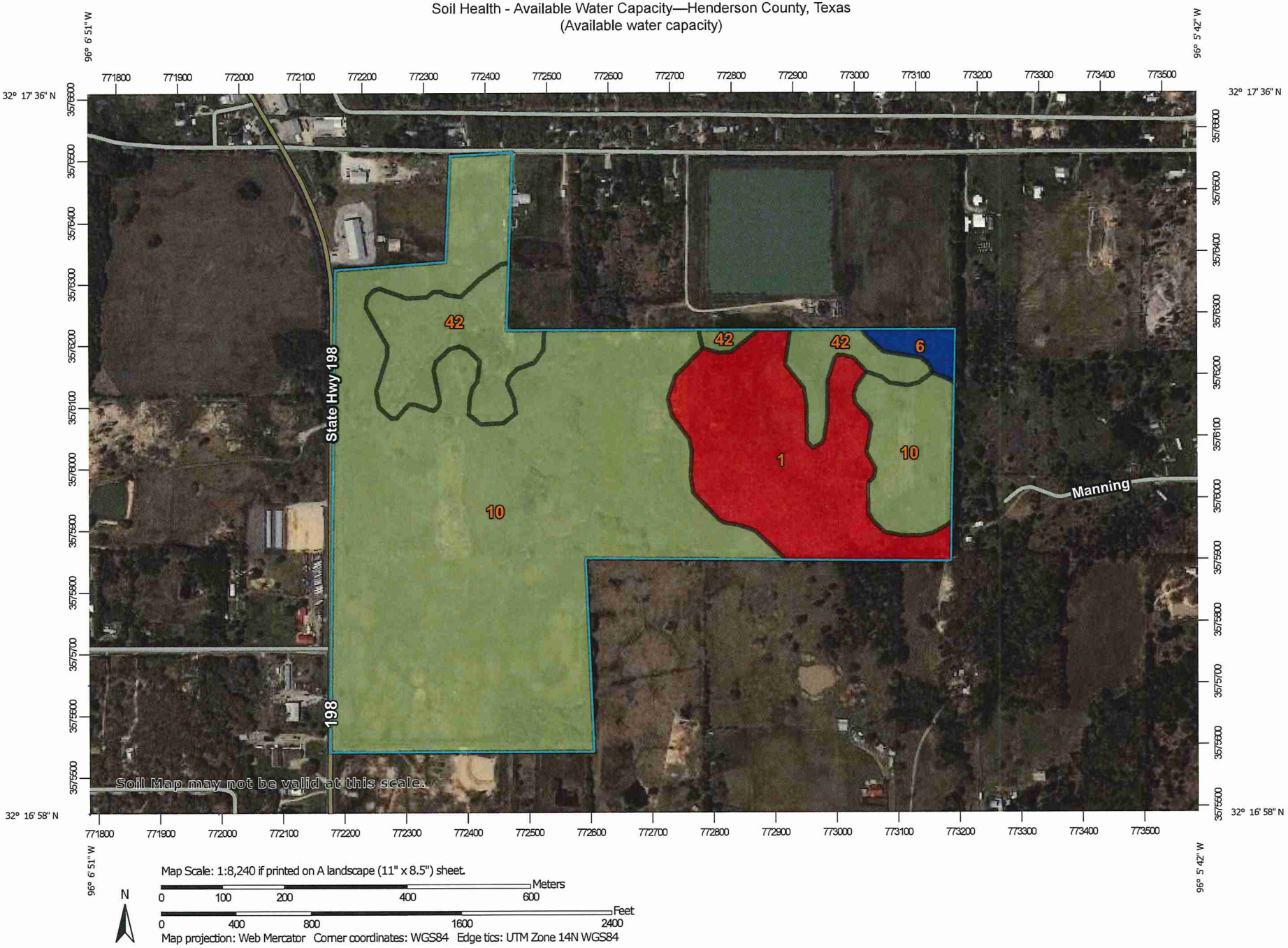
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Soil Health - Available Water Capacity—Henderson County, Texas
(Available water capacity)



Map Scale: 1:8,240 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- <= 0.13
- > 0.13 and <= 0.14
- > 0.14 and <= 0.18
- Not rated or not available

Soil Rating Lines
- <= 0.13
- > 0.13 and <= 0.14
- > 0.14 and <= 0.18
- Not rated or not available

Soil Rating Points
- <= 0.13
- > 0.13 and <= 0.14
- > 0.14 and <= 0.18
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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Please rely on the bar scale on each map sheet for map measurements.

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Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Date(s) aerial images were photographed: Apr 3, 2022—Apr 7, 2022

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Soil Health - Available Water Capacity

Map unit symbol	Map unit name	Rating (centimeters per centimeter)	Acres in AOI	Percent of AOI
1	Axtell loam, 1 to 5 percent slopes	0.13	22.8	16.6%
6	Crockett loam, 1 to 3 percent slopes	0.18	1.7	1.3%
10	Derly, occasionally ponded-Rader complex	0.14	98.0	71.2%
42	Wilson loam, 0 to 1 percent slopes	0.14	14.9	10.9%
Totals for Area of Interest			**137.5**	**100.0%**

Description

Available water capacity (AWC) refers to the quantity of water that the soil is capable of storing for use by plants. It is expressed in centimeters of water per centimeter of soil for each soil layer.

Significance:

Available water capacity is an indicator of a soils ability to retain water and make it sufficiently available for plant use. In areas where daily rainfall is insufficient to meet plant needs, the capacity of soil to store water is very important (USDA-NRCS, 2008). Water held in the soil is needed to sustain plants between rainfall or irrigation events and provide a buffer against periods of water deficit. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure, with corrections for salinity and rock fragments. Available water capacity determinations are used to develop water budgets, predict droughtiness, design and operate irrigation systems, design drainage systems, protect water resources, and predict yields (Lowery et al., 1996). They also are an important factor in the choice of plants or crops to be grown. The available water capacity can be increased by applying soil management that maximizes the soils inherent capacity to store water. Improving soil structure and ameliorating compacted zones can improve both the storage capacity of the soil itself and increase the depth to which plant roots can penetrate.

Factors Affecting Available Water Capacity:

Inherent factors.Available water capacity is affected by soil texture, amount of rock fragments, and a soils depth and layers. It is primarily controlled by soil texture and structure. Soils with higher silt contents generally have higher available water capacities, while sandy soils have the lowest available water capacities. Rock fragments reduce a soils available water capacity proportionate to their volume, unless the rocks are porous. Soil depth and root-restricting layers affect the total available water capacity since they can limit the volume of soil available for root growth.

Dynamic factors.Available water capacity is affected by soil organic matter, compaction, and salt concentrations. Organic matter can increase a soils capacity to store water, on average, equivalent to its weight in available water (Libohova et al., 2018). Indirectly, organic matter improves soil structure and aggregate stability, resulting in increased pore size and volume. These soil improvements result in increased infiltration and movement of water through the soil. Greater amounts of water entering the soil can then be used by plant roots. Compaction reduces the available water capacity by reducing the total pore volume. Soils with high salt concentrations have a reduced available water capacity. Solutes in soil water attract water (osmotic potential), making it difficult for plant roots to extract or uptake the water.

Measurement:

Available water capacity is determined in the lab by measuring the water content at field capacity (33 kPa) and wilting point (1500 kPa) and calculating the

difference (Soil Survey Staff, 2014). Pressure plates or membranes are used to bring the soil sample to a desired matric potential (33 kPa or 1500 kPa). When at equilibrium, the soil sample is removed and dried to determine its water content.

References:

Libohova, Z., C. Seybold, D. Wysocki, S. Wills, P. Schoeneberger, C. Williams, D. Lindbo, D. Stott, and P.R. Owens. 2018. Reevaluating the effects of soil organic matter and other properties on available water-holding capacity using the National Cooperative Soil Survey Characterization Database. Journal of Soil and Water Conservation 73(4):411-421.

Lowery, B., M.A. Arshad, R. Lal, and W.J. Hickey. 1996. Soil water parameters and soil quality. In: J.W. Doran and A.J. Jones (eds.) Methods for assessing soil quality. Soil Science Society of America Special Publication 49:143-157.

Soil Survey Staff. 2014. Kellogg Soil Survey Laboratory methods manual. Soil Survey Investigations Report No. 42, Version 5.0. R. Burt and Soil Survey Staff (eds.). U.S. Department of Agriculture, Natural Resources Conservation Service.

U.S. Department of Agriculture, Natural Resources Conservation Service. 2008. Soil quality indicatorsAvailable water capacity.

Rating Options

Units of Measure: centimeters per centimeter

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

ATTACHMENT No. 18

SOIL ANALYSIS

Page 34, Section 18.B.

Technical Report

REPORT

REPORT DATE	01/20/2025
RECEIVE DATE	12/03/2024
RECEIVE TIME	1615
WORK ORDER	N4L0473

REPORT TO
East Cedar Creek WW
Christopher Cotton
PO Box 309
Mabank, TX 75147

REPORT FROM
Eastex Environmental Laboratory
PO Box 631375
Nacogdoches, TX 75963
936-569-8879

PROJECT
ECC South Soil

Enclosed are the results of analyses for samples received by the laboratory on 12/03/24 16:15, with Lab ID Number N4L0473. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul D. Hughes, Laboratory Director

LABORATORY ANALYTICAL REPORT

Project: ECC South Soil

Sample Site: 0-6 inches
Sample Type: Grab
Sample Matrix: Waste

Sample Number
N4L0473-01

Collector: David B Randall
Sampled: 12/03/24 1245
Received: 12/03/24 1615

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Conductivity 2:1 Extract	157.3	10	µmhos/cm @25C	A	B4L1626	12/11/24 1436	ARB	EPA SW 846-9050A	Cs
Nitrate as N	19.5	0.6	mg/Kg dry	N	B5A3437	01/06/25 1000	TDS	SM 4500 NO3F KCl extract	3, Cs
Percent Solid	82.1	0.1	%	A	B4L1524	12/11/24 1210	ARB	SM 2540G	3, Cs
pH Soil	6.8		std unit	A	B4L2454	12/17/24 1630	JAA	EPA SW 846-9045	Cs
Phosphorus, Extract - mg/Kg	1.77	0.122	mg/Kg dry	A	B4L1787	12/13/24 1337	TAK	EPA SW 846-6010, 3050	
Potassium, Extract mg/Kg	17.5	0.609	mg/Kg dry	A	B4L1786	12/13/24 1224	TAK	EPA SW 846-6010, 3050	
Total Nitrogen	413.5		mg/Kg		B5A5584	01/17/25 0806	TDS	-	

Sample Site: 6-18 inches
Sample Type: Grab
Sample Matrix: Waste

Sample Number
N4L0473-02

Collector: David B Randall
Sampled: 12/03/24 1310
Received: 12/03/24 1615

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Conductivity 2:1 Extract	125.5	10	µmhos/cm @25C	A	B4L1626	12/11/24 1436	ARB	EPA SW 846-9050A	Cs
Nitrate as N	999	0.6	mg/Kg dry	N	B5A3437	01/06/25 1000	TDS	SM 4500 NO3F KCl extract	3, Cs
Percent Solid	83.7	0.1	%	A	B4L1524	12/11/24 1210	ARB	SM 2540G	3, Cs
pH Soil	6.7		std unit	A	B4L2454	12/17/24 1630	JAA	EPA SW 846-9045	Cs
Phosphorus, Extract - mg/Kg	0.738	0.119	mg/Kg dry	A	B4L1787	12/13/24 1339	TAK	EPA SW 846-6010, 3050	
Potassium, Extract mg/Kg	10.0	0.597	mg/Kg dry	A	B4L1786	12/13/24 1227	TAK	EPA SW 846-6010, 3050	
Total Nitrogen	1315		mg/Kg		B5A5584	01/17/25 0806	TDS	-	

Sample Site: 18-36 inches
Sample Type: Grab
Sample Matrix: Waste

Sample Number
N4L0473-03

Collector: David B Randall
Sampled: 12/03/24 1330
Received: 12/03/24 1615

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Conductivity 2:1 Extract	159.9	10	µmhos/cm @25C	A	B4L1626	12/11/24 1436	ARB	EPA SW 846-9050A	Cs
Nitrate as N	467	0.6	mg/Kg dry	N	B5A3437	01/06/25 1000	TDS	SM 4500 NO3F KCl extract	23, 3, Cs
Percent Solid	83.3	0.1	%	A	B4L1524	12/11/24 1210	ARB	SM 2540G	3, Cs
pH Soil	7.2		std unit	A	B4L2454	12/17/24 1630	JAA	EPA SW 846-9045	Cs
Phosphorus, Extract - mg/Kg	<0.120	0.120	mg/Kg dry	A	B4L1787	12/13/24 1350	TAK	EPA SW 846-6010, 3050	
Potassium, Extract mg/Kg	7.47	0.600	mg/Kg dry	A	B4L1786	12/13/24 1231	TAK	EPA SW 846-6010, 3050	
Total Nitrogen	778		mg/Kg		B5A5584	01/17/25 0806	TDS	-	

SM 2540G - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4L1524 - No Prep										
Blank (B4L1524-BLK1)										**Prepared & Analyzed: 12/11/24**
Percent Solid	ND	0.1	%							
Duplicate (B4L1524-DUP1)				**Source: N4L0473-01**						**Prepared & Analyzed: 12/11/24**
Percent Solid	82.7	0.1	%		82.1			0.728	20	
Batch B4L1626 - No Prep										
Blank (B4L1626-BLK1)										**Prepared & Analyzed: 12/11/24**
Conductivity 2:1 Extract	ND	10	µmhos/cm @25C							
LCS (B4L1626-BS1)										**Prepared & Analyzed: 12/11/24**
Conductivity 2:1 Extract	1007		µmhos/cm @25C	1000		101	80-120			
Duplicate (B4L1626-DUP1)				**Source: N4L0473-01**						**Prepared & Analyzed: 12/11/24**
Conductivity 2:1 Extract	157	10	µmhos/cm @25C		157.3			0.191	20	
Batch B4L1786 - Mehlich Extraction										
Blank (B4L1786-BLK1)										**Prepared: 12/12/24 Analyzed: 12/13/24**
Potassium, Extract mg/Kg	0.748	0.500	mg/Kg wet							
LCS (B4L1786-BS1)										**Prepared: 12/12/24 Analyzed: 12/13/24**
Potassium, Extract mg/Kg	24.3		mg/L	25.0		97.2	80-120			
LCS Dup (B4L1786-BSD1)										**Prepared: 12/12/24 Analyzed: 12/13/24**
Potassium, Extract mg/Kg	24.2		mg/L	25.0		96.8	80-120	0.412	20	

EPA SW 846-6010, 3050 - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4L1787 - Mehlich Extraction										
Blank (B4L1787-BLK1)										**Prepared & Analyzed: 12/13/24**
Phosphorus, Extract - mg/Kg	ND	0.100	mg/Kg wet							
LCS (B4L1787-BS1)										**Prepared & Analyzed: 12/13/24**
Phosphorus, Extract - mg/Kg	23.667	0.100	mg/Kg wet	25.2		93.9	80-120			
LCS Dup (B4L1787-BSD1)										**Prepared & Analyzed: 12/13/24**
Phosphorus, Extract - mg/Kg	25.903	0.100	mg/Kg wet	25.2		103	80-120	9.02	20	
Batch B4L2454 - No Prep										
LCS (B4L2454-BS1)										**Prepared & Analyzed: 12/17/24**
pH Soil	6.83		std unit	6.86		99.6	80-120			
Duplicate (B4L2454-DUP1)				**Source: N4L0473-01**						**Prepared & Analyzed: 12/17/24**
pH Soil	6.76		std unit		6.79			0.443	20	
Batch B5A3437 - No Prep										
Blank (B5A3437-BLK1)										**Prepared & Analyzed: 01/06/25**
Nitrate as N	ND	0.5	mg/Kg wet							
LCS (B5A3437-BS1)										**Prepared & Analyzed: 01/06/25**
Nitrate as N	0.935		mg/L	1.00		93.5	80-120			
Matrix Spike (B5A3437-MS1)				**Source: N4L0473-03**						**Prepared & Analyzed: 01/06/25**
Nitrate as N	582	0.6	mg/Kg dry	12.0	467	955	80-120			23

SM 4500 NO3F KCl extract - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5A3437 - No Prep										
Matrix Spike Dup (B5A3437-MSD1)				**Source: N4L0473-03**					**Prepared & Analyzed: 01/06/25**	
Nitrate as N	518	0.6	mg/Kg dry	12.0	467	425	80-120	11.6	20	

Notes and Definitions

Cs	Analyses performed at Coldspring Laboratory.
3	Sample analysis performed out of holding time.
23	Spike recovery outside of acceptance limits due to matrix interference.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

**All Metals Analyses performed at Coldspring Laboratory, unless otherwise indicated.*

EASTEX ENVIRONMENTAL LAB, INC.

P.O. Box 1087
Coldspring, TX 77329
(936) 653-3249 * (800) 525-0506

P.O. Box 631373
Nacogdoches, TX 75963-1373
(936) 569-8879 * FAX (936) 569-8949

Report To:

Company: East Cedar Creek South Plant
Address:
Attn:
Phone#
Fax#
P.O. #

Remarks:

Sample and Bottle Identification: NULO473-01-003

Sampler's Name (print): David Randall
Sampler's Signature:

Project Number
Project Name

ANALYSIS REQUESTED

Sample ID	Date	Time	C or G	DO	pH	Cl2	Flow	Temp	Matrix	Containers #	size	type	pres	Land App
0"-6"	12-3-24	1245	G						SO	1		P	C	X
6"-18"	12-3-24	1310	G						SO	1		P	C	X
18"-36"	12-3-24	1330	G						SO	1		P	C	X

Relinquished By:	Date: 12-3-24	Time: 1615	Received By: Sabrina Davis	Date: 12/3/24	Time: 1615
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By and/or Checked In By:	Date:	Time:

Received Iced: YES / NO

LAB USE ONLY	Sample Condition Acceptable	Temp°C	Therm. ID	Logged In By:	Date	Time
Alternate Check In:	Yes / No	1.1	033	Sabrina Davis	12/4/24	0853

See back for instructions

* Thermometers have a +/- 0.0 factor and recorded temperature is the observed temperature.

EASTEX
ENVIRONMENTAL LABS INC.

NELAP ACCREDITED TNI LABORATORY

REPORT

REPORT DATE	01/20/2025
RECEIVE DATE	12/03/2024
RECEIVE TIME	1615
WORK ORDER	N4L0473

REPORT TO
East Cedar Creek WW
Christopher Cotton
PO Box 309
Mabank, TX 75147

REPORT FROM
Eastex Environmental Laboratory
PO Box 631375
Nacogdoches, TX 75963
936-569-8879

PROJECT
ECC South Soil

Enclosed are the results of analyses for samples received by the laboratory on 12/03/24 16:15, with Lab ID Number N4L0473. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul D. Hughes, Laboratory Director

LABORATORY ANALYTICAL REPORT

Project: ECC South Soil

Sample Site: 0-6 inches
Sample Type: Grab
Sample Matrix: Waste

Sample Number
N4L0473-01

Collector: David B Randall
Sampled: 12/03/24 1245
Received: 12/03/24 1615

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Conductivity 2:1 Extract	157.3	10	µmhos/cm @25C	A	B4L1626	12/11/24 1436	ARB	EPA SW 846-9050A	Cs
Nitrate as N	19.5	0.6	mg/Kg dry	N	B5A3437	01/06/25 1000	TDS	SM 4500 NO3F KCl extract	3, Cs
Percent Solid	82.1	0.1	%	A	B4L1524	12/11/24 1210	ARB	SM 2540G	3, Cs
pH Soil	6.8		std unit	A	B4L2454	12/17/24 1630	JAA	EPA SW 846-9045	Cs
Phosphorus, Extract - mg/Kg	1.77	0.122	mg/Kg dry	A	B4L1787	12/13/24 1337	TAK	EPA SW 846-6010, 3050	
Potassium, Extract mg/Kg	17.5	0.609	mg/Kg dry	A	B4L1786	12/13/24 1224	TAK	EPA SW 846-6010, 3050	
Total Nitrogen	413.5		mg/Kg		B5A5584	01/17/25 0806	TDS	-	

Sample Site: 6-18 inches
Sample Type: Grab
Sample Matrix: Waste

Sample Number
N4L0473-02

Collector: David B Randall
Sampled: 12/03/24 1310
Received: 12/03/24 1615

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Conductivity 2:1 Extract	125.5	10	µmhos/cm @25C	A	B4L1626	12/11/24 1436	ARB	EPA SW 846-9050A	Cs
Nitrate as N	999	0.6	mg/Kg dry	N	B5A3437	01/06/25 1000	TDS	SM 4500 NO3F KCl extract	3, Cs
Percent Solid	83.7	0.1	%	A	B4L1524	12/11/24 1210	ARB	SM 2540G	3, Cs
pH Soil	6.7		std unit	A	B4L2454	12/17/24 1630	JAA	EPA SW 846-9045	Cs
Phosphorus, Extract - mg/Kg	0.738	0.119	mg/Kg dry	A	B4L1787	12/13/24 1339	TAK	EPA SW 846-6010, 3050	
Potassium, Extract mg/Kg	10.0	0.597	mg/Kg dry	A	B4L1786	12/13/24 1227	TAK	EPA SW 846-6010, 3050	
Total Nitrogen	1315		mg/Kg		B5A5584	01/17/25 0806	TDS	-	

Sample Site: 18-36 inches
Sample Type: Grab
Sample Matrix: Waste

Sample Number
N4L0473-03

Collector: David B Randall
Sampled: 12/03/24 1330
Received: 12/03/24 1615

Analyte	Result	Reporting Limit	Units	Nelac Status	Batch	Analyzed	Analyst	Method	Notes
Conductivity 2:1 Extract	159.9	10	µmhos/cm @25C	A	B4L1626	12/11/24 1436	ARB	EPA SW 846-9050A	Cs
Nitrate as N	467	0.6	mg/Kg dry	N	B5A3437	01/06/25 1000	TDS	SM 4500 NO3F KCl extract	23, 3, Cs
Percent Solid	83.3	0.1	%	A	B4L1524	12/11/24 1210	ARB	SM 2540G	3, Cs
pH Soil	7.2		std unit	A	B4L2454	12/17/24 1630	JAA	EPA SW 846-9045	Cs
Phosphorus, Extract - mg/Kg	<0.120	0.120	mg/Kg dry	A	B4L1787	12/13/24 1350	TAK	EPA SW 846-6010, 3050	
Potassium, Extract mg/Kg	7.47	0.600	mg/Kg dry	A	B4L1786	12/13/24 1231	TAK	EPA SW 846-6010, 3050	
Total Nitrogen	778		mg/Kg		B5A5584	01/17/25 0806	TDS	-	

Results apply to the samples analyzed in accordance with the chain of custody.

NELAC Status: A=Accredited, N=Accreditation not offered, O=Not Accredited, P=Approved

SM 2540G - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4L1524 - No Prep										
Blank (B4L1524-BLK1)									**Prepared & Analyzed: 12/11/24**	
Percent Solid	ND	0.1	%							
Duplicate (B4L1524-DUP1)				**Source: N4L0473-01**					**Prepared & Analyzed: 12/11/24**	
Percent Solid	82.7	0.1	%		82.1			0.728	20	
Batch B4L1626 - No Prep										
Blank (B4L1626-BLK1)									**Prepared & Analyzed: 12/11/24**	
Conductivity 2:1 Extract	ND	10	µmhos/cm @25C							
LCS (B4L1626-BS1)									**Prepared & Analyzed: 12/11/24**	
Conductivity 2:1 Extract	1007		µmhos/cm @25C	1000		101	80-120			
Duplicate (B4L1626-DUP1)				**Source: N4L0473-01**					**Prepared & Analyzed: 12/11/24**	
Conductivity 2:1 Extract	157	10	µmhos/cm @25C		157.3			0.191	20	
Batch B4L1786 - Mehlich Extraction										
Blank (B4L1786-BLK1)									**Prepared: 12/12/24 Analyzed: 12/13/24**	
Potassium, Extract mg/Kg	0.748	0.500	mg/Kg wet							
LCS (B4L1786-BS1)									**Prepared: 12/12/24 Analyzed: 12/13/24**	
Potassium, Extract mg/Kg	24.3		mg/L	25.0		97.2	80-120			
LCS Dup (B4L1786-BSD1)									**Prepared: 12/12/24 Analyzed: 12/13/24**	
Potassium, Extract mg/Kg	24.2		mg/L	25.0		96.8	80-120	0.412	20	

EPA SW 846-6010, 3050 - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4L1787 - Mehlich Extraction										
Blank (B4L1787-BLK1)										**Prepared & Analyzed: 12/13/24**
Phosphorus, Extract - mg/Kg	ND	0.100	mg/Kg wet							
LCS (B4L1787-BS1)										**Prepared & Analyzed: 12/13/24**
Phosphorus, Extract - mg/Kg	23.667	0.100	mg/Kg wet	25.2		93.9	80-120			
LCS Dup (B4L1787-BSD1)										**Prepared & Analyzed: 12/13/24**
Phosphorus, Extract - mg/Kg	25.903	0.100	mg/Kg wet	25.2		103	80-120	9.02	20	
Batch B4L2454 - No Prep										
LCS (B4L2454-BS1)										**Prepared & Analyzed: 12/17/24**
pH Soil	6.83		std unit	6.86		99.6	80-120			
Duplicate (B4L2454-DUP1)				**Source: N4L0473-01**						**Prepared & Analyzed: 12/17/24**
pH Soil	6.76		std unit		6.79			0.443	20	
Batch B5A3437 - No Prep										
Blank (B5A3437-BLK1)										**Prepared & Analyzed: 01/06/25**
Nitrate as N	ND	0.5	mg/Kg wet							
LCS (B5A3437-BS1)										**Prepared & Analyzed: 01/06/25**
Nitrate as N	0.935		mg/L	1.00		93.5	80-120			
Matrix Spike (B5A3437-MS1)				**Source: N4L0473-03**						**Prepared & Analyzed: 01/06/25**
Nitrate as N	582	0.6	mg/Kg dry	12.0	467	955	80-120			23

Results apply to the samples analyzed in accordance with the chain of custody.

Reported:

NELAC Status: A=Accredited, N=Accreditation not offered, O=Not Accredited, P=Approved

SM 4500 NO3F KCl extract - Quality Control

Eastex Environmental Laboratory - Coldspring

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5A3437 - No Prep										
Matrix Spike Dup (B5A3437-MSD1)			**Source: N4L0473-03**						**Prepared & Analyzed: 01/06/25**	
Nitrate as N	518	0.6	mg/Kg dry	12.0	467	425	80-120	11.6	20	

Notes and Definitions

Cs	Analyses performed at Coldspring Laboratory.
3	Sample analysis performed out of holding time.
23	Spike recovery outside of acceptance limits due to matrix interference.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

**All Metals Analyses performed at Coldspring Laboratory, unless otherwise indicated.*

EASTEX ENVIRONMENTAL LAB, INC.

P.O. Box 1087, Coldspring, TX 77329, (936) 653-3249 * (800) 525-0506
P.O. Box 631373, Nacogdoches, TX 75963-1373, (936) 569-8879 * FAX (936) 569-8949

Report To:

Company: East Cedar Creek South Plant
Address:
Attn:
Phone#
Fax#
P.O. #
Sampler's Name (print): David Randall
Sampler's Signature:
Project Number
Project Name

Remarks:

Sample and Bottle Identification

NU20473-01-003

ANALYSIS REQUESTED

Sample ID	Date	Time	C or G	DO	pH	Cl2	Flow	Temp	Matrix	Containers #	size	type	pres	Land App
0"-6"	12-3-24	1245	G						SO	1		P	C	X
6"-18"	12-3-24	1310	G						SO	1		P	C	X
18"-36"	12-3-24	1330	G						SO	1		P	C	X

Relinquished By: David	Date: 12-3-24	Time: 1615	Received By: Sabrina Davis	Date: 12/3/24	Time: 1615
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By and/or Checked in By:	Date:	Time:

Received Iced: (YES) / NO
Received Iced: YES / NO
Received Iced: YES / NO

LAB USE ONLY	Sample Condition Acceptable (Yes) / No	Temp°C	Therm. ID	Logged In By:	Date	Time
Alternate Check In:	Date: Time:	1.1	033	Sabrina Davis	12/4/24	0503

See back for instructions

* Thermometers have a +/- 0.0 factor and recorded temperature is the observed temperature.

ATTACHMENT No. 19

EFFLUENT MONITORING

Page 35, Section 9

Technical Report

SWWTP Daily Average Irrigation Flows and Monthly/Annual Totals

Month & Year	Starting Meter Reading	Ending Meter Reading	Monthly Average	Monthly Total		
Jan-22	0	0	0	0		
Feb-22	0	0	0	0		
Mar-22	0	0	0	0		
Apr-22	0	0	0	0		
May-22	306,366	309,250	96,133	2,884,000		
Jun-22	309,250	311,377	70,900	2,127,000		
Jul-22	311,377	313,993	87,200	2,616,000		
Aug-22	313,993	314,696	23,433	703,000		
Sep-22	314,696	318,423	124,233	3,727,000		
Oct-22	318,423	321,065	88,067	2,642,000		
Nov-22	321,065	321,740	22,500	675,000	Total Annual Flows	Daily Average Flow
Dec-22	321,740	321,740	0	0	15,374,000	42,121
Jan-23	321,740	321,740	0	0		
Feb-23	321,740	321,740	0	0		
Mar-23	321,740	321,740	0	0		
Apr-23	321,740	322,313	19,100	573,000		
May-23	322,313	324,430	70,567	2,117,000		
Jun-23	324,430	326,663	74,433	2,233,000		
Jul-23	326,663	332,173	183,667	5,510,000		
Aug-23	332,173	340,567	279,800	8,394,000		
Sep-23	340,567	349,820	308,433	9,253,000		
Oct-23	349,820	351,080	42,000	1,260,000		
Nov-23	351,080	351,080	0	0	Total Annual Flows	Daily Average Flow
Dec-23	351,080	351,080	0	0	29,340,000	80,384
Jan-24	351,080	351,080	0	0		
Feb-24	351,080	351,080	0	0		
Mar-24	351,080	351,080	0	0		
Apr-24	351,080	353,218	71,267	2,138,000		
May-24	353,218	353,620	13,400	402,000		
Jun-24	353,620	355,668	68,267	2,048,000		
Jul-24	355,668	358,482	93,800	2,814,000		
Aug-24	358,482	366,545	268,767	8,063,000		
Sep-24	366,545	373,497	231,733	6,952,000		
Oct-24	373,497	377,845	144,933	4,348,000		
Nov-24	377,845	377,845	0	0	Total Annual Flows	Daily Average Flow
Dec-24	377,845	377,845	0	0	26,765,000	73,329

	Plant #1		Plant #2		Plant #1		Plant #2	
	Jan-24		Jan-24		Feb-24		Feb-24	
Day	BOD5	pH	BOD5	pH	BOD5	pH	BOD5	pH
1		7.07		7.34		6.42		7.20
2	4.8	7.21	5.1	7.22		6.56		7.23
3		7.19		7.23		6.36		7.17
4		7.24		7.17		6.19		6.83
5		7.24		7.03		6.25		6.94
6		7.01		7.03	5.7	6.27	27.0	7.02
7		7.09		7.12		6.07		7.00
8		7.13		7.13		6.01		6.99
9	5.6	7.18	5.2	7.06				6.95
10		7.23		7.14		6.58		7.01
11		7.11		7.18		6.74		6.89
12		7.14		6.97		7.15		6.92
13		7.04		7.08	5.9	7.04	23.0	6.97
14		6.95		7.19		7.05		7.02
15		7.06				6.99		7.02
16	93.0		84.0	7.13		6.90		6.88
17		7.15		7.10		7.00		
18		7.12		6.71		7.00		7.08
19		6.96		7.34		7.07		7.25
20		6.66		7.32	5.1	6.88	38.0	7.13
21		6.68				6.94		7.12
22						6.95		7.07
23	19.0		15.0	6.99		6.96		7.00
24		6.86		6.64		7.05		7.08
25		6.96		6.73		7.10		7.21
26		6.46		6.77		6.92		6.90
27		6.49		6.77	9.7	6.80	43.0	7.40
28		6.30		6.94		6.85		7.34
29		6.36		6.94		7.08		7.11
30	5.1	6.30	5.1	7.09				
31		6.53		7.20				
	25.5	6.9			6.6	6.8		

Plant #1		Plant #2		Plant #1		Plant #2	
Mar-24		Mar-24		Apr-24		Apr-24	
BOD5	pH	BOD5	pH	BOD5	pH	BOD5	pH
	7.08		7.06		7.23		7.13
	6.94		7.19	15.0	7.25	22.0	7.07
	6.72		7.01		7.12		7.14
	6.59		7.10		7.29		7.19
7.5	6.87	47.0	7.02		7.35		7.38
	6.97		7.12		7.33		7.42
	6.96		7.19		7.36		7.33
	7.00		7.03		7.31		7.21
	7.04		7.17	36.0		15.0	7.25
	7.16		6.90		7.06		7.29
	6.86		6.91		7.27		7.08
10.0	7.26	41.0	7.01		7.11		7.05
	7.24		6.94		6.70		7.12
	7.27		6.94		7.00		7.13
	7.19		7.03		7.20		7.12
	7.12		7.12	8.6	7.18	23.0	7.16
	7.24		7.18		7.12		7.16
	7.30		7.05		7.06		7.16
12.0	7.26	26.0	7.03				
	7.25		7.05		7.09		7.13
	7.24		6.90		7.34		7.23
	7.18		6.90		7.22		7.02
	7.24		6.91	7.7	7.11	36.0	
	6.89		7.16		7.14		
16.0	7.06	39.0	7.07		7.26		7.17
	7.28		7.06		6.78		7.36
	7.25		6.99		7.30		7.18
	7.19		6.91		7.38		
	7.13		6.84		7.30		7.19
	6.91		6.86	12.0	7.27	21.0	7.18
	6.89		7.00				

11.4 7.1 15.9 7.2

Plant #1		Plant #2		Plant #1		Plant #2	
May-24		May-24		Jun-24		Jun-24	
BOD5	pH	BOD5	pH	BOD5	pH	BOD5	pH
	7.37		7.25		7.30		7.29
	7.27		7.20		7.36		7.15
	7.27		7.06		7.07		7.38
	7.20		7.16	40.0	7.29	43.0	7.08
	7.21		7.13		7.10		7.38
	7.10		7.24		7.21		7.10
16.0	7.14	41.0	7.17		7.25		7.34
	7.13		7.04		7.16		7.35
	7.07		7.10		7.17		7.42
	7.13		7.08				
	7.09		7.07	30.0	7.46	30.0	7.08
	7.11		7.23		7.08		7.35
	7.23		7.31		7.54		7.42
	7.39		7.14		7.31		7.16
	7.08		7.29		7.25		7.35
5.7	7.14	37.0	7.31		7.26		7.26
	7.28		7.08		7.41		7.47
	7.18		7.18	9.0	7.16	42.0	7.38
	6.93		7.45		7.19		7.07
	7.09		7.15		7.04		7.06
16.0	7.18	42.0	7.34		7.05		
	7.04		7.17		7.13		
	7.30		7.20		6.20		6.13
	7.32		7.15		7.18		6.89
	7.27		7.10	2.4	7.11	2.2	6.87
	7.36		7.05		7.13		6.96
	7.34				7.19		7.05
3.1	7.01	42.0	7.09		7.03		7.16
	7.15		7.41		7.29		7.24
	7.19		7.22		7.07		7.02
	7.35		7.38				

10.2 7.2 20.4 7.2

Plant #1		Plant #2		Plant #1		Plant #2	
Jul-24		Jul-24		Aug-24		Aug-24	
BOD5	pH	BOD5	pH	BOD5	pH	BOD5	pH
5.4	7.07	16.0	7.10		6.95		7.08
	7.20		7.23		7.00		6.93
	7.19		7.17		7.09		7.01
	7.11		7.12		6.89		6.68
	7.02		7.23		6.89		6.71
	7.08		7.34	8.6	7.40	6.1	6.42
	7.36		7.26		7.35		6.23
	7.25		6.95		6.83		6.01
19.0	6.89	29.0	7.26		7.35		6.33
	6.99		7.11		6.83		6.58
	7.02		7.08		7.35		6.42
	6.93		7.20		7.33		6.32
	6.98		7.13	7.8	6.92	12.0	6.89
	6.70		7.17		6.86		7.04
	7.10		7.04		7.32		7.40
14.0	7.07	23.0	7.21		7.16		7.41
	7.15		7.19		6.99		7.32
	7.14		7.08		7.24		7.40
	7.26		7.04		7.17		7.50
	7.14		7.18	12.0	7.08	12.0	7.45
	7.19		7.09		7.04		7.36
	7.05		7.07		7.07		7.55
17.0	6.98	12.0	7.10		7.14		7.11
	7.01		7.08		6.89		7.43
	6.92		7.13		6.90		7.24
	6.88		7.19		7.02		7.29
	6.79		7.16	3.5	6.81	5.1	7.39
	6.88		7.14		6.98		7.43
	6.88		7.12		6.99		7.38
9.7	6.94	4.1	7.04		6.90		7.40
	7.04		7.04		6.91		7.31

13.0	7.0	8.0	7.1

Plant #1		Plant #2		Plant #1		Plant #2	
Sep-24		Sep-24		Oct-24		Oct-24	
BOD5	pH	BOD5	pH	BOD5	pH	BOD5	pH
	6.71		7.36	5.8	6.92	4.4	6.80
	6.81		7.43		6.98		6.85
5.9	7.17	7.6	7.18		6.90		6.88
	7.01		7.23		6.94		6.84
	7.14		7.45		6.91		6.80
	7.09		7.50		6.86		7.04
	7.03		7.40		6.91		6.93
	6.94		7.34	4.1	7.03	3.3	6.90
	6.97		7.49		7.00		6.51
4.0	6.92	4.9	7.30		6.95		6.37
	6.79		7.36		6.86		6.40
	6.80		7.29		6.89		6.25
	6.84		7.28		6.86		6.39
	6.93		7.15		6.97		6.56
	6.95		7.34		7.01		6.47
	6.83		7.22		6.93		6.35
3.8	6.99	4.9	7.15	5.1	6.82	5.0	
	6.99		7.16				6.22
	6.99		7.17		6.77		
	6.93		7.14				6.22
	6.91		7.25		6.22		6.47
	6.97		7.09	3.5	6.56	4.9	6.86
	6.91		7.10		6.58		7.08
3.3	6.90	7.1	7.03		6.88		7.15
	6.91		6.81		6.95		7.06
	6.90		6.85		6.98		7.17
	6.86		6.62		7.06		7.33
	6.67		6.51		7.05		7.11
	6.72		6.62	10.0	7.08	7.9	7.25
	6.92		6.81		7.12		7.20
					7.16		7.03

4.3 6.9 5.7 6.9

Plant #1		Plant #2		Plant #1		Plant #2	
Nov-24		Nov-24		Dec-24		Dec-24	
BOD5	pH	BOD5	pH	BOD5	pH	BOD5	pH
	7.16		7.20		7.17		7.23
	7.05		7.15		6.97		7.24
	7.09		7.36	7.3	6.97	4.5	6.98
	7.08		7.10		7.29		7.05
9.7	7.23	12.0	7.19		7.26		7.23
	7.12		7.30		7.27		6.95
	7.04		7.18		7.26		6.87
	7.04		7.13		6.81		7.01
	7.12		7.24		6.96		6.98
	7.09		7.32	9.4	7.06	3.0	6.93
	6.84		7.21		7.11		7.05
6.1	7.17	4.5	7.26		7.14		7.12
	7.15		7.19		6.82		6.98
	7.20		7.21		6.81		6.77
	7.09		7.27		6.83		7.02
	7.06		7.19		6.76		7.06
	7.12		7.25	5.5	6.80	5.4	6.96
	7.12		7.08		7.07		7.03
8.9	7.16	5.0	7.15		6.98		6.96
	7.12		7.22		7.20		7.29
	6.93		7.05		7.16		7.21
	6.59		6.91		7.12		7.25
	6.89		6.90	4.5	7.19	6.0	7.07
	7.02		7.03		7.03		7.37
3.3	7.01	2.5	6.93		6.95		7.47
	7.10		7.00		7.28		7.22
	6.78		6.83		6.93		7.24
	7.13		7.01		7.37		7.21
	6.84		7.07		7.11		6.96
	7.17		7.06	11.0	6.58	6.0	6.99
					6.98		6.89

7.0 7.1 7.5 7.0

Candice Calhoun

From: Sigi West <swest@ksaeng.com>
Sent: Friday, June 13, 2025 9:51 AM
To: Candice Calhoun
Subject: RE: Application to Renew Permit No. WQ0013874001 - Notice of Deficiency
Attachments: Admin Response 1.pdf

Ms. Candice,
I have attached the response package for the East Cedar Creek FWSD South Plant renewal (WQ0013874001) for your approval.
Please let me know if there is anything further you need.

Sigi West | **Regulations Compliance Specialist**

O: 903.581.8141 | **D:** 214.833.4974 | **E:** swest@ksaeng.com

From: Candice Calhoun <Candice.Calhoun@tceq.texas.gov>
Sent: Wednesday, June 11, 2025 10:08 AM
To: genmgr@eastcedarcreek.net
Cc: Sigi West <swest@ksaeng.com>
Subject: Application to Renew Permit No. WQ0013874001 - Notice of Deficiency
Importance: High

Good morning, Mr. Blodgett,

The attached Notice of Deficiency (NOD) letter dated June 11, 2025, requests additional information needed to declare the application administratively complete. Please send complete response no later than June 25, 2025.

Please let me know if you have any questions.

Regards,

Candice Courville
License & Permit Specialist
ARP Team | Water Quality Division
Texas Commission on Environmental Quality
512-239-4312
candice.calhoun@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey

KSA
a Pape-Dawson company

6781 Oak Hill Boulevard
Tyler, TX 75703
903.581.8141

June 13, 2025

TCEQ-Applications Review and Processing Team
Attn: Candice Calhoun
Building F, Room 2101
12100 Park 35 Circle
Austin, Texas 78753

Re: East Cedar Creek FWSD
South Wastewater Treatment Plant
Discharge Permit Renewal Application
TPDES Permit No. WQ0013874001

Dear Ms. Calhoun,

Enclosed you will find the NOD Response for the application for the TPDES discharge permit renewal for the East Cedar Creek FWSD South Wastewater Treatment Plant. I have attached applicable replacement pages and responses to the deficiencies noted.

1. Section8, item 5 Administrative Report: The school district associated with this application does not require alternative language publications. Corrected replacement page 6 has been attached.
2. Plain Language Summary: The description of the location of the facility has been verified and corrected. A replacement page 2 of the Core Data Form is included. Replacement pages 8 and 9 are included.
3. NORI – The portion of the NORI notice has been reviewed. The location description in the notice will need to be corrected to the description noted in the Core Data Form corrected location description. See attached replacement page.

Please contact me, Sigi West, Regulatory Compliance Specialist at (903) 581-8141, or via email at swest@ksaeng.com if you need any other information on the above referenced permit.

Sincerely,

Siglinda West

KSA
Siglinda M. West
Regulatory Compliance Specialist

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(903) 887-7103		(903) 887-4299

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

East Cedar Creek Fresh Water Spply District South Wastewater Treatment Plant

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City		**State**		**ZIP**		**ZIP + 4**	
24. County	Henderson							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	Approximately 15700 feet south of the intersection of State Highway 334 and State Highway 198, in Henderson County, TX 75124				
26. Nearest City			**State**		**Nearest ZIP Code**
Payne Springs			TX		75147

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	32.2902777778		**28. Longitude (W) In Decimal:**	96.1016666667	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
32	17	25	96	6	6

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4952		221320	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Treatment of domestic sewage

34. Mailing Address:	**P.O. Box 309**							
	City	**Mabank**	**State**	**TX**	**ZIP**	**75147**	**ZIP + 4**	
35. E-Mail Address:	**offmgr@eastcedarcreek.net**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(903) 887-7103		**(903) 887-4299**

B. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package

Indicate by a check mark the preferred method for receiving the first notice and instructions:

☒ E-mail Address

☐ Fax

☒ Regular Mail

C. Contact permit to be listed in the Notices

Prefix: Mr. Last Name, First Name: Blodgett, James

Title: General Manager Credential: Click to enter text.

Organization Name: East Cedar Creek Fresh Water Supply District

Mailing Address: P.O. Box 309 City, State, Zip Code: Mabank, TX 75147

Phone No.: 903.887.7103 E-mail Address: genmgr@eastcedarcreek.net

D. Public Viewing Information

If the facility or outfall is located in more than one county, a public viewing place for each county must be provided.

Public building name: East Cedar Creek FWSD Office

Location within the building: Lobby

Physical Address of Building: 115 Hammer Road

City: Gun Barrel City County: Henderson

Contact (Last Name, First Name): Mr. James Blodgett

Phone No.: 903.887.7103 Ext.: Click to enter text.

E. Bilingual Notice Requirements

This information **is required** for **new, major amendment, minor amendment or minor modification, and renewal** applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

   ☐ Yes ☒ No

   If **no**, publication of an alternative language notice is not required; **skip to** Section 9 below.

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

   ☐ Yes ☒ No

E. Owner of effluent disposal site:

Prefix: Click to enter text. Last Name, First Name: Click to enter text.

Title: Click to enter text. Credential: Click to enter text.

Organization Name: **East Cedar Creek Fresh Water Supply District**

Mailing Address: P.O. Box 309 City, State, Zip Code: Mabank, TX 75147

Phone No.: 903.887.7103 E-mail Address: genmgr@eastcedarcreek.net

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: NOT APPLICABLE

F. Owner sewage sludge disposal site (if authorization is requested for sludge disposal on property owned or controlled by the applicant)::

Prefix: N/A Last Name, First Name: N/A

Title: N/A Credential: N/A

Organization Name: N/A

Mailing Address: N/A City, State, Zip Code: N/A

Phone No.: N/A E-mail Address: N/A

If the landowner is not the same person as the facility owner or co-applicant, attach a lease agreement or deed recorded easement. See instructions.

Attachment: N/A

Section 10. TPDES Discharge Information (Instructions Page 31)

A. Is the wastewater treatment facility location in the existing permit accurate?

☒ Yes ☐ No

If **no**, **or a new permit application**, please give an accurate description:

Click to enter text.

B. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☒ Yes ☐ No

If **no**, **or a new or amendment permit application**, provide an accurate description of the point of discharge and the discharge route to the nearest classified segment as defined in 30 TAC Chapter 307:

SURFACE IRRIGATION SITE

City nearest the outfall(s): Payne Springs

County in which the outfalls(s) is/are located: Henderson

C. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☐ Yes ☒ No

If **yes**, indicate by a check mark if:

☐ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: NOT APPLICABLE

D. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge: N/A

Section 11. TLAP Disposal Information (Instructions Page 32)

A. For TLAPs, is the location of the effluent disposal site in the existing permit accurate?

☒ Yes ☐ No

If **no, or a new or amendment permit application**, provide an accurate description of the disposal site location:

Click to enter text.

B. City nearest the disposal site: Payne Springs

C. County in which the disposal site is located: Henderson

D. For **TLAPs**, describe the routing of effluent from the treatment facility to the disposal site:

Effluent route is from the plant via piping to the irrigation area and sprayed on the site via irrigation sprinklers.

E. For **TLAPs**, please identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: East Cedar Creek Reservoir

Section 12. Miscellaneous Information (Instructions Page 32)

A. Is the facility located on or does the treated effluent cross American Indian Land?

☐ Yes ☒ No

B. If the existing permit contains an onsite sludge disposal authorization, is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ Not Applicable

If No, or if a new onsite sludge disposal authorization is being requested in this permit application, provide an accurate location description of the sewage sludge disposal site.

NOT APPLICABLE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

Plain Language Summary

East Cedar Creek Fresh Water Supply District (CN 600629935) operates East Cedar Creek Fresh Water District South Plant (RN 101612349), an activated sludge process plant operated in the extended aeration mode.

The facility is located at approximately 15,700 feet south of the intersection of State Highway 198 and State Highway 334, in Payne Springs, Henderson County, Texas 75147.

This application is to renew the authorization to dispose of treated domestic wastewater effluent at a daily average not to exceed 0.196 MGD via surface irrigation of 134 acres of non-public access agricultural land.

This permit will not authorize a discharge of pollutants into water in the state.

Discharges from the facility are expected to contain Biochemical Oxygen Demand (BOD), pH, Chlorine, Ammonia Nitrogen, Total Kjeldahl Nitrogen (TKN), Sulfate, Phosphorus, E.coli, and Dissolved Solids.

Domestic wastewater is treated by activated sludge process in the extended aeration mode using treatment units to include an aeration basin, clarifier, two aerobic digesters and chlorine contact chambers.